

CLIMATE CHANGE POLICY - IDEOLOGY OR EVIDENCE

MARCH 2015

Refuting the predictive claims of the Ontario Climate Change Discussion 2015 document with evidence.



TABLE OF CONTENTS

Contents

Critical Issue of Our Time – Evidence-based Policy			
Climate Model Madness – A Flawed Crystal Ball	2		
The Staggering Cost of Faulty Climate Policy	2		
This Changes Nothing	3		
The Influence of Unelected, Unaccountable ENGOs	4		
97% of all Scientists Have Never Been Asked	7		
When Polluters Pay – Consumers Pay More	8		
Carbon Trading – Playground of Crime	10		
Are Pension Funds at Risk Due to Divestment and Renewable Investments R Subsidies or Carbon Taxes?			
What of the Social Costs of Carbon?	16		
The Sun is the main driver of climate change. Not you. Not. CO2	17		
About Friends of Science Society	19		

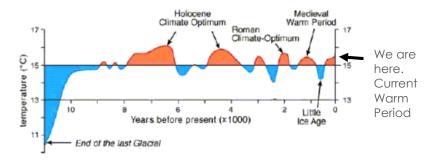
Critical Issue of Our Time – Evidence-based Policy

FAULTY PREMISE – "CLIMATE CHANGE IS A PROBLEM WITH A SOLUTION"

Climate change is a fact of nature.

History is witness to cyclical climate and weather – from the stable, pleasant days of the Medieval Warm Period that graced Europe with abundant crops – to the wild, unrelenting and often violent, cold, wet climate extremes of the 300-500 year Little Ice Age.¹

While Europe basked in warmth and build cathedrals, in the Medieval Warm Period, what is now the US south west was gripped by mega-drought epochs.



These climate cycles are often far outside generational memory and therefore changes in weather/climate are deemed to be unusual by people.

In the 1600's the cause of weather extremes was deemed to be 'witches' who were 'weather cooking' –

then the solution was mass executions of thousands of people suspected of this witch craft."

WEATHER COOKING

On May 24th, 1626 a hailstorm struck central Germany and dropped one meter of hail. Two days later, an arctic front descended on to Europe and bit hard. Rivers froze. Grapevines exploded. The rye and barley crops were destroyed. Tree leaves were blackened and fell to the ground and denuded the trees and people thought it was'Y2K' [end of the world]. The Lord Mayor of Franconia wrote "everything was destroyed by the frost, which had never happened in people's memory" - which was probably true. Probably a frost like that hadn't occurred in 500 years. But since it was so unusual, it had to be 'unnatural...'

Dr. Sallie Baliunas on "Weather Cooking" and Witch Hunts in the 1600's

¹ Some scholars say 1350-1850; NASA defines it as a particularly cold period of 1550-1850.

For 30 years the ideology has been 'global warming' – that's not what the evidence shows.

The cause of climate change was said to be human industry – the solution deemed to be carbon taxes, wealth transfers, and extreme climate policies to 'save the planet.'

An early theory of greenhouse gases warming the planet developed into a fear of global warming – and indeed temperatures had risen as the earth left the terrible cold of the 500 year Little Ice Age. However, as Canadian climate researcher Madhav Khandekar reports in "The Global Warming-Extreme Weather Link," there have been no global trends to extreme weather, other than cold snaps suggesting an impending solar minimum. Fising insurance losses are

evidence of increased valuation of properties, but not evidence of climate patterns or trends.

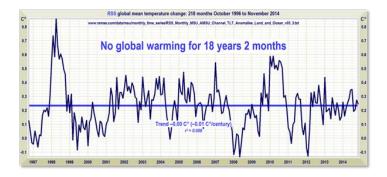
Modern day humans created our own version of medieval 'weather cooking' as very complex climate models were developed to 'predict' future warming based on the premise that a rise in carbon dioxide (CO2), would lead to a rise in global temperatures.

The only way to stop this warming, the theory went, was to reduce human emissions of CO2.

Two things happened.

- 1) Human emissions of CO2 rose.
- 2) Global warming stopped by itself naturally 16+ years ago.

Stopped? Wasn't 2014 said to be the warmest year 'on record'?



That's not what satellite data tells us. There is no trend to warming. We are well within historic temperature cycles. The 'solution' to climate change is human adaptation, not carbon tax wealth transfers or moralizing public hysteria over modern day 'weather cooking.'

Climate Model Madness – A Flawed Crystal Ball

COMPLEX MATHEMATICAL COMPUTER MODELS FAIL



"Trying to model a cloud is about as easy as trying to hold one in your hands...They are a major source of error...."

"Apollo's Arrow"-David Orrell

Accurate assessments of global temperatures began in the 1970's era of the satellite. As people developed advanced computers, there was improved forecasting of weather (the short-term changes of climate) and a push to develop long-term forecasting of regional and global climate. Much of this research was practical – farmers had, for decades, tracked daily weather patterns and published forecasts like the "Farmer's Almanac" attempting to quantify the next year's likely weather and the most suitable crops or best time for planting.

With the advancement of modern computers, the forecasts for climate, using complex mathematical models, began to <u>look</u> very precise. At first models

succeeded in forecasting climate. The only problem was that countries set climate policy based on these computer model predictions – by 2002 the models were skyrocketing up, forecasting high global warming – while evidence-based measurements like those of satellites showed that warming had stopped.

The claim that the world is 'on track for 4 degrees' of warming is a prediction by models. This claim is not supported by the evidence. Likewise, the economic evidence from the UK and Europe shows that moving to a 'low-carbon' economy destroys industry and pushes people into heat-or-eat poverty, as carbon taxes, subsidies and special interest fees are downloaded onto taxpayers.

The Staggering Cost of Faulty Climate Policy

GRFFN? CLFAN? COSTLY!

A "Better Place" electric vehicle company was cited as a case study in successful 'sustainable' investment in the October 2012 report "Accountants for Business – Canada and the Green Economy." As reported by CBC Television May 27, 2013 Better Place went from an asset value of \$2 Billion in 2012 to a bankruptcy value of \$12 million by 2013. Some of Wall Street's expert investors lost a spectacular \$900 million according to a May 28, 2013 report in the Wall Street Journal.

This past summer [2013] Siemens AG fired CEO Peter Loescher who had led that German icon into a "Green Energy Disaster" taking the company "down a green energy hole," as reported in Investors.com on July 31, 2013 topped off with a 22% decline in shares since his take-over in 2007.

A "Better Place" received \$1 million from the Ontario provincial government.

Around the world, efforts to force a 'low-carbon economy' into the conventional marketplace have led to spectacular financial failures, frequently funded by taxpayers!

For the Ontario Minister of Environment and Climate Change to predict – "6, the number, in trillions of dollars of new economic growth that will result from moving to a low-carbon economy" is simply not supported by the evidence from around the world.

Several climate change policies have had unintended consequences that are environmentally detrimental.

US GREEN ENERGY FAILURES (FEDERALLY SUPPORTED)

Evergreen Solar (\$25 million)* SpectraWatt (\$500,000)* Solyndra (\$535 million)*

Beacon Power (\$43 million)*

Nevada Geothermal (\$98.5 million)

SunPower (\$1.2 billion)

First Solar (\$1.46 billion)

Babcock and Brown (\$178 million)

EnerDel's subsidiary Ener1 (\$118.5 million)*

- . Amonix (\$5.9 million)
- . Fisker Automotive (\$529 million)
- . Abound Solar (\$400 million)*
- A123 Systems (\$279 million)*
- . Willard and Kelsey Solar Group (\$700,981)*
- . Johnson Controls (\$299 million)
- . Brightsource (\$1.6 billion)
- . ECOtality (\$126.2 million)
- . Raser Technologies (\$33 million)*
- . Energy Conversion Devices (\$13.3 million)*
- . Mountain Plaza, Inc. (\$2 million)*
- . Olsen's Crop Service and Olsen's Mills Acquisition Company (\$10 million)*
- . Range Fuels (\$80 million)*
- . Thompson River Power (\$6.5 million)*
- . Stirling Energy Systems (\$7 million)*
- . Azure Dynamics (\$5.4 million)*
- GreenVolts (\$500,000)
- . Vestas (\$50 million)
- LG Chem's subsidiary Compact Power (\$151 million)
- . Nordic Windpower (\$16 million)*
- Navistar (\$39 million)
- . Satcon (\$3 million)*
- . Konarka Technologies Inc. (\$20 million)*
- . Mascoma Corp. (\$100 million)

*Denotes companies that have filed for bankruptcy.

http://dailysignal.com/2012/10/18/president-obamas-taxpayer-backed-green-energy-failures/

This Changes Nothing

WESTERN INDUSTRIALIZED NATIONS HELD HOSTAGE BY "CLIMATE CREDITORS"

"The opportunity, [Angelica] Navarro Llanos said, was that since countries like hers (Bolivia) had done almost nothing to send emissions soaring, they were in the position to declare themselves "climate creditors," owed money and technology support from the large emitters to defray the hefty costs of coping with more climate-related disasters, as well as to help them develop on a green energy path."

- Naomi Klein, "This Changes Everything"

Some 195 nations of the world originally signed on to the United Nations Framework Convention on Climate Change in 1992, agreeing to jointly work to 'stop global warming' and save the planet for future generations, with special focus on the emissions of the 43 Annex 1 countries. The Annex 1 group are generally the most industrialized, most technologically developed. The remaining 152 nations (and environmental groups) now cite any weather event as evidence of human-caused climate change, and thus staking a claim as 'climate creditors' of the industrialized Annex I countries.

In this document you have seen that global warming stopped naturally some 18 years ago, despite a rise in carbon dioxide (CO2). You have read that climate extremes happened long before industrialization.

In fact, what the 152 developing nations with their "hand-out" require is the remedy proposed in Hernando de Soto's book "The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else." They need

- 1) established rule of law.
- 2) clarity and reliable title for property rights.

THE INTENSE HEAT—SUDDEN DEATHS AND SUICIDES.

(TELEGRAM FROM SPECIAL CORRESPONDENT.)

New York, July 29.

There are at last symptoms of an approaching cool wave from the east, but up to the present to-day's record of heat is the highest yet attained. From every quarter reports continue to arrive of sudden deaths consequent upon the excessive heat and fatal terminations to cases of prostration, even admittedly robust people succumbing, while the most lamentable feature of the awful visitation is now presented in the form of numerous suicides of persons of all ages and states whose brain had become affected by the overpowering atmosphere and intense liest.

(REUTER'S TELEGRAM.)

New York, July 29.

The heat continues intense, and a general scare prevails owing to the extraordinary number of deaths and cases of sunstroke and prostration. The official record yesterday registered 99 degrees in the shade at the Meteorological Station. It is 101, and in some cases 102, degrees in the shade in the street. The present is the most protracted and calamitous spell of heat on record. A peculiar feature is the entire absence of wind, and the great humidity which prevails. Many public offices are closed, and business generally is almost at a standstill.

National 27 adult deaths occurred here owing to the heat. Among children also the mortality is very great, and over 160 cases of sunstroke and prostration were reported. The hospitals are full, and in Brooklyn the authorities are hardly able to cope with the cases. Amongst horses the mortality is extraordinary, 162 having died here yesterday. In most of the large cities east of the Mississippi the heat is also intense, and the mortality is equally

1892 GLASGOW KILLER HEAT WAVE

"Climate creditor" funds – like the Green Climate Fund, will change nothing but only serve to enrich corrupt dealers in developing countries unless de Soto's principles are established first.

The Influence of Unelected, Unaccountable ENGOs

OFFSHORE FUNDING INFLUENCES CANADIAN CLIMATE POLICY

Carbon trading to reduce global CO²emissions



If the world's current greenhouse gas (GHG) emissions and growth trends continue, the planet could warm by between 4°C and 6°C by 2100. Scientists agree that this could have devastating impacts: the inundation of coastal cities, massive crop failures, droughts and heat

Market mechanisms that encourage fewer GHG emissions are proving successful at reducing global warming pollution. For example, a "cap and trade" system imposes a cap, or limit, on the total carbon dioxide emissions a region or country can produce each year. Permits allowing for the production of GHG emissions can be traded within the system, so that those who find it easy to reduce their emissions can sell excess permits to those who find it more difficult or expensive to cut back. In this way, global warming pollution is reduced while economic growth is generated. This rewards industries or sectors that pollute less, and penalises those that pollute more.

Oak Foundation has supported the work of many groups in North America and Europe to establish two cap and trade systems, which have seen varying degrees of success. The European Trading System (ETS), the cornerstone of the EU's efforts to combat climate change, regulates emissions from power plants, energy-intensive industries and commercial airlines – altogether amounting to about 45 per cent of Europe's GHG emissions. However, the system is currently selling too many permits, so emissions are not falling fast enough, and the price of each tonne of pollution is too low. There are efforts underway to reform this – if successful, the ETS will reduce European emissions to about 20 per cent below 2005 levels by 2020.

In 2009 the US Northeastern States passed the Regional Greenhouse Gas Initiative (RGGI). Unlike the ETS, the RGGI only regulates emissions from the power sector. Sales of permits have generated USD 1.35 billion; this money has been reinvested in renewable energy, in energy efficiency and in helping low-income consumers pay their energy bills. The RGGI has also been successful in terms of reducing GHG emissions – overall, emissions fell from 188 million tonnes of global warming pollution in 2005 to 92 million tonnes in 2012. On top of this, RGGI has helped the region move away from coal and oil to natural gas and renewable energy and to focus on increasing the efficiency of buildings and transportation.

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http://www.oakfnd.org/node/1293

Many of the most vocal Environmental Non-Governmental Organizations (ENGOs) and their members have demonized fossil fuels and campaigned for 'clean' energy projects – claiming to be 'saving the planet.' Following their funding dollars reveals that they may be acting as proxies for offshore objectives. Renewable energy projects are typically unable to survive financially without the addition of preferential government policy, subsidies or carbon emissions trading systems – ENGOs across the board have been pushing for these. Consequently, the question of conflict of interest arises. Some of these ENGOs have claimed to reject corporate funding, relying only on foundations, which were said to be non-partisan.

As Donna Laframboise reported in her research on the Intergovernmental Panel on Climate Change (IPCC), ENGOs play a significant role in IPCC report writing and negotiations; they are highly influential on government policy making – yet they are not elected or accountable to citizens in a democracy in anyway.

OAK FOUNDATION (SWITZERLAND) FUNDING IN CANADA FOR CLIMATE CHANGE – REPORTED OBJECTIVE OF OAK IS THE ESTABLISHMENT OF TWO CAP AND TRADE SYSTEMS. WHO ARE THEY TO SET CANADIAN POLICY?

How this works

There are many ways to search for information in our grant database. For specific information about each project, country, programme, year or amount, please click the main column headers to filter results. You can also narrow search results further by using the key word search

You can export search results into an Excel file by clicking on the download link a the bottom of the page. To view and export a list containing all of the information in our database, please click here.

What's New

09 May 2012: Last year Oak Foundation added grant descriptions to its newly designed website. In April we made changes to a number of our grant descriptions *across all our programme areas* to make them consistent with our — previously published — annual reports, which can be downloaded off our website. These descriptions have always been public and contain more accurate descriptions of our grants.



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Programme		Year	Country	
Environment	•	<any> ▼</any>	Canada	
Keywords				
Climate Change				Apply
				лергу

Organisation	Programme	Country	Year ▼	Amount
Global Campaign for Climate Action	Environment	Canada	2009	USD 2,500,000
Tides Foundation	Environment	Canada	2009	USD 700,000
World Wildlife Fund Canada Foundation	Environment	Canada	2008	USD 200,702
Climate Action Network Canada - Reséau action climat Canada	Environment	Canada	2008	USD 299,461
Ecology Action Center	Environment	Canada	2008	USD 280,584
Equiterre	Environment	Canada	2008	USD 376,861
Greenpeace Canada	Environment	Canada	2007	USD 436,675
Environment Northeast	Environment	Canada	2007	USD 200,004
Pembina Institute	Environment	Canada	2006	USD 51,458
Equiterre	Environment	Canada	2006	USD 263,408
Ecotrust Canada	Environment	Canada	2006	USD 129,556
Pollution Probe Foundation The	Environment	Canada	2006	USD 86,780
New Brunswick Lung Association	Environment	Canada	2006	USD 86,397
Ecology Action Center	Environment	Canada	2006	USD 87,877
Ontario Sustainable Energy Association	Environment	Canada	2006	USD 98,239
Tides Canada Foundation	Environment	Canada	2006	USD 440,587
National Environmental Trust	Environment	Canada	2006	USD 75,000
Pembina Institute	Environment	Canada	2005	USD 269,971
Tides Canada Foundation	Environment	Canada	2005	USD 208,181
Sierra Club of Canada Foundation	Environment	Canada	2005	USD 217,893
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97% of all Scientists Have Never Been Asked

CONSENSUS ON CLIMATE CHANGE? THEY'RE FOOLING YOU.

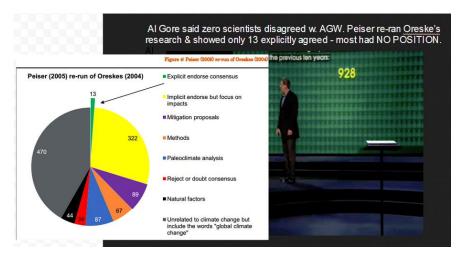
How many scientists are there? Millions.

According to a 2014 Congressional Research Study entitled <u>"The US Science and Engineering Workforce,"</u>..."In 2012, there were 6.2 million scientists and engineers (as defined in this report) employed in the United States" with some 4% or 248,000 working in the physical sciences.

Doran & Zimmerman (2009) asked 2 opinion questions of 79 scientists from a pool of 10,000 earth scientists, of whom only 3,146 responded. The 79 scientists (qualifications unknown) who claimed to have published something recently on climate were selected to answer 2 opinion questions. Of the 79, just 77 said "yes" to opinion question, on an empirical (facts) topic. That's where one 97% claim comes from.

And Zimmerman herself, in her thesis THE CONSENSUS ON THE CONSENSUS^{ix} which formed the basis of the peer-reviewed paper said: "This entire process has been an exercise in re-educating myself about the climate debate and, in the process, I can honestly say that I have heard very convincing arguments from all the different sides, and I think I'm actually more neutral on the issue now than I was before I started this project. There is so much gray area when you begin to mix science and politics, environmental issues and social issues, calculated rational thinking with emotions, etc..."

Oreskes (2004) was the first consensus study; Science Magazine published it just days before the UNFCCC COP-10 conference in Buenos Aires. By 2004, climate had already been stagnating for about 6 years.



Al Gore made the concept of 'consensus' famous, even though only Peiser (2005) found that only 13 scientists out of over 1,000 agreed with the Catastrophic Anthropogenic Global Warming theory. Most held no position - their work only mentioned the search term 'global climate change.'

When Polluters Pay – Consumers Pay More

"...first consumers are forced to pay ever increasing subsidies for costly wind and solar energy; secondly they are asked to subsidize nuclear energy too; then, thirdly, they are forced to pay increasingly uneconomic coal and gas plants to back up power needed by intermittent wind and solar energy; fourthly, consumers are additionally hit by multi-billion subsidies that become necessary to upgrade the national grids; fifthly, the cost of power is made even more expensive by adding a unilateral Emissions Trading Scheme. Finally, because Europe has created such a foolish scheme that is crippling its heavy industries, consumers are forced to pay even more billions in subsidizing almost the entire manufacturing sector."x

-Dr. Benny Peiser, Testimony to US Senate on UK/EU experience with low-carbon economy

Looking at other jurisdictions and how they perceive impending carbon taxes we find this:

"The National Association of Manufacturers (NAM) released a study conducted by NERA Economic Consulting that shows a carbon tax would have a devastating impact on manufacturing. The report, titled Economic Outcome of a U.S. Carbon Tax (Full Study | Executive Summary) found that levying such a tax would result in higher prices for natural gas, electricity, gasoline and other energy commodities. Manufacturing output in energy-intensive sectors could drop by as much as 15 percent and 7.7 percent in non-energy intensive sectors.

The study examines two carbon tax scenarios: one levied at \$20 per ton increasing at 4 percent, and the other designed to reduce carbon dioxide (CO2) emissions by 80 percent. In both cases, any revenue raised by the carbon tax would be far outweighed by the negative impact to the overall economy. A carbon tax would lead to lower real wage rates because companies would have higher costs and lower labor productivity. Over time, workers' incomes could decline relative to baseline levels by as much as 8.5 percent. The increased costs of coal, natural gas and petroleum products due to a carbon tax would ripple through the economy and result in higher production costs and less spending on non-energy goods. xi

In Europe, the 'rush-to-renewables' since 2008, included an array of hefty subsidies for renewables like wind and solar and carbon taxes. This is the recently reported result by Roger Helmer to the EU Parliament.

"I frequently quote our colleague, Mr Antonio Tajani, who when he was Commissioner for Industry remarked that our energy prices are creating an industrial massacre in Europe, and I trust the Commissioner recognises that. I've recently been preparing for a major speech I have to give, so I thought I ought to investigate the extent of this industrial massacre, and in the last fortnight I have had meetings with the European aluminium industry, the steel industry, and the petroleum refining industry, and frankly Mr Commissioner, I am horrified by what I

have I learned.

"The aluminium industry in Europe has lost 34 per cent of its capacity in the last seven years and forty thousand jobs have been lost. That's not because demand has reduced; demand is increasing, and being filled with imports which now amount to more than 50 per cent. A similar story in steel where a hundred thousand jobs have been lost, and plant closures have taken place. A similar story in petroleum refining. It is now cheaper to bring in refined petroleum products from Africa or Russia than it is to refine them here in Europe. And again we have refineries closing. Ten thousand direct jobs; forty thousand indirect jobs lost. That is the extent of the disaster we are creating. I am proposing to meet the glass industry, the chemicals industry, and the cement industry, and I have good indications that we will find a similar story.

"So we already have major energy intensive industries that are desperately hanging on by their fingernails, and at the same time, we in this Parliament are debating the Market Stability Reserve, which is a policy whose objective is to increase prices further and make Europe a less competitive place in which to do business.

"And if I may make, Mr Chairman, a final, but absolutely critical point, I have from the petroleum industry a copy of a British Government report, which indicates that the CO2 emissions associated with imported refined petroleum products, are 35 per cent higher than petroleum products refined in the European Union, and anecdotal evidence from the steel industry suggests that a tonne of important steel implies double the CO2 emissions of a tonne of steel made in Europe. So we have a policy which is exporting jobs, exporting investment, exporting manufacturing, and increasing CO2 emissions at the same time.

"Mr. Commissioner, if that is not madness, what is?"xii

- Roger Helmer, UKIP to EU Parliament

From the US Chamber of Commerce:

"U.S. Chamber of Commerce, in an amicus brief with the Supreme Court opposing further expansion of emissions regulations cites the EPA's documents, from 2004, which state that related permits would cost businesses "... an average of \$125,120 and required 866 hours for the applicant to complete ..." – death to small and medium businesses."

Carbon Trading – Playground of Crime

"...the carbon market is based on the lack of delivery of an invisible substance to no one." - Mark Schapiro, "Conning the Climate" Harper's Feb. 2010

INTERPOL - GUIDE TO CARBON TRADING CRIME

INTERPOL's ground breaking exposé "Guide to Carbon Trading Crime"xiv on the carbon trading systems to date, reveal a veritable playground for criminals due to the intangible nature of carbon dioxide itself and the difficulty of verifying with any accuracy the outcomes of 'carbon reductions.'

A 2007 power point by Baker McKenzie New Zealand indicated that the World Bank and a private fund (unnamed) made \$1.2 Billion in 23 minutes trading on the pollution of a Chinese plant.xv

The Interpol report indicates that far from reducing emissions, sometimes carbon trading has led to an increase in pollution, in order to increase profits!

These antics are not isolated to Third World Countries – BC's carbon trading system has come under fire.

Indeed many of the types of carbon trading shenanigans that <u>Interpol</u> has warned about in carbon trading seem to have reared their heads in some way in BC.

Nature Conservancy of Canada, a federally registered charity, is trading carbon credits on the <u>Darkwoods Forest Carbon</u> project.

The May 7, 2012 BC Business report stated: "In the case of the Darkwoods project, the Canadian Centre for Policy Alternatives conducted its own research and concluded that the (BC) Pacific Carbon Trust acquired the offsets for about \$5.70 a tonne and charged the public service [schools and hospitals]— that are legally bound to buy them — \$25 a tonne."

By Nov. 19, 2013, the <u>Globe and Mail</u> was reporting the Pacific Carbon Trust scandal would force massive restructuring. Jordan Bateman of the Canadian Taxpayers Federation is quoted as saying that: "Taxpayers are spending millions on buying carbon credits for these facilities rather than providing frontline [health/education] services," He had blogged July 26, 2013 that the <u>"BC: Carbon Tax No Success Story"</u> detailing why.xvi

INTERPOL's report says: "Carbon trading is the world's fastest growing commodities market.14 According to the World Bank's annual report on carbon markets, trading has been valued at US\$176 billion in 2011.15 It is estimated that if the United States were to adopt a carbon market it would grow to a \$2 to \$3 trillion market.16 Worldwide emissions trading in 2011 was 10.3 billion

tonnes of carbon dioxide equivalent, with permits in the EU Emissions Trading Scheme (ETS) accounting for more than three quarters of the total. 17 "

INTERPOL's guide outlines the intangible nature of virtual trading and the many risks associated with untraceable cyber trading. Here is one example:



In the UK and EU, many fraudulent carbon trades led to another loss for consumers – that of the loss of intended VAT (value-added tax, like GST) which would ordinarily be returned to government coffers to provide services for citizens.

At the same time, most major accounting firms now operate large carbon trading consultancy services, creating a market push for a 'product' of questionable value to the economy^{xvii} and which appears to have the unintended consequence of being detrimental to the environment when in the hands of criminal operators.

"For example, in April 2010, according to the daily newspaper "El Mundo," Spanish police found **unusual solar panels** in Andalusia and Castilla-la Mancha which, their owners assure, **produce electricity at night**. However, the police's investigation showed that the energy produced by these devices actually came from a few diesel generators; there is very little here one would call "a renewable resource." But this did not prevent the owners of such wonderful night solar panels from receiving significant European funding." xviii

Are Pension Funds at Risk Due to Divestment and Renewable Investments Reliant on Subsidies or Carbon Taxes?

A recent article in the Financial Times, titled "Private equity retreats from renewables fad," highlighted a recent survey from Prequin that identified just 22 percent of all renewable funds earned an internal rate of return higher than 3 percent. Joseph Dear, chief investment officer of Calpers, the world's sixth-largest pension fund, last year described clean-tech investment as a "noble way to lose money." Calpers suffered annualized losses of 9.7 percent in the sector. "We are all familiar with the J-curve in private equity. Well, for Calpers, clean-tech investing has got an L-curve for 'lose'" added Dear. "If it takes 12 years to get the money out, the internal rate of return is not going to be very good, even if the investment is reasonably successful."

In Australia, Pacific Hydro's wind power project just lost \$700 million of 'mom and pop' retirement pension savings.xix

Powerline of the US is reporting that as Thomas Steyer preaches divestment to institutional investors, private funds are snapping up the valuable divested energy stocks, leaving institutions hold the bag....of wind.*x

Most institutional investors (that hold most of the value of pension funds) have been directed to invest in 'low-carbon risk' funds – but these also turn out to be low value and with low returns – as noted in the quote above.

There is a 'voluntary and aspirational' group of some 1325 institutions, asset managers, and service providers holding some ~\$45 trillion in assets who are signatory to the UN's Principles for Responsible Investing (below). In addition, the Rockefeller non-profit also runs the Carbon Disclosure Project (CDP) that issues reports which directs some 770+ institutional investors holding ~\$78 trillion in investment capital toward a 'low-carbon future' based on annual aggregated reports from companies and cities on their 'carbon risk' and the various 'climate change' (actually 'weather') events in their region that year.

Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices.+

Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest.+ Principle 4: We will promote acceptance and implementation of the Principles within the investment industry.+

Principle 5: We will work together to enhance our effectiveness in implementing the Principles.+

Principle 6: We will each report on our activities and progress towards implementing the Principles.**

Principle 6 has a special requirement: "Report on progress and/or achievements relating to the Principles using a 'Comply or Explain' approach" ('The Comply or Explain approach requires signatories to report on how they implement the Principles, or provide an explanation where they do not comply with them.)

This group of investors is influencing the global economy through its investment decisions and efforts to sway investment funds away from traditionally valuable fossil fuel stocks (oil, gas, coal) – <u>ironically once an institutional investor divests</u>, the private funds – which have no obligation to the UN PRI – snap up these valuable stocks.

There are questions, as in the Australian case, about what real value those pension funds will have in the future for their pension holders; renewables, to date, have only been viable due to substantial government subsidies. An example is that reported by Bloomberg on Jan. 9, 2014:

In Texas, the wind tends to blow the hardest in the middle of the night. That's also when most people are asleep and electricity prices drop, which would be a big problem for the companies that own the state's 7,690 wind turbines if not for a 20-year-old federal subsidy that effectively pays them a flat rate for making clean energy no matter what time it is. Wind farms, whether privately owned or part of a public utility, receive a \$23 tax credit for every megawatt-hour of electricity they generate.xii

While this is a profitable arrangement, especially if tied together with cap and trade or similar arrangements, there is no inherent value to wind or solar farms, which have a short life and which are reliant on government subsidies, preferential arrangements – and must be backed up by conventional power 24/7 (hydro, natural gas peaking plants, coal-fired or nuclear base load). Thus the holder of conventional fuel stocks will always have a viable investment; the holder of renewable stocks is completely reliant on the existence of the subsidy and conventional power provider.

We see the fossil fuel 'divestment' push as a long-term risk to pension funds and to individual citizens who hope to access their pension funds in the future. Based on current evidence of a 16+ year hiatus in global warming, despite a rise in carbon dioxide from human industrial activity, it seems likely that the 'carbon risk' has been significantly overstated by environmental activists

Likewise the push for Green Bonds is not so much that investors see them as a profitable investment, but rather that it is an efficient means of offsetting what other 'carbon risks' their portfolio may have. As outlined in these concerns by Zurich Insurance:

"Investors around the world are snapping up the bonds, partly to offset the climate change risks to other assets in their portfolios." xxiii

This suggests that the value is based solely on a band-wagonned perception in financial markets, not supported by current scientific evidence. There appears to be some cyclical reasoning at work through a self-perpetuating mantra based on the claim that carbon presents a measurable risk and therefore investing in low carbon or Green Bonds will reap benefits for the environment and investors, which as we have shown is not the case.

Based on the experience in other markets like the EU and UK, the move to low-carbon is expensive and devastating to consumers, pushing them into heat-or-eat poverty, and disastrous for industry and the power generation markets.

We see a need for caution as there appears to be some semblance in the push for 'climate wealth' from low-carbon or 'green investments' to earlier 'market mania' schemes such as the "South Sea Bubble" of 1711, wherein:

"**Everybody** had heard of the gold and silver mines of Peru and Mexico; every one believed them to be inexhaustible, and that it was only necessary to send the manufactures of England to the coast to be repaid a hundredfold in gold and silver ingots by the natives."xxiv

We find the "Ontario Climate Change Discussion Paper 2015" to be peppered with bandwagon statements like "84 per cent of Canadians agree...rich countries have a moral obligation..." or "Private Sector Leadership...'they know that doing so is good for their bottom line and for the environment'" - when for the most part, as we have shown, these investments in green energy or renewables are done to maintain access to the \$78 trillion institutional investment funds, and these are being swayed by their 'climate catastrophe' mantra participation in the UN PRI – most of these references to "Caring for Climate" are based on reports from 2007 – prior to the September 2013 IPCC report that global warming had been in 'hiatus' – **stopped – for 15 years** - to their press time of 2012. "The Pause" is now 18 years and counting.

In fact, the actual scientists of the IPCC Working Group I, reported in September 2013 in the "Uncertainties" of their Technical Summary that:

"Based on model results there is limited confidence in the predictability of yearly or decadal averages for the global temperature, both for the global average and for some geographic regions."

Most concerning, recently Christiana Figueres, Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC) at a Feb. 3, 2015 press conference in Brussels said of the upcoming Paris 2015 climate talks that:

"This is the first time in the history of mankind that we are setting ourselves the task of intentionally, within a defined period of time to change the economic development model that has been reigning for at least 150 years, since the industrial revolution." xxv

Canada pulled out of Kyoto in 2011 and saved the country from some \$14-18 billion in climate penalties. All Canadians should be asking themselves how a conversation on climate change that began in 1992 at the Rio Conference, has now become an externalized, forced and contrived intentional change in our economic model – when Canadians have never voted or agreed to be part of such a thing.

TS.6 Key Uncertainties

This final section of the Technical Summary provides readers with a short ownriew of key uncertainties in the understanding of the climate system and the ability to project changes in response to anthropogenic influences. The overview is not comprehensive and does not describe in detail the basis for these findings. These are found in the main body of this Technical Summary and in the underlying chapters to which each sufficient to the control of the control of

TS.6.1 Key Uncertainties in Observation of Changes in

- There is only medium to low confidence in the rate of change of tropospheric warming and its vertical structure. Estimates of tropospheric warming rates encompass surface temperature waring rate estimates. There is low confidence in the rate and vertical structure of the ctratoroberic cooline. I 2A.
- Confidence in global precipitation change over land is low prior to 1951 and medium afterwards because of data incompleteness.
- Substantial ambiguity and therefore low confidence remains in the observations of global-scale cloud variability and trends. (2.5.6)
- nere is sovi commence in an oncerved giocal-scare tredi in drought or dyness (fact of rainfall), due to lack of direct observations, methodological uncertainties and choice and geographical inconsistencies in the trends. {2.6.2}
- There is now commonce that any reported long-term (centennial) changes in tropical cyclone characteristics are robust, after accounting for part changes in abronium constilling (1) 6-21.
- Robust conclusions on long-term changes in large-scale atmospheric circulation are presently not possible because of large variability on interannual to decadal time scales and remaining differences between data sets. (2.7)
- Different global estimates of sub-surface ocean temperatures have variations at different times and for different periods, suggesting that sub-decadal variability in the temperature and upper heat content (0 to to 700 m) is still poorly characterized in the historical record, (3.2)
- Below ocean depths of 700 m the sampling in space and time is too sparse to produce annual global ocean temperature and heat
- Observational coverage of the occan deeper than 2000 in a sain limited and hampers more robust estimates of changes in global ocean heat content and carbon content. This also limits the quantification of the contribution of deep ocean warming to sea level rise (3.2, 3.7, 3.8, 80x 3.1)

- The number of continuous observational time series measuring the strength of climate relevant ocean circulation features (e.g., the meridional overturning circulation) is limited and the existing time series are still too short to assess decadal and longer trends (3 6.1).
- In Antarctica, available data are inadequate to assess the sta of change of many characteristics of sea ice (e.g., thickness a volume). (4.2.3)
- On a global scale the mass loss from melting at calving fronts and iceberg calving are not yet comprehensively assessed. The largest uncertainty in estimated mass loss from glaciers comes from the Antarctic, and the observational record of ice-ocean interactions around both ice sheets manism soon (A 3 3 4 or

TS.6.2 Key Uncertainties in Drivers of Climate Change

- Uncertainties in aerosol-cloud interactions and the associate radiative forcing remain large. As a result, uncertainties in aeros forcing remain the dominant contributor to the overall uncertaint in net anthropogenic forcing, despite a better understanding some of the relevant atmospheric processes and the availability olohal statifier monitoring. D. 2.7 a.7.5. S. D.
- The cloud feedback is likely positive but its quantification remains difficult 17.21
- raisectimate reconstructions and Earth System Modes indicate that there is a positive feedback between climate and the carbon cycle, but confidence remains low in the strength of this feedback particularly for the land. (6.4)

TS.6.3 Key Uncertainties in Understanding the Clima

- The simulation of clouds in AOGCMs has shown modest improvement since AR4; however, it remains challenging. (7.2, 9.2.1, 9.4.)
- Observational uncertainties for climate variables other than temperature, uncertainties in forcings such as aerosols, and limits in process understanding continue to hamper attribution of changes in many aspects of the climate system. (10.1, 10.3, 10.7)
- Changes in the water cycle remain less relatory motives on both their changes and their internal variability, limiting confidence is attribution assessments. Observational uncertainties and the larg effect of internal variability on observed precipitation also precludes a more confident assessment of the causes of precipitation changes. {2.5.1, 2.5.4, 10.3.2}
- Modelling uncertainties related to model resolution and incorporation of relevant processes become more important at regiona scales, and the effects of internal variability become more significant. Therefore, challenges persist in attributing observed chang to external forcing at regional scales. {2.4.1, 10.3.1}

- The ability to simulate changes in frequency and intensity of extreme events is limited by the ability of models to reliably simulate mean changes in law features. (10.6.1)
- In some aspects of the climate system, including changes in drought, changes in tropical cyclone activity, Antarctic warming Antarctic sea ice extent, and Antarctic mass balance, confidence in attribution to human influence remains low due to model ling uncertainties and low agreement between scientific studies

TS.6.4 Key Uncertainties in Projections of Global and

- There is medium confidence in near-term projections of a north-
- There is generally low confidence in basin-scale projections of s militant trends in trends and extensive and intensity in t

TS.6.4 Key Uncertainties in Projections of Global and Regional Climate Change

Based on model results there is limited confidence in the predictability of yearly to decadal averages of temperature both for the global average and for some geographical regions. Multi-model results for precipitation indicate a generally low predictability.
 Short-term climate projection is also limited by the uncertainty in projections of natural forcing. {11.1, 11.2, 11.3.1, 11.3.6; Box 11.1}

munity about their reliability. {13.5.2, 13.5.3}

 There is low confidence in projections of many aspects of climate phenomena that influence regional climate change, including changes in amplitude and spatial pattern of modes of climate variability. 95 3, 14, 2–14, 7)

115

15 | Page

What of the Social Costs of Carbon?

SOCIAL COSTS OF CARBON CALIBRATED TO EXAGGERATED CLIMATE MODELS

Der Spiegel interview with climate scientist Hans von Storch: If things continue as they have been, in five years, at the latest, we will need to acknowledge that something is fundamentally wrong with our climate models. A 20-year pause in global warming does not occur in a single modeled scenario.... There are two conceivable explanations -- and neither is very pleasant for us. The first possibility is that less global warming is occurring than expected because greenhouse gases, especially CO₂, have less of an effect than we have assumed. This wouldn't mean that there is no man-made greenhouse effect, but simply that our effect on climate events is not as great as we have believed. The other possibility is that, in our simulations, we have underestimated how much the climate fluctuates owing to natural causes. (July 2013) xxvi

Climate models predicted temperature trends that averaged 0.21 °C/decade, more than four times the observed temperatures during the 15 year period of 1998 to 2012 inclusive. Fyfe et al. (2013) The trend is near zero. However, the "Social Costs of Carbon" have been calibrated to these exaggerated climate models, not to observed temperatures. As Robert Pindyck, noted American economist said:

"[The economic] models are so deeply flawed as to be close to useless as tools for policy analysis. Worse yet, their use suggests a level of knowledge and precision that is simply illusory, and can be highly misleading."

Noted Ontario scholar, Dr. Ross McKitrick, professor of economics at the University of Guelph has written a report for the Fraser Institute and he strongly recommends that policy makers wait 2 to 4 years before implementing any new climate policies, as it appears the effect of carbon dioxide on warming is much less than previously estimated, and that revamped climate models will provide a clearer picture. The objective is for governments to avoid making expensive mistakes that may devastate the economy, send consumers into financial crisis, all the while doing nothing for the environment.

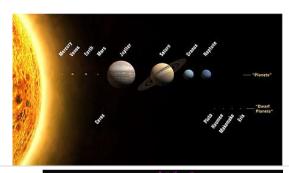
Please watch this short series of video discussions on the Social Costs of Carbon – "McKitrick on Climate Change." https://youtu.be/g30JfQIK6GA?list=PLZcRTdbkGEnHfU8-dkQfGnO67K6p1m8rh

Friends of Science has also put together a short layman's guide to how the Social Costs of Carbon are evaluated. It is revealing that most Cost-Benefit analysis weigh the forecast costs against the documented benefits – this is not the case in the Social Costs of Carbon evaluation. The benefits of fossil fuel use are not accounted for, leaving the outcome skewed. http://www.friendsofscience.org/assets/documents/McKitrick_Climate_Change_SCC_Feb_14 2015.pdf

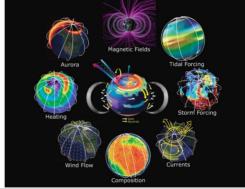
The Sun is the main driver of climate change. Not you. Not. CO2.

THAT'S OUR SCIENTIFIC POSITION.
YOU DON'T HAVE TO ACCEPT IT, BUT PLEASE CONSIDER THE EVIDENCE.

The sun is 1 million times the size of the earth.

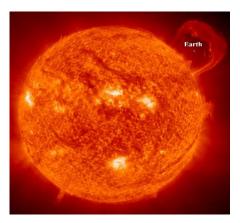


The sun affects all these climate change factors; humans only affect the atmosphere – nominally. The sun is therefore the main direct and indirect driver of climate change.



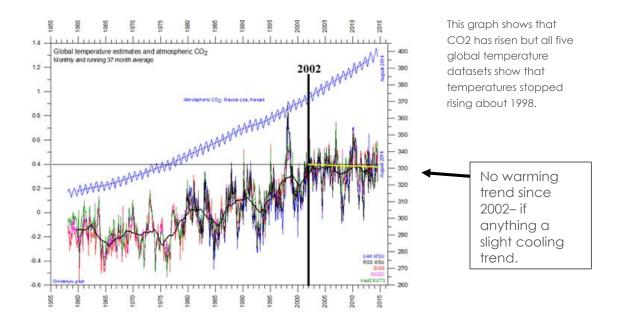
In context, a 0.8 degree C rise in temperature over 100 years is very little – especially compared to past climate variations.

There is no 'normal' temperature or weather activity for the earth's climate. Medieval Warm Period was stable in Europe but with mega epoch droughts in the southwest US. Little Ice Age was cold, wet, filled with violent storms and marked by crop failures and famines.



IDEOLOGY – CLIMATE MODELS PREDICT WARMING OF 4 DEGREES IN CENTURY

EVIDENCE - GLOBAL WARMING HAS STAGNATED FOR 18+ YEARS.



Temperatures have been warmer and colder in the past. This is part of the cyclical nature of aspects of climate that no one talks about.

"753 A.D. In 753, at the time of the taking of Clermont in the region of Auvergne, France by Pepin the Short [king of the Franks], there was over all of France a horrible storm. This thunderstorm lasted 22 hours. It spoiled wine cellars. Three thousand people and more than twenty-four thousand animals died of fright during this storm. [I suggest these deaths were more likely attributed to lightning strikes.] – James Marusek "A Chronological Listing of 14,000 Early Weather Events"

In Closing

We recommend that Ontario citizens and business leaders advocate for a 2 to 4 year wait before the implementation of any new climate policies.

Climate science is a very complex field with new evidence every day; to date it appears that the effect of human-made carbon emissions have been significantly over-estimated.

About Friends of Science Society

Friends of Science have spent a decade reviewing a broad spectrum of literature on climate change and have concluded the sun is the main driver of climate change, not carbon dioxide (CO2). The core group of the Friends of Science is made up of a growing group of earth, atmospheric, astrophysical scientists and engineers who volunteer their time and resources to educate the public.

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- ^v Cloud photo credit Axel Rouvin, Wikipedia Commons
- vi http://www.prweb.com/releases/2013/12/prweb11393573.htm
- vii http://news.ontario.ca/medt/en/2011/03/ontarios-electric-vehicles-plan-revs-up.html
- viii http://www.amazon.ca/Delinquent-Teenager-Mistaken-Worlds-Climate-ebook/dp/B005UEVB8Q
- ix http://www.lulu.com/ca/en/shop/m-r-k-zimmerman/the-consensus-on-the-consensus/ebook/product-17391505.html
- x http://www.thegwpf.com/content/uploads/2014/12/Peiser-Senate-Testimony-2.pdf
- xi See more at: http://www.nam.org/lssues/Carbon-Tax/
- <u>http://www.ukipmeps.org/articles_1141_The-Madness-of-Europes-Industrial-Massacre---Roger-Helmer-MEP.html</u>
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xvi http://www.prweb.com/releases/2014/12/prweb12388148.htm

ⁱ "The Great Warming" and "The Little Ice Age: How Climate Made History" Brian Fagan

ii Dr. Sallie Baliunas, Astrophysicist – on 'Weather Cooking' YouTube: https://youtu.be/wcAy4sOcS5M

iii Developed by Fourier, Arrhenius, Callendar among others

whttp://www.thegwpf.org/content/uploads/2013/11/Khandekar-Extreme-Weather.pdf

- xvii http://www.washingtonpost.com/world/europe/sting-operations-reveal-mafia-involvement-in-renewable-energy/2013/01/22/67388504-5f39-11e2-9dc9-bca76dd777b8 story.html
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