

Day One	8.30 – 9.00	Registration				
	9.00 – 10.30	Opening Plenary Session, Chair Renate Egan Prof. Martin Green (UNSW, ACAP): Recent Developments in Photovoltaics Manuel Blanco (IEA, CSIRO, ASTRI): Advances in Concentrating Solar Thermal Louise Vickery (ARENA)				
	10.30 – 11.00	Morning tea				
	11.00 – 12.40		Deployment - Resources Chair Anna Bruce	Advanced PV- Si Chair Malcolm Abbott	Solar Thermal 1 Chair Jin-Soo Kim	
		11:00	Jessie Copper Assessment of the Australian Bureau of Meteorology hourly gridded solar data	Stefan Gall Crystalline silicon thin-film solar cells – an option for the future?	James Hinkley	A Solar Fuels Roadmap for Australia – Project Outcomes
		11:20	Trevor Lee Comparison of Satellite Estimated Hourly Solar Data with Coincident Ground Based Measurements and their Applications in Industry and Commerce	Evan Franklin Towards 26% silicon IBC solar cells: five key efficiency improvements	Kenrick Anderson	Corrosion of second surface heliostats in coastal environments
		11:40	Dylan McConnell Capacity value assessment of distributed solar in the National Electricity Market	Kean Chern, Fong Excellent Surface Passivation via SiO ₂ -LPCVD SiN	Alex Post	Thermionics – a new approach to highly efficient solar energy conversion
		12:00	Andrew Thomson Prospecting solar energy in Australia: accounting for temperature losses	Ned Western Breakdown of adjacent contacts with the Point-contacting by Localised Dielectric Breakdown method	Charles-Alexis Asselineau	Exergetic efficiency of point-focus concentrators using realistic flux distributions
	12:20	Ori Agranat Short Term Frequency Management in the Australian NEM	Ngwe Soe Zin Evaluation of double-sided pyramidal texture for IBC solar cells	Dr Woei Saw	TBC	
	12.40 – 2.00	Lunch				
2.00 – 3.20		Deployment - Mini Grids Chair Muriel Watt	Advanced PV - Perov processes Chair Jacek Jasieniak	Solar Thermal 2 Chair Sarah Miller		
	2:00	Nikolasi Fonus Balancing Development And Energy System Transformation In Tonga	Paul Meredith Fundamental Physics of Organo-Halide Perovskite Solar Cells	Jin-Soo Kim	High temperature receiver design - overview of recent Australian activities	
	2:20	James Hazelton Improving Risk Management for Utility Scale PV-Battery-Diesel Mini-grid Projects in Sabah, Malaysia	Jeongmo Kim Effect Of Metal Doping In Sol-gel Processed Nickel Oxide Hole Transport Layer On Performance Of Perovskite Solar Cells	Daniel Potter	Optimised Design of a 1MWt Liquid Sodium Central Receiver System	
	2:40	Rolando Madriz A Literature-Based Study of Factors Influencing the Success of Community Renewable Energy Minigrids	Yan Li The influence of solvent evaporation time on the morphology evolution of the CH ₃ NH ₃ PbI ₃ film	William Logie	Temperature and heat flux distributions in sodium receiver tubes	
3:00	Kayla Inglis Optimising Business Models for Community-Owned Renewable Energy in Australia	Matthew Griffith Hybrid Fabrication of Flexible Large Area Organic Photovoltaic Modules by Combining Roll-to-Roll Printing, Coating and Vacuum Depositions	Nick Bartos	Experiences From Using Molten Sodium Metal As A Heat Transfer Fluid In Concentrating Solar Thermal Power Systems		
3.20 – 4.00	Afternoon tea					
4.00 – 5.20		Applied PV - Si Chair Andrew Thomson	Advanced PV - other materials Chair Stefan Gall	IEA PVPS Chair Lyndon Frearson		
	4:00	Malcolm Abbott Solving optics problems with cloud computing	Jacek Jasieniak Solution-Processed CZTS Solar Cells from Nanoparticle Inks	Renate Egan	The Australian Solar Market in an International Context	
	4:20	Thomas Ratcliff Design and Analysis of a Dielectric Totally Internally Reflecting Concentrator with Vertically Oriented, Bifacial Photovoltaic Receiver	Mats Andersson Improved Thermal Stability and Work Function Modification of Polymer Solar Cells through Fullerene Interfacial Materials	Warwick Johnston	Task 1 - Strategy and Outreach: Australian PV development in the residential and commercial sector	
	4:40	Tim Lam Selecting the right mounting structure for solar farms in Australia, fixed tilt versus single-axis trackers	Hongxia Wang An Effective Method to Suppress the Formation of Mo(S,Se) Interfacial Layer in Earth-Abundant Solar Cells based on Cu ZnSn(S,Se)	Iain Macgill	Task 14: High Penetration PV	
5:00	W K Yap Quantitative Analysis of Dust and Soiling Effects on PV Panels in the Tropics Utilizing Image Processing Techniques	TBA	Anna Bruce	Task 13: Potential in the Australian Solar Maps		
5.30	Cocktail Reception					

8.00 – 8:30		Registration					
8:30-10:30		Plenary Session Chair Louise Vickery Dr Mark Mehos (NREL): The role of CSP in an expanding regional portfolio of variable renewable technologies Michelle Taylor (Ergon): New Technology Opportunities with High PV Penetration Dr Shi Zhengrong (UNSW): Solar PV: the First Step for Energy Transformation Danny Kennedy (CalCEF): The Californian Cleantech Revolution					
10.30 – 11.00		Morning tea					
11.00 – 12.40		Deployment - Field Chair Chris Fell		Advanced Photovoltaics 4 Chair		Solar Thermal 3 Chair Manuel Blanco	
	11:00	Andrew Blakers	The PERC solar cell	C O Ramirez Quiroz	Pushing Efficiency Limits for Semitransparent Perovskite Solar Cells	José I. Zapata	Estimation of average mirror reflectivity using digital photographs and specular reflectometer measurements
	11:20	Chris Fell	Exploring Uncertainties in PV Module Flash Testing	The Duong	Efficient Semi-Transparent Perovskite Solar Cell For Four-Terminal Tandem Structure	Clotilde Corsi	Far-Field Optimisation of Heliostat Shape and Spacings
	11:40	Rhett Evans	A holistic consideration of the sources of mismatch loss in a fielded array	Lianzhou Wang	Resistive Random Access Memory Devices and Solar Battery: New Applications of Organic-inorganic Hybrid Perovskites	Piratheepan Mahendran	Optical properties of low concentration ratio façade integrated solar collectors
	12:00	Julius Tanesab	The effect of different types of dust on the performance degradation of PV modules	Byeong Jo Kim	Recyclable High Efficient Perovskite Solar Cells through Selective-dissolving Process	Ricky Dunbar	Heliostat motion under real wind loads in central receiver solar thermal plants
	12:20	Benjamin Duck	Better Predictions for the Impact of Spectrum on PV Output	Marina Lunardi	Life Cycle Assessment (LCA) of Silicon and Perovskite/Silicon Tandem Solar Cells	Timothy Anderson	A validated simulation of wind flow around a parabolic dish
12.40 – 2.00		Lunch					
2.00 – 3.40		Deployment - Market Chair Craig Froome		Advanced Photovoltaics 5 Chair Martina Calais		Solar Thermal 4 Chair Frank Bruno	
	2:00	Chris Dunstan	Mapping Network Opportunities For Cost-Effective Solar Deployment	Ricky B. Dunbar	Performance Measurements of PV Devices Subject to Metastability and Degradation: Efficiency of Perovskite Solar Cells Under Standard Test Conditions	Frank Bruno	Transitioning from low to high temperature PCM thermal storage
	2:20	Oscar Wilkie	Revenue Sufficiency in the National Electricity Market with High Penetrations of Renewable Energy	Ricky B. Dunbar	Mini-workshop: Accurate Measurement of Perovskite Solar Cells	Alicia Bayon Sandoval	Exploring Lithium Sulphate as a Low Cost Material for High Temperature Thermal Energy Storage
	2:40	Stephanie Easton	Generator investment transition in the Australian National Electricity Market with increasing penetrations of renewable energy	Gaveshana Sepalage	Inorganic hole-conductors in planar perovskite solar cells: Probing the origin of J-V hysteresis	Natasha Hjerrild	Oil-based Nanofluid Optical Filters for Hybrid Photovoltaic/Thermal Collectors
	3:00	Sharon Young	Impacts of Electric Vehicles on NEM and Household Expenditure for a Variety of Charging Regimes	Alexander Pascoe	Opto-Electronic Characteristics of Planar and Mesoscopic Perovskite Solar Cells	Yifeng Jiang	Development of Li2CO3-Na2CO3 Phase Change Materials for Concentrating Solar Power Plants
3:20	Di Kang	PV Module Recycling: Mining Australian Rooftops			Saeid Seddegh	Heat transfer mechanism in solar thermal energy storage systems using phase change materials	
3.40 – 4.15		Afternoon tea					
3:40-5:00		Poster Session					
5:00-5:30		APVI AGM					
6.30		Conference dinner					

8.00 – 8:30		Registration					
8:30-10:30		Plenary Session: Chair: Martin Green Hugo Llorens, US Ambassador Prof Christoph Brabec (Uni Erlangen): The Perovskite Revolution Dr Pierre Verlinden (Trina): Advances and cost-drivers in silicon module manufacturing. Dr Greg Wilson (NREL): Scaling solar and the need for international co-operation					
10:40		Morning tea					
11:00		Applied PV - Deployment Chair Rob Passey	ACAP - Advanced Photovoltaics 1 Chair Paul Meredith	Solar Heating & Cooling Chair Stephen White			
	11:00	Muriel Watt Policy Approaches and Tariff Structures to Maximize Renewable Energy Uptake in Pacific Island Grids	11:00 James Bullock Carrier-selective contacts for silicon solar cells	Frank Bruno	Evaluation of PCM Thermal Storage Demonstration System for Cold Storage		
	11:20	Ric Brazzale How effective will the RET be in supporting PV?	11:15 Rebecca Milhuisen Transition metal complexes as charge transport materials in thin film solar cells	Priyadarsini Rajagopalan	Solar Heating for Commercial Swimming Pools		
	11:40	Declan Kelly As Assessment of Cost-Reflectiveness of Proposed Network Tariffs in Australia	11:30 Kyra Schwarz Ultrafast studies of charge transfer and morphology in semiconductor materials	Chris Whittington	The design and performance of a novel low cost all polymer flat plate solar collector		
	12:00	Xiao Ying Xu Carbon Fee and Dividend as an Alternate Carbon Policy in Australia	11:45 Brett Hallam Mitigating Carrier-Induced Degradation in p-type Czochralski Silicon Solar Cells	Tahlia Nolan	Evaluating the performance, design and optimisation of a solar combisystem in the Australian climate		
12:20	Ben Elliston What cost for more renewables? The incremental cost of renewable generation in the National Electricity Market	12:00 Jenny Donaghey High dielectric constant organic semiconductors for organic photovoltaics	Alistair Sproul	Almost Everything You Wanted to Know About Admittance but Were Afraid to Ask			
12:40		Lunch					
14:00		Applied PV - Storage Chair Mary Hendricks	ACAP - Advanced Photovoltaics 2 Chair Richard Corkish	IEA SHC Chair Alistair Sproul			
	2:00	Susan Roaf The role and use of Energy storage in Maximizing the Benefits of Solar Energy in Smart Energy Communities	2:00 Hieu Nguyen Spectrally-resolved PL method	Ken Guthrie	Issues and Opportunities for Solar Heating and cooling - a Global View		
	2:20	Rob Selbie Assessing the Value Of Utility-Scale Energy Storage Arbitrage In The Australian National Electricity Market	2:15 Steffen Meyer Temperature-dependent performance and thermal stability of encapsulated perovskite solar cells	Stephen White	Solar Cooling - International Developments		
	2:40	Constantino Aznar González Energy Storage Integration Into Utility-Scale PV Plants	2:30 David Jones Molecular donors for high performance organic solar cells	Jeremy Osborne	Renewable solutions for process heating for manufacturing		
	3:00	Rui Tang Site Specific Battery Simulation Model	2:45 Xiaojing Hao Enhanced performance of low-cost pure sulfide Cu ₂ ZnSnS ₄ (CZTS) solar cells by novel interface engineering approaches	Mark Snow	Urban Planning impacts on solar energy deployment		
3:20	Evan Franklin Achieving High PV Penetration on Australian Residential Electricity Networks via Rollout and Retrofit of Smart Inverters and Battery Storage Systems	3:00 Hui (Hellen) Jin An efficient inverted bilayer all polymer solar cell processed without additives					
3:15		3:15 Doojin Vak Development of roll-to-roll compatible processes for Perovskite solar cells					
3:30		Afternoon tea					
4.00 – 5.30			ACAP: Advanced Photovoltaics	Solar Heating & Low Carbon Living Chair Jeremy Osborne			
	4:00		ACAP: Poster Session	Mike B Roberts	PV in Apartment Buildings – Opportunities & Barriers		
	4:20			Richard Corkish	A Mixed Mode Low Profile Solar Tunnel Dryer for Canarium Indicum		
4:40		Women in Solar Announcement	Wal Read Memorial Award for Best Paper and Best Poster	Claudia Barton	Photovoltaics and Heat Pumps for Domestic Hot Water		