

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)
Australia's climate change fiasco – still going - Alan Kohler, ABC news; InvestSMART Group
 Michael Daley, NSW Opposition Leader (Invited)
The next wave of renewable energy investment - Ian Learmonth, CEFC
Navigating the energy transition - Violette Mouchaileh, AEMO
Getting ready for new Government - Oliver Yates, UPC; Candidate for Kooyong

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
From megawatts to gigawatts - 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 Dahlmann, 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
How to make the most of DER - Chloe Munro, Monash University; Energy Transition Hub Advisory Panel
Application of LFP Li-Battery in ESS field - Wei Wang, CATL
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- Energy
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, 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
Designing network platforms to deliver a smart future - Stuart Johnston, 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
Half Cells to Shingles, what's going on with PV module innovation and what are the benefits? - Michael Rush, Canadian Solar
Industry Update - Ric Brazzale, Green Energy Trading
New requirements of lodging CCEWs - Bruce Blacker, Office Fair Trading
Sales Techniques: 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 DR 2- New battery & storage standard, are you prepared? - Glen Morris, SolarQuip
Developing a National Specification and Classification Standard for Batteries that allows comparison - Anand Bhatt, CSIRO Energy
Battery Standards Training - Peter Cockburn, Navitus Solar

12.45pm LUNCH

12.45 - 1.45pm LUNCH MIXERS – ENERGY REVOLUTION

1.45pm GRID ISSUES & SOLUTIONS

Managing high-voltage lines - Michelle Murray & Bradley Thomas, Essential Energy; Paul Brownlee & Kevin Smith, Ausgrid
Case Study - Demand Response on difficult sites - Karl Edmondson, Reposit Power
Introducing remote panel fault diagnosis - Geoff Bragg, New England Solar Power

3.15pm AFTERNOON TEA

3.45pm INNOVATION

Innovation in Renewables - Zink-Bromine Gel Batteries - Rob Fitzpatrick & Nathan Coad, Gellion 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 Warringham
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 STATE GOVERNMENT LEADERSHIP ON SMART ENERGY

Victoria's solar rush: how Australia's fastest growing state is becoming a renewable energy powerhouse - Lily D'Ambrosio, Victorian Minister for Energy, Environment and Climate Change and Minister for Solar Homes
NSW Minister for Climate Change and Energy (TBC)
South Australia's Smart Energy Policies and Programs - Sam Crafter, SA Department for Energy and Mining
Queensland's Smart Energy Policies and Programs - Stephanie Jolly, Queensland Department of Natural Resources, Mines and Energy
ACT's Smart Energy Policies and Programs - Geoffrey Rutledge, ACT Environment, Planning and Sustainable Development Directorate
Where are we up to? - Wayne Smith, Smart Energy Council

12.45pm LUNCH

1.45pm INNOVATION & TECHNOLOGY

Photovoltaics: Recent Developments and Future Prospects - 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
Developing Large-scale Hydrogen Facilities: Port Lincoln Green H2/NH3 Supply Chain Demonstrator - Attilio Pigneri, 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

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
Orchestrating DER. Where to from here? - Dan Sturrock, ARENA
Australian Battery Performance Standard project: Standards Gap Analysis - Nishad Mendis, DNV GL - Energy
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

Reinventing electricity supply in remote Australia - Mark Paterson, 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

Q Cells Presentation
PV Panel Validation program - Michelle Crosbie, CER
The impacts of AS3000 on installers and amendments of AS5033 - 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

The SA Home Battery Scheme in Action - Sam Craft, NRG Renewables
Results of the world-first independent lithium battery comparison tests - Jonathan Kennedy, ITP Renewables (Australia)
Demand Response without additional equipment - Alex Georgiou, ShineHub

12.45pm LUNCH

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