Dr Kesten C. Green
Adelaide
South Australia

22 September 2025

Committee Secretary
Senate Select Committee on Information Integrity on Climate Change and Energy Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Committee Secretary,

Government funding and regulation of research obstruct truth seeking and speaking

I wish to make the attached five-page submission to the Senate Select Committee on Information Integrity on Climate Change and Energy regarding the harmful consequences for Australians of regulation of, or other government influence on, information relating to climate change and energy.

I am an applied economist with a record of more than 20 years of research on forecasting methods for diverse problems (including climate), and on public policy (including the effects of regulation) that has been published in the peer reviewed literature. I was earlier an entrepreneur, having been a founder of, *inter alia*, a magazine publisher, an economic and financial forecasting and consulting firm, and a market and social research firm.

I am co-author of *The Scientific Method: A Guide to Finding Useful Knowledge* published by Cambridge University Press in 2022. The book includes a Foreword by Nobel Laureate Vernon L. Smith, the pioneer of experimental economics (Armstrong and Green, 2022).

My recent article "Are climate model forecasts useful for policy making?", published in the peer reviewed journal *Science of Climate Change*, concludes that government funded models of manmade climate change are neither valid nor useful (Green and Soon, 2025).

I have previously provided expert testimony on, variously, forecasting, regulation, and climate for, inter alia: the New Zealand Environment Court (2007), a Select Committee of the New Zealand Parliament (2007), a Florida court case (Ducoin v. Viamonte, 2009), the U.S. Congressional Subcommittee on Energy and Environment (2011), the Australian Senate Economics References Committee Inquiry into "Personal choice and community impacts" (2015), at Senator Malcolm Roberts Cost of Living Summit (2017), and the Select Committee on Energy Planning and Regulation in Australia (2024).[1]

I am an Australian citizen, and I am making this submission on my own behalf.

Yours faithfully,
Kesten C. Green, PhD
Adelaide
South Australia
kestencgreen.com

[1] References and links are available from my CV at kestencgreen.com.

Submission to The Senate Select Committee on
Information Integrity on Climate Change and Energy

Government funding and regulation of research obstruct truth seeking and speaking

Kesten C. Green, PhD.

In thinking about suppressing misinformation and disinformation, I propose considering the following "headlines from history":

- Galileo gaoled for misinformation maligning mainstream model of Heaven and Earth
- Semmelweis in sanitorium after medicos rejected his handwashing hype
- Darwin disavowed for monkeying with Genesis origins
- Einstein expelled from academy for discombobulating "Jewish physics" disinformation

The nature of misinformation and disinformation, and the time-tested antidote

Misinformation and disinformation can be products of mistaken understandings or of ignorance but can also be products of economic incentives to fame and fortune.

The former is readily dealt with through open public discourse. When the incentives to produce and disseminate misinformation and disinformation are strong and persistent, however, open public discourse is suppressed by those who seek advantage and to bolster beliefs that are too fragile to withstand the ungentle winds of scientific scrutiny.

The scientific method remains the best way that has been devised to learn about the world we live in. It requires a sceptical attitude toward long-standing claims to knowledge, popular beliefs, and claims of new knowledge. And the objective testing of competing claims to knowledge.

The fourth of Sir Isaac Newton's four "Rules of Reasoning in Philosophy" states, "…we are to look upon propositions… as accurately or very nearly true, notwithstanding any contrary hypothesis that may be imagined…" (Newton 1729, vol. 2, p. 205). Proposing and testing alternative hypotheses in the way that Newton described provides an objective tool for making discoveries and dispelling ignorance.

Giving a fair go to hypotheses that are contrary to common practice and current opinion is the attitude and approach that gave us the bounties that the Agricultural and then the Industrial Revolution delivered. In the late 19th century, geologist Thomas Chamberlin observed in his paper in *Science* that knowledge in disciplines that test alternative hypotheses progressed, whereas knowledge stagnated in fields where that was not the case (Chamberlin 1890). His paper, subtitled "With this method the dangers of parental affection for a favorite theory can be circumvented" was reprinted in the journal *Science* in 1965.

Two examples from earlier this century provide vivid illustrations of the importance of considering and fairly testing alternative hypotheses:

> "In the case of stomach ulcers, the treatment was to live a life avoiding stress, spicy foods, and alcohol… to alleviate the symptoms. When two researchers in Western Australia proposed that the cause was a particular bacterium, and that the condition could be cured by a dose of the appropriate antibiotic, they were ridiculed, had their papers rejected, and careers held back. Their evidence was eventually accepted, and stomach ulcers are now easily cured (Nobel Media AB, 2005).
>
> In the case of head injuries, when anti-inflammatory drugs were developed, they were applied to head injury patients in the belief that they would help by reducing brain swelling. Years later a large experiment was conducted to test that hypothesis. It was terminated early when it became clear that proportionately more of the patients were dying when they were given the drug that had been the standard treatment for many years (CRASH, 2004)."
>
> (p. 108, Armstrong and Green 2022.)

In the field of knowledge that is the specific concern of this Select Committee, in my own research paper published earlier this year, my co-author and I concluded that the dangerous manmade global warming hypothesis fails to meet the challenge when fairly tested against alternative hypotheses that variations in the Sun's radiation cause temperature changes on Earth (Green and Soon 2025). Those with an idealised view of scientists and scientific practice might be surprised to learn that despite the importance of the subject of the paper and our dramatic evidence-based findings, the relevant established high-status academic journals refused to publish it.

Peer review and the weight of expert opinion fail to determine the truth

Perhaps in every age there is a temptation to believe that knowledge has reached its zenith. The terms misinformation and disinformation imply that it has.

Are these terms being used in the genuine belief that is so? In a paternalistic way that assumes that "ordinary people" are not equipped to distinguish fact from fiction? Or that they must be kept away from "dangerous ideas"? Or is it possible that the terms are being used to suppress discussion, debate, and the testing of alternative theories for self-interested purposes?

Whatever the reason or combination of reasons for misinformation and disinformation denunciations, the denouncers display either a lack of confidence in the persuasive power of evidence and logical argumentation or—and this should be particularly concerning for Australians in considering the deliberations of this Senate Select Committee—the reverse.

The reality is that we are *not* living in the sunny uplands of an age where thorough peer review by disinterested experts has provided us with unchallengeable scientific certainties. Far from it, as the following editorial reviews by leading scientists of my book *The Scientific Method: A Guide to Finding Useful Knowledge* (Armstrong and Green, 2022) attest:

> 'Contemporary science falls well short of its ideals for trustworthiness and usefulness. This book tells the truth, spotlighting shortcomings and corruption in scientific practice, and provides step-by-step guidance for baking integrity and value into our research and publication practices.' **Denise M. Rousseau**, H.J. Heinz II University Professor of Organizational Behavior and Public Policy, Carnegie Mellon University

> '…As this important book makes clear, much contemporary science badly needs reformation. Scientists have been distracted from the honest, self-critical search for truth by careerism, ideology, and other lamentable forces. Too often 'science' has become well-funded propaganda for a political narrative. The book outlines what science should be, what problems contemporary science is facing, and how to fix them.' **William Happer**, Cyrus Fogg Bracket Professor of Physics, Emeritus, Princeton University

> '… The authors make clear why much research contributes nothing to scientific knowledge and how this situation can be changed by requiring checklists that focus the attention of stakeholders - journal editors, funding agencies, lawyers, regulators, the media, and scientists themselves - on the essential attributes of science, especially the consideration of alternative hypotheses… ' **Geoffrey Kabat**, Epidemiologist and author of Hyping Health Risks

In the domain of climate and energy, claims that 95 per cent, or some similar percentage, of scientists agree are not only irrelevant—scientific claims are not "settled" by voting—they are easily seen to be absurd by any person curious enough to look for and read the popular writings of some of the many senior scientists who reject the alarmist manmade global warming hypothesis.

Arguably pre-eminent among the climate scientists who are still with us is MIT Emeritus Professor of Meteorology Richard Lindzen. Lindzen addressed the "settled science" claim in an article titled "Manufacturing Consensus on Climate Change: How a political movement invented its own scientific basis" in November 2024. He concluded his article with the following caution:

> "So here we are, confronted with policies that destroy western economies, impoverish the working middle class, condemn billions of the world's poorest to continued poverty and increased starvation, leave our children despairing over the alleged absence of a future, and will enrich the enemies of the West who are enjoying the spectacle of our suicide march, a march that the energy sector cowardly accepts, being too lazy to exert the modest effort needed to check what is being claimed. As Voltaire once noted, "Those who can make you believe absurdities, can make you commit atrocities." Hopefully, we will awaken from this nightmare before it is too late.""
>
> Lindzen (2024)

Incentives to create and disseminate misinformation and disinformation

Misinformation and disinformation are only likely to grow and persist if they are supported by the overwhelming power and financial resources of the state. As with national defence, so too with science in the Western World post-World War II: governments have become near-monopoly buyers, or monopsonists. Independent private sector research has been crowded out by government selected, directed, commissioned, and funded research.

That is the conclusion that Professor Scott Armstrong and I came to in *The Scientific Method: A Guide to Finding Useful Knowledge* (Armstrong and Green 2022). Notable others have previously reached the same conclusion.

In his 1961 farewell address to the nation as U.S. President, Dwight Eisenhower warned about the scale of government involvement in science:

> "The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present – and is gravely to be regarded. Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the . . . danger that public policy could itself become the captive of a scientific-technological elite."
>
> (quoted p.77, Armstrong and Green 2022).

In the jargon of economics, he was referring to rent-seeking[1] behaviour by researchers, and to what amounts to "funder capture" by influential researchers. The capture can work both ways: scientists capture government officials and their grants by offering up scary scenarios that they claim require research funding to more fully understand, and politicians and officials capture the research agendas of scientists and research bodies for their own ends using their control over funding.

Perhaps Eisenhower had in mind the example of reciprocal funder-researcher capture provided by Stalin and Lysenko (President of the Lenin All-Union Academy of Agricultural Sciences) in the U.S.S.R., as the following extract describes:

> "In many articles about Lysenko… the opinion was expressed that he possessed the special psychological or hypnotic powers of Grigory Rasputin and was thus able to thrust upon Soviet leaders, first Stalin and then Khrushchev, his completely unfounded and false ideas. In fact Lysenko had no such "Rasputin-like" talents. He did not really try to persuade the leaders by overpowering them with his own views. Rather, he got caught up in the game of trying to make sense of the sometimes absurd ideas expressed by Stalin and later by Khrushchev and then creating from them pseudo-scientific assertions. Stalin and Khrushchev were essentially Lamarckians, which was only natural for the Bolsheviks who were convinced that anything could be re-made by establishing the right conditions. "Existence defines consciousness" was a formula which could be extended to apply to other qualities and characteristics.
>
> … very few people remember that the genetics debate… was the result of decisions made by Party and government leaders in August of 1931. The conclusion drawn by these leaders was that the nature of agricultural crops could be redesigned in a time frame so short as to contradict every principle of genetic selection. With the intention of supporting the collectivization process by introducing new high yield seed varieties, the Soviet government in the guise of the Central Control Commission of the Communist Party and the Workers and Peasants Inspection Commissariat issued a resolution "On selection and seed growing". According to this resolution, the full range of cultivated low-yield crops was to be replaced by high-yield varieties over the entire country in the course of 2 years."
>
> (p. 6, Medvedev 2000)

The parallels with the situation we in Australia are now in with regards debate and policy on climate and energy are frightening. The concluding section[2] of Medvedev's eyewitness account alludes to some of the long-lasting effects of the Soviet government's monopoly control of scientific thought and research that banned the use of the scientific method by outlawing the debate and testing of hypotheses that were contrary to the ideology and policy of the government:

> "…pseudoscientific concepts and tendencies gained preeminence in other spheres of knowledge as well… all pushed decades backwards.
>
> … A full "recovery from these consequences" has yet to be achieved even today. Indeed, the reduced authority of Soviet science… and the hypertrophy of far too expensive and complex projects… all made Soviet science too dependent on government coffers which are now almost empty. Science in the USSR has not become the primary mover of technological and economic progress… the development of technology and the economy were basically copies of whatever had already been done in other countries."
>
> (p. 11, Medvedev 2000)

Twenty years after President Eisenhower's farewell address, in his 1981 open letter to the National Academy of Sciences president, Nobel economics laureate Milton Friedman amplified Eisenhower's

[1] The *Oxford English Dictionary* (online) defines rent-seeking as: "The fact or process of seeking to gain larger profits by manipulating public policy or economic conditions, esp. by means of securing beneficial subsidies…".
[2] Titled "State pseudoscience" (p. 11 Medvedev 2000).

warning when he wrote of the malignant incentives faced by researchers who depend on government funding *and* impactful journal publications for career success:

> "[T]he NSF has also done harm to the progress of… science… First, by converting "grantmanship" into as important an ingredient of professional success as original and penetrating contributions… Second, by channeling… research into directions favored by dispensers of NSF funds."
> (quoted p.72, Armstrong and Green 2022).

Friedman could not have known at the time he was writing that some of the most impactful research being conducted in the U.S. in the decades prior to his letter was the product of fraud. Whether the fraud was the product of a desire for career advancement, greater funding, an ideological agenda, or some combination of reasons we cannot know, but the incentives were there. And once the Federal government adopted the fraudulent research findings as the basis for policy, regulation, monitoring, and enforcement, the incentives to scrutinise that research and to consider and test alternative hypotheses were much reduced to the detriment of scientific, technological, and economic progress.

The research programme that I am referring to was underpinned by the fraudulent findings of a large study published in 1951 by government scientist William Russell titled "X-ray induced mutations in mice". The findings of the study led to "the massive investment by the DOE [Department of Energy] into the Russell research plan" and "the central dogma of regulatory agency toxicology, that is, its acceptance of the Linear-Non-Threshold (LNT) model" (p. 3, Calabrese and Selby 2025).

The fraud was that Russell had hidden the observations on a large cluster of mice with genetic mutations from his control (unirradiated) sample of mice, thereby creating the illusion that exposure to x-rays was responsible for the mutations in the mice in the treatment (irradiated) group. Thus, the risks of cancer and hereditary damage from radiation were "greatly exaggerated" and the consequent regulations around sources of radiation lacking a sound scientific basis (Calabrese and Selby 2025).

The ongoing fraud was only uncovered by Russell's protégé, Selby, in 1995 when he was transferring the electronic records of the studies onto a new computer system. A subsequent Department of Energy investigation confirmed Selby's discovery of scientific misconduct. *Thirty years after Shelby's exposure of the fraud, the misplaced consensus remains uncorrected and the regulatory settings unrectified*:

> "Thus, no corrections have been made by the NAS or regulatory agencies, such as the EPA, whose national risk assessment policies/practices for cancer risk assessment were significantly corrupted and overstated by these errors. Based on the discovery reported herein that the Genetics Panel's policy recommendations considerably overestimated hereditary risks based upon Russell-inspired falsified publication, it seems imperative that the Genetics Panel report (1956) published in *Science* be retracted due to inherent falsification-based inaccuracies that continue to impact governmental regulatory agencies, such as the EPA, and the global community that often rely upon the US NAS and regulatory agencies for guidance, as well as the broader scientific community and general public."
> (p. 1, Calabrese and Selby 2025)

Research on climate and energy are *not* immune to funding and fame induced malincentives to conduct research designed to advocate for a preferred hypothesis by avoiding considering and testing alternative hypotheses[3]. Quite the opposite. Chapter 8 of the U.N. Intergovernmental Panel on Climate Change's (IPCC's) Second Assessment Report—which is somewhat revealingly titled "Detection of Climate Change and Attribution of Causes"—opens with "Since the 1990 IPCC Scientific Assessment considerable progress has been made in attempts to identify an anthropogenic effect on climate" (p. 411, Santer et al. 1996).

Incentives matter. Fame and fortune are available to those who make a show of "identifying" manmade global warming—the more extreme the better—and propose dire consequences. Vilification and social and professional exile for those who remain unconvinced that mankind can change the climate, and do so in a predictable way that will provide greater benefits than the cost of the exercise.

What a sad state we are in when fairly testing whether variations in the Sun's radiation or human carbon dioxide emissions is the better predictor of temperatures on Earth, as Willie Soon and I did in Green and Soon (2025), is considered mis- or disinformation to be suppressed to avoid confusing the masses or to threaten the flow of funding. Take your pick.

---

[3] See Chapter 5 of Armstrong and Green (2022) titled, "Scientific practice: Problem of Advocacy".

Unfortunately, the dangerous manmade global warming alarm has become an attractive cause for many politicians and officials, giving them opportunities to signal that they care and to claim that they will "do something". That whatever they do will make no difference to the climate, and that proposals and actions to "do something" will cost the great majority of Australians far more than any conceivable benefit, appear to be beside the point. Only a brave few dare to speak up for Australians and to point out that the warming alarm emperor is wearing no clothes.

Saving Australians from harmful misinformation and disinformation

I argue that the premise of this Select Committee is wrong on two counts. First, the implied assumption that to the extent that misinformation and disinformation on climate and energy exist the primary sources are *other than* the UN IPCC, government agencies, and the tax-payer funded ABC. Second, that greater government involvement in "picking winners" in the quest to discover the truth on climate change, its causes and its effects and, most importantly, its predictability will be more effective in discovering the truth than will free speech and the application of the scientific method.

Free speech and the scientific method remain the logical and empirically best way—free speech is an indispensable component of the scientific method—to detect and to avoid being misled by misinformation and disinformation in the search for the truth.

If reducing the harm of misinformation and disinformation on climate and energy is the Select Committee's objective, the solution is to *encourage* free speech on those issues, and not to enforce an ill-founded conformity. While the government continues to fund research advocating the dangerous manmade global warming hypothesis, there will remain a conflict between the free speech of researchers who are seeking the truth, and the interests of those who are seeking funding and career advancement.

In our democratic polity, we need citizens who are educated in the scientific method and who understand the need for scepticism toward claims of knowledge in the absence of evidence from stern tests comparing alternative hypotheses. The ability to think logically, the confidence to ask difficult questions, and to consider costs and benefits of alternatives are essential qualities for public debate. Our school curricula are letting us down badly in those regards.

Finally, we need political leaders who are willing and able to challenge the current orthodoxy on climate and energy. Who have the courage to be heretics when their questioning of what has by repetition and amplification become the orthodox position leads them to scepticism and rejection. And who neither resort to nor are cowed by unfounded accusations of misinforming or disinforming the public and related name-calling.

References

Armstrong, J.S. & Green, K.C. (2022). *The Scientific Method: A Guide to Finding Useful Knowledge*. Cambridge University Press.

Calabrese, E.J. & Selby, P.B. (2025). More fraudulent history of cancer risk assessment: The US National Academy of Sciences Biological Effects of Atomic Radiation (BEAR) I Genetics Panel used falsified data greatly exaggerating hereditary/cancer risks. *Chemico-Biological Interactions*, *419* (111640), 1-6. https://doi.org/10.1016/j.cbi.2025.111640

Chamberlin, T. C. (1890). The method of multiple working hypotheses. Reprinted in 1965 in *Science*, *148*, 754-759. https://webhome.auburn.edu/~tds0009/Articles/Chamberlain%201965.pdf

Green, K.C. & Soon, W. (2025). Are Climate Model Forecasts Useful for Policy Making? Effect of Variable Choice on Reliability and Predictive Validity. *Science of Climate Change*, *5.1*, 59-85. https://doi.org/10.53234/scc202501/07

Lindzen, R. (2024). Manufacturing consensus on climate change: How a political movement invented ints own scientific basis. *The American Mind*, 21 November. The Claremont Institute. https://americanmind.org/salvo/manufacturing-consensus-on-climate-change/

Medvedev, Z. A. (2000). Lysenko and Stalin: Commemorating the 50th anniversary of the August 1948 LAAAS Conference and the 100th anniversary of T.D. Lysenko's birth, September 29, 1898. *Mutation Research*, *462*, 3-11. https://lysvav.narod.ru/Files/Medvedev.pdf

Newton. I. (1729). *The Mathematical Principles of Natural Philosophy*, Translated from 3rd ed. Into English by Andrew Motte. London: Benjamin Motte.

Santer, B.D., Wigley, T.M.L., Barnett, T.P. & Anyamba, E. (1996). Detection of climate change and attribution of causes. In: J.T. Houghton, L.G. Meira Filho, B.A. Callander, N. Harris, A. Kattenberg & K. Maskell K (Eds.) Climate change 1995: the science of climate change. *Contribution of Working Group I to the Second Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press, 407–443. https://www.ipcc.ch/report/ar2/wg1/