Senate Standing Committee on Economics

ANSWERS TO QUESTIONS ON NOTICE

Innovation, Industry, Science and Research Portfolio Budget Estimates Hearing 2010-11 31 May 2010

AGENCY/DEPARTMENT: OFFICE OF THE CHIEF SCIENTIST

TOPIC: Monitoring of international debate on science issues

REFERENCE: Written Question - Senator Eggleston

QUESTION No.: BI-135

To what degree does the Chief Scientist's work include monitoring and following debates in other countries on important scientific issues? And what events or developments in science at an international level during her time as Chief Scientist does she believe have had the greatest relevance and/or implications for Australia – and why?

ANSWER

The number of issues that are the subject of debate in the international science arena is large and it is beyond the remit or capacity of the Office of the Chief Scientist to continuously monitor all subjects under discussion. It is worth noting, however, that science is an international activity, and therefore most scientific debate takes place in internationally recognised peer-reviewed journals.

To keep abreast of key international science developments and discourse, the (Office of the) Chief Scientist uses the expertise available through:

- o direct engagement with researchers and agencies at conferences and visits throughout Australia and overseas;
- o information gathering exercises performed in the course of preparing advice to government that draw upon peer-reviewed journal articles and an extensive professional network of individual researchers and research institutions;
- o expert working groups who prepare reports for the Prime Minister's Science Engineering and Innovation Council (PMSEIC). These are convened by the Chief Scientist and are comprised of Australian experts in the topic under consideration. These experts are aware of the most up-to date-information in their area of concern, including knowledge that is generated wholly or in part overseas.

Since taking her role as Chief Scientist, Professor Sackett has identified many issues of great relevance for Australia, including (but not limited to) food and agricultural science, the uptake and application of mathematics and statistics, population health, water security and management, monitoring earth's ecosystems and their functions, the science of how we learn, and climate change and earth systems science. At their core, most of these issues are related to using science to innovate in the face of finite resources and a growing population to create a healthier and more sustainable lifestyle for a larger fraction of society. In relation to climate change, she is of the view that developments in renewable energy technology and the identification of energy efficiency measures could have the highest degree of impact for Australia in mitigating emissions of CO₂, while adapting to climate change already underway will require natural and social scientists working with both urban and rural communities to find solutions that are locally applicable.