



# The Sustainable Engineering Society

...engineering in harmony with ecology

Presents:

**Wednesday 25 February 2015**

**Time: 5:30pm**

**Venue:**

Hawken Auditorium, Engineering House  
447 Upper Edward St, Brisbane

**Cost:**

Members \$35

Non Members \$65

Please register to assist catering

***PLEASE NOTE: As this is the Eminent Speaker Series Booking online is Essential.***

**Speaker:**

**Dr Mark Diesendorf**

Dr Mark Diesendorf, Associate Professor and Deputy Director of the Institute of Environmental Studies at the University of New South Wales, Sydney.

Previously, at various times, he was a Principal Research Scientist in CSIRO, Professor of Environmental Science and Founding Director of the Institute for Sustainable Futures at University of Technology Sydney, and Director of Sustainability Centre Pty Ltd.

Currently his principal research is on rapid mitigation of global climate change and, in particular, integrating renewable energy on a large scale into electricity supply-demand systems.

His most recent book is Sustainable Energy Solutions for Climate Change (UNSW Press and Routledge-Earthscan, 2014).

## NATIONAL EMINENT SPEAKER TOUR

### A Sustainable Energy Future for Australia

If we replaced all the fossil fuelled power stations of the Australian National Electricity Market by commercially available renewable energy systems, how reliable would the renewable electricity supply system be? What would be the respective costs of the 100% renewable energy system, an efficient fossil fuelled system and fossil fuelled systems with hypothetical carbon capture and storage and under what conditions would 100% renewable energy systems break-even with the various fossil fuelled systems? What are the greenhouse gas emissions from each scenario? Research at UNSW has addressed all these questions by performing hourly computer simulations spanning (so far) one year, using actual hourly electricity demand, hourly weather data on wind and sunshine, and a projection of technology costs and fuel prices by the Bureau of Resources and Energy Economics. The results are encouraging for a renewable energy future, both in terms of reliability and economics.



#### Drinks and Networking

Please join us for a few drinks and light supper after the presentation.

The presentation will count as one hour towards your CPD.



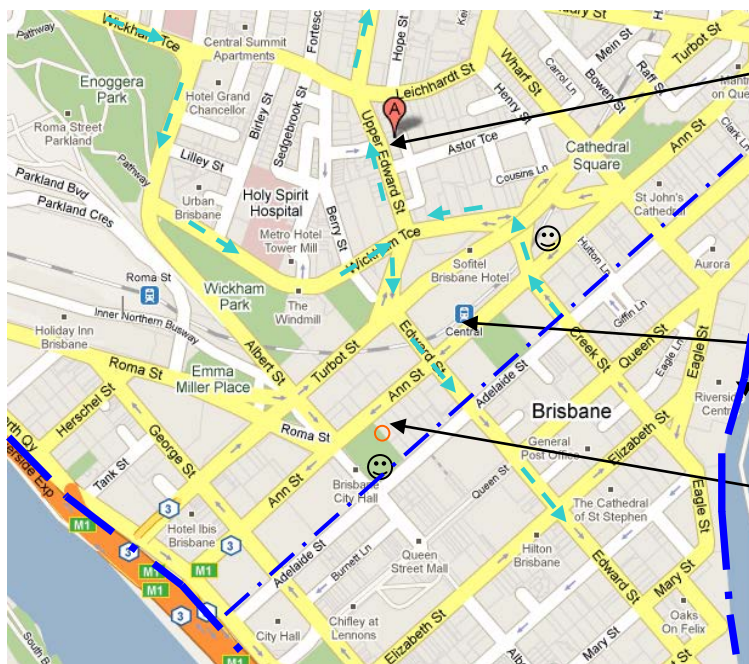
## Drinks and Networking

Please join us for a few drinks and light supper after the presentation.

- For catering purposes **please register by 5pm on Monday 23 February 2015.**
- Register on-line at the [QLD Division Events Website](http://www.qld.gov.au/division/events)
- Please telephone Qld Division for any registration queries (07) 3832 3749

The presentation will count as one hour towards your EA CPD.

## SENG encourages you to travel by public transport.



### Engineering House

447 Upper Edward St

Spring Hill Loop bus  
every 10 minutes until 6pm

Pedestrian - Cycle  
way

Central Train Station

Citycat

Transport  
Information Centre

CityCycle station

For more information go to <http://www.translink.com.au/> or visit the **Transport Information Centre** at King George Square station, Ann Street Concourse.

## Join SENG to take advantage of the lower registration costs.

Annual membership costs to join the SENG are provided below (July 2014):

### Engineers Australia Members (incl GST)

General - \$111.65

Retired - \$63.80

Student (without Journal) - FREE

### Non Engineers Australia Members (incl GST)

General - \$133.65

Retired - \$74.80

Student (with Journal) - \$27.50

For more information about SENG membership, visit the SENG website at:

<http://seng.org.au/membership>

Visit the Engineers Australia Qld website at: <http://qld.engineersaustralia.org.au/>

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