



Senator Malcolm Roberts
One Nation Senator for Queensland

19 October 2020

Dr Larry Marshall
CSIRO
Black Mountain
PO Box 1700
CANBERRA ACT 2601

Dear Dr Marshall

Re: Questions for Senate Budget Estimates

To make optimal use of your time, senators' time and taxpayers' resources, I ask that you and Dr Peter Mayfield prepare to answer the questions below in this month's Senate Budget Estimates.

Firstly, I remind you of the context. In 2017 prior to my second meeting with your CSIRO climate research team under the leadership of Dr Steve Rintoul, I asked that the CSIRO provide evidence of anything unprecedented in earth's last 10,000 years climate record and to provide empirical scientific evidence proving it was unprecedented.

CSIRO offered one paper on temperatures, being Marcott et al (2013). During our subsequent questions and discussions in our meeting on 10 May 2017 Dr Rintoul advised me emphatically that today's temperatures are not unprecedented and that instead he claimed that the rate of rise in twentieth century temperatures is unprecedented.

After we comprehensively proved, for many reasons, that Marcott does not provide valid scientific evidence, CSIRO replaced Marcott (2013) with Lecavalier (2017) and in our subsequent meeting on 26 July 2017 we showed Lecavalier does not provide valid scientific evidence.

Questions

1. Do you stand by CSIRO's implied claim that Marcott and Lecavalier are the best evidence CSIRO has for showing that the rate of temperature change today is unprecedented in the last 10,000 years?
2. What did CSIRO rely on before Marcott (2013), say in the 1980s, when Bob Hawke was the first Prime Minister to raise the issue of anthropogenic climate change said to be due to carbon dioxide from human activity?
3. At what stage did CSIRO start giving significant advice to governments on anthropogenic climate change?

In senate estimates hearings on Thursday 24 October 2019, I asked Dr Mayfield to provide empirical scientific evidence that shows “statistically significant variation that proves there has been a process change, that is, variation that is beyond or outside natural, inherent, cyclical or seasonal variation, over the last 350 years?” In response, Dr Mayfield held aloft one of CSIRO’s past slide show presentations to me and answered that CSIRO has already identified that in the previous presentation.

4. I need Dr Mayfield to specify the slide(s) and specific data to which he refers and on which his answer relies, and to specify the statistical analysis techniques upon which he relies to deem statistically significant process change in climate and the relevant statistical levels of confidence from the analysis of the climate factor he identifies, and to specify the time interval of data for which the statistical analysis was applied.

I take this opportunity to remind you that prominent politicians of the Greens, Labor, Liberal and Nationals parties directly or implicitly advocate policies that are costing Australia and Australians tens of billions of dollars and are having economic impacts costing trillions of dollars, destroying jobs and killing our nation’s competitiveness.

I hope you agree that the only valid basis for such policies is specific empirical scientific evidence within a logic proving causation and quantifying the effect of carbon dioxide from human activity on climate factors such as atmospheric temperature. I hope you understand the need to justify such policies on solid scientific evidence quantifying cause and effect. Such quantified evidence is needed to implement such policies and to monitor the effect of such policies.

Without the specific quantified relationship between human carbon dioxide output and climate factors, it is not possible to do cost-benefit cases nor track progress.

5. If you disagree with this reasoning, please provide me with what you see as the alternative basis for policy.
6. Australia has already done much to destroy its energy grid, yet as an overseer of taxpayer resources, I need to know whether this has shown up in atmospheric carbon dioxide levels and if so, how and to what extent? Please provide evidence of the effect on atmospheric carbon dioxide levels and temperatures from Australia’s cuts to human carbon dioxide output.
7. Have global attempts to cut human production of carbon dioxide shown up in atmospheric carbon dioxide levels and if so how and to what extent?

On this occasion we do not want your answers to the above simple and straightforward questions 1-7 to include alternatives to science such as appeals to authority that are internationally and scientifically accepted as not science.

We understand from your repeated claims that you believe that CSIRO is in the top one per cent of scientific agencies globally, yet your opinion is not what is wanted. That is a deviation from science and shows an unscientific approach and answer. In my experience here and overseas, people who rely on such distractions use such substitutes instead of science when they lack scientific evidence.

Nor do I want political rhetoric or buzzwords that mislead many politicians, journalists and members of the public. These are not science and only mislead people who do not understand science. Instead, we want to see CSIRO’s science in the form of quantified scientific evidence of causation.

If your answer includes scientific papers or other scientific references, we can only see your references as valid if you specify the specific location—being publication title, page number, sentence, data table—of any claimed scientific data as evidence within a logical framework that proves and quantifies causation.

I take this opportunity to address an implied slur on me in your previous letter. I had enormous respect for CSIRO, yet sadly that respect has been eroded in part due to CSIRO's unscientific behaviours and claims about climate. I note that prominent and highly respected retired CSIRO researchers and managers have publicly expressed their concerns and it disturbs me that CSIRO's leadership apparently ignores these. I take this opportunity to express my support, in writing, for the overwhelming majority of CSIRO's people and to remind them and you that my concerns for CSIRO is what drives me to hold you and its climate divisions accountable in order to restore CSIRO's reputation.

Yours sincerely

Senator Malcolm Roberts
Senator for Queensland