

Professor Penny D Sackett

Chief Scientist for Australia

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Science and Technology**

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- Good morning Your Excellency Monsieur l'Ambassadeur, Your Excellencies, ladies and gentlemen.
- I would like to thank His Excellency Ambassador Filhol for his kind words of welcome, and for inviting me to represent the Australian Government on this occasion.

We live in an increasingly global world. The decisions taken in part of the world have ramifications in the opposite hemisphere.

Although that can and does introduce challenges, it also gives us a new way to meet those challenges by working together as global citizens to solve our problems together.

Science, and scientists, have a special role in international engagement for the common good, of which this roundtable is an excellent example.

Given the events of the past years and recent months, the importance of affordable, low-emission energy and water has sky-rocketed.

Collaboration between Australia and France

- The Australian Government has a long-standing and well-developed science and technology relationship with France. We recognise that collaboration with French researchers and institutions is an important part of Australia's overall research effort.
- To illustrate this relationship, five per cent of all Australian Research Council international S&T collaborations are with France, placing it in Australia's top five international S&T partner countries.
- And the total number of Australian-French collaborative publications in all fields has grown by four-fold since 1993, and more than doubled in the last decade.
- Australian research institutions such as the Australian National University and Commonwealth Scientific and Industrial Research Organisation have important collaborative agreements with multiple French institutions in the areas of environmental, natural resources and agricultural research. In addition, Australian Nuclear Science and Technology Organisation has a long-standing agreement with the Commissariat à l'Energie Atomique, and doctoral students regularly participate in exchanges between the two institutions.
- To give strength to this relationship both the French and Australian Governments support the continued funding of the French-Australian Science and Technology Program (FAST) through the Department of Innovation, Industry, Science and Research.
- To this end, an agreement to renew the FAST program will be signed in December by the Ambassador Fihol and Senator the Hon Kim Carr, Minister for the Department of Innovation, Industry, Science and Research.
- The FAST program is five years old this month.

FAST Program

- FAST, although a relatively modest program, has funded some very worthwhile projects. As of November 2007:

- 90 per cent of FAST projects had resulted in internationally co-authored scientific publications,
- Over thirty per cent had resulted in further collaborative projects,
- 18 per cent in new IP or new technologies,
- and 68 per cent subsequently attracted substantial Australian and international funding through programs such as the EU Framework Programs and the Australian Research Council Discovery Grants.
- It may be a young program, but FAST is truly living up to its name by producing worthwhile results quickly.
 - Mapping of coral reef systems under stress
 - Improvements in disease resistance technology for food crops
 - The development of unique radiation detectors as part of cancer therapy.
- One priority focus of the FAST program is environmental science, which includes the fields of sustainable energy and water research.
- For example, in 2006 the FAST program supported a project between the Australian National University, and researchers from the CNRS (French National Center for Scientific Research) at Saclay (*Sack-lay*), to explore the enzyme Photosystem II.
- This enzyme uses a highly efficient mechanism to convert light into electrochemical energy that can split water at the molecular level. The knowledge gained in this study could ultimately lead to the development of renewable energy sources that artificially mimic the processes nature has evolved for this purpose.
- Within recent years, FAST has also supported vital research into the efficiency of water-use in plants. This project brought together researchers from the University of Sydney and researchers from a number of French institutions, all world leaders in their fields.
- Understanding how plants utilise water has important implications for potentially increasing our agricultural

and forestry productivity. This is particularly vital given the projected effects of climate change on the production of food and timber, and could have a major impact on our management of agricultural water sources.

- These joint projects have made important contributions to our efforts to combat the effects of climate change, and demonstrate the continued strength of French-Australian collaborations.
- The major challenges of our time are those with global impact such as the spread of infectious diseases, sustainable energy, water and climate change – these require, in part, scientific solutions.
- Therefore it is important that we continue to forge new international scientific linkages, both between governments and between private and academic partners, and work together as a global scientific community to look at ways to address these challenges.
- I am sure that the tradition of extensive and strong research links between Australia and France will aid us considerably in that effort.
- On a more personal note, and as a scientist who lived and worked in Europe for seven years, may I welcome visitors to our beautiful country and wish you a pleasant as well as productive interaction.
- May you have an exciting roundtable filled with new ideas lively exchanges and the forging of new collaborations capped this evening perhaps with a bottle or two of fine Australian shiraz.
- Best wishes and thank you.