



Wednesday, 14 February 2024			
Opening and Welcome to Country			
The Lantern			
13:00 - 13:05	Welcome to Country Aunty Freda Ogilvie		
13:05 - 13:10	Official Conference Opening Professor Melinda Fitzgerald (Deputy Vice Chancellor Research, Curtin University)		
13:10 - 13:15	Remembering Professor Ariel Liebman Associate Professor Roger Dargaville (Monash University)		
VIP Speaker			
The Lantern			
13:15 - 13:30	Chair: Professor Peta Ashworth (Curtin University) Accelerating the energy transition Professor Peter Klinken (WA Chief Scientist)		
Keynote 1.1 Proudly Sponsored by Rio Tinto			
The Lantern			
13:30 - 14:00	Chair: Professor Peta Ashworth (Curtin University) Benchmarking research on the energy transition Professor Ken Baldwin (Chair of the ACOLA Australian Energy Transition Research Plan)		
Panel Discussion 1.1			
The Lantern			
14:00 - 14:45	Moderator: Professor Peta Ashworth (Curtin University) How can research accelerate the energy transition? Dr Dietmar Tourbier (CSIRO) Kate Ryan (AEMO) Sarah McNamara (Australian Energy Council) Professor Peter Klinken (WA Chief Scientist) Professor Michael Brear (University of Melbourne, Net Zero Australia Project)		
Keynote 1.2			
The Lantern			
14:45 - 15:15	Chair: Professor Peta Ashworth (Curtin University) Energy systems integration Professor Pierluigi Mancarella (University of Melbourne)		
15:15 - 15:35 Afternoon Tea			
15:35 - 15:40 Transition			
Resources, Systems and Technologies	Resources, Systems and Technologies	Markets, Policy and Regulations	
The Lantern	Room 434A	Room 434B	
Chair: Professor Paul Medwell (University of Adelaide)	Chair: Dr Charlie Hargrove (Curtin University)	Chair: Professor Peta Ashworth (Curtin University)	
15:40 - 16:00	H2LCA.org: An online tool for life cycle assessment of green hydrogen and ammonia production Dr Graham Palmer (Monash University)	Road mapping an equitable transition to EVs in Perth Sinead Thompson (Arup)	Australian microgrids: catalysing the regional energy transition Dr Simon Wright (Charles Sturt University)
16:00 - 16:20	Comparing the economics and emissions of grid-connected vs. off-grid hydrogen production Dr Changlong Wang (Monash University)	Observed destination charging behaviour at Monash University Associate Professor Roger Dargaville (Monash University)	Electricity tariffs and total cost of ownership of corporate electric vehicles Ramith Wimalaratna (Griffith University)
16:20 - 16:40	Cost-competitiveness implications of misalignment in hydrogen certifications: a case study of exports from Australia to the EU Dr Reza Fazeli (Australian National University)	The future of hot water flexible demand in the age of rooftop solar Dr Baran Yildiz (School of Photovoltaic and Renewable Energy Engineering (SPREE)/UNSW)	Are lands sufficient for solar and onshore wind in the group of twenty (G20) and Australia to supply 2050 electricity demands? Dr Saori Miyake (University of Technology Sydney)
16:40 - 17:00	Modelling sustainable hydrogen supply chain paths Professor Michael Johns (University of Western Australia)	Machine learning approach to detecting electric vehicle charging at both meter-level and feeder-level Dr Hao Wang (Monash University)	Is renewable energy sustainable? Relationships between renewable energy production and sustainable development goals Jing Tian (The University of Adelaide)
17:00 - 17:20	Export-domestic energy integration via industrial hydrogen storage Dr Bin Lu (Australian National University)	Lessons from the rEVolution: the (almost) first residential vehicle-to-grid instance in Australia Professor Stuart White (Institute for Sustainable Futures, UTS)	Mapping Australia's home energy upgrade ecosystem and unpacking the elusive one-stop shop Dr Ed Langham (Institute for Sustainable Futures, UTS)
17:20 - 17:25 Transition			
Keynote 1.3 Proudly Sponsored by Western Power			
The Lantern			
17:25 - 17:55	Chair: Professor Peta Ashworth (Curtin University) Enabling the renewable energy evolution in the regions Chris Sounness (Wimmera Southern Mallee Development)		
17:55 - 19:30 Poster Session			



Thursday, 15 February 2024			
VIP Speaker			
The Lantern			
8:30 - 8:45	Chair: Professor Eric May (University of Western Australia)		
	Policy development to support the transition Hon. Minister Reece Whitby MLA, (Minister for Energy; Environment; Climate Action)		
Keynote 2.1 Proudly Sponsored by Synergy			
The Lantern			
8:45 - 9:15	Chair: Professor Eric May (University of Western Australia)		
	Afterward - the innovations and practices that accelerated the energy transition Audrey Zibelman (Zibelman Energy Advisors)		
Keynote 2.2 Proudly Sponsored by DCCEEW			
The Lantern			
9:15 - 9:45	Chair: Professor Eric May (University of Western Australia)		
	Energy transition policy development and implementation, and the unique rights and aspirations of First Nations' peoples Dr Kate George (First Nations Clean Energy and Emissions Reductions Advisory Committee)		
Panel Discussion 2.1			
The Lantern			
9:45 - 10:30	Moderator: Professor Eric May (University of Western Australia)		
	WA's potential for fast track the Australian transition Jai Thomas (Energy Policy WA) Vi Garrod (Horizon Power) Dom Watson (Synergy) Rachell Doyle (Rio Tinto) Justin Nash (BP)		
Morning Tea			
Keynote 2.3 Proudly Sponsored by FENEX			
The Lantern			
10:50 - 11:20	Chair: Associate Professor Roger Dargaville (Monash)		
	Energy storage technologies to support the transition Professor Maria Forsyth (Deakin University)		
Transition			
	Resources, Systems and Technologies	People, Society and Institutions	Markets, Policy and Regulations
	The Lantern	Room 434A	Room 434B
	Chair: Professor Michael Brear (University of Melbourne)	Chair: Peter Hansford (Deakin University)	Professor Stefan Trueck (Macquarie University)
11:25 - 11:45	Incentivising agrivoltaics: a multidisciplinary perspective Dr Madeline Taylor (Macquarie University)	First Nations and clean energy: barriers, opportunities and actions to increase First Nations jobs in clean energy Dr Chris Briggs (University of Technology Sydney)	The roadmap to 100% renewables in WA Dean Sharafi (Australian Energy Market Operator (AEMO))
11:45 - 12:05	The role of hydrogen blending in Australian natural gas networks Professor Paul Medwell (The University of Adelaide)	Emergent opportunities and barriers on the feasibility of microgrids in Australia Farzan Tahir (University of Technology Sydney)	Planning and governance decision making informed by sequential design of net zero greenfield energy hubs Dr Arian Zahedmanesh (The University of Sydney)
12:05 - 12:25	Effect of β phase fraction on hydrogen embrittlement in two-phase titanium alloys Lucia Chen (CSIRO)	Visibility, meaning and power imbalances in a VPP pilot Dr Maureen Boyle (Australian National University)	Engaging with communities to plan transmission Alisa Toomey (Australian Energy Market Commission)
12:25 - 12:45	Transforming main roads into net zero boulevards Professor Peter Newman (Curtin University)	Accelerating a just transition? Human rights due diligence as a tool to ensure a social licence to operate for wind and solar projects in Western Australia Rosie Rowe (Curtin University)	Modeling the dynamics of wind generation in the Australian national electricity market Jennifer Zhao (Macquarie Business School)
12:45 - 13:05	Leveraging consumer investment in the energy transition: a meta analysis of the potential contribution and economic benefits of distributed energy resources in Australia Dr Gabrielle Kuiper (IEEFA)	Warm and safe? An exploration of householder practices and perceptions of heating in Victoria Dr Pabasara Wijeratne (RMIT University)	Research priorities for the rapid re-engineering of Australia's power systems Chris Davies (Australian Energy Market Operator (AEMO))
Lunch			
Video Screening			
The Lantern			
13:50 - 14:00	Net Zero Precincts Launch		
Keynote 2.4			
The Lantern			
1400 - 14:30	Chair: Professor Ken Baldwin (AETRP)		
	Risks in integrated systems planning Professor Bruce Mountain (Victoria University)		
Panel Discussion 2.2			

	The Lantern		
	Moderator: Professor Ken Baldwin (AETRP)		
14:30 - 15:15	Do we need an integrated, economy-wide plan for Australia's energy system? Monica Richter (WWF) Professor Tim Nelson (Iberdrola/Griffith University) Professor Peta Ashworth (Curtin University for Energy Transition) Dean Sharifi (AEMO) Rowan Hill (Mineral Resources)		
	Top 4 Posters		
	The Lantern		
	Chair: Associate Professor Roger Dargaville (Monash)		
15:15 - 15:30	Three-minute pitch for top 4 Posters		
15:30 - 15:45	Afternoon Tea		
	Keynote 2.5		
	The Lantern		
	Chair: Associate Professor Roger Dargaville (Monash)		
15:45 - 16:15	Turbocharging the energy transition with a new green energy statecraft Professor Elizabeth Thurbon (UNSW)		
16:15	Transition		
	Resources, Systems and Technologies	People, Society and Institutions	Markets, Policy and Regulations
	The Lantern	Room 434A	Room 434B
	Chair: Dr Maureen Boyle (Australian National University)	Chair: Peter Hansford (Deakin University)	Chair: Dr Tania Urmee (Murdoch University)
16:20 - 16:40	Driving toward tomorrow: cost dynamics of hydrogen-powered trucks and infrastructure in Australia Dr Pourandokht Naseri Hudson (Curtin University)	Social licence for offshore wind energy in Australia Dr Alaya Spencer-Cotton (The University of Western Australia)	CCS renaissance: why hub and cluster models matter for implementing low emissions infrastructure Dr Linda Stalker (CSIRO)
16:40 - 17:00	The energy transition and sustainability: are we disregarding intergenerational equity? Professor Tina Soliman-Hunter (Macquarie University)	Creating 'lasting and meaningful' benefits from new energy projects: what communities in renewable energy zones (REZ) expect for a social licence to operate. Associate Professor Kathy Witt (University of Queensland)	System-level impacts of 24/7 carbon-free electricity procurement in Australia Dr Dylan McConnell (UNSW Sydney)
17:00 - 17:20	Sharing learnings from Australia's only non-commercial wave energy demonstration project – the M4 in Albany, WA Professor Christophe Gaudin (The University of Western Australia)	Accelerating corporate Australia's delivery and implementation of net zero by 2050 strategies Dr Ellen Tyquin (Queensland University of Technology)	The financial analysis of solar and battery power purchase agreements Professor Stefan Trueck (Macquarie Business School)
17:20 - 17:40	Enabling high PV penetration levels in low-voltage distribution networks using smart inverter control strategies Dr Ibrahim Ibrahim (Institute for Sustainable Futures (ISF), University of Technology Sydney (UTS))	ESG risks in the supply chain: a blind spot in the energy transition Professor Nigar Sultana (Curtin University)	Collocating renewables and ore processing accelerates sustainable decarbonization of the metal industry Dr Bishal Bharadwaj (Curtin Institute for Energy Transition)
17:40	End of Day Two		
19:00 - 22:00	Conference Dinner - Fraser's Kings Park Matthias Jahn (Fraunhofer)		



Friday, 16 February 2024			
Keynote 3.1			
The Lantern			
8:45 - 9:15	Chair: Dani Alexander (UNSW)		
	Anna Skarbek (Climateworks)		
Keynote 3.2 Proudly Sponsored by Race for 2030			
The Lantern			
9:15 - 9:45	Chair: Dani Alexander (UNSW)		
	Policy development to support the transition Professor Frank Jotzo (Australian National University)		
Panel Discussion 3.1			
The Lantern			
9:45 - 10:45	Moderator: Dani Alexander (UNSW)		
	CRC showcase: How is your CRC accelerating the transition? Jenny Selway (HILT CRC) Professor Eric May (Fenex CRC) David Norman (Future Fuels CRC) Dr Bill Lilley (RACE for 2030 CRC) Campbell Kenny (South32) Shannon O'Rourke (Future Battery Industries CRC) Masoud Abshar (Magellan Power) Dr James Holbeach (Wood) Naomi Lawrance (Development WA)		
10:45 - 11:00 Morning Tea			
Keynote 3.3			
The Lantern			
11:00 - 11:30	Chair: Professor Paul Medwell (University of Adelaide)		
	Renewable energy and energy storage governance Associate Professor Penelope Crossley (University of Sydney)		
11:30 - 11:35 Transition			
	Resources, Systems and Technology	People, Society and Institutions	Resources, Systems and Technology
	The Lantern	Room 434A	Room 434B
	Chair: Dr Bishal Bharadwaj (Curtin University)	Chair: Peter Hansford (Deakin University)	Chair: Dr Chris Briggs (University of Technology Sydney)
11:35 - 11:55	An electro-geothermal battery for large-scale ultra-supercritical energy storage based on aquifer thermal energy storage (ATES) Professor Klaus Regenauer-Lieb (Curtin University)	Building a social license to operate for renewable gas: reflections and lessons learnt since 2020 Dr Amrita Kambo (University of Queensland)	DEEPSyM-Grid: digital tool for modelling energy demand, supply, and net-zero emissions Dr Gobinath Rajarathnam (The University of Sydney)
11:55 - 12:15	Geothermal/ground source heat pumps - tapping the potential reduction in peak demand, urban heat island effect and embodied carbon Dr Tracey Colley (RACE for 2030 CRC)	The biocultural approach to effective clean energy projects Dr Raquel Tardin Coelho (Curtin University)	Geotechnical research to unlock safe, cost-efficient foundations to underpin offshore wind in Australia Professor Fraser Bransby (The University of Western Australia)
12:15 - 12:35	Broken Hill battery energy storage system: supporting the reliable supply of electricity in the NEM Dr Georgios Konstantinou (UNSW)	Climate Contracts: A Swedish perspective on transdisciplinary partnerships for energy transitions. Dr Giles Thomson (Curtin University / Blekinge Institute of Technology)	The optimal infrastructure design for smart charging system: a case study based on the Monash microgrid Soobok Yoon (Monash University)
12:35 - 12:55	Electrification of mining mobile fleets and machinery: the role of optimal systematic design Dr Hossein Ranjbar (School of Electrical and Mechanical Engineering, The University of Adelaide, Australia)	Realities of electric mobility transition in developing countries: the case of Nepal Monica Maharjan (Murdoch University)	Re-designing the energy transition based on circular economy principles - materials constrained optimisation framework Prof Ali Abbas (The University of Sydney)
12:55 - 13:00 Transition			
13:00 - 13:30 Closing Address - Reflection on the progress of energy transition research			
13:30 Conference Close Lunch			