## **Senate Standing Committee on Economics**

## ANSWERS TO QUESTIONS ON NOTICE

Innovation, Industry, Science and Research Portfolio Budget Estimates Hearing 2008-09 2-3 June 2008

**AGENCY/DEPARTMENT:** INNOVATION, INDUSTRY, SCIENCE AND RESEARCH

**TOPIC:** Science Topics

**REFERENCE:** Question on Notice (Hansard, 3 June 2008, Page E45)

**QUESTION No.** BI-107

**Senator MILNE**—Can you give me an idea of what work you have been preparing since the last estimates then—what papers you are working on to provide to government apart from the nanotechnology one you have just cited?

**Dr Peacock**—In the first place I will give examples of 10 areas of science research that I think are key for Australia's future. The Minister has asked me to prepare draft business plans for two of those at the moment. One is in the area of nanotechnology and nanostructures and the other is in epigenetics.

**Senator MILNE**—What are the other eight?

**Dr Peacock**—I do not know that I can list them all here for you but they would include solar energy, including solar thermal and photovoltaic and matters to do with water security and climate adaptation, things that are clearly of great importance. There is also molecular resistance to virus diseases that applies to all organisms from plants to humans. There are very exciting developments in science in regard to that. I think I have suggested the Antarctic and Southern Oceans, also tropical marine systems are things that I believe the government needs to know where we are at this stage. I am not sure I have given you all eight but I can provide you with a list—

**Senator MILNE**—I would like to have those topics, if I may—

**Dr Peacock**—They are personal views of mine, but I can do that.

## **ANSWER**

Dr Peacock, Chief Scientist of Australia, provides the following in reply to Senator Milne:

The following are among the key areas of science research I believe are crucial to Australia's future:

- Epigenetics and Development;
- Nanochemistry, Electromaterials and Supramolecular Science;
- Fossil Fuel Chemistry clean energy, liquid fuels and chemical feedstocks;
- Realising Australia's Potential in Solar Energy Research;
- Understanding Climate and Water in Australia;
- Molecular Resistance Against Viral Disease;
- Antarctic and Southern Ocean Science;
- Tropical Ocean Life Science;
- Science of the Universe; and
- Earth-System Geoscience.