

FRIDAY FORUM #27 Peak Oil - New Zealand's Response

Friday, 8 July 2011, 9am - 12 noon at

Faculty of Engineering, University of Auckland, Lecutre Room 1.401

Speakers

Professor Bob Lloyd, of the University of Otago With Richard Hawke, Manager, Energy and the Environment Group and Carolyn van Leuven, Manager Fuels and Crown Resources

The Sustainability Society has invited Professor Lloyd from Otago University to give a follow up presentation to his successful lecutre on Peak Oil – are we ready? September last along with Richard Hawke and Carolyn van Leuven of the Energy and Communications Branch, Ministry of Economic Development, to tell us what the government plans.

Abstracts:

Professor Lloyd:

Concern for the environment and a move towards sustainable development has assisted progress in a wide range of renewable energy technologies in recent years. The science suggests that a transition from fossil fuels to sustainable sources of energy in a time frame commensurate with the demise of the fossil fuels and prevention of runaway climate change is needed. However, while the movement towards sustainable energy technologies is underway, the World does not want to give up the idea of continuing economic growth. In recent times the financial collapse of October 2008 has given rise to yet another set of pleas from corporations and politicians alike to restart the growth machine.

The transition to renewable energy technologies will be difficult to achieve as nowhere within existing economic and political frameworks are the limits to when growth will be curtailed being set. It is possible that the irrational insistence on endless growth as a non negotiable axiom, by a large proportion of the world's population, may in fact be akin to the similarly irrational belief, by a similarly large proportion of the world's population, that a supernatural being controls our existence and destiny. The irrationality of religion has recently been examined by Richard Dawkins in 'The God Delusion.!' Dawkins' book is used as a starting point to investigate similarities between a belief in God and a belief in continuous growth.

Richard Hawke:

The **Energy and the Environment Group** is responsible for: renewable energy and energy efficiency policy; the New Zealand Energy Strategy; international energy relations and monitoring the Energy Efficiency and Conservation Authority. The Group is also responsible for the Ministry's involvement in natural resources (which includes climate change policy and water management reform).

New Zealand is a member of the **International Energy Agency** (IEA), which provides credible information on the global oil market. One of Richard's responsibilities is managing New Zealand's role in the IEA. As part of this he is responsible for insuring New Zealand holds at least 90 days of oil reserves (measured as net imports). The 90-day oil stock obligation is a mechanism to help stabilise world oil markets in the event of a major event, such as Hurricane Katrina, that impacts the oil market for a limited period.

The **Fuels and Crown Resources Group** advises the Government on policy relating to petroleum (oil and gas) and minerals (including metallic minerals, coal and carbon capture and storage), oceans policy, the operation of fuel markets, biodiscovery and infrastructure emergency management.

Profiles:

Dr Bob Lloyd came to New Zealand in 2002 after having worked for the Australian Co-operative Research Centre for Renewable Energy (ACRE), based at Murdoch University in Perth. At ACRE he coordinated and edited a major review of standards in place for renewable energy systems in Australia. His current research interests at Otago University, where he is the Director of Energy Studies, lie in energy conservation in residential housing and energy management including world energy resources. His PhD from Flinders University in South Australia was completed in the field of experimental atomic physics.

Richard has worked at the Ministry since 2004. During that time he has worked extensively on energy, natural resource and regulatory issues. Richard has a background in economics and geography. Prior to joining the Ministry Richard was a senior lecturer at Victoria University of Wellington.

Before joining the Ministry in 2009, originally as a Director in the Energy and Communications Branch, **Carolyn** was a corporate/commercial partner in a leading Australasian law firm and headed the firm's electricity practice. In her time as a lawyer, she specialised in public and commercial law and was heavily involved with a number of high profile initiatives in the energy sector. Carolyn has been recognised by Chambers Global as a Leading individual: band 1 for Energy & Natural Resources and by Asia Pacific Legal 500 as a Highly regarded individual in Public Law practice.

This is a free lecture – all are welcome RSVPs are essential - Email <u>vicky@nzsses.org.nz</u>

Sponsored by Department of Civil and Environment Engineering Faculty of Engineering, University of Auckland

The Sustainability Society

The Sustainability Society is a Learned Society established to foster the discipline of sustainability engineering and science as the study of complex systems. The Society provides training and information sessions on sustainability through its workshops, seminars, forums and bi-annual international conferences.

Formerly, NZSSES, The New Zealand Society for Sustainability Engineering and Science is rebranding in preparation for the 5th International Conference – *Sustainability by Design: breaking the silos*.

The Sustainability Society is a Technical Interest Group of the Institution of Professional Engineers of New Zealand and an Affiliated Organisation of the Royal Society of New Zealand.

Sustainability Forums

The NZSSES hold regular forums aimed at exploring different engineering and science sectors and their approach to sustainability. The forums are morning sessions and comprise brief presentations from guest speakers followed by a facilitated discussion.

The aim of these Forums is firstly to give the speakers the opportunity to outline their understanding of the topic, and secondly, and perhaps more importantly, to provide the background information to resource what is hoped – and expected to be - a stimulating and forthright discussion.

Topics to date:

- o Forum 26 Sustainability and the Auckland Plan, Auckland (May 2011)
- o Forum 25 Future of Buildings, Auckland (March 2011)
- o Forum 24 Peak Oil are we ready? Auckland (Sept 2010)
- o Forum 23 Clean Tech, Green Tech & Sustainability Research. Auckland (July 2010)
- o Forum 22 Future of Food, Auckland (Apr 2010).
- o Forum 21 Future of Transport, Christchurch (Apr 2010)
- o Forum 20 Sustainable Water Supply for Auckland. (Feb 2010)
- o Forum 19 Convervation v Mining. Auckland (October 09)
- o Forum 18 Sustainable Air Qualaity for Auckland (Sept09)
- o Forum 16 Auckland: Sustainable Transport (July 2009)
- o Forum 15 Auckland: Complexity, Innovation and Decision (May 2009)
- o Forum 14 Auckland: Municipal Three Waters (April 2009)
- o Forum 13 Christchurch: Blueprints for Sustainable Infrastructure Conference Papers (March 09)
- o Forum 12 Auckland: Sustainable Housing (Sept 2008)
- o Forum 11 Christchurch: Strategies for Canterbury Water (Aug 2008)
- o Forum 10: Auckland: Sustainable Electricity (July 08)
- o Forum 9 Auckland: Biofuels (May 2008)
- o Forum 8 Christchurch: Water: Supply and Storage (March 2008)
- o Forum 7 Auckland: Future thinking and Frontier Design (Feb 2008)
- o Forum 6 Auckland: Carbon Trading (Oct 2007)
- o Forum 5 Auckland: Sustainable Transport: Cars and Congestion (Aug 2007)
- o Forum 4: Auckland: Governance and Sustainability (Sept. 2006)
- o Forum 3 Auckland: Consultants and Sustainability (May 2006)