

Penury or Prosperity

Part 2 - A Critical Review of "Bridge to the Future"

Task Force for a Resilient Recovery

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Contents

"Bridge to the Future" with Five Bold Moves or Financial Folly?	2
TFRR's 5 Bold Moves in the Throne Speech	3
Bold Move #1	3
Bold Move #2	3
Bold Move #3	3
Bold Move #4	3
Bold Move #5	3
What Investors Might Be Attracted to Canada and Why?	5
Sovereign Wealth and Pension Funds Controlling Canadian Businesses: Ta	x-Policy Implications9
How Did Canada Do So Well in the 2008 Recession?	10
The Preferred Financier – Canada Infrastructure Bank	13
Examining the Five Bold Moves Proposed in "Bridge to the Future"	14
Bold Move #1	14
Invest in climate-resilient and energy-efficient buildings	14
Bold Move #2	15
Jumpstart Canada's production and adoption of zero-emission vehi	cles 15
Hydrogen – the New Silver Bullet	17
Bold Move #3	19
Go big on growing Canada's clean energy sectors	19
Bold Move #4	23
Invest in Nature	23
Do Forests Sequester Carbon Dioxide?	25
Greta Thunberg and George Monbiot Discover Photosynthesis	26
Carbon Credit Forests – Canadians Pay – Someone Else Profits	28
Bold Move #5	30
Grow Clean Competitiveness and Jobs Across the Canadian Econom	ı y 30
Undue Influence of ENGOs	31
In Conclusion – Save Canada, Quit Paris, Ruild Pinelines	32

Page | 1

"Bridge to the Future" with Five Bold Moves or Financial Folly?

On September 16, 2020, the <u>Task Force for Resilient Recovery</u> issued a report entitled "<u>Bridge to the Future</u>" which proposed "5 Bold Moves" to stimulate the economy. The Task Force frames itself as: "The Task Force for a Resilient Recovery is an independent group of Canadian finance, policy and sustainability leaders determined to make sure Canada seizes this opportunity." One week later, the Speech from the Throne closely echoed the "5 Bold Moves". No due diligence appeared to have been done in either the report or for the Speech from the Throne. Though the Task Force claims to be 'independent', one of the participants is Gerald Butts, who has a new position as a Vice Chairman and strategic advisor to Eurasia group, and whose profile makes it clear that he is an influential person in Canadian politics. He operates in many spheres of commercial interest according to his bio.¹

Page | 2



https://www.eurasiagroup.net/people/gbutts

The question becomes, how independent is this advice, and who will benefit? Why is there no due diligence on the cost-benefit or effectiveness of the proposals, which now appear to have been abruptly adopted as federal policy?

Parker Gallant, retired international banker and frequent commentator on various aspects of undue influence by environmental activist groups on public policy did a review, correlating the elements of the Speech from the Throne with those from the Task Force (TFRR) report "Bridge to the Future – 5 Bold Moves".

¹ In addition to his work with Eurasia Group, Gerald leads New Climate Group, a private consultancy that advises global financial firms, educational institutions, and philanthropists on strategic investments in climate mitigation and resilience, and artificial intelligence. He holds undergraduate and graduate degrees from McGill University.

TFRR's 5 Bold Moves in the Throne Speech

Bold Move #1 "Invest in climate resilient and energy efficient buildings"

Page | 3

From the Throne Speech: "As part of its plan, the Government will: <u>Create thousands of jobs</u> retrofitting homes and buildings, cutting energy costs for Canadian families and businesses;"

Bold Move #2 "Jumpstart Canada's production and adoption of zero-emission vehicles"

From the Throne Speech: "And make zero-emissions vehicles more affordable while **investing in more charging stations** across the country. A good example of adapting to a carbon-neutral future is building **zero-emissions vehicles and batteries**. Canada has the resources – from nickel to copper – needed for these clean technologies. This—combined with Canadian expertise – is Canada's competitive edge."

Bold Move #3 "Go big on growing Canada's clean energy sector"

From the Throne Speech: "And support <u>investments in renewable energy and next-generation</u> <u>clean energy</u> and technology solutions. Canada cannot reach net zero without the know-how of the energy sector, and the innovative ideas of all Canadians, including people in places like British Columbia, Alberta, Saskatchewan, and Newfoundland and Labrador."

Bold Move #4 "Invest in the nature that protects and sustains us"

From the Throne Speech: "The Government will work with municipalities as part of a new commitment to **expand urban parks**, so that <u>everyone has access to green space</u>. This will be done while protecting a quarter of Canada's land and a quarter of Canada's oceans in five years, and <u>using nature-based solutions</u> to fight climate change, including by <u>planting two billion</u> trees."

Bold Move #5 "Grow clean competitiveness and jobs across the Canadian economy"

From the Throne Speech: "<u>Climate action will be a cornerstone of our plan to support and create</u> <u>a million jobs</u> across the country. This is where the world is going. Global consumers and investors are demanding and rewarding climate action."

Part 4 of Parker Gallant's series referenced Gerald Butts and his role as one of the 15 members of the <u>Task Force for a Resilient Recovery</u> (TFRR).

Page | 4

As noted therein, TFRR released their final report "Bridge to the Future" on September 16, 2020 recommending the government commit to spending \$55.4 billion over the next 5 years on "5 Bold moves" for a Resilient Recovery.

Is it truly coincidental that just one week later we were the recipients of the Throne Speech which effectively blessed TFRR's recommendations?

TFRR on <u>their website</u> state: "Funding for the initiative is provided by: The Jarislowsky Foundation, <u>Ivey Foundation</u>, The McConnell Foundation, The Schad Foundation, The Echo Foundation." TFRR don't disclose their financial resources, nor do the "Foundations" who provided funding disclose their donations.

Now a little background on the founding partners; Smart Prosperity Institute, International Institute for Sustainable Development (IISD), Insurance Bureau of Canada and the **Ivev Foundation**.

Smart Prosperity was formerly Sustainable Prosperity and "The Sustainable Prosperity Project (SP) was originated by law professor Stewart Elgie". "In early 2008 SP received \$155,000 of additional funding from three Canadian Foundations, and was awarded \$1.8 million over seven years by the Social Sciences and Humanities Research Council of Canada (SSHRCC) for the Research and Policy Network." It is based at the University of Ottawa. The above came from the McConnell Foundation who granted them \$725K. SSHRCC falls under the responsibility of Navdeep Bains, Minister of Innovation, Science and Industry in the Trudeau led government.

IISD is a registered charity and their website notes "IISD receives core and project funding support from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector." In a quick look at their last financial report filed on the CRA site for the year ended March 31, 2019 they generated 0.65% of their total revenue from donators requesting charitable receipts however \$4,458K (17.2%) came from the Federal, Provincial and/or territorial governments and \$19.8 million (76.8%) came from sources outside Canada. IISD are nothing without taxpayer support!

Insurance Bureau of Canada (IBC). Their website notes: "Established in 1964, Insurance Bureau of Canada (IBC) is the national industry association representing Canada's private home, auto and business insurers". It states: "IBC's role is to be proactive on behalf of its members. Back on October 3, 2016 they were happy the government instituted their carbon tax and made the following claim: "Climate change has brought more rain and snow, more storms, and more flooding to almost every part of the country."

Ivey Foundation for almost 16 years has been run by Bruce Lourie. One of the many claims in his bio is "his leadership in the phase-out of coal-fired power plants in Ontario, the single largest climate action in North America." There is little doubt he worked closely with Gerald Butts to make that happen and in the May 19, 2020 announcement by the Smart Prosperity Institute on the members of TFRR Bruce Lourie's name was on the list together with Gerald Butts and Stewart Elgie of Smart Prosperity.

It is the opinion of Parker Gallant that "...this cabal of unelected eco-warriors have been able to usurp Canada's taxpayers, driving the country's economic health into a nose-dive that will exacerbate energy poverty, create unemployment as small and medium sized corporations are bankrupted. Further unemployment will occur as large multi-national companies shutter their Canadian subsidiaries due to high energy costs."

Gallant has written numerous evidence-based commentaries over the years on the Green Energy Act debacle of Ontario which has virtually bankrupted the industrial heartland of Canada. Many of the individuals associated with the Task Force on Resilient Recovery were party to the development and implementation of the Green Energy Act.

Far from job creation, the Green Energy Act devastated Ontario's job market. Robert Lyman's report details the devastating outcome.

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

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



 $\underline{https://blog.friends of science.org/wp-content/uploads/2019/06/The-Ontario-Electricity-Legacy-FINAL.pdf}$

What Investors Might Be Attracted to Canada and Why?

In 2014, many of the United Nations Principles for Responsible Investment signatories (UNPRI) signed on to the Montreal Carbon Pledge, a pact to lobby governments and corporations to advocate for 'sustainable' investments in line with the Paris Agreement 2°Celsius climate target.

Never mind that this target was arbitrarily set some 40 years ago by economist William Nordhaus, as stated by his eco-modernist nephew Ted Nordhaus in this Foreign Affairs article.

AN ARBITRARY TARGET

My uncle, the Yale University economist William Nordhaus, is widely credited with being the first person to propose that climate policy should strive to limit anthropogenic global warming to two degrees above preindustrial temperatures. He didn't arrive at that conclusion through any sort of elaborate climate modeling or cost-benefit analysis. Rather, he considered the very limited evidence of long-term climate variance available at that time and concluded that a two-degree increase would take global temperatures outside the range experienced by human societies for the previous several thousand years and probably much longer. The standard was, by his own admission, arbitrary.

Page | 6

https://www.foreignaffairs.com/articles/world/2018-02-08/two-degree-delusion

And never mind that Nordhaus' own calculations show that trying to meet this target would be economically destructive to the global economy – missing it would be virtually harmless financially.

Conclusion

Both fans and critics of William Nordhaus's computer model of the global economy and climate acknowledge that it is a crude approach that omits many crucial real-world considerations. Even so, it is surely significant that the work that won Nordhaus the Nobel Prize says quite plainly that the UN's special report on climate change is full of proposals that are ludicrously expensive. In an interview after Nordhaus accepted his prize, he diplomatically handled the situation by saying that the 1.5°C target is impossible to achieve at this point. Yet we can go further. Nordhaus's work shows that such an aggressive goal would make humanity much worse off than if we simply adapted to climate change with no government measures.

Source: https://www.econlib.org/library/Columns/y2018/MurphyNordhaus.html

Now many institutional investors, transnational corporations, sovereign wealth funds, hedge funds, banks and foundations are deeply embedded in 'green finance'. Rather than cut their losses (which will be dramatic) they press on, using ENGOs and lobbyists to 'sustain' the unsustainable taxsubsidies that are a form of taxation without representation.

Indeed, since the 2013 report of the Intergovernmental Panel on Climate Change (IPCC), wherein the 15 years hiatus in warming was reported, despite a huge rise in carbon dioxide concentration in the atmosphere from human industrial emissions, it has been clear that carbon dioxide is not the control knob that can fine-tune climate. Coincident to that report, as Roger Pielke, Jr. has reported, green billionaires Tom Stever and Michael Bloomberg propagated the "Risky Business" scenario

based on the unrealistic RCP8.5 modeled scenario, presenting it 'as if' the 'Business-as-Usual' model.

Consequently, various start-ups or low-carbon branches of existing companies have dedicated millions of investment dollars and tax-subsidies toward creating 'disruptive' technologies, often framed as if a Silicon Valley-style potential winner. The difference is that Silicon Valley is mostly dealing with invisible algorithms that can be mathematically manipulated to extract more efficient results; energy systems are by their nature grounded purely in physics and reality.

Page | 7

These investors would be interested in pursuing the "5 Bold Moves" proposed by the "Bridge to the Future" Task Force authors. So indeed, the "5 Bold Moves" may draw investment to Canada, but Canada will not substantially benefit from it due to the tax structure that benefits foreign institutional investors and sovereign wealth funds, and further drains the Canadian tax pool. Likewise, few of these projects would have 'legs' of their own if not specifically funded or supported by government, as detailed further on.

Promptly on the heels of the Speech from the Throne, the Prime Minister, along with Canada Infrastructure Bank and Minister McKenna announced a \$10 billion plan to invest in clean infrastructure, hoping to draw in public and private investors.²

According to the economics group CEIC:

"Canada's Government debt accounted for 53.3 % of the country's Nominal GDP in Mar 2020, compared with the ratio of 52.9 % in the previous year. Canada's government debt to GDP ratio data is updated yearly, available from Mar 1962 to Mar 2020. The data reached an all-time high of 82.6 % in Mar 1996 and a record low of 32.7 % in Mar 1977. CEIC calculates Government Debt as % of Nominal GDP from annual Government Debt and quarterly Nominal GDP." [bold added]

According to the Canadian Taxpayers' Federation, the debt clock as of Oct. 4, 2020 was \$892,143,073,972.59. 4

To recover from the COVID economic crisis, Canada must draw investors that will develop highvalue commodities, minerals, resources, or materials for export to create **value-added opportunities to replenish the tax pool.**

However, the most likely candidates for investment, based on the "Bridge to the Future's - 5 Bold Moves" plan would be foreign sovereign wealth funds and climate-addled UNPRI institutional investors looking for investments, where their tax losses will be low-to-minimal and the opportunities can be quickly exploited. In this case, it is true that wind and solar farms are much faster and easier to build within a few years, whereas large infrastructure projects like pipelines and energy or mines may take decades. **The important difference is for Canada's bottom line.** Pipelines, energy, and mines also return decades of job creation, tax, and royalty payments to all levels of government, assistance in the development of related infrastructure (i.e. paved roads for heavy equipment, which benefit communities along the way; transmission lines to serve their remote needs, as a consequence other remote habitations can then also achieve electrification; these end up being shared costs, underwritten by industry taxes or by direct payments by industry

 $^{^2\,\}underline{\text{https://cib-bic.ca/en/the-canada-infrastructure-bank-announces-a-plan-to-create-jobs-and-grow-the-economy/}}$

³ https://www.ceicdata.com/en/indicator/canada/government-debt--of-nominal-gdp

⁴ https://www.debtclock.ca/

in some cases as in oil sands airport development⁵ prior to the Tar Sands Campaign's recent success and global oil price downturn).

A current case in point is the Trans Mountain Expansion pipeline project, as described by Robert Lyman in his June 1, 2017 assessment, a year prior to the purchase of the project by the Canadian federal government from the proponent Kinder Morgan:⁶

Page | 8

The opposition to the Trans Mountain Expansion project on the grounds of alleged environmental risks, both onshore and offshore, seems to ignore or belittle the economic benefits of the project. According to testimony filed by Trans Mountain and studies conducted by the Conference Board of Canada, those economic benefits will include:

- \$7.4 billion in investment in Canada
- More than 800,000 person-years of employment during construction and the 20-year operation of the project
- \$46.7 billion in federal and provincial government tax revenues to fund a wide range of public programs
- \$23.2 million per year in increased municipal property taxes in British Columbia
- \$3.7 billion more for Canadian oil producers as a result of increased export sales

Lyman explains in the article the thorough assessment of risks and in other articles, the extraordinary lengths the Canadian government has gone to in order to protect against potential spills.⁷ It is important to note that ENGOs have continued to refer to the EXXON Valdez disaster of 1989, a disingenuous reference as oil tankers today are double-hulled, have advance GPS navigation and are guided into port in Canada with tugs.

Many similar large infrastructure projects were on the table in Canada, but over the past 2 years, according to the CD Howe Institute, at least \$100 billion in investment was driven off by federal government climate and energy policies.⁸

In consequence, the type of investors likely to choose Canada today, are those looking for a free ride. Some will be French companies or Franco-European investors trying to meet the French *diktat* of Article 173, requiring all international French investments to address the 2°C Paris targets. Some will be in search of the Green Bonds markets (many of which are 'ring-fenced' – meaning tax sheltered offshore). Likewise, Green Bonds will have the backing of the Export Development Corporation of Canada for 'clean technology'. Others will be European operations which have few growth opportunities in those struggling, moribund economies. As described by Philipp Bagus in the Mises Institute's "Anatomy of the Crash of 2020": 12

"...banks in the Eurozone are still connected closely to their government. As of January 2018, Eurozone banks held €3.536 bn. government debt on their books which amounts to 13 percent of their balance

⁵ https://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/air-oil-sands-a-new-flight-path-in-alberta/article543552/

https://blog.friendsofscience.org/2017/06/01/british-columbias-challenge-to-the-rule-of-law/

⁷ https://blog.friendsofscience.org/2018/04/18/spilling-best-kept-secrets-on-the-west-coast/

⁸ https://blog.friendsofscience.org/2020/03/20/prosperity-foregone-a-summary/

⁹ https://www.frenchsif.org/isr-esg/wp-content/uploads/Understanding article173-French SIF Handbook.pdf

¹⁰ https://www.edc.ca/en/investor-relations/green-bonds.html

¹¹ https://www.edc.ca/en/blog/canada-cleantech-advantage.html

¹² https://cdn.mises.org/anatomy of the crash english.pdf?utm source=Mises+Institute+Subscriptions&utm campaign=a2e414adab-

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sheet total. When in the next recession, the sovereign debt crisis looms again banks can expect losses on their sovereign debt portfolio."

Canada, sadly, offers a great giveaway to foreign investors, according to a paper by Vijay Jog and Jack Mintz.

Page | 9

Sovereign Wealth and Pension Funds Controlling Canadian Businesses: Tax-Policy Implications ¹³

In a world without taxes, investors that take over companies would do so because they expect to be able to operate the business efficiently and at a high rate of return. But in Canada today, some acquirers enjoy tax advantages over others. And that could mean that certain buyers, who may not be best suited to owning a particular company, are able to outbid those who are better positioned to run that company at optimal efficiency.

That is a problem not just for investors who end up outbid, due to Canada's uneven tax policy, but for the Canadian economy, which suffers from the resulting economic inefficiency.

With respect to registered pension plans, the so-called 30-per-cent rule puts a cap on the amount of voting equity in a company that they are permitted to own. Meanwhile, however, sovereign wealth funds — whether controlled by China or Australia — face no such limit when purchasing stakes in Canadian firms.

The number and size of sovereign wealth funds, globally, is only growing — and rapidly. But as Canada increasingly attracts foreign capital, with foreign-controlled government-affiliated funds seeking out Canadian takeover targets, much of the discussion around public policy has focused primarily on the Investment Canada Act and the "net benefit test" for foreign direct investment.

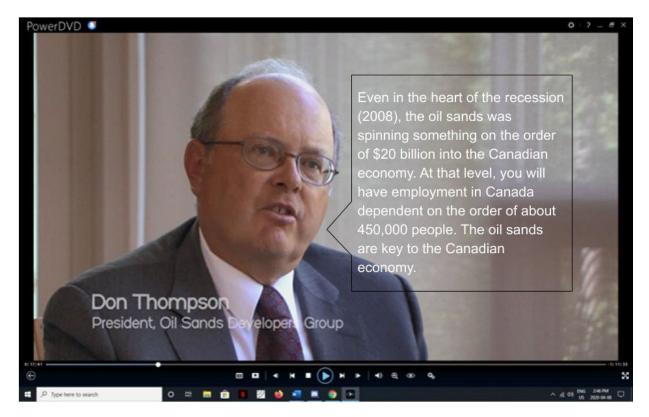
Another component in ensuring that Canadian interests are preserved, however, is the question of whether Canadian institutional investors can operate on a level playing field with foreign sovereign wealth funds. With the 30-per-cent rule limiting equity purchases for one but not the other, it would appear that they are not.

The most appealing remedy to this imbalance is a tax solution: limiting the corporate deductions on interest, fees, royalties, rents, and the like, that so often factor into the takeover calculation, as part of a tax-minimization strategy. This would not only put pension funds and sovereign wealth funds on equal footing, but it could also be applied to investors operating from low- or zero-tax jurisdictions, as well. This approach is not without disadvantages. But overall, the neutrality it could achieve among different types of institutional investors, and the potential it has to enable those investors best able to maximize management excellence and synergies,

¹³ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2240449

Page | 10

How Did Canada Do So Well in the 2008 Recession?



Source: From the 2011 CBC Nature of Things co-production of "The Tipping Point: Age of the Oil Sands"

Since the late 1990's, Canada has been under siege by foreign funded and strategized Tar Sands Campaign actors, 14 most of them bent on blocking Canada's access to global markets, 15 many of them funded by large foundations who are part of the ClimateWorks plan to establish global capand-trade systems, carbon pricing and to put their vested interests in renewables on the global grid.

No matter that engineers have long explained that wind and solar cannot support even basic society ¹⁶ (though they may be useful for off-grid applications or nominal complementary generation in specific situations), no matter that we have known since the 1970's that a hydrogen powered society is an expensive, dangerous and energy-losing proposition, ¹⁷ no matter that Ohm's law means EVs will never meet the performance standards of ICE vehicles, no matter that geothermal is useful in specific geographic contexts, which exist in few places of the world, but expensive and potentially dangerous elsewhere ¹⁸ – we still have these green ideologues that are

¹⁴ https://friendsofscience.org/assets/documents/Fear&Loathing.pdf

¹⁵ https://blog.friendsofscience.org/wp-content/uploads/2020/08/Protest-vs-Green-Trade-War-rebutting-Enviro-Defence-FINAL-Aug-17-2020.pdf

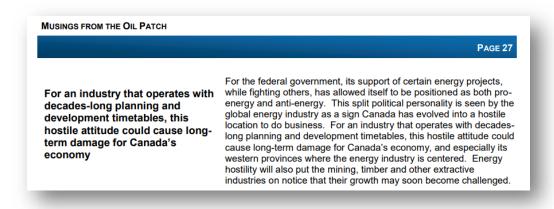
¹⁶ https://www.cambridge.org/core/journals/mrs-energy-and-sustainability/article/lessons-from-technology-development-for-energy-and-

sustainability/2D40F35844FEFEC37FDC62499DDBD4DC 17 https://euobserver.com/opinion/149089?utm_source=euobs&utm_medium=email

¹⁸ https://blog.friendsofscience.org/wp-content/uploads/2019/08/Geothermal-Alberta-A-Case-for-Caution-Aug-12-2019-REV2.pdf

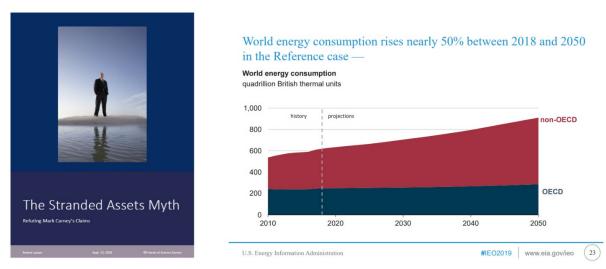
well-financed, very well networked, pushing out professionally designed ad campaigns¹⁹ and reports with common international messaging. Pushing out these economically destructive, tax subsidized solutions on the public and policy makers, draining the tax pool, and in the case of the Tar Sands Campaign, shutting down Canada's economy and making Canada into a country hostile to investment.

Page | 11



Excerpt of "Musings" newsletter by PPHB Energy Bankers of Houston, April 2018

In the real world, the fact remains that the world runs on oil, natural gas, and coal and will do so for a very long time. As shown in Part 1 of this report, there will not be any stranded assets as Asian markets are set to continue their growth for decades. If anything, vulture investors are profiting on the decline in value of Alberta's locked in oil sands, and the **Canadian public are facing decades of debt and poverty if our natural resource exports to global markets are not freed up for delivery without interference by foreign-funded ENGOs.**



https://blog.friendsofscience.org/2020/09/13/stranded-assets-are-a-myth-mark-carney/

 $^{^{19}\,\}underline{\text{https://www.boothroydco.com/clients-and-projects}}$

Our largest trading partner is the United States of America. The US pulled out of the Paris Agreement, and ironically, is the only country of the world meeting their targets without the economically destructive climate and energy policies of Canada.

The Top 10 plus EU

Table 1 lists the countries that are the ten largest carbon dioxide emitters in the world, as well the European Union, whose members tend to set joint policy on emissions reduction, along with data showing trends over the past decade. The emissions are listed in terms of megatonnes (Mt):

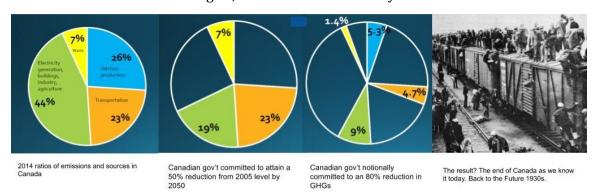
Table 1 Carbon Dioxide Emissions Trends

Country/Group	2008(Mt)	2018(Mt)	Change (Mt)	Change (%)
China	7379	9429	2050	28
USA	5676	5145	-531	-9
European Union	4149	3479	-670	-16
India	1467	2479	1021	69
Russia	1554	1551	-3	-0.2
Japan	1275	1148	-127	-10
South Korea	558	698	140	25
Iran	504	656	152	30
Saudi Arabia	424	571	147	35
Canada	545	550	5	1
World	30,337	33,891	3554	12

Source: BP Statistical Review of World Energy 2019

https://blog.friendsofscience.org/wp-content/uploads/2019/08/PROMISES-VS-PERFORMANCE-Final.pdf

If Canada were to meet its Paris targets, this is what our economy would look like.



 $\underline{https://blog.friends of science.org/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-climate-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/10/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/2017/05/can-canada-survive-change-policy/201$

But the good news is that these targets are entirely self-imposed, and as shown earlier in the section on Bjorn Lomborg's analysis, there would be no change in global warming. Lomborg proposes that we adapt – we have been so good at it so far.

Page | 13

Canada ratified the Paris Agreement on October 5, 2016. Canada's treaty obligations under that Agreement do not include any requirement that Canada:

- meet any specific GHG emissions reduction target;
- · pay any penalty if it fails to meet its voluntary emissions reductions targets;
- pay any specific amount or share of the collective financing for developing countries:
- use any specific set of policy instruments (e.g. taxes, regulations, subsidies, etc.) in pursuing its voluntary emissions reductions goals.

https://blog.friendsofscience.org/wp-content/uploads/2020/07/Litigating-Climate-Change-FINAL-rev.pdf

The Preferred Financier – Canada Infrastructure Bank

Several of the green proposal documents invoke the name of the Canada Infrastructure Bank (CIB) as the ideal body to underwrite many of the initiatives. On page 36 of "Bridge to the Future", a "\$13 billion capitalization of public investment into a retrofit finance platform" is proposed, invoking the CIB as the body to "facilitate aggregation, securitization, and incentives for project origination."

Canadians should think twice about this. Here is why.

Canada's former Finance Minister (Bill Morneau) has had a long association with AGF Management.[1] In 2014, AGF proposed the idea in the press of establishing an infrastructure bank. Mr. Morneau was reportedly a director with this firm for some 15 years.[2] AGF has now established an infrastructure arm which is building a wind farm in BC. "In other words, the JV will aim to "bring global capability to mid-market infrastructure," through investments in both green and brown field projects. **The goal is to generate an annual return of 8%-14%."** This is a very high rate of return likely only attainable due to large government subsidies and long-term contracts, as explained below. To place this return in context, consider that recently Blackrock warned that mutual fund returns would be in the 4% mark for the next decade, much less than the projected 7-10%.[3] The interview with Larry Fink of Blackrock indicates that pension funds will be significantly underfunded as they typically look for about a 7% return. Many funds incurred huge losses in the 2008 mortgage collapse; these were further complicated by reported 9.7% annualized losses (by CalPERS) in clean-tech investments as reported in 2013 in the Wall Street Journal in an interview with Joseph Dear, then ClO.[4]

Examining the Five Bold Moves Proposed in "Bridge to the Future"

Page | 14

Bold Move #1

Invest in climate-resilient and energy-efficient buildings

Robert Lyman, Ottawa energy policy analyst and former public servant of 27 years, diplomat for 10 years, has addressed many 'green' proposals over the past 5 years in a series of articles and reports that he contributed to Friends of Science Society. He addressed the proposed <u>"LEAP Manifesto"</u> <u>push for building retrofits in a May 2019 article</u>, saying:

I was reminded of this in reading a recent article written by Michael Kelly, a professor at the University of Cambridge, in which he described a 2019 U.K. government report stating that "the 29 million existing homes in the U.K. must be made low-carbon, low-energy and resilient to climate change". Professor Kelly's article can be read here: https://www.thegwpf.com/decarbonisation-and-the-command-economy/# ftn2

In it, he described his experience in advising on a pilot program launched by the UK government in 2008. That program, called, "Retrofit for the Future" committed 150,000 pounds (Canadian \$262,000 at today's exchange rates) to retrofit each of 100 houses in the housing association (i.e. social housing) sector. The target for the program was to reduce per house GHG emissions by 80%, largely by installing full wall insulation, underfloor insulation, the newest high-efficiency appliances, and other measures. The efficiency improvement goal was not attained (some units reached 60 per cent GHG emissions reduction), even at that elevated cost.

The City of Cambridge subsequently considered a proposal to retrofit the city's 49,000 homes and 5500 other buildings at a cost of 700,000 to one billion pounds (Canadian \$1.2 billion to \$1.7 billion) to halve the CO2 emissions. The City declined. If that proposal were to be extended to all 29 million existing homes in the U.K., the cost of retrofitting would be about 4.3 trillion pounds (Canadian \$7.5 trillion).

If the typical U.K. household energy bill of 2,000 pounds per year (Canadian \$3,500) were halved, the saving would be 29 billion pounds (Canadian \$51 billion) per year, and the payback time would be 150 years.

Proponents of expensive emissions reduction measures often claim that, if they were ordered to be done in the entire economy, the resulting economies of scale would reduce costs to a more manageable level. However, in the U.K., private lenders would not agree to finance a home improvement unless the payback period were about 3-4 years, rising to perhaps 7-8 years on infrastructure investments in the

 $^{{}^{20}\,\}underline{\text{https://blog.friendsofscience.org/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-potential-conflict-of-interest/2017/11/24/infrastructure-bank-questions-of-pote$

home. There is no way that the payback period could be reduced to that level, especially in eleven years.

If private lenders would not touch such uneconomic investments, would governments? There are about 14 million housing units in Canada. If the cost of major housing retrofit here were the same as in the U.K., the cost to halve GHG emissions would be \$3.6 trillion.

Page | 15

How much is \$3.6 trillion (\$3,600,000,000,000)? If you were given a guaranteed annual income of \$100,000 per year from such a fund, you would have to live 36,000,000 years to spend it, even if you received no interest. It costs about \$6 million per kilometer to build a highway in Canada, and the distance from Halifax to Vancouver is just under 6,000 km. You could build a highway that crossed Canada 100 times for \$3.6 trillion. It costs about \$2 billion to build a new hospital in Canada; you could build 1800 of them for \$3.6 trillion

Which political party will commit to that?

As a nod to Indigenous communities, "Bridge to the Future" suggests establishing a \$1 billion per year, non-lapsing infrastructure fund, but does not address the decades long, **glaring and inhuman lack of safe, suitable housing and water on First Nations reserves across Canada.**

This need is well-known, a hand-waving comment on establishing another fund disrespects the dire circumstances of millions of First Nations people whose real needs for housing have been left behind in this regard for far too long.

Some activists signatory to Canada's "Green Pact/Le Pacte Vert" believe there are \$58 billion/yr. in fossil fuel subsidies that can simply be diverted to pay for their green schemes. This is not the case. As in our 2016 critique of the Green Budget Coalition, "Keep Canada in the Black", Friends of Science Society explained that there are no subsidies to fossil fuels. In our 2019 report "Look Before You Leap into Climate Emergency Mode" we dispelled many of the myths of fossil fuel subsidies and dismantled the ideological claims of a fast transition to NetZero. Our 2019 report "Shocking Reality" showed that decarbonization is a pathway to catastrophe.

Bold Move #2

Jumpstart Canada's production and adoption of zero-emission vehicles

"Bridge to the Future" makes a push for the establishment of Zero Emissions Vehicles (ZEV), proposing some \$6.5 billion in funding to attract ZEV value-chain manufacturers, to provide \$2.5 billion in incentives to kickstart the adoption of ZEVs across Canada, to provide \$2 billion for increased funding for existing EV charging infrastructure, all to be driven by ZEV mandate legislation requiring a phase-in on sales of ZEV in all classes of vehicles. Electric vehicles are subsidized by various programs in Canada.²⁴

²¹ https://blog.friendsofscience.org/wp-content/uploads/2016/03/a-business-review-of-green-budget-2016-final-mar-11-2016.pdf

 $^{^{22}\,\}underline{\text{https://blog.friendsofscience.org/wp-content/uploads/2019/05/Look-Before-you-Leap-into-Emergency-Mode.pdf}$

²³ https://blog.friendsofscience.org/wp-content/uploads/2019/06/Shocking-Reality-FINAL.pdf

https://www.plugndrive.ca/electric-vehicle-incentives/

EV policy. According to an engineering review, Canada would need to install an additional 10,000 MW of power generation facilities in the next 20 years. Such projects require a 20-30-year lead time and cost billions of dollars; no such projects are presently on the table. Likewise, hundreds of billions of dollars of transmission and distribution infrastructure would be required.

Page | 16

- Using the actual measured amount of energy expended in this area today allows some determination of what conditions must exist for all vehicles in Canada to be electric in 2040.
- At perfect efficiency, impossible, more than 10,000 megawatts of additional electrical generation capacity are required for Canada to be 100% electric passenger cars by 2040.
- At the present time, there are two large power projects being built in Canada, Site C in BC, and Muskrat Falls in NL. Combined, they have a capacity of 1,924 megawatts, if they meet their design capacity.
- Example of lead time and cost escalation: Site C dam in BC was first considered in hearings in 1980-81, and turned down. After the Clean Energy Act of 2010, it began to move forward; in 2012 it was mandated under CEAA; 2014 received environmental approval from federal and provincial authorities. Site clearing began in 2016 since then it has been stalled and started several times with court action from various environmental groups or First Nations. The original cost was estimated at \$6.6 billion; estimates now predict \$11 to \$12 billion. This cost does not include transmission lines to hubs. (Source: Wikipedia)
- The existing projects have taken or will take more than five (5) years to reach production.
- There are no other large power generation projects even being contemplated in Canada currently. To meet the 2040 stated objective at least eight (8) more projects, of about the sizes being built, are required.
- In addition to the power generation, large amounts of additional electrical infrastructure will be needed to deliver the newly generated power to locations where it will be needed. None is planned now. (Costs are in the hundreds of billions or trillions the 500 kV transmission line from Calgary to Pincher Creek wind farms cost \$2.2 billion dollars. Additional upgrades would be required for most distribution lines (within neighbourhoods) and transformers and the IT infrastructure at the electric system operation, which may be in the 9 figures.)
- Given how electrical vehicles will be used, most for commuting and shopping, recharging will be a nighttime load on the power system. Weather may require day-time charging adding to base load demands. This eliminates solar and wind power from contention as new supply.
- Other technologies, fission, and fusion may be deployable in time to meet the projected demand. However, both of these technologies have long, long lead times and will be challenged to meet demand in even fifteen years.
- The subsidies for buyers of electric cars should cease immediately.
- A national consensus needs to be developed supporting increased power generation and distribution ahead of the demand coming on from electrical vehicles.



Hydrogen – the New Silver Bullet

"This is the dream: clean electricity producing clean energy which only produces water when it is consumed, and which will allow diversification with the electric vehicle in case this other illusion does not last long either!"

Page | 17

- Prof. Samuele Furfari

Mark Carney's many <u>blithe public comments on hydrogen</u> as the new NetZero solution have driven a flurry of projects around the world. Hydrogen, when consumed as fuel, leaves only water when consumed. Thus, some see hydrogen fuel cells as the Net Zero replacement for vehicle gasoline and diesel or even aviation fuel; others see hydrogen electrolysis as the ideal method to use wind energy to create energy 'storage' in the form of hydrogen (an extremely energy dense, indeed, highly explosive gas).

Hydrogen does not exist naturally in any quantity in the atmosphere; therefore, it must be 'made' from chemical/fracking or electrolytic processes. These require the use of energy, thus diminishing the energy value of the end product. Hydrogen is difficult to capture and must be stored under extremely high pressure, requiring very specialized metal structures that are also resistant to the metal corroding/embritling qualities of hydrogen when it reacts with certain metals.

This <u>Dutch engineer's video</u> explains why wind and hydrogen are not the match 'made in heaven' that renewables advocates claim it is to create 'green' hydrogen (as a means of storing wind energy).

Jørgen Henningsen, formerly part of the EU Commission explains the problem of trying to convert wind power into hydrogen as 'storage' for later energy use:

"The explanation is quite simple: conversion of electricity, green or not, into hydrogen implies a loss of +/- 30 percent of the energy content of electricity; and whatever subsequent step taken in making the hydrogen into practical use will imply another 30 percent loss (of the 70 percent energy remaining in the hydrogen), altogether leaving us with +/- half the energy in the original electricity being available for useful purposes." ²⁵

Prof. Samuele Furfari, author of "L'utopie hydrogène" (English version: <u>Hydrogen Illusion</u>) says that: "Of course, some EU industries will benefit from the windfall of the hydrogen strategy – understand the manipulation of the market by politics – as others did in the biofuels era; they will benefit from guaranteed prices and a green image, of course, at the expense of taxpayers/consumers. It is therefore not surprising that on March 10 this year they entered an alliance with the European Commission, as others did for batteries and biofuels.

Moreover, hydrogen is essential for the petrochemistry, but it is not for energy use especially since the **subsidised hydrogen is produced from energy**. Therefore – unless you want to create a vast smuggling market – hydrogen will be used in chemistry and not as a fuel because – obviously – it has a much higher value as a chemical feedstock than as a fuel. Burning hydrogen to generate energy when

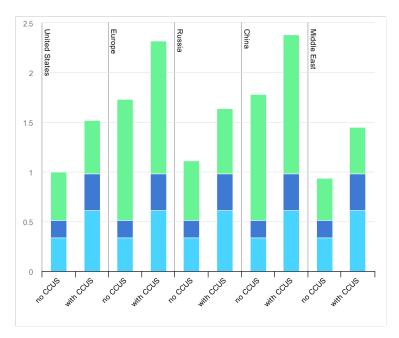
²⁵ https://euobserver.com/opinion/149089?utm source=euobs&utm medium=email

hydrogen has been produced by energy is like keeping oneself warm burning Louis Vuitton handbags. Inevitably, any hydrogen produced will end up in chemistry and not in a motor vehicle."²⁶

In a separate article, Prof. Furfari explains, there is a much more important use for hydrogen – the making of fertilizer for agriculture, so that we can eat.

Page | 18

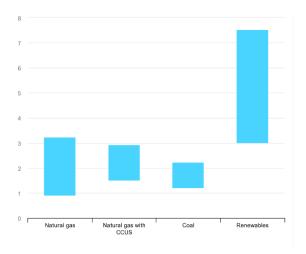
"Hydrogen is a chemical produced from natural gas in a common and worldwide process called "steam cracking". This molecule is used extensively by the petrochemical industry and all the chemistry that results from it, mainly for the production of fertilizers. With growing global demographics, the demand for hydrogen for the production of agricultural fertilizers will keep pace with food necessities. This basic molecule, already highly sought after, will become more and more so. Thanks to this real surprise in the geopolitics of energy that is natural gas, its global market is more and more competitive and fluid, which will result in a reduction in its price on international markets."²⁷



Hydrogen production costs using natural gas 2018 (IEA) (CCUS = Carbon Capture Utilization Storage)

²⁶ https://www.europeanscientist.com/en/energy/hydrogen-strategy-to-nowhere%E2%80%A8/

¹⁷ https://www.latribune.fr/opinions/hydrogene-enieme-utopie-de-l-ue-ou-comment-se-chauffer-en-brulant-des-sacs-louis-vuitton-853316.html



Hydrogen production costs by production source (2018) (IEA)

Based on the foregoing graphs, it does not look like hydrogen production from renewables will be cost competitive.

Bold Move #3

Go big on growing Canada's clean energy sectors

CLEANTECH-60,000 JOBS EVERY YEAR TO 2020. REALLY?

You can forecast anything, delivering actual results is a different story.

"The Firm: The Story of McKinsey and its Secret Influence on American Business"

by Duff McDonald

Smart Prosperity's report states that McKinsey foresees 'clean innovation' in Canada's energy sector as leading to the development of some 60,000 new jobs every year from now to 2020, an astonishing forecast that does not appear to be tied to a specific industry or product, particularly considering the rocky state of economies and geopolitics world-wide.

According to our report "Green Jobs—Rhetoric or Reality" some 2.2 jobs are lost for every 'green' job created.

McKinsey's optimism should be weighed against this comment: "It's an impossible number to quantify [the firm's economic impact], given that McKinsey doesn't actually make final decisions for its clients, but it may not be too far off the mark to suggest that McKinsey has been the impetus for more layoffs than any other entity in corporate history." (96) "The Firm"

Excerpt of Friends of Science Society's report "Grounded in Reality: Challenging Smart Prosperity on Clean Tech"

Contrary to the proposition of that Task Force on Resilient Recovery's "Bridge to the Future", Robert Lyman writes of 'clean energy' that it is all <u>Broken Promises</u>, <u>Empty Wallets</u>, and <u>Empty Pockets</u>. If the Task Force are truly independent experts, as they claim, how are they unaware of these facts?

Page | 20

Globally, according to the REN21 Renewables Global Status Report published by the United Nations Environment Program, from 2006 to 2017 nearly U.S. \$2.5 trillion was funneled into government mandated renewable energy investments. Yet, despite that monumental expense, global emissions increased by almost 20%.

As the global economy emerges from the current pandemic, logic would suggest that oil and gas, which now constitute 60% of global energy use, will grow far faster than renewables which hold only a 4% share. Further, in emerging from a period of depressed income, companies and people would probably prefer energy sources that are less expensive and more reliable; that consideration strongly favours oil and gas. However, government mandates, so common in many countries, may require people to continue using less economic renewable energy where free choices would dictate otherwise.

An example of one member of the Task Force for Resilient Recovery's failure to appreciate the difference between economic development and tax subsidized virtue-signalling is found in the letter from Dr. Kyla Tienhaara, Canada Research Chair on Economy and Environment (Tier II), at Queen's University to the Standing Committee on Industry, Science and Technology of June, 2020.

In her letter,²⁸ Dr. Tienhaara denounces the 2009 Canadian investment in a high voltage transmission line in Northern B.C. as just a prop to industry, saying:

In terms of directing investment to the **public** sphere, an example is that **public infrastructure should receive government funding whereas effectively private infrastructure should not**. The Northwest Transmission Line, which received \$130 million from the "Green Infrastructure Fund" in Canada's 2009 stimulus package, was marketed as a project to transition a small remote community from diesel power to clean energy. In reality it was intended to provide cheap energy to mining companies (Tienhaara 2018). For the same cost, we could have had 46 projects like the Cowessess First Nation Wind [CFN] and Storage Demonstration project, which brought not only clean energy but also revenue to a small community at a fraction of the cost (\$2.8 million from the "Clean Energy Fund").

As with many 'clean/green' advocates, Dr. Tienharra is unaware of the actual costs of the Cowessess First Nation wind project. According to Natural Resources Canada, the project's total cost was \$6,851,000 dollars (land not included).²⁹ There are 234 residential and commercial CFN facilities requiring energy. The cost of wind implementation alone would be \$30k per structure. Assuming an average use of 50kwhr/ day averaged over the year what sort of capacity do these combined sources provide?

NRCan goes on to say: "CFN has a power purchase agreement with SaskPower who pays approximately \$100/MWh (escalates at 2% per year under the Green Options Partners Program) for electricity generated at the site."

This is a 20 year Power Purchase Agreement (PPA) and the \$100/MWh payment is more than three times the ~\$30/MWh paid to the major conventional producers that provide reliable, uninterrupted power to the grid, thus this 'green *investment*' is skewing free-market investments and earnings in favour of a tax-subsidized project. According to industry experts, the likely life of

²⁸ https://kylatienhaaradotcom.files.wordpress.com/2020/06/tienhaara_indu_green_recovery_submission_final.pdf

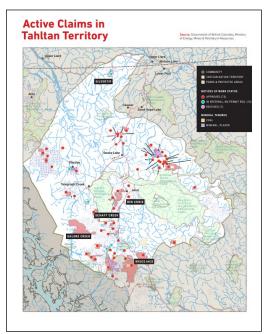
²⁹ https://www.nrcan.gc.ca/science-and-data/funding-partnerships/funding-opportunities/current-investments/wind-and-storage-demonstration-first-nations-community-cowessess-first-nation/4983

the turbines might be 30 years and the battery 10 years. The jobs created are few, and there is no value-added, exportable energy or product.

As noted by SaskWind: "In a very limited number of off-grid applications there is value in windbattery operations such as this one. However the reality is that adding a battery to a wind turbine substantially increases costs which is why it is rarely done. And this is why the electricity from this Page | 21 project will be more than three time more expensive than that which would be produced by several

large, grid connected, wind turbines."30 (underline added)

By contrast, Northwest Transmission Line in BC, which Dr. Tienhaara denounces, received \$130 million from the "Green Infrastructure Fund" in Canada's 2009 stimulus package. This has led to a very constructive relationship with the Tahltan First Nation of BC. Some 28% of the workforce at the Red Chris Mine (129 individuals³¹) identify as Tahltan and the Tahltan Central Government Industry Review 2020 report explains the various trickle-down benefits to the First Nation and region.³² The Red Chris Mine is just one of several. Likewise, the Tahltan Central Government report notes: "The Golden Triangle area in northwest B.C. has been a focus of mineral exploration and mining activity for over 150 years. Early discoveries included significant gold, silver, copper, zinc, lead and molybdenum deposits throughout the region, which covers nearly one-quarter of the province of B.C. Today, a rise in commodity prices and improvements in infrastructure have made the Golden Triangle one of the hottest mineral exploration districts in the world."



This kind of economic development adds value to communities as exports reach international markets. As reported in The Tyee, "... 2008 findings of a Mining Association of B.C.-led industry report that predicted the power line would draw \$15 billion in capital and 30,000 jobs to the northwest of B.C. over the coming decades."

According to Trade and Invest British Columbia, in 2017, mining generated \$8.8 billion worth of mine products.³³

That kind of capital and those kind of jobs will regenerate Canada's economy. Subsidized wind and solar will not.

Bold Move #3 suggests that clean energy creates three times as many jobs as fossil fuel investments? Three times what kind of jobs? As seen above in the Cowessess First Nation project vs the Tahltan First Nation, it is conventional resource and energy that creates the long-term, good paying, skilled jobs.

https://www.saskwind.ca/project-case-studies-2-1

³¹ Tahltan First Nation Band Council description of Dah Ki Mi "our house" - "The main reserves of the Tahltan First Nation are located in Telegraph Creek and today the town is home to about 400 residents, of which approximately 350 are of Tahltan ancestry." ... "Today [Dease Lake] the town is considered the government centre and supply point for the district. The present population numbers around 475 of which approximately 45% are

Tahltan." https://tahltan.ca/nation/territory/#:~:text=The%20main%20reserves%20of%20the,350%20are%20of%20Tahltan%20ancestry.

³² https://tahltan.org/wp-content/uploads/2020/03/3369 TCG IndustryReview2020 webspreads.pdf

³⁴ https://www.britishcolumbia.ca/invest/industry-sectors/mining/#:":text=British%20Columbia%2C%20Canada%20is%20rich,minerals%20and%20other%20mining%20products.





The claim that clean energy industries create three times as many jobs as fossil fuel investments is a spurious correlation and ignores the economic objective of energy use and job creation. As Ottawa energy policy consultant, Robert Lyman writes in this article critiquing claims of University of Alberta economics professor Andrew Leach about the Alberta oil sands:³⁴

The public discussion about employment in the energy industries has becomes highly politicized. People like Mr. Leach <u>likes to trivialize the estimates of employment spinoffs</u> because the largest effects often occur over two to three-year construction periods and the number of people required to operate a large capital-intensive project is far smaller. (The

same people then ignore this consideration when it comes to the construction of wind and solar plants.) The best way to consider the employment effects of any project is in terms of person-years to employment, but this standard is rarely used because of the politics surrounding the issue. A more fundamental point is that, from an economic policy perspective, the goal is not to create as many jobs as possible, but rather to produce as much energy as possible at the lowest possible cost, and that means doing so with the fewest energy workers. The oil and gas industry features relatively lower employment but exceptionally high value-added, because of the high output of valuable products. The higher productivity, other things equal, justifies higher wages per worker.

Many people believe clean tech to be on the verge of taking over conventional sources of power generation. As we saw in the energy consumption charts in the Part 1 of these reports, that is not the case. But what is the statistical comparison between clean technology and conventional in Canada? Robert Lyman has summarized some key points from Canada's Energy Fact Book (2018-2019): 35

"Clean Technology"

Claim:

The "clean technology" sector is a very important part of Canada's economy.

Facts:

In 2016, the clean technology sector accounted for 1.3% of Canada's GDP.

Claim:

Renewable energy is a source of increasing investment in Canada.

Facts:

Renewable energy investments declined from a peak of about \$6.8 billion in 2014 to \$2 billion in 2016, before partially recovering to \$3.3 billion in 2017. Investments in solar PV declined from about \$2.2 billion in 2014 to \$300 million in 2017.

Claim:

Energy is not a major contributor to Canada's income, especially outside of Alberta.

Facts:

While the energy sector GDP in **Alberta in 2017 was the highest in Canada at \$79.6 billion,** it was significant in all provinces, including notably **Ontario (\$15.9 billion), Quebec (\$14.9 billion), Saskatchewan (\$13.2 billion) and British Columbia (\$12.9 billion).**

https://blog.friendsofscience.org/2020/04/22/inconvenient-facts/

Claim:

The energy industry does not contribute much to government revenues.

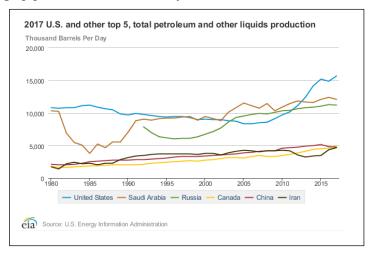
Facts:

The average annual government revenue from the energy industries over the period 2012-2016 was \$17.8 billion. Of this, the oil and gas industry accounted for \$15.8 billion, or 89%, with the upstream portion of the oil and gas industry providing \$12.9 billion, or \$72%. The energy sector's share of total taxes paid by all industries was 8.4%.

Page | 23

From the foregoing numbers, it looks like ramping up production and delivery of conventional oil,

gas, coal, and other commodities will be the best way to develop jobs, stimulate the economy, replenish the tax pool and expand value-added industries from the product stream of hydrocarbons. We are in the top six global exporters of oil and other refined petroleum products. No other competitor nation is trying to meet climate targets. No other competitor nation has a Tar Sands Campaign blocking pipelines or railways.



Additional References:

Robert Lyman's report "Green Jobs – Rhetoric or Reality?" deconstructs this myth of job creation in a green economy.

https://friendsofscience.org/assets/documents/Green-Jobs-Rhetoric Lyman.pdf



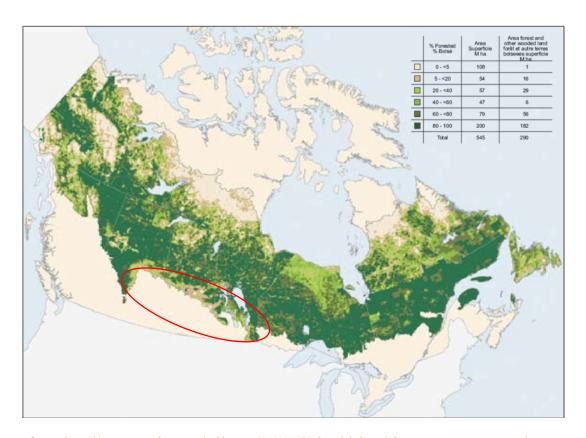
Bold Move #4

Invest in Nature

"Bridge to the Future" claims that planting 2 billion trees will sequester carbon at the comparatively lower cost of \$16-\$36 tonne. Again, no due diligence has been done. Where would Canada plant such trees? What greenhouse has those seedlings presently being cultured? There is an active, professional Canadian forestry industry that is already planting millions of seedling every year in an expertly planned process. The '2 billion trees' is not a project can could ramp up overnight.

The only area left in Canada for planting large numbers of trees is the so-called 'white zone' that lies between the prairies and the boreal forest – the very area that thousands of pioneers painstakingly

It is true that trees sequester carbon dioxide (CO₂); by weight, wood is 50% carbon.



Source: https://www.researchgate.net/publication/264040453 Canada's boreal forest economy economic and socioeconomic issues and research opportunities

Let us review a previous tree-planting program. Many people were outraged when Premier Doug Ford cancelled the larcenous Forest Ontario programme which entailed 50-million seedlings to be planted over a 17-year period at \$.7-million per year.

That is about 3-million seedlings or 2,450 ha per year at an astonishing price of \$1.56/ seedling. Was there proper site selection? Site preparation? Species selection? Or was that 'too much science' – after all, trees are 'natural', right? Just put them in the ground and they will grow. No. Is it appropriate to use taxpayers' money to send a box of seedlings to a school, have kids plant the seedling and let them die? Has there ever been an audit to determine survivorship or growth of the planted seedlings?

Professional foresters know that stand tending, and maintenance are absolutely essential in the urban environments into which these seedlings are condemned but there is no budget for that, because there is no consideration of the *science of forestry* in the realm of green ideology.

Page | 24

In researching this issue, one forestry consultant told us the following:

- This year I am providing consultation and crop management plans on over 340-million seedlings.
- We are up about 30-million seedlings from last year.
- 340-million seedlings will reforest about 280,000 ha of forest harvesting. That is enough to deal with current harvesting, some plantation failures, and destruction of plantations by wildfire.
- Seedlings go for about 25-cents per seedling.
- *Planting costs another 20-cents*
- Planning and site preparation costs another 10-cents per seedling.
- Seedling prices and planting costs have remained static since the 1980s.
- If we could get the \$1.5 to \$2/ seedling that are in these government tree planting programmes we would think we have died and gone to heaven.
- And we get 90% survival and Mean Annual Increment (MAI)³⁶ of 4-7m³ MAI per year.

Do Forests Sequester Carbon Dioxide?

The forestry consultant further explained: "At about 9.7g CO2e per seedling we are only sequestering about 3300 tonnes CO2e at the nursery and when those 340-million seedlings are planted. In about 50-60-years at harvest those little seedlings will yield about 300m³ of wood per ha with a CO2e of about 248 tonnes CO2e per ha.

Those 280,000 will have sequestered at least 69 Megatonnes CO2e. That is larger than current annual emissions for BC. That doesn't include the roots nor the detritus of biomass from 60-years of growth. A very conservative biomass expansion would add another 40% to that estimate bringing the total to 96.6 Megatonnes. Nor does that estimate include the gross ecosystem biomass - shrubs, understory vegetation, humus, and soil organic that might add another 40% to the gross sequestration. That is more than 10% of the current annual Canadian emissions."

But recall from our report "Futile Folly": ""China emits in one month (819 Mt/month) about what Canada emits in one and a half years (from all sources)."

Bold Move #4 in "Bridge to the Future" talks about a national 2-billion seedling programme over a decade. According to our forestry consultant, that is about 200-million seedlings year or about 166,000 ha per year of planting.

"Outside of forest harvesting which is already being reforested with about 1-billion seedlings per year where will Canada find an additional 166,000 ha to plant? We are simply not clearing or converting that much land requiring planting. The "white zone" of Alberta, Saskatchewan, and Manitoba - the transition zone between agriculture and forest which is managed as rough forage - is about the only place that you could pull of such an industrial scale forest conversion. Even if there was the money to do the conversion - roughly \$1.25 per seedling all costs founded - it would require a significant alteration to the taxation system in order to encourage landowners to take on such a conversion. But much of that land is already managed by professional farmers whose operations typically entail carbon sequestration as the norm of nature. If one ran out the carbon footprint on such a conversion, there would likely not be a benefit to the carbon investment. There are some real forest

Page | 25

³⁶ The **MAI** (Mean Annual Increment) is the volume of wood growing on one hectare of **forest** during one year (m³/ha/year) on average since the **forest** has been established. For a tree plantation, the **MAI** is the present total growing stock volume of one hectare divided by the total age.

Greta Thunberg and George Monbiot Discover Photosynthesis

Page | 26







Source: https://voutu.be/-Q0xUXo2zEY

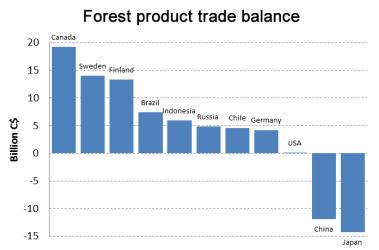
The notion of vast, national tree planting program as a 'climate solution' sprang from a video produced with Greta Thunberg and UK climate activist George Monbiot. They appear to have only just discovered the photosynthetic process – that plants/trees uptake carbon dioxide naturally. They advocate for tree planting on a 'massive scale' and show images of young people joyfully planting trees. Other climate activists who are advocating for the Green New Deal make comparisons to tree planting programs of the Great Depression New Deal – however that was in a time when forestry management was a developing science and the millions of unemployed were grateful for 'anything to do' for nominal pay, room and board in sparse conditions.



Today, especially in Canada, forestry employs thousands of people, most of them are well-trained and well-paid specialists. Those who engage in tree stand planning and forestry management are not the Great Depression unemployed but are highly qualified experts. Summer tree planters are people skilled in outdoor survival, trained to deal with bears and other dangerous risks like physical injury, lightning, wildfire, and

Furthermore, introducing thousands of young Canadians to forest planting as a make-work project risks destroying the excellent planning and planting that has been conducted under the supervision of forestry experts. It makes a mockery of the university educated forestry specialists who take their profession seriously, taking pride in knowing that their work's legacy will live for a hundred years.

Page | 27



Source: NRCan https://www.nrcan.gc.ca/our-natural-resources/forests-forestry/forest-industry-trade/overview-canadas-forest-industry/13311#:~:text=Canada's%20forest%20industry%20bv%20the,aross%20domestic%20product%20(GDP).

According to Natural Resources Canada:

Forests are a major source of wealth for Canadians, providing a wide range of economic, social, and environmental benefits.

In 2013, production in the forest sector contributed \$19.8 billion—or 1.25%—to Canada's real <u>gross</u> <u>domestic product</u> (GDP). In a global context, Canada has the world's largest forest product trade balance—C\$19.3 billion (2013)—a position it has held for as long as trustworthy trade statistics have

been compiled. While other countries may produce more of one product or another, no nation derives more net benefit from trade in forest products than Canada, and the gap between Canada and the second largest net trader (Sweden) has been expanding continuously since 2009.

Clearly, Canada already has carbon sequestration by forestry well under control. Thus, the 'plant 2 billion trees' initiative cannot be said to be a "Bold Move" as it will simply destabilize an industry of working professionals for the sake of international virtue-signalling or the development of carbon credits for nature.



https://youtu.be/RGlnxkLoqts

Carbon Credit Forests – Canadians Pay – Someone Else Profits

One of the Build Back Better initiatives not mentioned directly in "Bridge to the Future" is that of carbon trading in carbon credits in forests. Since Greta Thunberg is backed by a group of carbon offset kings, it is likely that her association with anti-capitalist George Monbiot in the forestry video Page | 28 has some correlation to carbon credits on Canadian forests. George's role is likely related to his 2006 "Here's the Plan" – that all people should be given a 'personal carbon ration'.

2Nse that target to set an annual carbon cap, which falls on the ski jump trajectory. Then use the cap to set a personal carbon ration. Every citizen is given a free annual quota of carbon dioxide. He spends it by buying gas and electricity, petrol and train and plane tickets. If he runs out, he must buy the rest from someone has has used less than his quota(2). This accounts for about 40% of the carbon dioxide we produce. The rest is auctioned off to companies. It's a simpler and fairer approach than either green taxation or the Emissions Trading Scheme, and it also provides people with a powerful incentive to demand low-carbon technologies. Timescale: a full scheme in place by January 2009.

Source: https://www.monbiot.com/2006/10/31/heres-the-plan/

Corporate Knights published an article by Chief Marilyn Sett on June 2, 2020, wherein she advocates that companies support a resilient recovery by buying carbon credits in the Great Bear Rainforest. ³⁷ ³⁸ Most Canadians who love nature believe that the Great Bear Rainforest was created as a joint partnership of the Canadian government, various environmental groups, Coastal First Nations, and the BC government in order to protect the rare white Kermode "Spirit" Bear and the old growth forests. While it is true that this animal lives there, the Great Bear Rainforest (which was largely funded by foreign Tar Sands Campaign donors) has a geographic footprint which also conveniently blocks off tanker traffic.39

A 2013 article in the left-wing online publication "Rabble" reveals that the carbon credit business on the Great Bear Rainforest suffers from some serious conflicts of interest and lack of transparency. That thanks to the BC carbon tax, much of which was drawn from school and hospital budgets, wealthy corporations and other interests were making a lot of money trading in 'the lack of delivery of an invisible substance to no one'. 40

As we have tried to point out in other parts of this report, carbon markets rely on hypothetical, imaginary reductions in carbon dioxide emissions. Carbon trading, which involves a high emitting industry buying 'credits' from a carbon sink (i.e. forestry holding company) or a lower emitter (which has unused credits), thus 'offsetting' the larger emissions. In fact, many people describe this as paying a burglar to go and rob someone else. Carbon trading does not effectively reduce emissions in anyway, and as Interpol has reported, is subject to criminal or subversive activity precisely because the product traded is invisible and intangible.

As reported in Rabble, taxpayers paid a bundle for the privilege of being taxed more to benefit the BC Crown, various large already tax subsidized ENGOs, various First Nations and some wealthy corporations:

³⁷ https://www.corporateknights.com/channels/natural-capital/canada-can-build-back-better-investing-coastal-first-nations-great-bear-forest-carbon-project-15911136/

³⁸ https://coastfunds.ca/great-bear-rainforest/

³⁹ https://www.pipelinenews.ca/news/local-news/vivian-krause-s-testimony-on-the-tanker-moratorium-1.23829809

⁴⁰ https://rabble.ca/blogs/bloggers/policynote/2013/01/great-bear-rainforest-carbon-store-or-carbon-story

In the two years prior to the PCT's purchases of carbon offsets from the Great Bear Rainforest (GBR) project, the single largest offset purchases made by the PCT to help the provincial government achieve its "carbon neutral" status were also from so-called "forest conservation" projects. Yet both purchases -- one from a leading Canadian conservation organization, the other from one of the largest private-land logging companies in the province -- raised serious questions about the alleged climatic benefits associated with the purchases.

In the first case, the Nature Conservancy of Canada(NCC) was paid an estimated \$2.3 million from the PCT for doing what conservation groups do -- conserving a tract of privately owned forestland in B.C.'s southern interior that had been logged for decades. The money came on top of \$25 million that the NCC received from the federal government toward the purchase cost, later estimated at \$125 million.

The NCC was able to convince the PCT to buy the offsets using a purely hypothetical scenario that involved what would have happened had another buyer succeeded in purchasing the lands. Under the imaginary scenario, the other buyer would have logged the lands at a rate five times greater than what had historically occurred. The difference between the purely hypothetical rate and the

_	Re	venue: 2000 -
Org IDRC	,	2018
Ducks Unlimited - Canada	\$	3,552,093,750
	\$	1,760,621,215
Nature Conservancy Canada		1,452,308,191
Toronto and Region Conservation Author		1,347,142,424
Tides (Foundation, Initiatives, Centre)	\$	517,492,974
WWF - Canada + Foundation	\$	431,531,955
Canadian Wildlife Federation + Foundation		285,128,766
IISD	\$	285,043,742
David Suzuki Foundation	\$ \$ \$	156,925,844
Greenpeace Canada*	\$	143,845,385
BC Conservation Foundation	\$	130,924,255
Nature Trust - BC	\$	121,600,515
Land Conservancy of BC	\$	109,160,956
Coast Conservation Endowment Fund	\$	106,222,357
Pacific Salmon Foundation	\$	101.449.777
Pembina Institute + Foundation		84.182.986
Habitatat Conservation Trust Fund	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	78,761,460
CPAWS	Š	76,698,542
Fraser Basin Council	č	70,982,750
Canadian Climate Forum	č	68.756.446
Ecotrust - Canada	ě	49,524,387
Equiterre*	Š	44,893,420
ForestEthics	č	43.181.576
WC ²	ć	36.369.024
Sierra Club - BC	ė	24,482,904
Raincoast Conservation Society	ė	21.618.529
Sierra Club Canada	è	17,453,039
Wildlands League	\$	15,307,701
Wildiands League Alberta EcoTrust Foundation	\$	
	\$	14,733,779
Wildsight Dogwood Initiative	\$	14,342,107
Dogwood Initiative	\$	12,694,471
Canadian Environmental Grantmakers	\$	3,774,309
Land Trust Alliance - BC	\$	2,600,627
Climate Reality Project Canada	\$	2,510,340
	\$	11,184,360,503

new and allegedly "innovative" land-use practice employed by the NCC was what was eventually marketed as carbon offsets. [highlighter added]

Canadians are paying a lot to pretend to be saving the planet.

From 2000-2018, NCC brought in revenues of \$1,452,308,151. As an already tax-subsidized federal charity, it is not clear why provincial and federal governments granted NCC millions of taxpayer dollars on top of the tax-subsized charitable status.



Canadian taxpayers' dollars to 'save the bear' but used for selling carbon offsets, and Canadians are being asked to pay a carbon tax which will underwrite more the ENGO 'carbon credit', 'clean-tech', and 'low-carbon' schemes.

Now other people are making money on trading carbon credits on land that was acquired with

Bold Move #5

Grow Clean Competitiveness and Jobs Across the Canadian Economy



Source: https://spectrum.ieee.org/energy/renewables/to-get-wind-power-you-need-oil

Despite "Bridge to the Future" listing a large number of expert contributors, none of them seem to know how things are made. All clean tech is made from oil, natural gas, coal, and other mined minerals in processes requiring extremely high heat, power and thus, vast demands of energy.

This brief document has shown that the "Resilient Recovery" "Green Recovery" "Green New Deal" proponents have not done the least due diligence to test their multi-billion dollar proposals, and none of them are doable in the time frames proposed, many are technically infeasible (i.e. east-west power grid), and all of them will cost hundreds of billions more than what is laid out in their documents.

Despite claiming to be 'independent' experts, research by Parker Gallant and Scott Luft show that the various foundations involved have commercial interests that have been promoted by a collection of funded ENGOs. Conflicts of Interest abound.

Parker Gallant on the Pan Canadian Expert Collaboration

https://parkergallantenergyperspectivesblog.wordpress.com/2019/11/11/pan-canadian-expertcollaboration-phase-1/

Parker Gallant on the Strathmere Alliance:

https://parkergallantenergyperspectivesblog.wordpress.com/2020/09/08/the-strathmere-grouppart-1/

Parker Gallant on Ecofiscal Commission:

Page | 30

https://parkergallantenergyperspectivesblog.wordpress.com/2019/02/11/who-and-what-is-the-ecofiscal-commission/

Scott Luft on the "Thee to We" Foundations of Canada's green stimulus:

Part I.

https://morecoldair.wordpress.com/2020/09/05/thee-to-we-the-foundations-of-canadas-green-stimulus-part-1/

Part II.

https://morecoldair.wordpress.com/2020/09/07/thee-to-we-the-foundations-of-canadas-green-stimulus-part-2/

Undue Influence of ENGOs

Robert Lyman has prepared four reports on ENGO charities, showing that they have exceptional financial and political power, and since the change in law regarding use of charitable funds for political activity, they also have billions of dollars available to lobby the government, and to do some political cross-funding and back scratching to get what they want.



 $\frac{https://blog.friends of science.org/wp-content/uploads/2019/05/Money-Matters-report-format-final.pdf$



Page | 31

https://blog.friendsofscience.org/wpcontent/uploads/2019/05/Dark-Green-Money-Foundation-Funding-lan-11-2019-1.pdf



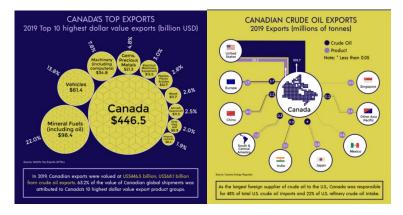




https://blog.friendsofscience.org/wpcontent/uploads/2019/04/Green-Titanic-FINAL-RevA-April-29-2019.pdf

Can Canada survive climate change policy? So far, the "Canada is Back" team has driven deep wedges and much resentment between regions and caused a tremendous loss in incomes, jobs, royalties, revenues, and taxes.





Source: https://energyminute.ca/single/infographics/799/exporting-energy-canadian-oil/

The way back to prosperity is to get our most valuable commodities and value-added products to global markets and to end the undue influence of ENGOs and their green crony capitalists funders. We must stop the drain of taxpayers' precious monies being paid to green schemes that have not gone through any full cost-benefit analysis. We must dismantle climate change hysteria.

We must cancel the climate emergency dogma and go back to normal.





About

Friends of Science Society Friends of Science Society is an independent group of earth, atmospheric and solar scientists, engineers, and citizens that is celebrating its 18th year of offering climate science insights. After a thorough review of a broad spectrum of literature on climate change, Friends of Science Society has concluded that the sun is the main driver of climate change, not carbon dioxide (CO2). Friends of Science Society

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