

## 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

**Australia's smart energy future** - Simon Holmes à Court, Energy Transition Hub, Melb Uni  
**The power of the energy prosumer** - Sophie Vorrath, RenewEconomy  
**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  
**Renewable projects impacted by changes to the Marginal loss factors** - Amar Singh, Market Advisory Group

### 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** - James Martin, 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  
**High Voltage is killing your Solar business: How to protect your customers from rising grid voltages** - Richard McIndoe, Edge Electrons

### 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, 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 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  
**Decarbonisation and resilience building: Perspectives from the Pacific** - John Connor, Fijian COP23 Presidency Secretariat

### 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 Polices 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** - Vincenzo Marciano, 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  
**The right battery size for your residential solar system** - Roman Jordan, VARTA Storage

### 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