



**3 & 4 April, 2014**

University of Technology Sydney, Australia

## Thursday, 3rd April, 2014

7:30 am - 8:30 am

**Registration with coffee & tea on arrival**

8:30 am - 10:00 am

### **Energy Productivity in the U.S. and Australia - Shared Challenges and Opportunities**

Kateri Callahan, President, U.S. Alliance to Save Energy

Maya Stuart-Fox, Assistant Secretary, Emissions Reduction Fund Taskforce at the Department of the Environment

Heather Zichal, Lead U.S. White House Advisor on Energy and Climate Change (2009-2013)

The Hon. Anthony J Roberts MA (Comms) MP, Minister for Resources and Energy, and Special Minister of State

Adjunct Prof. Robert Hill, U.S. Studies Centre

*Chair: Jonathan Jutsen, Chairman, A2SE*

*The U.S. Government has adopted a goal of doubling energy productivity by 2030. What does this mean and is it achievable? Is this a precedent that Australia should follow? Learn from key members of the U.S. team that developed the plan and persuaded the U.S. Government. Engage with leading Australian policy makers on the current state of energy productivity. The opening plenary will set the tone for discussion and sharing of experiences and ideas throughout the Forum.*

10:00 am - 10:30 am

### **Morning Tea**

10:30 am - 12:00 pm

#### **Industrial energy productivity**

Peter Burn, Director - Public Policy, Australian Industry Group

Paul Orton, Director, Policy and Advocacy, NSW Business

#### **Residential buildings energy efficiency**

Adjunct Prof. Alan Pears, RMIT University

Barry Lynham, Group Director of Strategy and Communication, Knauf Insulation

Chamber  
Terry O'Brien, Chair of Australian Food and Grocery Council, Managing Director of Simplot Ltd.  
Stefan Preuss, Director of Resource Sustainability, Sustainability Victoria

Cecille Weldon, Head of Sustainable Real Estate, LJ Hooker  
Professor Deo Prasad, CEO, CRC for Low Carbon Living

*Chair: Gene McGlynn, Department of Industry*

*Chair: Jonathan Jutsen, Chairman, A2SE*

*Manufacturing accounts for about 8% of Australia's GDP and employment and half of non-transport energy use. What can manufacturers and construction companies do to increase productivity? What stands in their way? How can government help? Is energy reporting and auditing a help or a hindrance? How can energy management create a competitive edge? How can energy utilities work with their industrial customers for mutual benefit?*

*Homes account for approximately one third of non-transport energy consumption in Australia, but there is a wide range of energy use in homes and zero net energy homes that are becoming more common. In 2003, the National Framework on Energy Efficiency estimated that 70% of energy use in homes could be saved cost effectively. How do we unlock these massive energy savings for households? What is the role of energy codes, ratings and standards? How can homes become more efficient and productive?*

12:00 pm - 1:00 pm

### **Lunch**

1:00 pm - 2:30 pm

### **Optimising distributed generation & energy storage**

Muriel Watt, President, Australian PV Institute  
Dr. Dan Arvizu, Director and CEO, U.S. National Renewable Energy Laboratory (NREL)  
Kaia Hodge, Manager of Liveable City Programs, Sydney Water  
Patrick Greene, Business Development Manager, Ingenero

### **Commercial sector energy productivity**

Peter Verwer, CEO, Property Council of Australia  
Clover Moore, Lord Mayor of Sydney  
Romily Madew, CEO, Green Building Council of Australia  
Rob Murray-Leach, CEO, Energy Efficiency Council

*Chair: Dr Alan Broadfoot, Director, Newcastle Institute for Energy and Resources*

*The advent of affordable solar power is transforming the energy sector. More than one million households now own their own power stations. More businesses and communities are also looking to generate their own power from solar, cogeneration, trigeneration and other technologies. How will the move to local generation and storage change the way we use energy? How can these trends support energy productivity? What does this mean for the traditional centralised electricity providers?*

*Chair: Tom Roper, President, Australian Sustainable Built Environment Council (ASBEC)*

*The services sector now comprises two thirds of GDP and 86% of employment. Substantial productivity gains can accrue from comprehensive energy efficiency improvements as well as individual efficiency components. What improvements can be made to commercial buildings to improve energy productivity? How do we cut energy bills for hospitals, accommodation and education?*

2:30 pm - 3:00 pm

### **Afternoon Tea**

3:00 pm - 4:30 pm

### **Vehicle Efficiency and Electric Vehicles**

Graham Blight, Director, NRMA

### **Financing Energy Productivity**

Jillian Broadbent AO, Chair of Clean Energy Finance

Riccardo Pagliarella, Environmental Policy Manager, Toyota  
Scott Ferraro, Engagement Project Manager, ClimateWorks  
Dr Howard Lovatt, Team Leader Electrical Machines, CSIRO

*Chair: Mark McKenzie, GM, Victorian Automobiles Chamber of Commerce*

*Vehicle efficiency standards have been instrumental in reducing US reliance on imported oil, while Australia has no comparable standards. Is it time for Australia to adopt vehicle standards? Or should Australia dispense with incremental reform and embrace next generation electric vehicles that are typically three times more efficient than petrol vehicles? And how can Australia tap the productivity savings? What are the specific barriers to financing energy synergies between electric vehicles, distributed generation and storage, demand management and energy efficiency?*

Corporation (CEFC) and former Member of the Board of the Reserve Bank of Australia on securing CEFC finance  
Tanya Cox, Executive General Manager Property Services and Chief Operating Officer, DEXUS Property Group  
Dr Nicholas Regan, Technical Manager - Australia International Division, COFELY Australia Pty Limited & GDF SUEZ Energy Services  
Brian Innes, Group General Manager, Energetics

*Chair: Brian Morris, Country Manager, Energy and Sustainability Services, Schneider Electric*

*Improving energy productivity offers very attractive returns on investment, but often does not fit into conventional financing models. How can we bring financial capital together with the enormous potential for efficiency improvements and how have they been overcome? Are new tools and institutions required? What is the role of changing internal business culture and practice in unlocking the opportunities?*

4:30 pm - 6:00 pm

### **Building knowledge and engagement in Energy Productivity**

Dr. Dan Arvizu, Director and CEO, U.S. National Renewable Energy Laboratory (NREL)  
Dr. Alex Wonhas, Director, CSIRO's Energy Flagship  
Prof. Stuart White, Director, Institute of Sustainable Futures, UTS  
Skip Laitner, Visiting Fellow, American Council for an Energy Efficiency Economy  
Prof. Ken Baldwin, Director, Energy Change Institute, ANU

*Chair: Chris Dunstan, CEO, A2SE*

*To transform Australia's energy future and productivity, we need to invest in research, knowledge, analysis and engagement. This session considers both how to create and deliver these resources and proposals for the next steps: an Energy Productivity Roadmap, its plans, goals and key players and an Australian Centre for Energy Productivity.*

6:00 pm - 7:00 pm

### **Drinks and Networking**

7:00 pm - 10:00 pm

### **Dinner, Aerial UTS Function Centre**

John Hewson AM, Economist, Business Leader, former Federal Liberal Party Leader

*MC: Jon Jutsen, Chair, A2SE*

**Friday, 4th April 2014**

7:30 am - 8:30 am

**Registration with coffee & tea on arrival**

8:30 am - 10:00 am

**Policy Tools for Doubling Energy Productivity**

Connie Hedegaard, Commission for Climate Action, European Commission  
Heather Zichal, Lead U.S. White House Advisor on Energy and Climate Change (2009-2013)  
Martin Hoffman, Deputy Secretary for Energy, Department of Industry  
Anna Skarbek, Executive Director, ClimateWorks  
Chris Dunstan, CEO, A2SE

*Chair: Jonathan Jutsen, Chairman, A2SE*

*What are the key policy tools for boosting energy productivity? The session discusses world's best practice in energy efficiency and productivity governance, and how policy options can be tailored to the current political and economic circumstances of different countries.*

10:00 am - 10:30 am

**Morning Tea**

10:30 am - 12:00 pm

**Smart appliances, smart consumers**

Adam Welsh, Senior Director of Regulatory Affairs, APAC, Opower  
David Walker, Department of Industry  
Dr Nina Hall, Social Scientist and Project Leader, CSIRO  
Ian Forte, Regulatory Affairs Manager, Electrolux (Australia)

*Chair: George Wilkenfeld, Director, George Wilkenfeld & Associates*

*Appliance energy efficiency standards and labeling have been among the great success stories of energy productivity in Australia. Smart policy has delivered billions of dollars in savings for Australian consumers. What are the next steps for smarter more efficient appliances? How can appliances and equipment reduce not just energy use but also peak demand? What is the role energy management devices and software in empowering consumers to use energy more efficiently? How do we improve and simplify the interface between appliance and consumers? What is the role of education, information and behaviour change?*

**Lunch**

**Efficient public transport and urban design**

Tim Raimond, Transport for NSW  
Dr Garry Glazebrook, University of Technology  
Dr. Peter Rickwood, Institute for Sustainable Futures, UTS  
Assoc. Prof Rod Simpson, Urban Design Director, University of Sydney

*Chair: Prof Stuart White, Director, Institute for Sustainable Futures*

*While generally more efficient than private vehicles, urban public transport's other productivity benefits such as reduced traffic congestion and increased amenity can offer even greater benefits. But the key is thoughtful urban design to provide the right transport options in the right places at the right price. Australia's car dependent cities have often failed to do this. How do we unlock the value of more efficient transit options in our cities? How can we encourage better urban transport infrastructure and mode choices?*

12:00 pm - 1:00 pm

1:00 pm - 2:30 pm

**Energy market productivity & DM**

**Freight transport**

Paul Smith, CEO, Australian Energy Market Commission  
Paul Troughton, EnerNOC  
Ric Brazzale, Managing Director, Green Energy Trading  
Lucy Carter, Energy Fellow, Grattan Institute

*Chair: David Green, Managing Director, Energy Futures Australia*

*More than 10% of our electricity supply capacity is used less than 1% of the time but contributes significantly to the cost of supply. The AEMC estimated that greater demand management could result in likely savings of \$4.3 billion to \$11.8 billion over the next ten years. Are current reform packages effective and sufficient? What difference will opening up the energy/demand market make to the generation sector's productivity? Will it work? What else needs to be done?*

#### **Afternoon Tea**

#### **Electricity transmission and distribution productivity**

Omar Siddiqui, Senior Technical Executive, Energy Utilization, Electric Power Research Institute  
Chris Dunstan, CEO, A2SE  
Warwick Anderson, General Manager, Network Regulation, Australian Energy Regulator  
John Bradley, CEO, Energy Network Association

*Chair: Judy Anderson, President, Smart Grid Australia*

*The cost of new electricity network infrastructure has been the biggest contributor to rising electricity prices over the past seven years. According to the Productivity Commission, more efficient network investment could save consumers between \$2.2 and \$3.8 billion. Meanwhile, electricity networks are facing major technological change from the impact of energy efficiency and decentralised energy, particularly solar PV and the decline in energy consumption since 2008. Is this a recipe for higher energy charges or stranded assets? How do networks respond to a suddenly unpredictable future, including potential disconnection + impact of electric vehicles and energy storage?*

Mark McKenzie, GM, Victorian Automobiles Chamber of Commerce  
Frank Muller, Former Commissioner, National Transport Commission  
Jordan Groeneveld, Energy Analyst, Aurizon  
David Coleman, Ron Finemore Transport

*Chair: Kait Gotham, Pitt and Sherry/Rare Consulting*

*Currently, road freight accounts for almost 80% of total energy consumption within freight transport. Rail, on the other hand, was less than 10%. What are the opportunities in shifting from road to rail? What does the prospect of peak oil and rising oil prices mean for our freight choices? How do we capture the benefits? What would it take to provide infrastructure? How do we ensure the flexibility of road with the dependability of rail?*

#### **Mining and agriculture energy productivity**

David Eyre, General Manager, Research & Development, NSW Farmers' Association  
Brendan Pearson, CEO, Minerals Council of Australia  
Mr Michael Scott, Technical Specialist, CRC Ore  
Dr Damien Giurco, UTS  
Mary Stewart, CEEC Board member and General Manager, Consulting at Energetics

*Chair: Michael Smith, ANU*

*Mining is one of the most energy intensive industries, consuming 9% of energy while only employing 2% of the population. Given the boom-bust nature of the industry, long-term investment can be challenging. While opportunities for energy efficiency are huge, what could be done to persuade these major energy users of the merits of changing? Agriculture is also a significant energy user, particularly in the form of diesel, which makes the sector, which runs on low margins, even more vulnerable to rising energy costs. What is the role of solar PV and EVs in this sector?*

2:30 pm - 2:50 pm

2:50 pm - 4:20 pm

4:20 pm - 4:50 pm

**Doubling Energy Productivity - The Way Ahead**

Kateri Callahan, President, U.S. Alliance to Save Energy

Jonathan Jutsen, Executive Director, Energetics

*Chair: Chris Dunstan, CEO, A2SE*

*Wrap up of what we have learned about Australia's opportunities for doubling energy productivity, challenges for implementation, attitude of our stake-holders, and how do we marshal resources to drive a similar program to the USA. What have we learned from the US specialists about the best way to proceed?*