

Senate Standing Committee on Economics
ANSWERS TO QUESTIONS ON NOTICE
Industry, Innovation, Science, Research and Tertiary Education Portfolio
Additional Estimates Hearing 2011-12
15 February 2012

AGENCY/DEPARTMENT: COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION

TOPIC: Comments made by Professor Flannery – Cooling trend

REFERENCE: Written Question –Senator Bernardi

QUESTION No.: AI-70

On Lateline on 23 November 2009, the government’s head of the Climate Change Commission, Professor Tim Flannery, said: “for the last few years we have gone through a slight cooling trend” and “What Kevin Trenberth, one of the most respected climate scientist in the world, is saying is, ‘We have to get on our horses and find out what we don't know about the system, we have to understand why the cooling is occurring, because the current modelling doesn't reflect it’. And that's the way science progresses, we can't pretend to have perfect knowledge, we don't.”

- a. Does the CSIRO agree with these statements made by Professor Flannery?
- b. If so, how does the CSIRO account for the cooling given that CO₂ levels have rapidly risen in the past 10 years?

ANSWER

- a. CSIRO agrees with these statements made by Professor Tim Flannery
- b. Globally-averaged temperatures reveal that the last two decades have been the warmest in the instrumental record (Keenan and Cleugh, 2011). This demonstrates that individual years can be relatively cool within a longer-term warming trend. Data over just a few years provide little insight into long-term trends; the period is simply too short. Year-to-year and decadal climate variability arises from natural processes, such as the El Nino Southern Oscillation (ENSO) phenomenon, which are superimposed on the longer-term warming trend resulting from rising CO₂ levels (Keenan and Cleugh, 2011).

References:

Easterling, D.R. and Wehner, M.F. 2009. Is the climate warming or cooling? *Geophys. Res. Lett.*, 36, L08706, doi:10.1029/2009GL037810.

Keenan, T.D. and Cleugh, H.A. (2011). Climate Science Update: A Report to the 2011 Garnaut Review. CAWCR Technical Report No. 036.