

16th OERC Symposium

An Equitable and Low-Cost Energy Transition

Day 1 - Monday 28th November 2022	
9:00-9:15am	Welcome/Mihi
9:15-10:00am	Keynote: Pam Wynne: Head of the Fuel Poverty Unit (UK BEIS, Online) (Sean Connelly Introduction)
10:00-10:25am	Morning tea
10:25-10:45am	Mel Pande: Progress towards indicators of energy hardship (MBIE) - MBIE indicators (Chair: Sean Connelly)
10:45-12:00pm	Energy Wellbeing Session One: Energy Hardship/ Wellbeing and Healthy Homes Framework (Chair Mel Pande)
	Janet Stephenson (U of Otago): Research on energy hardship using the energy cultures framework
	<u>Scott Willis</u> (Aukaha Ltd), et al: Applying the energy cultures framework and the Otago Home Upgrade Programme
	Ryan Roberts (VUW, Online): System dynamics Model of Energise Ōtaki Solar PV Projects
	Bettina Reid (Te Puni Kōkiri Tai Tokerau Housing Advisor, Online): The importance of diversity of thought, experiences and co-design in the energy wellbeing sector
Tom Kane (Kāinga Ora): Measuring energy wellbeing in social housing	
12:00-1:00pm	Lunch
1:00-2:15pm	Energy Wellbeing Session Two: Indicators and data sharing platforms (Chair: Janet Stephenson)
	Phil Squire (Toast Electric, Online): Household-level Energy Hardship Rating
	<u>Luiza Brabo Catala</u> (U of Waikato), et al: Energy hardship severity: applying 17 of the proposed MBIE indicators
	Daniel Gnoth (Powerco, Online): Identifying energy hardship at a utility scale
	<u>María Callau</u> (SUR architecture), Michael Jack (U of Otago): Understanding the performance of ultra-efficient housing in Dunedin
Caroline Fyfe (Motu, Online): Indicators of Energy Hardship: An Update on the Warmer Kiwi Homes Study	
2:15-3:30pm	Energy Wellbeing Session Three: Diverse voices and approaches (Chair: Gareth Cartwright)
	Sea Rotmann (SEA Ltd, Online): Hearing the voices of those living in "hidden energy hardship"
	<u>Sheralee MacDonald</u> (Orion), et al: Towards energy equity in mid-Canterbury – place-based collaboration
	Chris Lambourne (Manaaki Energy, Online): Reducing energy hardship: Making the case for new gentailers
	Leana Hunt (Habitat for Humanity): Home repair programme in Te Tai Tokerau; Tamaki and Aotea Island
Jessica Kereama (Allen & Clarke, Online): Evaluation of the Maori and Public Housing Renewable Energy Fund	
3:30-4:00pm	Afternoon tea
4:00-5:00pm	Energy Wellbeing Session Four: Panel discussion on Future of the Energy Wellbeing Evaluation Consortium (Chair: Nina Campbell)
	Panelists: Helen Viggers (He Kāinga Oranga); Gareth Cartwright (CEN); Mel Pande (MBIE); Sean Connelly (UoO)
6:00pm	Dinner (St Margarets College)
Day 2 - Tuesday 29th November 2022	
9:00-10:00am	Keynote: Tim Walmsley, University of Waikato: High-temperature heat pumps for process heat decarbonisation: A systems integration perspective (Sam Lowrey Introduction)
10-10:30am	Morning tea
10:30-12:00pm	Session One: New Energy Technologies (Chair Arjan Abeynaike)
	Sally Brooker (U of Otago): German-New Zealand Hydrogen Centre: research networking and outreach
	Grant Telfar (Meridian Energy): Southern Green Hydrogen and dry-year power system flexibility: The needs of the Aotearoa power system, a notional contract structure for supply, and trying to keep everyone happy.
	<u>Abbi Virens</u> (U of Otago), Smrithi Talwar (GNS): Exploring Expectations for Green Hydrogen in New Zealand using an Energy Cultures Framework
	Bill Currie, Neil Fernades (Powerhouse Wind Limited): Hybrid Renewable Energy Generators for Remote NZ
Kirill Misiuk (U of Otago), et al: Topographical surface tension gradients for effective water management in energy technology	
Solis Norton (Mansford Station): Exploring the relationship between the economy, energy, and transition	
12-12:10pm	Pecha Kucha poster session (Chris Hughes, Brian Stephens)
12:10-1:15pm	Lunch and Posters session
1:15-2:45pm	Panel Discussion: Electricity supply and demand in a decarbonised New Zealand (Chair Michael Jack)
	Andrew Sykes (Ernst&Young), Grant Telfar (Meridian Energy), Jen Purdie (U Otago), Greg Sise (Energy Link)
2:45-4:00pm	Session three: Energy Demand (Chair Craig Cliff)
	Tanja Kneiske (Fraunhofer Institute): A hierarchical control algorithm for flexible multi-energy storage systems
	<u>Anthony Mirfin</u> , et al (U of Otago): Determining the true value of energy efficiency improvements and demand flexibility services
	<u>Aleida Powell</u> , et al (U of Otago): Modelling the Long-term Impacts of EV Uptake within a 100% Renewable New Zealand Power System
	Rafferty Parker (Vector): Detection of electric vehicles at household level from half-hourly smart meter data
<u>Michael Jack</u> , Hannah Konings (U of Otago): Will net-zero energy buildings break New Zealand's electricity grid?	
4:00-4:15pm	Close