

March 2021

FoSS MEMBERSHIP QUARTERLY NEWSLETTER

No. 69

Dedicated to Providing Insights into Climate Science and Policies

PRESIDENT'S MESSAGE

Well this year has so far proven that changing the calendar has little to no effect on anything. True to form, we at FoSS have not dawdled. On January 19th we hosted our second online speakers event; Dr. Spencer's presentation was a great success bringing in as many ticket purchases as new memberships. The presentation slides for both events can be found on our [website](#). On April 15th Friends of Science will webcast Michelle Stirling presenting *Resistance is Mandatory: Cruel and Unusual Punishment for Canadians Ahead with Climate Plan*. This will be free and open to the public, please keep an eye on your inbox for details and invite your friends to tune in.

Ever wonder what our reach is? We have our latest networking statistics below, just above Fundraising.

Net Zero by 2050 and Carbon Taxes

Some believe in a premise that "reasons": CO₂ is created when we combust hydrocarbons, CO₂ causes climate change, thus, combusting hydrocarbons causes climate change. Subsequently they leap to: curbing hydrocarbon use will reduce climate change, consumption taxes (*carbon taxes*) will reduce hydrocarbon use, thus carbon taxes will solve climate change. The key takeaway is that for carbon taxes to truly fix climate change we must believe that the control knob on climate change is CO₂ and that the majority of CO₂ comes from the combustion of hydrocarbons. No scientist has proven that CO₂ is the cause of climate change, so how will hydrocarbon consumption taxes do anything to mitigate a changing climate?

The ruling Liberals have given us [A Net-Zero Emissions Future](#) (by 2050). The present opposition does not have the courage to demand a common sense review of the science that is the foundation of this tax grab. Proper scientific debate is the only way to counteract this "carbon" emission reduction/offset scheme. Model based predictions of global warming continue to be wrong, only proving an overabundance of arrogant confidence by their proponents. Do we want to wait another 30 years to directly observe the inability of carbon taxes to change climate? Thinking we can control climate is foolish and a monstrous waste of funds. These solutions are still stuck on fixing global warming; a cooling planet will pose much larger problems. Should we not be investing in improving infrastructure to mitigate for the potential wild natural swings we see in our local environments?

Many industries are capitulating to the fraud. They fool themselves in believing if they "meet" the green dogma proponents "half way" they will receive special dispensation and be allowed to keep on functioning. We are now inundated with statements like "reduce our carbon footprint", "provide offsets" or "become sustainable" from industry and government leaders. But these are just words that prove these people have subjugated themselves to the Green Bullies. Mark my words if you give them a molecule they will eventually move the goal posts and take your entire industry. Don't believe me? Check out the [WEF's short summary](#) of our dystopian 2030 future. Note to the petroleum industry, see #6 and cattle ranchers see #4. Other industries need to rethink how they are being played and start to consider how to push back. Stand up for your industries. Supporting any premise that human CO₂ emissions are damaging to our environment is senseless.

CO₂ is not pollution. Everyone, worldwide, should demand that their elected officials demonstrate leadership in conserving our non-renewable resources (water, air and land) by creating strict penalties to stop real polluters, whether they are individuals, corporations or municipalities.

Let's stop the unfounded mistreatment of CO₂!

Andrew Bonvicini, P. Geoph.
President, Friends of Science

POLITICAL DEVELOPMENTS

The Biden Administration's Initial Climate Actions

During the US presidential campaign Joe Biden [touted](#) *The Biden Plan for a Clean Energy Revolution and Environmental Justice*, which proposed reaching net-zero emissions by 2050 and investing \$1.7 trillion over ten years while leveraging additional private, state and local investment of \$5 trillion. It also promised using the full authority of the executive branch from day one. Immediately after taking office on January 20 Mr. Biden kept this promise when he [issued](#) an *Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. This order included three climate-related matters:

- (Sec. 2) Immediate review of all Agency Actions taken by the Trump administration for consistency with the new administration's policies.
- (Sec. 5) "Accounting for the Benefits of Reducing Climate Pollution," which involves bringing back using the social costs of carbon dioxide, nitrous oxide and methane emissions to calculate cost-benefit analyses of regulatory actions.
- (Sec. 6) Revoking the March 2019 permit for the Keystone XL pipeline, which [prompted](#) 21 states to sue Mr. Biden, alleging he exceeded his presidential authority in revoking the permit.

On January 27 Mr. Biden issued [other executive orders](#) that center the "climate crisis" in US policy and national security considerations (including hosting a Leaders' Climate Summit on April 22 and developing the US nationally-determined contribution under the Paris Agreement); takes a whole-of-government approach to the crisis (establishing the first ever National Climate Advisor and a National Climate Task Force); leverages the federal government's footprint and buying power to lead by example (directing federal agencies to zero-emission electricity and vehicles, eliminating fossil fuel subsidies); rebuilds infrastructure for a sustainable economy; advances conservation, agriculture and reforestation; revitalizes energy communities (coal, oil, natural gas and power plant communities); secures environmental justice and spurs economic opportunity (delivering 40% of relevant federal investments to disadvantaged communities).

On February 26 Mr. Biden [restored](#) an Obama-era social cost of carbon, raising it from Donald Trump's \$8/t and [setting](#) it temporarily at \$51/t, with new Interagency Working Group on the Social Cost of Greenhouse Gases required to set a final number next January. The \$51/t figure is based on a discount rate of 3%. A 5% rate would push it down to \$14/t.

One thing that the Biden administration's climate plan apparently will *not* include is a carbon tax. While the US oil industry's largest trade group, the American Petroleum Institute supports market-based, economy-wide mechanisms and [is considering](#) throwing its weight behind a carbon tax, [it appears that](#) the administration prefers to exercise [regulatory authority](#) instead. As White House climate advisor Gina McCarthy put it: "My job is really to establish an action plan that uses every bit of our agency expertise, every bit of our federal dollars, every bit of our policies and our regulations and standards to actually drive the kind of change that we need to have in the United States." Moreover, carbon taxes are prominently visible to consumers, and attempting to impose one would run into solid Republican opposition. Better to focus on tools such as vehicle and energy efficiency standards until after the 2022 elections.

While the Biden Administration is initially using regulation, instead of legislation to pursue its climate agenda, many regulations, like the federal fuel economy rules for cars and trucks, [require](#) a lengthy rulemaking process with scientific analysis and public comment. For example, the Trump administration's final rollback of the Obama-era auto emission standards [went into effect](#) only in March 2020. Even after coming into effect, new environmental rules are likely to be challenged by lawsuits, potentially adding years to the process. This has some looking at Congress for meaningful climate action, since laws are stronger than regulation and can include spending power. However, a high-profile climate bill would test the balance of power in the Senate, where opposition by just one conservative Democrat, such as Joe Manchin of West Virginia. Mr. Manchin has said that he [will block](#) any infrastructure and climate bill that lacks any Republican support.

Now that the \$1.9 trillion economic stimulus package has been [signed into law](#), the first real test for the new administration's climate agenda will be a \$3 trillion [pair of infrastructure bills](#) that put climate change front and center. Reportedly they will include \$1 trillion for road, bridges, rail lines, ports, electric vehicle charging stations, grid upgrades and a million energy-efficient household units. The remainder will be set aside for

FRIENDS OF SCIENCE SOCIETY

rural broadband, building and renovating schools and job retraining for millions of workers. Getting this package through Senate will be problematic.

Bright Green Lies

Bright Green Lies: How the Environmental Movement Lost Its Way and What We Can Do About It is the title of a new environmental documentary that will debut on April 22 (Earth Day) with a [livestreaming premiere](#) and live Q&A with the filmmaker and authors. The film will be available on iTunes, Google Play, YouTube Movies and Amazon Prime on April 23. *Business Wire* has written [a review](#) of the documentary.

Since March 16 *Big Green Lies* in book form has been available from Amazon (paper and Kindle versions). The authors, [Derrick Jensen](#), [Lierre Keith](#) and [Max Wilbert](#), are “deep green” environmentalists – for them the “war against the earth” began, not with the Industrial Revolution, but 12,000 years ago when humans took up agriculture. In the book they debunk the views of the “bright green” environmentalists who claim that the unsustainable aspects of our life today can be solved by current technologies and processes, such as photovoltaic cells, wind power generators, recycling, etc. To the authors, “sustainability” means a way of life that doesn’t require importation of resources. For example, since a city imports its food, energy, water, etc., it is denuding the landscape, and is therefore not sustainable. As the book’s prologue states: “Our way of life doesn’t need to be saved. The planet needs to be saved from our way of life.”

The authors begin with three “hard truths”:

1. Our current way of life requires industrial levels of energy.
2. Fossil fuels, especially oil, are functionally irreplaceable, since technologies like solar, wind, solar and biomass will never scale up to power an industrial economy.
3. These technologies require industrial-scale devastation: open-pit mining, deforestation, soil toxification, extirpation and extinction of vulnerable species – as well as fossil fuels.

Over the past 20 years bright green environmentalism has become mainstream, because it tells a lot of people what they want to hear: you can have industrial civilisation and a planet too. So, the authors decided to write the book as an introduction to the lies common with the bright greens (among the latter they include such stalwarts of the environmental movement as [Bill McKibben](#), [Lester Brown](#), [Naomi Klein](#), [Mark Z. Jacobson](#), and [David Suzuki](#)).

The book’s list of green lies includes:

- **Solar** (waste of money in terms of climate benefit; dependent on mining, industrial processing using hazardous and toxic chemicals with emission of greenhouse gases and polluted wastewater; huge source of electronic waste; just another way to power industrial capitalism).
- **Wind** (turbines are mainly constructed from steel and concrete, with wood and petrochemicals used in the blades, with nacelles requiring copper and rare earths; require electrical substations, transmission lines, control facilities, access roads and vehicles to haul maintenance teams; also dependent on mining and associated pollution; require tree clearing, killing of bats and birds; cause infrasound; have low power density; cause surface warming on the lee side of the turbines; problem of waste disposal).
- **Green Energy Storage** (requires mining of lithium with large amounts of water and causes destruction of land and lakes; energy density of lithium batteries is 1/46 that of gasoline; toxic chemicals in fuel cells; pumped hydro storage causes similar environmental destruction as hydro dams).
- **Efficiency** (increased efficiency results in more energy use with associate environmental effects; manufacturing LED lighting involves a supply chain of mined materials, some of them toxic).
- **Recycling** (scrap metals require high temperatures to recycle; for all materials there is energy needed for transportation, sorting and processing; glass and plastic resist decay; 100% of metal recycling is impossible due to mixing of alloys in the waste stream; recycling lithium batteries is uneconomic; recycling e-waste is difficult and hazardous, often outsourced to poor nations).
- **The Green City** (all cities require routine importation of resources and resulting use of land outside the cities; any city requires asphalt-paved roads, railways and vehicles; with too many people in too small an area, all resources have to be imported, so no city can be “sustainable”).
- **The Green Grid** (renewables depend more on the grid for power distribution than does fossil fuel-generated electricity; the modern US grid can provide only 6.7% of the energy needs from renewables; power grids destroy land; oil, coal and gas are essential to the manufacture, transportation, assembly, maintenance, decommissioning and disposal of transmission lines and towers).

FRIENDS OF SCIENCE SOCIETY

- **Hydropower** (dams kill rivers, fish, forests, marshlands and grasslands; they subvert or destroy indigenous rights; they concentrate mercury; their reservoirs cause methane emissions).
- **Other Lies** (geothermal, carbon capture, tidal power, biofuels, LED lighting, offshore wind farms, harvesting the energy from evaporating water, and geo- or climate-engineering with aerosols).

When it comes to solutions, the authors' first step is simple: stop industrial civilization (i.e., anything based on extraction, especially the "so-called green energy projects") and accept that there is no solution that leaves our current way of life intact. The second step is to "help the land heal" by letting plants and forests flourish and so to reduce atmospheric CO₂. They don't advocate killing all humans, just changing our lifestyle dramatically. They want "those of us who care" to form: "massive movements to relentlessly impede the functioning of industrial civilization, using every tactic: political pressure, legal challenges, economic boycotts, civil disobedience, and whatever else becomes necessary."

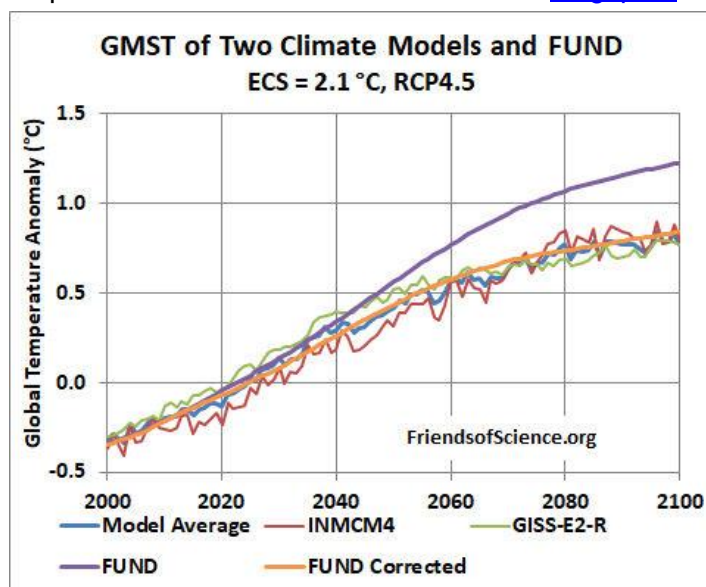
Bright Green Lies is coming out exactly one year after Michael Moore's and Jeff Gibbs' documentary [Planet of the Humans](#) and ten months after Michael Schellenberger published [Apocalypse Never: Why Environmental Alarmism Hurts Us All](#). What's common to all three exposés is that they are products of environmental activists who have come to realize that "green" solutions will neither stop global warming nor cure other environmental ills. When researchers report findings they hate, you know they're being truthful.

Ian Cameron
Director, Friends of Science

SCIENCE NEWS

Correcting FUND's Temperature Response to CO₂

The [December 2020 Science News](#) featured a test I performed of FUND's temperature response to CO₂ forcing. FUND uses a very simple climate model to convert radiative forcing from greenhouse gases to temperatures. It should match the time response of climate models for a given emissions scenario and climate sensitivity. The test showed that the FUND projects global average temperatures increasing much faster than climate models. When equilibrium climate sensitivity (ECS) is set at 2.1 °C, the temperature rise from 2000 to 2100 with RCP4.5 emissions is 0.44 °C or 38% greater than climate models. A 2-box ocean energy balance model can very well replicate the temperature rise of climate models. A [blog post](#) by Dr. Isaac Held provides a set of equations and information about this model. The top 70 m of the oceans are well mixed and in near temperature equilibrium with the surface. Heat flow from this layer to the deeper ocean acts as a negative feedback, inhibiting the surface temperature rise. I created this model in Excel to replace the erroneous FUND temperatures. The results are shown in the graph. The purple line is the FUND temperature profile. The 2-box energy balance model is the orange line which well matches the model average blue line. Using a more realistic ECS of 1.0 °C, a 30% increase in the CO₂ fertilization effect as [recommended here](#) and corrected [energy](#) impacts, FUND gives a beneficial impact of emissions of US\$4040 billion in 2100 relative to 2000. The impact with the 2-box corrected temperatures would be US\$2570 billion, or a loss of US\$1470 of estimated net benefits of warming.



Michael Mann Cancels the AMO

Michael Mann, the author of the [hockey stick](#) with which he attempted to remove the Medieval Warming Period and the Little Ice Age from history, now proposes to erase the Atlantic Multidecadal Oscillation (AMO) from more than 8,000 years of history. In his paper, entitled [Multidecadal Climate Oscillations during the Past Millennium Driven by Volcanic Forcing](#), he proposes that the AMO doesn't exist since climate models

FRIENDS OF SCIENCE SOCIETY

are unable to replicate the AMO. This circular reasoning was rebutted by Judith Curry in a detailed [review](#) of several AMO papers including her "Evaluation of the Mann et al. paper" where she concludes:

"With that context, you can see why I am not accepting the aerosol explanation (pollution and/or volcanoes) for an explanation of what causes the AMO. ... So, what exactly is wrong with Mann's analysis? He relies on global climate models, which are inadequate in simulating the AMO. ... While climate models exhibit various levels of decadal climate variability and some regional similarities to observations, none of the model simulations considered match the observed signal in terms of its magnitude, spatial patterns and their sequential time development. ... Relying on global climate models, which don't adequately simulate the multi-decadal internal variability, to 'prove' that such multi-decadal internal variability doesn't exist, is circular reasoning (at best). How does this stuff get published in a journal like Science? Peer review is sooooo broken. ... In closing, Mann's quest to cancel the Medieval Warm Period and now the AMO, in the interests of showing that recent warming is 100% anthropogenic, is not at all convincing to scientists who understand anything about climate dynamics and global climate models."

U.S. Pacific Coastal Droughts Are Driven by Internal Variability

A [new study](#) examines the roles played by the Pacific Ocean and internal atmospheric variability on U.S. Pacific coast droughts. Droughts were defined using summer soil moisture measurements. The authors used two climate models forced with observed sea surface temperatures from 1856 to 2012 to quantify the influences of the tropical Pacific and internal atmospheric variability on coastal droughts. The study found that internal atmospheric variability accounts for 84% of drought severity. Cold phases of the Pacific Ocean play a secondary role and contribute only 16% of drought severity. Analysis of precipitation and soil moisture along the Pacific coast corroborate these findings. The small effects of sea surface temperature "suggests limited predictability of pan-continental droughts." It also implies that greenhouse gas induced ocean warming is unlikely to have a significant effect on coastal droughts.

Antarctica Fails to Warm Over Past Four Decades

High estimates of sea level rise used in some integrated assessment economic models (IAM) may be due to speculative calving and melting ice in Antarctica. The DICE IAM [forecasts](#) a rate of sea level rise that is about double that by the IPCC. This is strange because Antarctica has failed to warm over the last four decades. Pierre Gosselin and Kirye at NoTricksZone compiled [surface station temperature records](#) of East Antarctica, where surface temperatures are colder than on the peninsula. The data from 1983 reveals that 8 of the 12 surface stations have a cooling or no warming trend at all. NASA's own data show there's nothing to be alarmed about in Antarctica. The Russian station (Mirnyj) has data starting in 1955 and it shows no significant trend. "Obviously the southern pole is not warming along like the rest of the globe."

Ken Gregory, P. Eng.
Director, Friends of Science

LATEST NETWORKING/OUTREACH STATISTICS

Websites	~42,000 users with >154,000 views /year
Blog	~30,000 users with >55,000 views /year
Twitter	>35,200 subscribers
Facebook	>34,000 followers
YouTube	>43,300 subscribers
LinkedIn	2,412 followers
Instagram	>1,000 posts 166 followers
Press Releases	>40 million potential audience per news release

FUNDRAISING COMMITTEE: DONATIONS

We are truly thankful for all of our faithful and generous members and financial supporters. Without your consistent support of our organization, we would have failed in communicating with the public a long time ago. After 18 years of providing insights on climate and related energy policies, we find that more and more

FRIENDS OF SCIENCE SOCIETY

people finally understand and appreciate our efforts. These efforts will be even more needed following the recent ruling by the Supreme Court in favour of the Federal Government's ability to force a carbon tax.

COVID-19 resulted in 2020 being a year of lockdowns worldwide and made our job for communicating our message even more difficult. 2021 has the appearance of an equally challenging year with unprecedented political, social and financial turmoil.

We continue to lose more freedom each day for getting our message out while the green crony capitalists and the media have ramped up their mistruths with the support of various Governments from the local level up. Regardless, Friends of Science vows to stay focused on our mandate by publicly communicating the science and the empirical evidence regarding climate change.

We assure you that we do our best to utilize your generous donations in the most effective way we can to gain as much exposure as we can for minimal cost. In 2020, we limited expenditures to one billboard, a number of low-cost videos and two live streaming presentations.

This year with your generous donations we are hopeful to be able to continue to produce our popular videos, our many press releases and other communication opportunities including guest speaking at events or attending community gatherings to make our voices heard. We will continue our valuable social media outreach, our informational website by relying on many volunteer hours. However, we continue to need more paid support to assist with time consuming proactive research to facilitate participating in more community debates in the face of an ever growing and strong opposition.

In addition to our regular community outreach, we are planning to develop potentially marketable communication packages to fund more billboards and/or media Op-eds. We are hopeful to be able to acquire sponsors for each package. You will of course be kept informed of what these packages will include and ask for any assistance you can provide for directing us towards potential sponsors. You as well, may along with a group of other members, be interested in participating as a sponsor or a shared sponsor of a package you feel will have noticeable influence in our quest to communicate the truth. It is our intent to solicit sponsors from within the various industries and from interested parties we feel can directly benefit from our outreach or who support what we do.

We continue to believe we need to push back and provide the information the main-stream media chooses to not report. We must not stop communicating empirical evidence and scientific truth. Stopping would diminish our commitment to the freedom and future welfare of our children, grandchildren and those less fortunate than ourselves.

Please share our content (listed at the end of this newsletter) with friends and family and assist us to grow our audience through this sharing and along with your financial support to maintain our two websites (friendsofscience.org climatechange101.ca).

Needless to say the months ahead will be some of our greatest challenges with many unknowns as we watch countries across the globe move towards greater totalitarianism.

Please join the battle in any way you can.

As you can see our operational budget funding right now will unfortunately only take us through September 2021.

We need you to help us find more members and donors!

We recognize these are tough times with limited exposure to the community as COVID continues to linger, but we need you to reach out to your friends, tell them the value you receive from our messaging and encourage them to join.

On a last note, have you personally considered making monthly contributions to Friends of Science?

Setting up your recurring donation only takes a few minutes. Please call us at 1 888 789 9597 Ext 2 to join a growing group of monthly donors.

Contributions can be made at friendsofscience.org by clicking on "Become a Member/DONATE" in the upper right of the home page. The PayPal donation link will allow you to pay with your credit card even if you do not have a PayPal account. Should you experience technical difficulties with online processing, please try

Investigating the Science of Global Climate Change



FRIENDS OF SCIENCE SOCIETY

turning off any ad blocker as this sometimes interferes with the program and we do not have ads on our site. Otherwise, if you prefer, you may phone us at 1-888-789-9597 Ext 2 to pay by credit card. Alternately, you can mail donations to Friends of Science at the following address:

Friends of Science Society

P.O. Box 23167 Mission P.O.

Calgary AB Canada T2S 3B1

Toll-Free Telephone: 1-888-789-9597 Ext 2

E-mail: contact@friendsofscience.org

MEMBERSHIPS

Thank you to our members for your support and helping your society spread the truth about climate change. All of our funding comes from our membership; comprised of donations and the modest membership fee.

Without your support, our outreach through our many social media platforms would not be continuing to grow and potentially reach millions of people. Since you are a member and you are reading this, we make the leap that you believe in what we do and like how we do it. Our call to action for you is to please [pledge](#) an amount then **circulate this newsletter to twenty or even one of your friends** requesting they match your donation or sign up for a membership.

It is critical that we grow FoSS's ability to get our message out. Times are hard everywhere. We need your help to keep going. Please, help us solve our ongoing funding challenge. If you have constructive comments or ideas which would improve the ability of your society to advance its mandate, we would truly love to hear from you.

VOLUNTEERING

Do you want to make a difference? For our voice to continue being heard, we need much more support. We need you! Please email us at volunteering@friendsofscience.org, put Volunteer in the subject and tell us what you would like to help with.

This debate matters, you are making a difference.

MICHELLE'S BREAKING NEWS!

Very busy first quarter: I presented at the [FreedomTalk Conference](#) this spring on "[Carbon Tax to Stop Climate Change? Science or Science Fiction?](#)" and "Bill C-12". Subsequently I was interviewed by Paul Hinman on his "Live@5" show and this past week I was invited on [Cory Morgan's Western Standard](#) show. Cory Morgan's curiosity was piqued by our critique, by our volunteer team of Professional Engineers, of a [misleading CTV News story](#) on Electric Vehicles. The same team wrote the cost-benefit analysis of the Carmangay Solar Farm: [Carmangay Solar Project – Good for Carmangay... Terrible for the Rest of Us](#)

Supreme Court Trial – It was about constitutionality of carbon tax, not climate science.

Big News: The March Supreme Court's decision on the constitutionality of the carbon tax and the media furor over an element of the Conservative Party's Conference – "[Climate Change is Real?](#)" Again, the media do a disservice to the public by quoting these four little words out of context. Robert Lyman weighed in *schooling* the media with "[Is Climate Change Real?](#)" And I bring you a [video explainer version](#) of it.

[Erin O'Toole on Climate Change – The Speech He Should Have Given](#) is my re-imagining of his speech.

More media critiques on our blog:

- "[Divisive](#)" [Nemeth Report Points out the Need for Journos to Up their Game](#) is a summary of how journalists fail to challenge climate dogma.
- "[Avoiding the Evidence – Tar Sands Campaign Denialism](#)" – [An Open Letter Response to Martin Olszynski's Submission to the Public Inquiry into Anti-Alberta Energy Campaigns](#) is directed at a University of Calgary Associate Professor of Law.

New Science contributions to the blog:

- [A Critique of Geological Society of London Scientific Statement](#)
- [Russian Scientist Warns of Impending Cooling due to Solar Inactivity](#) Habibulov Abdussamatov's PowerPoint. A 2004 Russian [Retrospective - The Kyoto Protocol: An Assault On Economic Growth, Environment, Public Safety, Science, And Human Civilization Itself](#) is enlightening.
- [The Global Mean Temperature Anomaly Record](#) video is the presentation of the important Drs. Christy and Lindzen paper "[The Global Mean Temperature Anomaly Record - How it works and why it is misleading](#)". We are very pleased that *CO₂ Coalition* (publisher) and the authors agreed to allow Michelle Stirling present their paper. We deem this critical as this important paper was [censored by LinkedIn](#) and it was not getting the attention it deserved

Latest from Robert Lyman's Desk:

Blog posts that "Follow the Money" on Climate Cash:

- [A Landscape Littered with Climate Cash](#)
- [Never Enough – The Incessant Demands Of Climate Finance](#)

Climate Policy Articles and Reports:

Robert Lyman notes there are [Storm Signals for COP 26 in Glasgow](#)



Pick Your Poison

Lyman argues that the debate over what role carbon pricing should play is a distraction from the far more important questions that Canadians should ask themselves about the measures that governments are taking to reduce emissions in Canada.

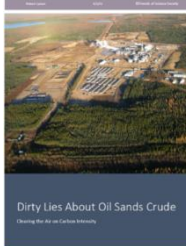
[Pick Your Poison on Climate Policy vs Effective Management of Economy and Tax Dollars](#)



When Giants Arise

A report on how by 2050 the "west" will be surpassed by at least two, and possibly more, global economic powers that will be the real "leaders" with respect to emissions decisions.

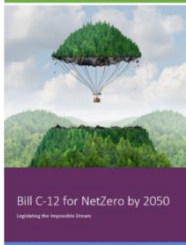
[WHEN GIANTS ARISE: The Real World of GHG Emissions and Growth](#)



Dirty Lies About Oil Sands Crude

In this report Robert demonstrates that Canadian crude oil GHG emissions cannot be distinguished, with any statistical certainty, from the crudes produced in 31 of the top 50 oil producing countries.

[Dirty Lies About Oil Sands Crude: Clearing the Air on Carbon Intensity](#)



Bill C-12 For Net Zero By 2050

Lyman investigates why is this now Canada's legally required goal? It is not required by the Paris Accord, the federal government has previously set several GHG emission reduction goals without needing any new laws, so why legislate now?

[Bill C-12 For Net Zero By 2050 – Legislating The Impossible Dream?](#)

The ultimate compilation of Lyman's key Green Agenda [reports are on our blog.](#)



Many more reports are summarized here: [A compilation of our all time favourites](#)

FRIENDS OF SCIENCE SOCIETY

New YouTube Videos



SPECIAL FREE FoSS FEATURE – the complete trilogy (June, July, September 2020) on climate change and freedom of speech by award-winning, independent European filmmaker Marijn Poels.

Poels is renowned for producing over 50 films on social justice in conflict and poverty countries, where most people struggled to have enough to eat. He then decided to investigate the paradigms in Climate Change.

To view:

[MARIJN POELS' DOCUMENTARIES](#) will take you to all three or find them on our [YouTube](#) site.



GLOBAL WARNING

Friends of Science Society is pleased to partner with award-winning Calgary filmmaker Mathew Embry and producer Peter Beyak to offer Video-on-Demand of “Global Warning” – a fantastic documentary that explores the complex climate and environmental community from many different viewpoints – especially as it relates to our hometown of Calgary and the economic and human damage wrought by the Tar Sands Campaign. We are pleased to help break the media blackout that this film received on its release over a year ago. This is sponsored content, so we receive a small portion of the viewing fee.

We also have a number of video interviews with [filmmaker Mathew Embry](#) on our [YouTube](#). [Watch “Global Warning” now!](#)



#KidFriendly #ClimateTales for the Whole Family:



[Grampy the Garden Gnome Stops Boiling Oceans](#)



[The Tiny Rabbit Family "Dad, How Big is the Sky?"](#)

Still haven't subscribed to our blog? Don't delay. It's easy and best of all FREE! Enter your email on the [home page of the blog](#) and click Subscribe. That's it. Now you will get an update as soon as a new blog is posted.

Our full list of social media and web platforms:

bilingual website climatechange101.ca
climate change library friendsofscience.org
hugely active Twitter feed twitter.com/FriendsOfScience
very active Facebook page facebook.com/FoSClimateEd
400+ mostly short videos youtube.com/FriendsofScience/videos
and now on LBRY lbry.tv/@FriendsOfScience or odysee.com/@FriendsOfScience
blog with reports and articles blog.friendsofscience.org
LinkedIn page linkedin.com/company/Friends-of-Science-Society
Instagram instagram.com/fosclimateed/

Please continue to share our materials by email, social media or in any way you can.