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# Nuclear – Solar Energies: Facts and Fictions Demystified

## Monday, 8 November 2010

### 6:00pm for 6:30pm start

Coles Theatre
The University of Melbourne
200 Leicester Street Carlton
VIC 3053

### Facilitator

**Professor Vassilios G. Agelidis**
Professor and Director
Centre for Energy Research & Policy Analysis
The University of New South Wales

### Speakers

**Professor Barry W. Brook**
*Sir Hubert Wilkins Chair of Climate Change*
Director of Climate Science
The Environment Institute
The University of Adelaide

**Dr Peter Seligman**
Associate Melbourne Energy Institute
Professor University of Melbourne

There are some enormous challenges ahead with energy and electricity generation.

More than one-quarter of the world's population has no access to electricity and our reliance on fossil fuels must be reduced rapidly. A carbon constrained sustainable development is inevitable.

Electricity demand is likely to continue to soar and transportation loads are likely to change profile as more electric vehicles would soon rely on electricity grids.

Multi-billion dollar smart grid investments worldwide present tremendous opportunities.

Solar energy technologies have made rapid progress and are being built in both small and large-scale systems. Together with other renewable energy sources, they now have the potential to replace fossil fuels.

Nuclear energy is seen by many nations as a way to energy security and immediate reduction to electricity generated carbon emissions.

Join our experts as they:

- demystify fact from fiction for both solar and nuclear energy technologies
- highlight the merits and limitations of these energy sources
- debate their role to Australia's energy mix of the future
- share your contributions and address your questions and concerns.

# FACILITATOR

**Professor Vassilios G. Agelidis**

**Professor & Director,**
**Centre for Energy Research and Policy Analysis (CERPA),**
**The University of New South Wales**

## Facilitator

**Professor Vassilios G. Agelidis**

Vassilios G. Agelidis is Professor and Director of the Centre for Energy Research and Policy Analysis (CERPA) at the University of New South Wales. Prior to this appointment, he was Director of the Centre of Excellence in Power Engineering; Director of the Electrical and Information Engineering Foundation and Professor holding the prestigious *EnergyAustralia* Chair in Power Engineering at the University of Sydney. Vassilios provided the vision, designed and established the *Sir William Tyree Laboratory in Power Engineering* and the *ABB Technology Centre* at the University of Sydney.

Vassilios has held other distinguished positions at Murdoch University, Perth and the University of Glasgow, Scotland.

Vassilios leads research in the areas of smart grid, renewable energy sources and their conversion and integration with the electricity grid, advanced power transmission technologies with voltage-source converters, power electronic control of electrical systems and inverter based grid interfaces for power quality and energy storage.

# SPEAKERS

**Professor Barry W. Brook**

*Sir Hubert Wilkins Chair of Climate Change*
**Director of Climate Science,**
**The Environment Institute,**
**The University of Adelaide**

## Speakers

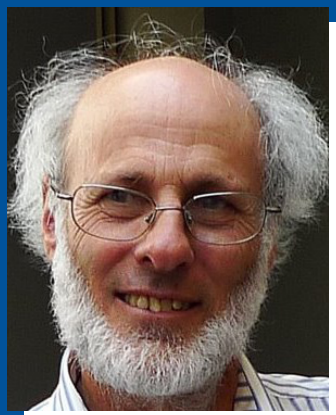
**Professor Barry W. Brook**

Barry Brook is a leading environmental scientist, holding the *Sir Hubert Wilkins Chair of Climate Change*, at the University of Adelaide's Environment Institute. He has published three books, over 150 referred scientific papers and regularly writes popular articles for the media. Professor Brook has received a number of distinguished awards for his research excellence (including the Australian Academy of Science Fenner Medal). His focus is on climate change, computational and statistical modelling, systems analysis for sustainable energy, and synergies between human impacts on the biosphere. He runs a popular climate science and energy options blogs http://bravenewclimate.com

Barry Brook takes an active leadership role in the communication of the science of global change to government, industry and the community. It is his belief that presenting hard-won technical scientific evidence to a broad audience in an intelligible way is the surest path to provoking meaningful societal change towards long-term sustainability.

**Dr Peter Seligman**

**Associate, Melbourne Energy Institute**
**Professor, University of Melbourne**



**Dr Peter Seligman**

Dr Peter Seligman is an Associate of the Melbourne Energy Institute and Professor with the University of Melbourne. Dr Seligman was a key member of the team that developed the Melbourne/Cochlear multiple-channel cochlear implant. In 2009 Dr Seligman was awarded a Doctor of Engineering (honoris causa) by the University of Melbourne for his contribution to the field of cochlear implant signal processing. Since his retirement from Cochlear Ltd in 2009, he has been able to devote more of his time to the area of sustainable energy and conservation, a field in which he has been active for 35 years. Dr Seligman is the author of *"Australian Sustainable Energy-by the numbers"* [2010]. This book provides a clear account of Australia's renewable energy potential, based on a systematic analysis of available technologies. It also offers a blueprint for a nation-wide renewable energy system based on the most efficient mix of technology, societal, and habitual changes.