In what reality, does Net Zero make sense?

Mark Carney has said he will spend \$2 trillion of Canadian taxpayer money to make Net Zero happen. That is obviously a number that was fabricated for convenience. Canada's 2022 Federal Budget had already "established" the Net Zero Costs at \$125 to \$140 billion per year from 2023 to 2050. That equates to \$3.5 to \$3.92 trillion dollars. McKinsey Global Institute has estimated global Net Zero costs at \$275 trillion US\$ (\$380 trillion CDN\$). Our 1.5% share of emissions would suggest our share of the cost would be in the \$5.7 trillion CDN\$ range. Vaclav Smil (Fraser Institute) puts the estimate at \$400 trillion US\$ (\$552 trillion CDN\$), Canada's 1.5% share would be \$8.3 trillion. For this purpose, we will use Carney's \$2 trillion "estimate".

What will that \$2 trillion achieve? How much economic damage will be avoided? How much temperature rise can be averted? We can start with a look at Canada's economic outlook. Conveniently, Canada's Federal Parliamentary Budget Office (PBO) has already produced a report (Global greenhouse gas emissions and Canadian GDP, November 8th, 2022) that lays out the consequences. The PBO analysis shows that 'Climate Change' will reduce Canada's GDP in 2100 by just 6.6%. That means that in a reasonable scenario where Canada's GDP growth continues at 2%/year, Canada's GDP growth by 2100 would be 371.4% instead of 378%. That difference equates to \$140 billion of 'climate change' damage in 2100. Over the 2023 to 2050 period the total 'climate change' cost would be \$3.64 trillion (discounted at 3%/year, that value drops to \$0.7 trillion). The Carney Net Zero costs are \$80 billion per year. That is \$2 trillion (\$1.4 trillion discounted at 3%). A summary table is included below. The economic benefits are questionable at best. The realities of Net Zero, trillions of taxpayer dollars will be wasted (just in Canada). More detailed discussions can be found in my PSS-6 – Climate Change – Quick Cost/Benefit Analysis post.

Spend Canadian Taxpayer Money

To Save

\$2.0 trillion (undiscounted)

\$3.6 trillion (undiscounted)

Looks like a good idea if we ignore the time value of money and previous government (\$3.5 to 3.92 trillion) or independent consultant (\$5.7 to \$8.3 trillion) forecasts.

\$1.4 trillion (discounted at 3%/year) \$0.7 trillion (discounted at 3%/year)

We are wasting money (even at Carney's unreasonably low estimate of Net Zero costs)!

Now we can switch to the temperature "benefits" of Net Zero. A recent paper "Net Zero Averted Temperature Increase" by Lindzen, R., Happer, W., van Wijngaarden, W.A. (2024) showed that the 2050 temperature improvements would be just 0.07 °C (based on theoretical CO₂ sensitivity). With the IPCC's unsubstantiated positive water vapour feedback factored in, the estimate might be as high as 0.28 °C. Canada's 1.5% share of emissions means the temperature averted for our \$2 trillion would be just 0.001 to 0.004 °C. A recent article by Bjorn Lomborg in the National Post put Canada's temperature rise reduction at 0.018 °C using the "UN's standard climate model" while ignoring "that much of the production and emissions just move to the Global South" (China, India, Africa, etc.). These are the models that have been self-acknowledged by the programmers themselves to "run way too hot" and use unrealistically high emission scenarios. We will use the 0.018 °C for the rest of the discussion (not because I want to or should).

\$2.0 trillion (undiscounted)

0.018 °C, \$1.1 trillion for every 1/100th °C

Our Net Zero efforts are totally wasted. Any temperature improvements are insignificant and unmeasurable and well within the margin of error and natural variation.

\$1.4 trillion (discounted at 3%/year) 0.018 °C, \$0.8 trillion for every 1/100th °C

The discounted numbers look slightly better but are of the same order of magnitude and require that much more realistic estimates of temperature averted be ignored.

There is no economic or technical incentive to pursue Net Zero (even under the "supposed" utopian approach/interpretation used by Mark Carney and his UN/IPCC/WEF partners). More taxpayer dollars will be spent than can be saved (based on the Canadian government's own estimates) and the temperature reductions (using the IPCC science) are insignificant (i.e.: too small to measure or even be confirmed). Unfortunately, both leading parties (the Liberals and Conservatives) are still committed to Net Zero. Their approaches, however, are different and should be highlighted. The Liberals under Mark Carney have already shown that they will be continuing the policies that have reduced business investment/capita in Canada and stagnated Canada's GDP/capita growth. Canada has been at or near the bottom of the growth charts over the last decade and is forecasted to remain there.

Rather than dealing with our stratospheric deficits and debt, Carney has chosen to spend an additional \$130 billion and increase our debt by \$225 billion over his 4-year term (should he get elected). Unfortunately, he will not be growing our economy effectively, because he is still stuck in the Liberal, Net Zero, no pipelines, restricted oil & gas development, censorship, restricted freedom world the Liberals forced on us for the last decade (with his guidance for much of it).

Poilievre and the Conservatives are also stuck in a Net Zero fantasy, but they are proposing to use our natural resources (oil & natural gas included) to effectively fund their somewhat misguided aspirations. Establishing LNG facilities will actually reduce emissions globally as proposed coal powered generation facilities are replaced with LNG powered ones. Pipelines in all directions (through dedicated energy corridors) will also produce emission reductions. Any drop of oil, molecule of gas, and even tonne of coal not produced in Canada, will be produced elsewhere, often in jurisdictions that have much lower emission, environmental, ethical, technical, and social standards than Canada. The Conservatives will still be wasting money, but they will allow some growth to offset that waste. Not close to ideal but a huge improvement over the Liberal plan.

Both Canadian parties are ignoring what happens after we reach Net Zero in 2050 (assuming we can). The spending does not stop. All those solar panels, wind turbines, EVs, battery systems, etc. must be replaced every 15 to 20 years. How do we afford that? Providing battery backup for just Alberta's current electrical grid will cost in that \$2 trillion range on its own. Assuming the battery facilities must be rebuilt 2 or 3 times post-2050, that adds another \$4 to \$6 trillion dollars by the end of the century. Just for Alberta's electrical grid with no output growth built in or supply chain consideration. We very likely do not have enough rare and critical minerals to support the initial round of Net Zero. Where do the supplies for the next few iterations come from? A chance to reach Net Zero would also require full global compliance. That means China, India, Africa, the United States, the OPEC+ countries, etc. would have to

be on the same program as Canada. They are not. Emissions are rising or soon will be in all these areas. The demand for hydrocarbons and coal is rising and will not be declining soon.

"The science" behind our "green" policies ignores a wide range of radiative forcings that have more impact than CO_2 without even knowing CO_2 's actual impact. The IPCC uses a range of CO_2 climate sensitivities (1.8 °C to 5.7 °C). Makes a big difference which sensitivity is correct. My apologies, but that is a trick statement! The IPCC modeler's have already self-acknowledged that their computer models "run way too hot" and use unrealistically high emission scenarios (OPS-55 – The State of Climate Science). The CO_2 climate sensitivity is less than 1.8 °C (i.e.: none of their models are correct).

But this post is about using the Canadian government's most recent estimates and standing behind the IPCC "science". To summarize, the Liberals want to spend \$2 trillion (\$1.4 trillion discounted at 3%) on Net Zero to save \$3.6 trillion (\$0.7 trillion discounted at 3%) in climate change damages (GDP growth) and reduce the temperature rise by 0.004 °C (using the IPCC "science"). To restate the opening statement slightly, in what reality does spending roughly \$1 trillion to reduce future temperature rise by 1/100th of a degree Celsius make any sense?

Remember, we are ignoring much higher capital commitment estimates, and the IPCC computer projections are overestimating climate damage and temperature increases. That perceived benefit of spending \$2 trillion to save \$3.6 trillion (all undiscounted) evaporates quickly when realistic capital estimates are used and post-1950 capital requirements are factored in. The government's own 2022 budget estimates were higher in the \$140 billion/year range (\pm \$4 trillion (undiscounted) to 2050). Poof, there are no savings with Net Zero, just waste. All in, the costs to reduce future temperature rise by 1/100th of a degree Celsius are likely in the \$10 trillion dollar range. As mentioned earlier, more detailed discussions can be found in my PSS-6 – Climate Change – Quick Cost/Benefit Analysis post.