



SENATOR THE HON KIM CARR

**MINISTER FOR INNOVATION, INDUSTRY,
SCIENCE AND RESEARCH**

The Hon Danna Vale MP
Member for Hughes
PO Box 1014
SUTHERLAND NSW 1499

11 NOV 2009

Dear Ms Vale

Thank you for your letter of 26 October 2009 concerning the CSIRO/BoM climate model used in the Garnaut Review.

I have referred your letter to CSIRO and have been advised that there are no observational data in either of the published papers you have cited that either disproves the underlying theories on which the global climate models (GCM) are based, or would invalidate outputs from those models.

I can clarify that two CSIRO Climate models were used in the Garnaut Review. These were:

1. CSIRO's Mk3.5 Global Climate Model (GCM), which was also one of 23 GCMs used in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment. The method used to provide probabilistic climate projections, referred to in Chapters 4 and 5 of the Garnaut Review, has been published in a peer-reviewed publication¹.
2. The model used in Chapter 11 (and for Figure 4.6) of the Garnaut Review was a low resolution version of CSIRO Mk3.5 GCM called CSIRO Mk3L. These models essentially capture the main climate processes similarly, though at different spatial resolutions.

Thank you for raising this matter with me.

Yours sincerely

Kim Carr

¹ Watterson IG, McGregor JL, Nguyen KC (2008) Changes in extreme temperatures of Australasian summer simulated by CCAM under global warming, and the roles of winds and land-sea contrasts. *Australian Meteorological Magazine* 57 (3) 195-212.