

6th GREEN Grid Conference: Renewable Energy and the Smart Grid

Friday, 29 November 2019
Rehua 102, University of Canterbury, Christchurch



09:00 **Registration, tea and coffee**

09:30 **Introduction**

Dr Stephen Jay, General Manager Grid Development, Transpower; GREEN Grid Industry Advisory Panel Chair

09:40 **GREEN Grid Summary and main findings**

Associate Professor Alan Wood, Electrical and Computer Engineering, University of Canterbury; GREEN Grid Principal Investigator

10:00 **Transpower's view of the energy future**

Richard Hobbs, General Manager Strategy, Transpower

10:20 **Generation and Transmission – Short-term and long-term variability**

Comparing the cost of different response speeds of Instantaneous Reserve

Dr Josh Schipper, Postdoctoral Research Fellow, EPECentre, University of Canterbury

System requirements modelling towards 100% renewable generation

Luke Schwartzfeger, Postgraduate Student, EPECentre, University of Canterbury



11:00 **Morning tea**

11:20 **Meeting customer expectations – Orion**

Paul Deavoll, General Manager Customer and Stakeholder, Orion

11:40 **Impacts of EVs and Batteries on Low Voltage Networks**

A Probabilistic Framework for Assessing the Impact of Electric Vehicles In Low Voltage Distribution Networks

Euan McGill, Postgraduate Student, EPECentre, University of Canterbury

Feasibility Analysis of Repurposing EV Batteries for Battery Energy Storage Systems (Sponsor: DARC Technologies Ltd)

Cheng Zhang, Master of Engineering in Management Student, University of Canterbury



12:20 **Lunch**

13:00 **EECA's strategy and discussion of EECA's programme of work on peak demand**

Vince Smart, Senior Advisor Strategy and Programme, Energy Efficiency and Conservation Authority (EECA)

13:20 **Opportunities for households**

Load Shifting Extension to the EECA Energywise Solar Calculator

Dr Sharee McNab, Research Engineer, EPECentre, University of Canterbury

Socio-technical changes at the grid edge - significant savings or costly consequences?

Dr Michael Jack, University of Otago



14:00 **Afternoon Tea**

14:20 **Panel session: Benefits and Challenges of Using Distributed Technologies for New Demand Response/Grid Services**

Dr Stephen Jay, General Manager Grid Development, Transpower (Convenor)

Richard Hobbs, General Manager Strategy, Transpower

Stephen Godfrey, Opportunities and Developments Manager, Orion

Vince Smart, Senior Advisor Strategy and Programme, EECA

Associate Professor Alan Wood, University of Canterbury

Associate Professor Janet Stephenson, University of Otago

15:00 **Closing remarks of the day and official closure of IAP**

Associate Professor Alan Wood

15:30 **End**



For more information or to register visit:
www.canterbury.ac.nz/epecentre/events/green-grid-conference/

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