# CARBON KLEPTOMANIA

"...the carbon market is based on the lack of delivery of an invisible substance to no one." – Mark Schapiro, Conning the Climate

Report shows most Canadian households would be burdened by carbon *debt* – the unintended consequences outweigh any proposed rebate. The carbon tax 'pool' will substantially drop if we reach for Paris targets, leaving little or no rebate funds at all. Taxpaying citizens deceived. Again.



© September 26, 2018

Rebuttal to the "Carbon Dividend" report and petition by Canadians for Clean Prosperity.

# Carbon Kleptomania

"Investors need to realize that any business built on government policies that impoverish ordinary people will never be secure and sustainable."

Page | 1

— Matthew Sinclair "Let Them Eat Carbon: The Price of Failing Climate Change Policies, and How Governments and Big Business Profit from Them"

"Kleptomania (klep-toe-MAY-nee-uh) is the recurrent inability to resist urges to steal items that you generally don't really need and that usually have little value." – Mayo Clinic  $^1$ 

Canadians for Clean Prosperity issued a report by Mark Cameron, based on commissioned research by Dave Sawyer of EnviroEconomics, which modelled (computer simulated) potential benefits of carbon tax rebates. The report was entitled *"Federal Carbon Price Impacts on Households in Alberta, Saskatchewan and Ontario"* released on or about Sept. 22, 2018.

The report confuses the notion of a 'dividend' (which is a profit-share return on a successful business investment) with a carbon tax 'rebate' which is a **subsidy** to low income families who are burdened by the carbon taxes on their personal energy use (gasoline, natural gas, electricity), and the carbon taxes embedded in the products or services they pay for. Businesses must pay carbon taxes, which are treated like any other operating expense. *That cost is passed on to the consumers*.

The report from 'Clean Prosperity' falsely says "There will be enough funds to give households back more than they paid in because carbon taxes are collected not only on households but also on business and industrial emissions." Households, as consumers, pay for the carbon taxes that are initially charged to businesses as those costs are embedded in the price of all products.

Cameron's report<sup>2</sup> reframes carbon taxes that come *from* the pockets of citizens as if a carbon **dividend**, such as that paid by profitable corporations back to shareholders.

Citizens of Canada are not *investing* in something when they use vital energy resources to heat their homes, light the lights, drive to work, or have a job where energy is an integral factor for the work to exist. They are paying for a product and delivery of service. Energy – especially in Canada – a 'winter' country – is an **essential means of survival.** 



Pioneer woman gathering buffalo chips (dung)

Years ago, our aboriginal and pioneer ancestors burned wood and dung – "buffalo chips" – to keep warm and cook food at the camp fire. Imagine the government would have taxed them on these basics they needed to survive! There is no difference today on coal, natural gas and oil – without them, modern society would collapse into anarchy within days.<sup>3</sup> Thus, the concept of a tax like this on essential services is fundamentally contrary to the motto of Canada – "Peace, Order and Good Government."

<sup>&</sup>lt;sup>1</sup> <u>https://www.mayoclinic.org/diseases-conditions/kleptomania/symptoms-causes/syc-20364732</u>

<sup>&</sup>lt;sup>2</sup> <u>https://d3n8a8pro7vhmx.cloudfront.net/conservativeforward/pages/13/attachments/original/1537559269/carbon-dividends-would-benefit-canadian-families-dated.pdf?1537559269</u>

<sup>&</sup>lt;sup>3</sup> <u>http://blog.friendsofscience.org/2018/05/13/how-reliant-on-fossils-fuels-are-people-in-ontario/</u>

Friends of Science Society rejects this 'dividend' distortion. Taxes on citizens are not comparable to shareholder dividends; dividends are beneficial returns on increasing profit. By contrast, carbon taxes take the most from the poor, favor green crony capitalists, hurt the most vulnerable of our Canadian society and run small and medium sized businesses into the ground.

This report is a compilation of relevant commentaries by Robert Lyman, Ottawa energy policy consultant, former public servant of 27 years. He also served as a diplomat for 10 years prior to that.

Page | 2

### Eight Ways Carbon Taxes Make Your Life Harder

- 1. Devastating for Poor and Vulnerable Heat or Eat Poverty
- Carbon pricing has a disproportionate impact on those with low incomes.
- According to the U.S. Bureau of Economic Research, carbon prices, depending on how broadly applied, place cost burdens 1.4 to 4 times higher on the lowest fifth of the income earners than it does on the highest fifth.
- A \$15 per tonne tax adds about \$325 per year in energy costs
- Taxing natural gas for home heating will affect the elderly even more.

#### 2. Harmful to Canadian Competitiveness

- Carbon prices harm competitiveness
- They add to the input costs of firms, making it more difficult to compete with others that are not so taxed in either the Canadian or export markets
- The situation is made worse because of tax changes in the USA
- Between 2015 and 2017, Canada ranked 16<sup>th</sup> out of top 17 OECD countries for business investment

#### 3. Deadweight Loss on Economy

- Carbon taxes impose a "deadweight loss" on the economy; that is, a cost to the economy over and above the amount raised by the government
- Production costs rise, and real wages decline, imposing at least a \$1.30 loss in economic welfare from \$1.00 in tax revenue
- The effect is worse in countries that already have large existing taxes.

#### 4. Ineffective in Reducing Demand

- Carbon prices do little to reduce demand
- Gasoline and diesel fuel demand have traditionally been very unresponsive to higher prices, especially in the short term

- In Norway, gasoline prices are equivalent to Cdn \$2.61 per litre, yet demand is rising. Unlike Norway, Canada's distances are much greater; industry, agriculture, and general life require substantial travel. Canadians have no choice.
- To reach the higher emission reduction targets would require the complete elimination of oil and gas use



How Norway fits into Canada.

5. Burdened with Existing Fuel Taxes

- Carbon pricing ignores the effect of pre-existing taxes and regulations
- Federal and provincial excise and sales taxes on gasoline in Ontario averaged 42 cents per litre in 2017. Carbon taxes will add 12 cents per litre by 2022 or, about \$200 per year to the annual gasoline bill.
- Due to regulation, vehicle fuel efficiency will already increase by 50% over 2008 models by 2025.

#### 6. Instituted with No Cost-Benefit Analysis

- Carbon tax rates bear no relationship to either the "costs" of climate change or the prices that, in theory, would attain the emissions reduction targets.
- Ontario conducted no cost-benefit analysis either of its recent climate policy or of carbon pricing. Alberta did no cost-benefit analysis. The Federal Government's paltry carbon tax report and Gender-Based Analysis had no hard figures for valid analysis – just platitudes.

#### 7. Carbon Taxes Do Not Replace Other Taxes – They Pile-On More

- Carbon prices do not replace the other regulations and programs to reduce emissions.
- Across Canada there are 272 different programs in place at the provincial level alone, with more added every year.
- Instead of allowing the market to determine the lowest cost of emissions reduction, the Ontario government wants to choose the winners and losers.

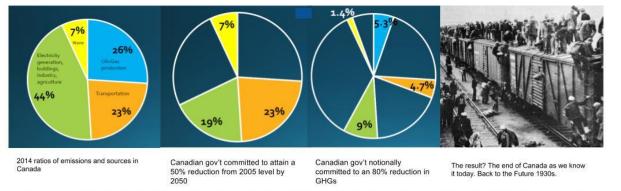
#### 8. It's a Revenue Grab for Big Government

- It's a revenue grab.
- The federal and several provincial governments claim the carbon tax will be revenue neutral and most monies would be rebated to those most in need. This claim ignores the cost of a new layer of bureaucracy to collect, count and disseminate funds. UK carbon pricing has driven up heat-or-eat poverty.<sup>4</sup>
- According to the Institute for Climate Economics, of the 40 carbon pricing regimes in places in the world today, only 29% of the revenues were recycled back into the economy. The rest was spent on other climate programs or simply added to the treasury.
- Carbon taxes are extremely costly and pointless virtue signaling.

<sup>&</sup>lt;sup>4</sup> <u>https://www.spectator.co.uk/2014/04/let-them-eat-carbon-credits/</u>

## Carbon Revenues will Decline to Nothing If Paris Agreement is Met

So...No rebates. And no jobs.



There is presently **no technology** that can achieve these reductions. This is requires shutting down major industries completely - while the rest of the world builds more coal/natural gas/oil terminals and industries. No other nation is doing this.

Achieving the COP-21 Paris Agreement targets set for 2030 and 2050 clearly cannot be accomplished by minor changes in energy use, energy efficiency improvements and minor changes in lifestyle. What is at issue is the prospect of fundamental structural change in Canada's energy economy, in the economic fortunes of Canada's regions and in Canadians' standard of living. Using the 50% reduction by 2050 (from 704 Mt in 2016 to 366 Mt in 2050, a reduction of 338 Mt), some or all of the following changes would be required:

- Complete elimination of Canada's coal, oil and natural gas industries;
- Complete elimination of the use of coal and natural gas-fired power plants for electricity generation;
- Significant reductions in Canada's energy-intensive industries like mines and minerals; petrochemicals; iron, steel and aluminum; auto and parts manufacturing, and cement;
- Significant reductions in use of aircraft for commercial and tourist purposes;
- Significant reduction in the number of private vehicles;
- Major changes in farming practices;
- Unprecedented shifts of freight transportation from truck to rail and of passenger transportation from aircraft and private cars to heavy rail and light transit; and
- Extensive and extremely costly electrification of the transport system.

Though many supporters of renewables like wind, solar, geothermal, and tidal **believe** these could replace conventional coal, natural gas, oil, hydro, and nuclear, there is no evidence to support this belief.<sup>5</sup> After 40 years of highly subsidized wind and solar, worldwide wind and solar combined supply only about 2% of world energy.<sup>6</sup> Wind and solar are intermittent and not energy dense. They cannot support basic society, let alone one of high culture and aviation. <sup>7</sup> They are made from fossil fuels.

<sup>&</sup>lt;sup>5</sup> <u>https://www.sciencedirect.com/science/article/pii/S1364032117304495</u>

<sup>&</sup>lt;sup>6</sup> http://blog.friendsofscience.org/2018/04/09/the-international-energy-agency-global-energy-and-co2-status-report-2017/

<sup>&</sup>lt;sup>7</sup> <u>https://www.cambridge.org/core/journals/mrs-energy-and-sustainability/article/lessons-from-technology-development-for-energy-and-sustainability/2D40F35844FEFEC37FDC62499DDBD4DC/core-reader</u>

# The 2-degree-C Delusion

Unconcerned about climate – likely more concerned about health care, education, the economy, jobs, trade, immigration, or global terrorism.	Concerned about pollution more than Climate	Concerned about human impacts on Climate	Concerned about Climate, and pollution but want to see a Cost- Benefit Analysis	Worried about Climate Change – but find messages confusing and contradictory. "Why does Al Gore fly so much?" "If there was warming and cooling before, how is this different?"	Angry that people think the economy matters over climate and future of the planet. "What about my kids?"	Terrified of a climate apocalypse. May decide to go vegan, not to have children, not to drive or may engage in other sacrifice to save the planet.	Pa
A Spectrum of Some Views on Climate Change							

We live in a democracy. As with any topic, there will be diverse points of view and demands for change depending on one's values. We have to find solutions that are cost-effective and reasonable.

Many 'mantras' have made for strong voices in one direction or the other. Let us take some time to untangle a few of these.

- The 2 degree Celsius target is a 'delusion' according to Ted Nordhaus, the nephew of William Nordhaus, an economist who first arbitrarily came up with this idea in the 1970's. Nordhaus explains "Why the 2 degree C target is a delusion" in Foreign Affairs, noting that it is very difficult to decarbonize a society that is reliant on oil, natural gas and coal.<sup>8</sup> Thus, we should not feel pressure to reach for the unattainable, but rather methodically work on solutions. This means the UNPRI investors<sup>9 10</sup> and the CDP signatories<sup>11 12</sup> should stand down from their aggressive demands that corporations and government comply with a mythical, presently unattainable, arbitrary goal.
- 2. "Carbon pollution...we're using the air like a sewer." At a recent public meeting in Saskatchewan, Prime Minister Trudeau made many comments about 'carbon' as a pollutant and that polluters should pay. He is misinformed. Carbon dioxide is not a pollutant and not listed as one. Since at least 1970 and in some places before, industry has worked with government to reduce the real noxious polluting emissions. The National Air Pollution Surveillance (NAPS) program has 286 air monitoring sites in 208 communities.<sup>13</sup> Industrial operations typically also have their own monitors. Provinces may have more. The NAPS program has effectively reduced noxious emissions (nitrogen oxides, sulfur oxides, lead, mercury, cadmium, soot, carbon

<sup>&</sup>lt;sup>8</sup> https://www.foreignaffairs.com/articles/world/2018-02-08/two-degree-delusion

<sup>&</sup>lt;sup>9</sup> http://blog.friendsofscience.org/2017/02/01/new-reports-challenge-share-on-climate-change-risk-and-denial-for-pension-fund-trustees-andcorporate-boards/

<sup>&</sup>lt;sup>10</sup> https://blog.friendsofscience.org/2016/08/08/an-open-letter-to-clients-and-investors-of-nei-investments/

<sup>&</sup>lt;sup>11</sup> <u>https://www.cdp.net/en</u>

<sup>&</sup>lt;sup>12</sup> https://b8f65cb373b1b7b15feb-

c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/001/327/original/oil-gas-report-exec-summary-2016.pdf?1479834286

<sup>&</sup>lt;sup>13</sup> <u>https://www.canada.ca/en/environment-climate-change/services/air-pollution/monitoring-networks-data/national-air-pollution-program.html</u>

monoxide, etc.). Canada has some 37 GHG reduction regulations, programs and subsidies already in place.<sup>14</sup> In most of Canada, most of the time, our air quality stands in the top 3 countries of the world.<sup>15</sup> Non-compliant industries that emit more than they are permitted are fined and can be shut down. In Alberta, large emitters report hourly. Alberta's Air Health Quality is reported live in short intervals.<sup>16</sup> Canada's NAPS system also monitors air quality 24/7 and the Page | 6 GEM-MACH system does models of satellite and ground inputs to evaluate and forecast air quality twice daily. National air quality is reported by Environment Canada.<sup>17</sup>

3. Humans do impact the earth and regional climate. As described by Sir John Houghton's definition of human-caused elements of climate change in the first intergovernmental climate report in 1997, human influence is through land use, agriculture, deforestation, water diversion, urban development and the use of greenhouse gas emitting fossil fuels. Since 2003, scientists have known that carbon dioxide from human industry is not the dominant factor in climate change.<sup>18</sup> This was confirmed in 2005.<sup>19</sup> In 2006, Al Gore's movie, "An Inconvenient Truth" came out and the public took up the climate change 'crisis' cry. This is also about the same time that the ClimateWorks billionaires began their global push for cap and trade, by funding environmental groups for millions of dollars annually.<sup>20</sup> Science was outshouted. The 2013 IPCC AR5 report showed a 15-year hiatus in global warming since before the Kyoto Accord ratification. Dr. Judith Curry testified to the US Senate that "Carbon dioxide is <mark>not a control knob that can fine tune climate"</mark> and that reducing carbon dioxide – even if possible - may be futile because natural influences like solar cycles, volcanoes and other unexpected surprises can affect climate through warming or cooling, far beyond human influence.<sup>21</sup> She is not the only scientist holding this view.

4. Lack of cost-benefit analysis = economic and energy catastrophe. Lack of costbenefit analysis on using wind/solar renewables as a means of reducing carbon dioxide and 'greening' the grid has led to energy catastrophes in Europe,<sup>22</sup> Ireland,<sup>23</sup> the UK,<sup>24</sup> Australia<sup>25</sup> and Ontario.<sup>26</sup> Energy costs have skyrocketed, heat-or-eat poverty has hit the middle-and lowerincome echelons; meanwhile the rich have enjoyed subsidized solar panels and expensive Electric Vehicles – subsidized by those who can least afford it. Ireland implemented wind farms, believing they would reduce carbon dioxide emissions – only to find out cost skyrocketed, emissions hardly reduced (because back-up natural gas plants work overtime to match erratic wind generation and keep the power grid stable), and now they will be fined 600 million euros for missing their EU greenhouse gas reduction targets. Some green cronies have made lots of money on these deals; the people have suffered and now a transnational body will fine them

- <sup>21</sup> https://curryja.files.wordpress.com/2014/01/curry-senatetestimony-2014-final.pdf
- 22 http://nlvow.nl/wp-content/uploads/2014/08/germany lessonslearned final 071014.pdf

<sup>&</sup>lt;sup>14</sup> <u>http://blog.friendsofscience.org/2017/05/10/can-canada-survive-climate-change-policy/</u>

<sup>&</sup>lt;sup>15</sup> http://agicn.org/fag/2015-05-16/world-health-organization-2014-air-pollution-ranking/

<sup>&</sup>lt;sup>16</sup> http://airquality.alberta.ca/map/

<sup>&</sup>lt;sup>17</sup> https://www.weather.gc.ca/airquality/pages/index e.html

<sup>&</sup>lt;sup>18</sup> <u>https://www.springer.com/us/book/9783642623738</u>

<sup>&</sup>lt;sup>19</sup> https://www.nap.edu/catalog/11175/radiative-forcing-of-climate-change-expanding-the-concept-and-addressing

<sup>&</sup>lt;sup>20</sup> <u>ClimateWorks Foundation - WikiLeaks</u> <u>https://wikileaks.org/podesta-emails/fileid/57594/16165</u>

<sup>&</sup>lt;sup>23</sup> http://blog.friendsofscience.org/2017/12/09/the-costs-of-wind-energy-in-ireland-new-report/

<sup>&</sup>lt;sup>24</sup> https://www.friendsofscience.org/index.php?id=653

<sup>&</sup>lt;sup>25</sup> https://www.goulburnpost.com.au/story/5045070/australias-energy-crisis/

<sup>&</sup>lt;sup>26</sup> https://www.cbc.ca/radio/thecurrent/the-current-for-september-1-2016-1.3744010/people-have-to-choose-between-heating-and-eatingrising-hydro-costs-hit-ontarians-1.3744013

even more! No cost benefit analysis.... because it would have shown what a poor deal the Irish were going into. This is against all principles of a sovereign nation and democratic principles.

5. Why the Economy Matters as Much as the Environment. Public services use public funds – these are limited, and we have diverse needs. Since Climate Change has been framed as an 'urgent crisis' a lot of money has been thrown at climate-related programs, with little effort to monitor the effectiveness. Author, economist and researcher Bjorn Lomborg is extremely critical of this approach. He found that in most of the world, climate change is NOT a public priority – and that if the money presently spent on vague 'stop climate change' programs was applied to the real, tangible needs of people, most serious problems of hunger, lack of means and pollution could be solved or grandly mitigated. The carbon tax – said to be payment against 'future' damages, is spent in the present, often on pet projects of governments or their green cronies. Real needs are left unmet. This is immoral, wasteful and just plain wrong.

# Robert Lyman – Some Final Thoughts



The government's claim that it will return all the funds to taxpayers has proven to be false in every jurisdiction that has implemented a carbon pricing regime so far. Among all the regimes in place in the world today, 71% of the revenues are used for new programs or subsidies to various groups and industries, not returned to the public.<sup>27</sup>

In most places, carbon taxes and carbon fees from Cap and Trade have been only in the \$15 to \$30 per tonne range. That is just the beginning, and yet the tax revenues to governments are already immense.<sup>28</sup>

Revenues from carbon taxes on the present schedule of increases will be far more than people realize. My estimate is that, had the Ontario cap and trade plan continued and the carbon price rose to \$40 per tonne by 2022 (and Ontario emissions decline by 6% to 156 megatonnes), the Ontario government's revenues in that year would have been \$6.24 billion. By 2030, assuming emissions decline by 20% from 2015 levels to 133 Mt and the price per tonne rose to \$80, Ontario revenues would be \$10.6 billion per year. The numbers would be far higher at the national level. By the time carbon taxes rose to \$200 per tonne, the revenues from carbon taxes would rival those from personal income taxes.

The purpose of the higher and higher taxes is not only to "incentify" energy efficiency and fuel switching, it is to shut down entire industries that are emissions intensive. Those industries include the ones that form the backbone of the Canadian economy - oil and gas, mining, metals fabrication, iron, steel, cement, petrochemicals and auto and parts manufacturing.

High taxes do not work in promoting fuel switching when the technologies are not there to be switched to. That is certainly the case for most of the transportation system.<sup>29</sup> Governments cannot force the pace of technology commercialization.

 <sup>&</sup>lt;sup>27</sup> <u>https://www.i4ce.org/wp-core/wp-content/uploads/2017/10/Global-Panorama-Carbon-prices-2017 FINAL 5p-2.pdf</u>
<sup>28</sup> Some parties are pushing for a \$400/ton carbon tax

https://www.prweb.com/releases/hothouse earth is agenda driven fearmongering for a 400 ton carbon tax but politicians and taxes cant stop climate change says friends of science/prweb15711787.htm

<sup>&</sup>lt;sup>29</sup> <u>https://www.friendsofscience.org/assets/documents/You cant get there from here Lyman.pdf</u>

Taxing everyone's fuel consumption and then giving the money back to people on a per capita basis would have regressive income effects; energy costs are a higher share of the spending of a low-income person than they are of a high-income person, so the people with low incomes would get back less than they paid.

The danger, of course, is that governments would in fact see this as the greatest opportunity ever to do some social re-engineering and to massively subsidize all kinds of new programs, transferring funds from those who have it to those who do not.

When the high value energy-intensive industries are the ones losing out to the subsidized ones, we will inevitably end up with a far smaller economy - *the Venezuela solution*.

Venezuela "...the combination of plummeting oil revenues and years of government mismanagement has virtually killed off the country's economy, sparking a humanitarian crisis that threatens to engulf the region. Caracas refuses to track inflation (or at least publish its findings), but the National Assembly calculates the annual rate to be more than 4,000 percent, and the International Monetary Fund predicts it could hit 13,000 percent this year. Given how much prices have already risen since January, the real number could be 10 times higher." – Foreign Affairs, July 16, 2018

https://foreignpolicy.com/2018/07/16/how-venezuela-struck-it-poor-oil-energy-chavez/



http://archivio.lavocedeltrentino.it/2016/05/26/crisi-venezuela-supermercati-vuoti-manca-lo-zucchero-e-si-ferma-la-produzione-di-coca-cola/

#### Additional Resources:

McKitrick on Climate Change - plain language guide to Social Costs of Carbon <u>https://www.friendsofscience.org/assets/documents/McKitrick\_Climate\_Change\_SCC\_Feb\_14\_2015.pdf</u>

14 short videos w Dr. Ross McKitrick on Climate Change and Carbon tax <u>https://youtu.be/g30JfQIK6GA?list=PLZcRTdbkGEnHfU8-dkQfGnO67K6p1m8rh</u>

Page | 9

"Alberta Climate Plan - A Burden with No Benefit" https://friendsofscience.org/assets/documents/AB Climate%20Plan Economic Impact Gregory Tech.pdf

Robert Lyman: Panorama of Carbon Pricing The Global Panorama of Carbon Prices in 2017

Robert Lyman: Just the Facts on COP-21 Paris Agreement THE COP21 AGREEMENT – JUST THE FACTS, PLEASE

Video presentation: Carbon tax, coal phase-out challenged at Grande Prairie agriculture conference

Let them Eat Carbon: Let Them Eat Carbon - Rebuttal to Ecofiscal Commission's report "Clearing the Air"

Let them Eat carbon - report: http://blog.friendsofscience.org/wp-content/uploads/2018/04/Let-Them-Eat-Carbon-FINAL-R-1-April-18-2018.pdf

Critiquing Abacus Data methodology on climate change as priority The Abacus Data-Ecofiscal Push Poll – A Critique of Methodology

Checkstop: Challenging the Canadian Federal Government's Carbon Pollution Pricing System Results Report http://blog.friendsofscience.org/wp-content/uploads/2018/05/Challenging-the-Canadian-Federal-Government-FINAL-R-2-May-2-2018.pdf

CLIMATE CHANGE POLICIES AND CARBON TAXES – A Brief for the Prime Minister of Canada http://blog.friendsofscience.org/2018/07/18/climate-change-policies-and-carbon-taxes-a-brief-for-the-primeminister-of-canada/

Prof. Samuele Furfari on Venezuela: <u>http://blog.friendsofscience.org/2017/08/09/venezuela-the-missed-opportunity-to-become-norway-of-latin-america/</u>

"Conning the Climate" by Mark Schapiro, Harper's Magazine, Feb. 2010 (cover quote) <u>http://citizensclimatelobby.org/files/Conning-the-Climate.pdf</u>





Page | 10

#### 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).

Friends of Science Society P.O. Box 23167, Mission P.O. Calgary, Alberta Canada T2S 3B1 Toll-free Telephone: 1-888-789-9597 Web: friendsofscience.org E-mail: contact(at)friendsofscience(dot)org Web: climatechange101.ca

