OERC SYMPOSIUM

Programme contents



DAY 1

Opening keynote — Dr Thomas Longden

Session One

Session Two

Session Three

Session Four

DAY 2

Morning keynote — Dr Andrew Sykes

Session Five

Afternoon keynote — Sam Elder

Community Energy Network Panel

Session Six



OERC SYMPOSIUM PROGRAMME

DAY 1 | Morning

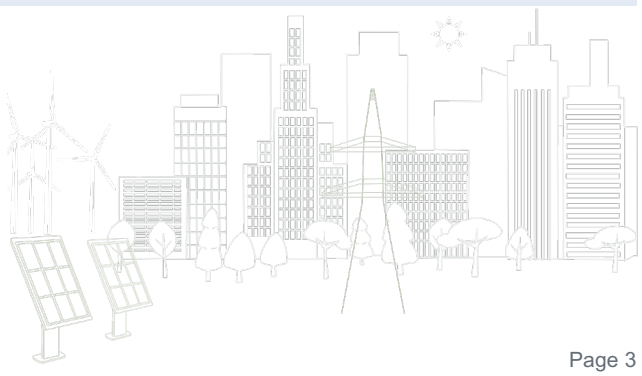
9:00 – 9:15 am	**Welcome/Mihi**
9:15 – 10:15 am	**Keynote** Keynote Speaker 1: **Dr Thomas Longden** (Western Sydney University) *Energy Equity and Energy Security – The Importance of Preventing a Two-Speed Energy Transition*
10:15 – 10:45 am	**Morning Tea**
10:45 am – 12:00 pm	**SESSION ONE**
10:45 – 11:00	**Essential household energy services during electricity outages: evidence from Te Tairāwhiti, Aotearoa New Zealand** Kimberley O'Sullivan, Lydia Le Gros, Cheyenne Locke, Breeann Cairns, Rewiti Ropiha, Shirley Keown, Lief Keown, Pauline Norris, Janet Stephenson *University of Otago and Tūranga Health*
11:00 – 11:15	**People, Place and Networks: Reciprocal Learning and the importance of Community Energy in the Future Energy System** Hinerangi Pere *Orion*
11:15 – 11:30	**Indoor conditions and energy use in New Zealand homes: Highlights from HEEP2** Vicki White *BRANZ*
11:30 – 11:45	**Developing a Home Energy Course for the community** Rachel Hart *EPECentre, University of Canterbury*
11:45 – 12:00	**Quantifying solar rooftop shading losses from neighbouring medium and high-density developments** Sharee McNab, Tulaulelei Overhoff *EPECentre, University of Canterbury*
12:00 – 12:30 pm	**Poster Session**
12:30 – 1:15 pm	**Lunch**



OERC SYMPOSIUM PROGRAMME

DAY 1 | Afternoon

1:15 – 2:20 pm	SESSION TWO
1:15 – 1:35	**Leading interdisciplinary conversations: Reflections on the first 20 years of the OERC** Janet Stephenson *Centre for Sustainability Research, University of Otago*
1:35 – 1:50	**Social acceptance of geothermal development in New Zealand: Building a social and institutional baseline** Y. Imamura and S. Talwar *Earth Sciences New Zealand*
1:50 – 2:05	**From Fragmented Data to Energy Intelligence: Anthill's Mission to Make Sense of NZ's Energy System** Rafferty Parker *Anthill Ltd*
2:05 – 2:20	**Where the Digital and Energy Transitions Meet: Understanding ICT and AI Emissions at the University of Otago** Sophia Penner *University of Otago*
2:20 – 2:30 pm	**Break**
2:30 – 3:30 pm	**SESSION THREE**
2:30 – 2:45	**The impact of price comparison tolls on electricity retailer choices** Peter Gibbard and Kevin Remmy *Department of Economics, University of Otago*
2:45 – 3:00	**The invisible grid: behind-the-meter and substation trading under Multiple Trading Relationships in Aotearoa New Zealand** Brad Mudgway *Victoria University of Wellington*
3:00 – 3:15	**Comparative study of decentralised control of hot water cylinder within New Zealand low-voltage distribution feeders.** Max de Groot *University of Otago*
3:15 – 3:30	**PowerCo placeholder** *Presenter and affiliation to be confirmed*
3:30 – 4:00 pm	**Afternoon Tea**
4:00 – 5:00 pm	**SESSION FOUR**
4:00 – 4:15	**Modelling New Zealand's Electricity Transition: Life cycle emissions, system security and prices** Maoxing Liu, Jen Purdie, Michael Jack *University of Otago*
4:15 – 4:30	**Life Cycle Assessment of Residential Space and Water Heating Technologies Considering Temporal Electricity Emissions and Grid Infrastructure Impacts** Patricio Gallardo, Sharee McNab, Hamish Avery *Electric Power Engineering Centre - University of Canterbury*
4:30 – 4:45	**Improving condensation measurements for energy-efficient heat exchangers using a multi-camera wind-tunnel platform** Kirill Misiiuk, Lucas Olsen, Sam Lowrey *University of Otago*
4:45 – 5:00	**China's Green Technology Dominance and the Political Economy of the Global Energy Transition** Jack Buchan *PhD Student Politics Programme University of Otago*
5:00 pm	**Day 1 Close**
6:00 pm	**Symposium Dinner** Staff Club



OERC SYMPOSIUM PROGRAMME

DAY 2 | Morning

9:00 – 9:15 am		**Welcome to Day 2**
9:15 – 10:15 am		**Keynote** Keynote Speaker 2: **Dr Andrew Sykes** (Transpower) *Powering prosperity: Te Kanapu, New Zealand's first grid blueprint*
10:15 – 10:45 am		**Morning Tea**
10:45 am – 12:00 pm		**SESSION FIVE**
10:45 – 11:00	💻	**Decarbonising Industrial Heat in New Zealand: A Techno-Economic Assessment of Electrification and Biomass-based Pathways** Tillman Tenzler *Hamburg University of Technology / University of Otago - Physics Department*
11:00 – 11:15	💻	**Powering Prosperity at Scale: A Scenario Analysis of New Zealand's 600% Renewable Energy Vision** Rafferty Parker, Daniel Gnoth *Anthill Ltd, New Zealand*
11:15 – 11:30		**Open-source power system modelling for Aotearoa New Zealand: from current operation to energy transition planning** Vicente Sepúlveda-Figueroa, Rebecca Peer, Jannik Haas *SERG, University of Canterbury*
11:30 – 11:45		**Energy Return On Investment for optimising energy resilience** Solis Norton[1] and Tim Crownshaw[2] *[1]Whirika Consulting Ltd and [2]EECA*
11:45 – 12:00		**From renewable electricity to decentralised H2O2: Techno-economic screening of flexible power-to-chemicals production** Gregor Riha[1] [2], Hannah Aster[2], Johannes Lindorfer[2], Jannik Haas[1] *[1] Sustainable Energy Research Group (SERG), University of Canterbury, Ōtautahi Christchurch, Aotearoa New Zealand [2] Energieinstitut an der Johannes Kepler Universität Linz, Austria*
12:00 – 1:00 pm		**Lunch**



OERC SYMPOSIUM PROGRAMME

DAY 2 | Afternoon

1:00 – 2:00 pm		**Keynote** Keynote Speaker 3: **Sam Elder** (Climate Navigator) *Towards a new energy democracy – a collective vision to guide Aotearoa's energy transition*
2:00 – 3:00 pm		**Community Energy Network Panel** Chaired by Gareth Cartwright
3:00 – 3:30 pm		**Afternoon Tea**
3:30 – 4:30 pm		**SESSION SIX**
3:30 – 3:45		**Who Controls the Energy Transition? Community Energy, Prosperity and Technological Autonomy** Jennifer Campion *University of Waikato*
3:45 – 4:00		**Elevating Indigenous Voices in the Just Energy Transition** Dr Sea Rotmann *SEA - Sustainable Energy Advice Ltd / HTR Task by Users TCP*
4:00 – 4:15		**Energy Abundance, for whom?** Josh Ellison *Rewiring Aotearoa*
4:15 – 4:30		**Electricity use findings from the Māori and Public Housing Renewable Energy Fund (MPHREF)** Phoebe Taptiklis *Motu Economic and Public Policy Research*
4:30 – 4:50 pm		**Presentation of student prizes**
4:50 – 5:00 pm		**Symposium close**

