

# BULLETIN

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## A Report on the Energy and Sustainability Seminar 12 November 2009

This topical seminar was attended by a cross-section of the AFAS membership and a welcome number of invitees from academia and industry, amounting to a total attendance of 40 persons.

The speakers and their topics were :

- Prof Kerry Pratt  
Monash Sustainability Institute  
*Energy: State of the Art – What are the Alternatives?*
- Dr Selena Ng  
AREVA  
*Nuclear Energy – Does It Fit?*
- Dr John Andrews  
RMIT University  
*Solar Energy – What Use is It?*
- Julien Gaschignard  
HydroTas, Victoria  
*The Australian and French Wind Energy Markets – How do they Compare?*
- Chris Tehan  
Evans & Peck  
*An Energy User's Perspective – How is Transport addressing Sustainability?*

In his opening presentation, Prof Kerry Pratt commenced with an overview of the current energy supply and demand situation in Australia and of the options available for achieving more eco-friendly energy generation.

He went on to discuss a number of these options in more detail, encompassing carbon-capture, prospective improvements to coal-fired generators, direct-carbon fuel cell technology, geothermal energy and wave power.

In the following presentation, Dr Selena Ng addressed the possibility of introducing nuclear power generation into the future mix of energy sources for Australia. She argued that nuclear-energy technology was now well established, with significant improvements having been achieved over the years in safety, efficiency and waste reduction.

In discussing the prospects for harnessing solar energy, Dr John Andrews reviewed a range of options for solar energy generation, encompassing both established technologies and some still in course of research and development. Of particular interest was his discussion of the *Hydrogen Energy Cycle*, which he proposed as a means of harnessing solar energy to deliver base-load power.

Julien Gaschignard introduced a French flavour into the proceedings with his Comparison of the Australian and French Wind Energy Markets. After comparing the overall energy generation mixes in the two countries and the respective carbon footprints, he reviewed the relative growth in wind-power generation.



Peter Tolé introducing Julien Gaschignard

The final presentation by Chris Tehan looked at some prospective improvements achievable by reducing energy demand, in particular in relation to transport. This encompassed a discussion of the environmental impact of travel, of the factors contributing to this impact, and of options for reducing it.

The overall message from the presenters was that a movement to a more sustainable, eco-friendly future was achievable, provided only that there was a general commitment to doing so.

### **Prospective Programme for 2010**

March	Annual Reception and AGM
May	Visit to Synchrotron
June	Annual Dinner
July	Technical Forum/Seminar
August	AFAS FEAST-France Fellowship Award Ceremony

### **Season's Greetings**

The President and committee of **AFAS Victoria** take this opportunity to wish all members the compliments of the season and look forward to seeing you at a function next year.

### **More Details**

Members wishing to download a PDF copy of the presentations on *Energy Alternatives*, *Solar Energy*, *Wind Power* or *Transport*, may do so by logging in to the **Members' Zone** of the AFAS website (<http://www.afas.org.au/vic/restricted/login.php>) and clicking on the link to the **Document Archive**.