

SMART ENERGY SOLUTIONS



9.00am OPENING PLENARY CHAIR: Professor John Hewson

Welcome Address - Steve Blume, President, Smart Energy Council
Welcome to Country - Allan Murray, Gadigal Elder
 Gladys Berejiklian, Premier of New South Wales (Invited)
Navigating the transition to the fourth revolution - Audrey Zibelman, AEMO
 Michael Daley, NSW Opposition Leader (Invited)
The next wave of renewable energy investment - Ian Learmonth, CEFC
Getting ready for new Government - Oliver Yates, UPC; Candidate for Kooyong
Australia's climate change fiasco – still going - Alan Kohler, ABC news; InvestSMART Group

10.45am MORNING TEA

11.15am AUSTRALIAN MARKET TRENDS

Outlook for the Australian market - Leonard Quong, Bloomberg NEF
The power of the energy prosumer - Sophie Vorrath, RenewEconomy
Australia's smart energy future - Simon Holmes à Court, Energy Transition Hub, Melb Uni
Rooftop solar trends in the Renewable Energy Target - Mark Williamson, CER
How solar will turn day into night for the electricity market & why you should be worried - Tristan Edis, Green Energy Trading
The role of virtual power plants in Australia's future energy system - Anita Oh, BCG

12.45pm LUNCH

12.45 - 1.45pm LUNCH MIXERS – ENERGY REVOLUTION

1.45pm FINANCE AND INVESTMENT

International trends in decarbonisation as global finance shifts, and the risk of stranded assets - Tim Buckley, Institute for Energy Economics and Financial Analysis
The outlook for wholesale electricity prices as the NEM moves to 50% renewables by 2030 - David Leitch, ITK
Strategic investors: friends or foes - Mark Woodall, Kilara Capital
Australian Clean Energy Investment Trends - Bianca Sylvester, CEFC
Energy Storage Projects - Kate Phillips, Baker McKenzie
New model of Power purchasing agreement (PPA +) - Scott Lai, Future X Energy Group

3.00pm AFTERNOON TEA

3.30pm DEMAND RESPONSE & ENERGY EFFICIENCY

Virtual power plant participation models: Examining consumer choice in an evolving landscape - Andrew Mears, SwitchDin
Moulding Virtual Power Plants - Dean Spaccavento, Reposit
Happy Power Hour - Dynamic electricity tariffs for medium-sized industrial companies - Benedikt Dahmann, University of Wuppertal, Germany
Understanding the implication of network control on domestic assets - James Sturch, Sonnen
Energy efficiency as a distributed energy resource and the death of deemed white certificate schemes - James Clements, Wattwatchers Digital Energy
Built to Perform: An Industry Led Pathway to a Zero Carbon Ready Building Code - Francesca Muskovic, Property Council of Australia

4.45pm CLOSE

APPLIED ENERGY STORAGE

11:00am MARKET REVIEW

Australian Energy Storage Market Update - John Grimes, Smart Energy Council
Prospects for solar and battery adoption: main drivers - Paul Graham, CSIRO Energy
Opportunities for Energy Storage - Dong Lin, Alpha ESS
Solar panel validation: ensuring the installation of genuine solar panels - Michelle Crosbie, CER
Amy Kean, Director, Energy Infrastructure and Emerging Technologies, NSW Department of Planning and Environment
One million Australian batteries by 2025 - fantasy or inevitable? - Warwick Johnston, SunWiz

12.30pm LUNCH

12.45 - 1.45pm LUNCH MIXERS – ENERGY REVOLUTION

1.30pm TECHNOLOGY REVIEW

Highlights of the DNV GL Energy Transition Outlook - Graham Slack, DNV-GL
Open Source Modelling of the National Electricity Market - Simon Franklin, ITP Renewables
Enphase Advanced Microinverter Technology - Andrew Mitchell, Enphase
Understanding Safety Data Sheet (SDS) for popular Battery Types - Peter Cockburn, Navitus Solar
The SA Home Battery Scheme in Action - Sam Craft, NRG Renewables
Solar cannibalism - victims of our own success. Too much of a good thing - Colin Gillam, Manager Energy Storage Solutions, redT Energy Australia

2.45pm AFTERNOON TEA

3.15pm LARGE SCALE ON GRID

Renewables 2.0; integrated with storage - Mark Leslie, Fluence
Smooth, shift, ship – storage, stability and sentiment beyond 50% renewables - Vanessa Sullivan, Lyon Group
Dr Stuart Johnston, General Manager Network Transformation, Energy Networks Australia
100% renewables - Andrew Blakers, ANU- Hydro
Queensland Wind Energy; why it is vital to achieve a low cost, renewable energy future across the NEM - Roger Price, Windlab Limited
Financial prospects for Battery Storage - Chandana Samarasinghe, Risen Energy

4.30pm CLOSE

PROFESSIONAL DEVELOPMENT INSTALLER



9.00am INDUSTRY & BATTERY STANDARDS UPDATES

Welcome: Overview & House Rules - Brian England, SEIA
Industry Update - Ric Brazzale, Green Energy Trading
Role & Responsibilities of OFT/Asbestos risk for installers - Bruce Blacker, Office Fair Trading
Unveiling the sales techniques that are the keys to success in the residential energy storage market - Grant Behrendorff, AC Solar Warehouse

10.45am MORNING TEA

11.15am VOLT VAR RESPONSE AND BATTERY TESTING STANDARDS

AS5139 new battery & storage standard - Glen Morris, SolarQuip
Developing a National Specification and Classification for Batteries - Anand Bhatt, CSIRO Energy

12.45pm LUNCH

12.45 - 1.45pm LUNCH MIXERS – ENERGY REVOLUTION

1.45pm GRID ISSUES & SOLUTIONS

Network issues and future utility directions - Michelle Murray, Essential Energy; Paul Brownlee, Ausgrid
Case Study - Demand Response on difficult sides - Karl Edmondson, Reposit Power
Remote I/V Curve testing - Geoff Bragg, New England Solar Power

3.15pm AFTERNOON TEA

3.45pm INNOVATION

Innovation in Renewables - Zink-Bromine Gel Batteries - Rob Fitzpatrick & Nathan Coad, Gelion Technologies

4.30pm CLOSE

SMART ENERGY SOLUTIONS

9.00am TRANSFORMING TO ZERO CARBON

The real world transition to zero-carbon - Jon Dee, Arup
Jobs and opportunity from the transformation to a clean economy - Zali Steggall, Independent Candidate for Warringah
Jumping the 'net' - Christine Milne, Australian Greens; Smart Energy Council
The path towards 100% renewable energy - Kenneth Baldwin, Energy Change Inst, ANU
The Sapphire Renewable Energy Hub – a Wind/Solar/Battery Tribrid - Alex Hewitt, CWP
The opportunities and challenges for regulatory reform in a transitioning energy sector - Penelope Crossley, The University of Sydney

10.45am MORNING TEA

11.15am POLICY & REGULATION

Lily D'Ambrosio, Victorian Minister for Energy, Environment and Climate Change and Minister for Solar Homes
NSW Minister for Climate Change and Energy (TBC)
Sam Crafter, Executive Director Energy Implementation, SA Department for Energy and Mining
Kathie Standen, Deputy Director-General, Queensland Department of Natural Resources, Mines and Energy
Ben Ponton, Director-General, ACT Department of Environment, Planning and Sustainable Development
Where are we up to? - Wayne Smith, Smart Energy Council

12.45pm LUNCH

12.45 - 1.45pm LUNCH MIXERS – ENERGY REVOLUTION

1.45pm INNOVATION & TECHNOLOGY

Photovoltaics: Recent Developments and Future Prospects - Prof Martin Green, UNSW Energy Innovation - Nicola Morris, ARENA
Bifacial PERC Module - Yield data Analyze and Simulation - Monsoon Wang, Longi Solar
Utility Capabilities for advanced DER Integration - Brendon Hampton, SA Power Networks
Virtual power plants (VPP) & Customer Choice - Brent Harris, Eguana Technologies
Innovations in solar PV energy management - David Barshevski, Meteocontrol Australia

3.00pm AFTERNOON TEA

3.30pm WHO OWNS OUR ENERGY?

Social Impact: Creating Sustainable Communities - Felicity Stening, Enova Energy
Choice and control in the age of distributed energy generation - Stefan Jarnason, Solar Analytics

4.15pm THE BIG FINISH: AUSTRALIA'S ENERGY FUTURE

Moving beyond 50% renewables – what should governments and industry do? - Simon Corbell, Energy Estate

4.30pm CLOSE

APPLIED ENERGY STORAGE



9:00am HYDROGEN & ALTERNATIVE FUELS

Hydrogen, a viable energy storage media to increase renewables penetration to the grid - Christopher Munning, CSIRO Energy
Attilio Pigneri, CEO, The Hydrogen Utility
Batteries or hydrogen? - Stephanie Moroz, Davanz
The Asian Renewable Energy Hub: Potential to become Asia's premier source of green hydrogen - Andrew Dickson, CWP Renewables
ATCO's Clean Energy Innovation Hub - Stevan Green, ATCO Gas Division
Microgrids: Real World Applications with Hydrogen + Battery Storage - Catherine Von Burg, SimpliPhi Power
Australia's transition to a hydrogen-powered transport future - Claire Johnson, Hydrogen Mobility Australia

10.30am MORNING TEA

11:00am FOCUSING ON THE CONSUMER

How can distribution networks support decarbonisation and better outcomes for consumers? - Gabrielle Kuiper - Energy Security Board; Churchill Fellowship
Consumer expectations in DER - Rosemary Sinclair, Energy Consumers Australia
How delivering for the customer will grow your business - Patrick Matweew, Redback Technologies
How to create a Solar Proposal that will crush your competition - Finn Peacock, SolarQuotes
Quality Beyond Expectation - Paul Scerri, REC
Why focusing on the consumer is the path to 24 hours of sun (100% renewable energy supply) - Keshia Noronho, Fronius
Consumers' Appetite for Prepayment Metering - Nancy Katsimberis, Australian Utilities Company (AUC)

12.30pm LUNCH

12.45 - 1.45pm LUNCH MIXERS – ENERGY REVOLUTION

1.30pm ACTIVE ENERGY MANAGEMENT SYSTEMS

Intelligent Home Energy – from theory to practice - Emlyn Keane, Evergen
The future of home automation - Eddy May, NRG renewables
Activating consumers in the energy transition, the role for industry - Nicky Ison, Community Power Agency
Australian Battery Performance Standard project: Standards Gap Analysis - Nishad Mendis, DNV GL - Energy, Renewables Advisory
Solahart PowerStore – Smart Water Heating reduces consumer electricity bills and improves the electricity network - Sean Box, Rheem Australia

2.45pm AFTERNOON TEA

3.15pm OFF GRID & HYBRID

Mark Paterson, General Manager - Consumer Energy, Horizon Power
Integrating solar and transport - Toby Roxburgh, Energy Estate
AC Coupled / DC Coupled / Hybrid – The distinct Difference - Derick Martins, OutBack Power

4.15pm CLOSE

PROFESSIONAL DEVELOPMENT INSTALLER



9.00am COMPLIANCE & SOLAR/ELECTRICAL STANDARDS UPDATES

PV Panel Validation program - Michelle Crosbie, CER
Impacts of AS3000 on installers/AS5033 Solar Standard Amendments - Sandy Atkins, Energysafe VIC
Inverter settings for Volt Var Response Mode - Craig Hunter, PowerPlus Energy
Rapid Shutdown of Photovoltaic Systems Using Micro Inverters - Duwayne Robertson, Enphase

11.00am MORNING TEA

11.30am BATTERY TESTS & VPP

Results of the world-first independant lithium battery comparison tests - Jonathan Kennedy, ITP Renewables (Australia)
Demand Response without additional equipment - Alex Georgiou, ShineHub

12.45pm LUNCH

12.45 - 1.45pm LUNCH MIXERS – ENERGY REVOLUTION

1.45pm INDUSTRY ISSUES AND FUTURE

The EV market and charging requirements for EVs - David Hiley, WATTEver
Various Lithium chemistries and quality variations - Simon Chan, PowerPlus Energy
Causes and effects of micro cracks in pv panels - Thomas ByWater, Jinko Solar

3.15pm AFTERNOON TEA

3.45pm COMMUNICATIONS & CONTROL

Comms with battery installs - field issues and solutions - Ivan Carter Selectronic
Integration of load management with system monitoring - Nigel Morris, Solar Analytics

4.30pm CLOSE