

The Denial Of Climate Science

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Why do you trust your mechanic when he says your car does not need work? Because people are so motivated to protect their own interest that statements made against self-interest are usually honest.

Self-interest can help separate climate fact from fiction.

Radio ads by the Friends of Science and Bill Bell's The Scam of Our Lifetime advert in this paper both proclaim that temperatures have not been rising for the last decade.

I assert that this claim is nonsense, but why trust me? Critics like Bill Bell charge that scientists like me hype warming to feather our own nests.

I plead guilty to self-interest. But, paradoxically, the fact that scientists are as competitive and self-interested as the rest of us is a reason to take science seriously and to be skeptical of the deniers.

Let's return to the dispute about the decade's temperature trend. The most famous analysis of satellite temperature records is that by John Christy at the University of Alabama. His data was widely cited by deniers because for many years it showed no warming, and he became famous using the data as the basis of a broader attack on climate science, saying in U.S. Senate testimony that "carbon dioxide is not a pollutant. In simple terms, carbon dioxide is plant food."

Because of Christy's selfinterest in protecting his credibility, I trust him to look hard for any conceivable way to adjust his analysis to make warming look small. So, if Christy's data shows warming, it's probably warming.

Over the last decade, Christy's data show a warming trend that is roughly in line with other data sources.

It gets better: the last two years show rapid warming and last month was the second warmest month in the last decade of the satellite data most cited by deniers as proof that there is no warming.

Deniers are wrong about the decade's temperature trend, but what of their other arguments? Again, follow self-interest: Bell and the Friends of Science want to use their advertising dollars wisely, so they are motivated to use their best arguments. The fact that both chose to highlight an out-of-date claim that can be disproven by a few minutes of fact-checking suggests that their other claims are equally flimsy.

If the deniers' argument was really about facts, they would have more convincing facts.

What about the argument that scientists like me oversell climate science out of self-interest? This argument confuses group interest with individual self-interest.

There is little doubt that some institutions such as Greenpeace or a major climate modelling centre have an interest in hiding problems with the climate science. The fastest way to get ahead in science is to prove one's colleagues wrong. Scientists are self-interested, but scientists don't get ahead by repeating the same analysis again and again; they get ahead by finding its flaws.

The atmospheric physics that underlie climate science rest on a massive web of scientific data developed over more than a century. Most of this data was gathered long before this issue became politicized. The first quantitatively accurate predictions that the Earth's temperature will rise with carbon dioxide, for example, were made at the air force geophysics lab in the 1950s using radiation physics developed for other purposes.

If the denier's were right, climate scientists would need to be faking data and adjusting models in a massive international conspiracy maintained over decades. Sensible folks know that such conspiracies do not occur in the real world because of the huge personal incentive for an individual to blow the whistle means that someone always tells.

Don't trust the climate science because of what institutions like the United Nations say in summary documents: trust it because of the individual self-interest of scientists working in a system that rewards them for finding flaws in the work of others.

While there is much healthy dispute about the details, I am not aware of a single scientist who gets his hands dirty doing real work in atmospheric science who thinks that the world will not warm this century if we keep pumping carbon into the atmosphere.

The culture of climate denial runs deep in Alberta. In part, denial arises from healthy dose of skepticism about obscurely governed multinational entities such as the IPCC and for overhype from some environmentalists who say that global warming poses an imminent threat to humanity's continued existence. But most denial is, I suspect, rooted in the perceived selfinterest of a province dominated by oil and gas.

I share the skepticism of bureaucracy. And I share the self-interest: taxes on Alberta's economy pay my professor's salary.

Alberta's economic future is at risk from carbon regulations. Claims of an easy path to green jobs fuelled by carbon regulation are nonsensical. But good policy is founded on the willingness to face hard truths.

Suppose Alberta pursues a strategy shaped by the assumption that climate science is nonsense, and thus that the world will someday wake up and see things our way. If we dig in to defend our carbon-intensive industry against change to the bitter end, we risk a crash landing.

We have a better chance of leaving a healthy economy to our kids if we take the facts as they are and shape our strategy around them, a strategy that gives Alberta the best chance in a carbon-constrained future.

Leaders do not win battles in business or war by fooling themselves about reality.

Ignorance is dangerous; wilful ignorance doubly so.

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