

*FOS MEMBERSHIP QUARTERLY NEWSLETTER*  
*No. 50*

**“FoS is dedicated to providing the public with insight into Climate Science”**

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**PRESIDENT’S MESSAGE**

I wish to reiterate that if you are concerned about the education and welfare of your children as a result of the misinformation and abuse of science regarding man’s ability to control the climate then please consider volunteering to help us. We will gladly find a role for you befitting your interests, aptitude and resources.

**Capitalizing on Success**

This summer the directors and other key people of Friends of Science (“FoS”) will be organizing sub-committees with well-defined roles and mandates in order to most effectively communicate our message to the public. Each sub-committee will have a chairman responsible to lead a small group of volunteers and to communicate and coordinate with the directors of FoS. The goal will be to maximize the impact of those of you who volunteer on the sub-committee of your choice. We expect that we can provide a list of sub-committees and their mandates to you early this fall. Obviously we will be most interested in our members offering to volunteer on one of these sub-committees.

**Everyone Has a Role**

Even if you do not join with us on one of our sub-committees you can have an indispensable role in communicating the truth.

FoS provides the ground work and the resources required to reveal the truth, but this battle will be won, or lost, by **word of mouth**; by politely and respectfully speaking truth to agenda driven political, ideological and economic propaganda which corrupts science and empirical evidence to further climate alarmists’ misguided goals.

As “climate change deniers” we face the significant impediment of rampant political correctness. Unfortunately, this too frequently causes us to withhold an opinion that runs counter to the “consensus” commonly expressed in the main stream media or by our political leadership. It takes courage and finesse to challenge friends’, neighbours’ and associates’ understanding of climate science in a respectful way while remaining wary of the political correctness minefield.

As we at FoS are all too aware that the alarmists are trying hard to curtail the freedom of speech of those who take a stand against their misinformation and misuse of science. If they are successful in perpetrating their agenda, even if only for a few years, the costs will be enormous.

I encourage each of you to take the time to review the quality of our work as published on our blog; <https://friendsofsciencecalgary.wordpress.com/>.

For current articles and opinions check out our very active Facebook page; <https://www.facebook.com/Friends-of-Science-244675788944611/>. Join the conversation.

For a virtual library of resources on the issue of climate change look to our website to provide the answers or resources you want at; <http://www.friendsofscience.org/>.

If you have questions, need assistance or want to help us please email or phone us. We are here to help you to communicate the truth. It is up to YOU and people like you who will speak the truth to conquer misinformation and the misuse of science to perpetrate a faulty agenda. The stakes are high.

Warren Blair  
President, Friends of Science

## POLITICAL DEVELOPMENTS

### Ontario's New Climate Plan

In mid-May the *Globe and Mail* [leaked](#) a draft marked “Cabinet Confidential” of the Ontario government's Climate Change Action Plan. This included spending more than \$7 billion over four years to affect every aspect of life – from what people drive to how they heat their homes and workplaces – in a bid to slash the province's CO<sub>2</sub> footprint. On June 8 the government officially [released](#) the plan. Some highlights:

- The Minister of Environment's justification: “Climate change is a fact in our daily lives – raising the cost of our food, causing extreme weather that damages property and infrastructure, threatening outdoor activities we love, and melting winter roads that provide critical seasonal access to remote northern Indigenous communities.”
- The CCAP's aim is to cut greenhouse gas emissions by 15% below 1990 levels by 2020, 37% by 2030 and 80% by 2050.
- To help finance the CCAP, a cap-and-trade scheme, under the Western Climate Initiative (with Quebec and California) is expected to generate \$1.8-\$1.9 billion/year. Details are sketchy, as the province will begin consultations in late 2016, and the other two jurisdictions have just begun their own consultations to define the post-2020 program guidelines. Moreover, California's recent auction of carbon credits [brought in](#) a paltry 2% of the revenues it was expected to generate. The Golden State's cap-and-trade regime now [faces](#) an uncertain future.
- The WCI cap-and-trade scheme will have an emissions price of \$18/tonne in 2020 (in 2016 dollars).
- The program is all carrot and no stick. The province will establish a green bank to finance low CO<sub>2</sub> technologies and reduce emissions from buildings.
- The CCAP establishes an electric and hydrogen passenger vehicle sales target of 5% in 2020. EVs will get a rebate of \$14,000/vehicle and incur no sales tax. There are other incentives, such as free overnight charging, more charging stations and EV-ready homes and workplaces. There is also a “cash for clunkers” program to encourage Ontarians to trade in their old cars for new low-emission vehicles. (As she left the public announcement event of the CCAP, Premier Kathleen Wynne [was filmed](#) leaving in a V8-powered Chevrolet Suburban.)
- To reduce emissions by commercial road transport, the province will help establish a network of natural gas and “low- or zero carbon” fueling stations. Because conventional natural gas is a fossil fuel, the CCAP [introduces](#) the concept of a “low-carbon content natural gas” or “renewable natural gas” using methane released from landfills, agricultural residues, livestock manure, food waste and sewage treatment plants.
- There will be incentives to improve energy efficiency in residential buildings, schools and hospitals, free energy audits.
- The government will move to a “carbon-neutral public service.”

The complete 85-page plan can be downloaded in pdf format [here](#). At the end of the document is a table summarizing the various actions, funding, estimated GHG reductions and estimated cost per tonne of CO<sub>2</sub> reduction. The total funding is \$6.0 - \$8.3 billion, to achieve a GHG reduction of 9.3 million tonnes in 2020. Only three of the actions show costs of less than \$30/t – the amount of Alberta's legislated carbon tax in 2018. These actions are: Increase use of lower-carbon transportation fuel – \$20/t; Promote low-carbon energy supply and products for industry and buildings – \$5/t; and Help industries adopt low-carbon technologies – \$30/t. The others range from \$50/t to \$525/t.

In the *National Post* Terence Corcoran [targets](#) the economic fraud of Ontario's carbon pricing plan. He refers to a 1-minute video, *Kids Talk Climate Change*, that [manipulates](#) nine-year old children into making statements on climate science, declaring that climate change “sucks” and “it's not like it's fake or anything.” The CCAP gives Ontarians the worst of both worlds: a carbon tax (through cap-and-trade) and a closetful of regulatory straight jackets. Or, as the *Globe and Mail* [puts it](#), the CCAP “... threatens to become a megaproject of micromanagement.”

The pro-AGW *Huff Post* [was critical](#) of the plan, stating that the new building requirements are going to drive up the cost of housing. Requiring all small buildings to become carbon neutral could mean a de facto phase out of natural gas. The renewable energy content for natural gas will drive up its cost. Certain provisions, like the subsidies for electric super cars, will benefit only the wealthy.

The *Globe and Mail's* Jeffrey Simpson has long been a steadfast critic in his columns about foot dragging by various federal and provincial governments in the “fight against climate change.” But now even he is coming to accept the writing on the wall. In a piece titled *A renewable reality: Fossil fuels aren't going anywhere*, Mr. Simpson [scoffs at](#) the artwork for Ontario's CCAP, circa 2050, as “...a paradise of cyclists, electric cars, wind turbines, solar panels, dense urban environments and homes powered by geothermal energy.” Despite government prodding, subsidies for renewables and the clamour of rent seekers, fossil fuels will be the dominant energy source for a long time.

### **Ratifying the Paris Agreement**

On April 22 the UN held a ceremony as the Paris Agreement was opened for national leaders to sign, and 177 have done so. Justin Trudeau [did the honours](#) for Canada and John Kerry [signed](#) for the US. The Agreement comes into force when 55 countries accounting for 55% of global emissions have ratified it. According to the Paris Agreement Ratification Tracker only 17 countries accounting for 0.05% of emissions had [ratified](#) as of May 21, 2016.

Canada is expected to ratify this year, as Mr. Trudeau indicated at the signing ceremony that he intends to table the Agreement in Parliament for ratification. In the case of the US the issue is more complicated as US law recognizes several routes for entering into international agreements, of which the most stringent is under the Constitution's Article II (Senate approval by two-thirds majority.) The different routes are [described](#) in a May 2015 report titled *Legal Options for US Acceptance of a New Climate Change Agreement*.

Besides Article II treaties, US law recognizes “congressional-executive agreements” (requiring simple-majority approval in both houses of Congress), “treaty-executive agreements” (accepted by the president under a prior treaty), and “presidential-executive agreements” (accepted by the president). Regarding the Paris Agreement, the president has three options (p. 13):

- Submit the Agreement for ratification under Article II.
- Seek congressional approval by both houses enacting a law approving the Agreement.
- Using the President's existing authority to approve the Agreement without seeking any Senate or congressional approval.

According to *CBS News*, President Obama [will choose](#) the third option, ratifying the Agreement in December just before he leaves office. Since the courts would be reluctant to intercede in a dispute between the executive and legislative branches, this leaves Congress the choice of (a) accepting the president's authority, (b) passing a law rescinding the president's approval, or (c) refusing to vote any funding needed to implement US compliance with the Agreement.

The European Commission [is preparing](#) for quick ratification by the EU, but the process requires approval by the European Parliament and the European Council representing governments of the member states. While a parliamentary approval requires a simple majority, all 28 members of the Council [must approve](#) ratification. It [could take](#) two years of internal wrangling before the EU can formally ratify.

The *Global Warming Policy Forum* has an [illustrative scenario](#) of how early ratification might be secured without the EU. If China (20.09%), the US (17.89%), Russia (7.53%), India (4.10%), Japan (3.79%), Canada (1.95%), Mexico (1.70%), Indonesia (1.49%), Australia (1.46%) and Argentina (0.89%) ratified in 2016 this would account for 60.9% of emissions, and the Agreement would come into effect. However, Russia [wants](#) a clear set of rules before it ratifies, and India is avoiding making any explicit commitments to do so. Without the support of these two countries, quick ratification is impossible.

Ian Cameron  
Director, Friends of Science

## SCIENCE NEWS

### Alberta's Proposed Climate Plan: A Burden with No Benefit

The Alberta government intends to shut down coal-fired power plants at a cost of at least \$22 billion and impose a carbon tax that will add another 6.73 ¢/L on gasoline and 1.52 \$/GJ tax on natural gas by January 2018. The plan is expected to reduce global temperatures by 0.00007 °C by 2030. The Alberta Climate Panel did not do any review of climate sensitivity or economic analysis, but relied on estimates of the social costs of carbon dioxide (CO<sub>2</sub>) emissions by a USA Interagency Working Group (IWG). Empirically-based estimates of climate sensitivity have declined dramatically in recent years, but the IWG failed to use the most recent estimates. They instead used high estimates from climate models. Those models over-warm the tropical atmosphere (surface to 15 km) from 1979 to 2015 by a factor of 3, indicating the models are far too sensitive to our CO<sub>2</sub> emissions. Two of the three economic models that the IWG used fail to account for CO<sub>2</sub> fertilization and benefits of warming.

Using an energy balance method and accounting for natural warming from the Little Ice Age and urban warming, my best estimate the warming from 2016 to 2100 due to greenhouse gas emissions is 0.60 °C assuming an exponential growth of CO<sub>2</sub> and CH<sub>4</sub> concentrations. By comparison, the IPCC high emission scenario (RCP8.5) estimates the temperature rise will be 3.5 °C, which is almost six times too high. Only the FUND economic model includes CO<sub>2</sub> fertilization effects and it shows that the world benefits from CO<sub>2</sub> emissions by about US\$17/tCO<sub>2</sub>. The benefits of CO<sub>2</sub> fertilization, reduced cold-weather-related mortality, lower outdoor industry costs (eg. construction costs), increased arable land area and reduced heating costs greatly exceed harmful effects of warming on a global basis. Canada benefits from CO<sub>2</sub> emissions much more than the world average. See [here](#).

### Climate Model Predictions of Rain and Drought Are Wrong

Many climate models predict that dry regions will be drier and wet regions will get wetter with global warming. But scientists at Stockholm University analyzed proxy reconstructions of rainfall and found that over the last millennium "prominent seesaw patterns of alternating moisture regimes observed in instrumental data across the Mediterranean, western USA and China have operated consistently over the past 12 centuries." The paper says that the reconstruction "does not support the tendency in simulations of the 20th century for wet regions to get wetter and dry regions to get drier in a warmer climate". See [here](#). An analysis of precipitation changes from 1000 stations with more than a century of data finds "No significant global precipitation change from 1850 to present". This indicates deserts/jungles are neither expanding nor shrinking due to changes in precipitation patterns." See [here](#).

### Rise in CO<sub>2</sub> has Greened Planet Earth

A major study by 32 authors from eight countries found a widespread increase of greening over 25% to 50% of the global vegetated area, with the CO<sub>2</sub> fertilization effect explaining 70% of the observed greening trend. Green leaves produce sugars that are the source of food, fiber and fuel for life on Earth. The warming climate since 1982 explains 8% of the greening trend, predominantly in the high latitudes and the Tibetan Plateau. The study used three satellite leaf area index records to determine the greening trends and used ecosystem models to allocate the greening trends during 1982 - 2009 among four key drivers. The increase in vegetation is considerably larger than suggested by previous studies. Lead author Dr. Zaichun Zhu said "The greening over the past 33 years is equivalent to adding a green continent about two-times the size of mainland USA (18 million km<sup>2</sup>)". The abstract is [here](#) and the news release with a greening map is [here](#).

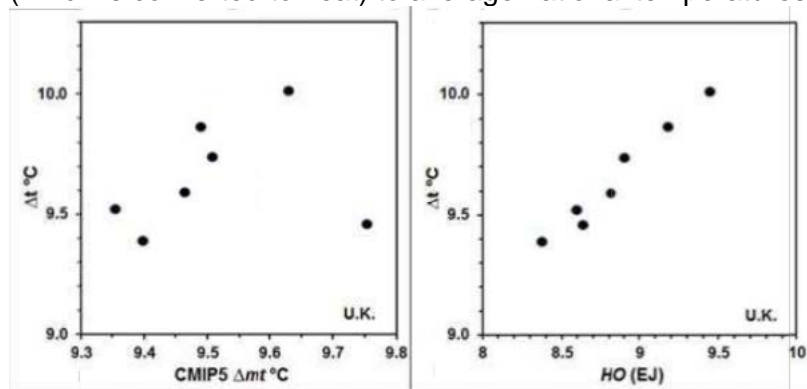
### Cloud Studies Point to Low Climate Sensitivity to CO<sub>2</sub>

The effect of aerosols on clouds is one of the largest sources of uncertainty in climate science. Recent experiments using the large CLOUD (Cosmics Leaving Outdoor Droplets) chamber at the CERN, the European Organization for Nuclear Research, show that organic vapours emitted by trees produce abundant aerosol particles in the atmosphere and these particles can rapidly grow to sizes big enough to seed cloud droplets. Climate modelers assumed that sulfuric acid is the key player in cloud formation so that the pre-industrial sky was less cloudy than now due to a lack of sulfur emissions from the use of fossil fuel. The new results show that modelers can't offset as much CO<sub>2</sub> forcing with aerosol cooling. The studies suggest that future temperature increases from greenhouse gas emissions will be much less than currently projected by

climate models. The CLOUD experiments also find that ions from galactic cosmic rays strongly enhance the production rate of the biogenic particles. The cosmic rays are modulated by changing solar activity, so they affect cloudiness and global temperatures. See the Sciencemag article [here](#).

### The National Heat Island Effect

The IPCC claims “the locations of greatest socioeconomic development are also those that have been most warmed by atmospheric circulation changes.” That is, cities and densely populated countries are located where natural warming is greatest, a nonsensical claim. A study compared the national energy consumption (which is converted to heat) to average national temperatures for the United Kingdom and Japan.



The chart on the left shows the climate models do a very poor job of predicting temperatures in the U.K region ( $r^2 = 0.10$ ). The right chart shows energy consumption explains measured temperatures very well ( $r^2 = 0.89$ ). The abstract says “It is clear that the fluctuation in [temperature] are better explained by energy consumption than by present climate models.” The paper implies that the temperature indexes used by the IPCC are seriously contaminated by the effects of urban development, so the warming forecasts are too high. See the paper [here](#).

Ken Gregory  
Past Director, Friends of Science

### New Reports and Videos

COMING SOOOON: New bi-lingual plain language website w bi-lingual twitter feed! #JointheDebate  
Climate Change-101 web-site revamped

Alberta Climate Plan – A Burden with No Benefit

[http://www.friendsofscience.org/assets/documents/AB\\_Climate%20Plan\\_Economic\\_Impact\\_Gregory.pdf](http://www.friendsofscience.org/assets/documents/AB_Climate%20Plan_Economic_Impact_Gregory.pdf)

Geothermal for Alberta? A Case for Caution

<https://friendsofsciencecalgary.wordpress.com/2016/06/21/geothermal-for-alberta-a-case-for-caution/>

Why Renewables Cannot Replace Fossil Fuels by 050

<https://friendsofsciencecalgary.wordpress.com/2016/05/31/why-renewable-energy-cannot-replace-fossil-fuels-by-2050/>

An Honest Debate on Climate Science

<https://friendsofsciencecalgary.wordpress.com/2016/05/26/an-honest-debate-on-climate-science-its-time/>

A Confluence of Carbonbaggers

[http://www.friendsofscience.org/assets/documents/Carbonbaggers\\_Report.pdf](http://www.friendsofscience.org/assets/documents/Carbonbaggers_Report.pdf)

Undue Influence – Markets Skewed

<https://friendsofsciencecalgary.wordpress.com/2016/04/09/50-billion-drop-in-oilpatch-investment-undue-influence-markets-skewed/>

Keep Canada in the Black

<https://friendsofsciencecalgary.wordpress.com/2016/03/15/keep-canada-in-the-black/>

**LOTS of new videos!** <https://www.youtube.com/user/FriendsofScience/videos>

Dr. John D. Harper and Ezra Levant May 10, 2016 event videos are online:  
<http://www.friendsofscience.org/index.php?id=2222>

Happy Canada Day! Are you a radical or rational Canadian? <https://youtu.be/GrF5Ek8ghTk>

A series of short Ezra Levant interview clips are on our YouTube site: <https://youtu.be/IMs2xCFyScw>

Dr. Neil Hutton on IPCC: <https://youtu.be/BSKVqQK-7pE>

Series of Dr. John D. Harper video clips: <https://youtu.be/e6UHTa5hzq0>

Series of Dr. Ian Clark video clips: [https://youtu.be/4uDoKc9\\_2CQ](https://youtu.be/4uDoKc9_2CQ)

and more!!! Our most viewed to date – Marshall Islands: <https://youtu.be/Uv60bC11qqc> 39,000+

***Please share with family and friends – tweet, post on facebook, share in emails, send to MLAs/MPs.***

## **DONATIONS**

To accomplish our goal of educating the broader public and policy makers on the diversity of views on climate change, and the important natural factors, we need financial help from our members. Thank you for your help to date. **This debate matters, you are making a difference.**

Please continue to make donations to Friends of Science. We can be a voice for your climate change issues – and we thank all of you who have given us tips on the misinformation they see in the marketplace. Donations made directly to Friends of Science will help us bring in quality guest speakers, expand our media presence and create a platform for informed debate. To make a contribution at [www.friendsofscience.org](http://www.friendsofscience.org); click on DONATE in the upper right of the home page. Alternately, you can mail donations to Friends of Science at the following address:

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