Senate Standing Committee on Economics

ANSWERS TO QUESTIONS ON NOTICE

Innovation, Industry, Science and Research Portfolio Supplementary Budget Estimates 2011-2012 19 October 2011

AGENCY/DEPARTMENT: DEPARTMENT OF INNOVATION, INDUSTRY, SCIENCE AND

RESEARCH

TOPIC: GLOBAL CLIMATE

REFERENCE: Written Question - Senator Colbeck

QUESTION No.: SI-94

At what time in world history does Professor Chubb believe that human-sourced emissions first begin to have a significant impact on global climate?

ANSWER

Over the past approximately 50 years, clear evidence of climate change has accumulated, with measured changes in atmospheric and ocean temperatures, alpine and polar ice sheets melting, and decreasing Arctic sea-ice cover, among other parts of the climate system. These decade-by-decade climate variations occur in patterns over space and time which point strongly to warming by accumulation of greenhouse gases, rather than other natural or man-made processes.

The evidence for the observed changes in the climate system and the scientific case for attributing them to human-sourced emissions are reviewed in the UK Royal Society's summary of the science of climate change:

http://royalsociety.org/policy/publications/2010/climate-change-summary-science/