Personal Statement

I joined the University of Strathclyde in 2019 as a Chancellor’s Fellow working jointly between the Departments of Government & Public Policy and Electronic & Electrical Engineering. I am also the Research Director of the UK’s Energy Revolution Research Consortium (EnergyREV). Prior to this I held positions at the University of Oxford, the University of Otago in New Zealand (where I served as Deputy Director of their Centre for Sustainability) and at Victoria University of Wellington.

My research explores how people interact with energy systems, and how social, environmental, and technological insights can be co-developed to better inform policy for sustainable development. I take a multidisciplinary approach to my work, and believe in the importance of research for impact, and in bridging the gap between different forms of knowledge to advance solutions tackling climate change.

Research outputs

**Smart local energy systems (SLES): a framework for exploring transition, context, and impacts**

**Energy Justice POINTs: Policies to Create a More Sustainable & Fairer Future for All**

**Are we seeing clearly? The need for aligned vision and supporting strategies to deliver net-zero electricity systems**

**Easy or arduous? Practices, perceptions and networks driving lighting transitions from kerosene to solar in Vanuatu**

**Detailed comparison of energy-related time-use diaries and monitored residential electricity demand**

**Understanding the path to smart home adoption: segmenting and describing consumers across the innovation-decision process**

**What's energy management got to do with it? Exploring the role of energy management in the smart home adoption process**

**Energy efficiency: behavioral contributions from around the globe**

**Reaching a 1.5°C target: socio-technical challenges for a rapid transition to low carbon electricity systems**
Home energy management (HEM) database: a list with coded attributes of 308 devices commercially available in the US

Smart grid research in New Zealand - a review from the GREEN Grid research programme

Categories and functionality of smart home technology for energy management

Comparative analysis of monitored and self-reported data on electricity use

Energy UX: leveraging multiple methods to see the big picture

Emerging energy transitions: PV uptake beyond subsidies

Modelling and simulation of a solar PV lithium ion battery charger for energy kiosks application

Evaluating the impact of energy interventions: home audits vs. community events

Assessing Players, Products, and Perceptions of Home Energy Management

The effects of feedback on energy conservation: a meta-analysis

Keen on EVs: Kiwi perspectives on electric vehicles, and opportunities to stimulate uptake

The energy cultures framework: exploring the role of norms, practices and material culture in shaping energy behaviour in New Zealand

What Do We Know About What We Know? A Review of Behaviour-Based Energy Efficiency Data Collection Methodology

Characterization and Potential of Home Energy Management (HEM) Technology
PV in Blueskin: Drivers, barriers and enablers of uptake of household photovoltaic systems in the Blueskin communities, Otago, New Zealand

Photovoltaic (PV) Uptake in NZ: The story so far


Energy feedback technology: a review and taxonomy of products and platforms

Personalized Energy Priorities: A User-Centric Application for Energy Advice

User-centred design of an audio feedback system for power demand management

Transport Transitions in New Zealand: A scoping study

Energy Transitions: Home Energy Management Systems (HEMS)

Suricatta: a platform to model smart grid technologies in the distribution system

The Usability Perception Scale (UPscale): A Measure for Evaluating Feedback Displays

Graphical Displays in Eco-Feedback: A Cognitive Approach

Awards and Research Grants
2018-2022 Co-I, Energy Revolution Research Consortium, funding from UKRI, £9.8m
2012-2018 Renewable Energy and the Smart Grid, funded by the New Zealand Ministry of Business, Innovation and Employment (MBIE), $7,332,809
2015-2016 New Smart Grid Technologies, funding from the New Zealand Smart Grid Forum, $25,327
2013-2015 Household Energy End Use Study, funding from Powerco and Unison, $70,000
2013-2014 2050 Pathways New Zealand, funded by National Energy Research Institute, $80,000
2012-2014 Named Researcher, Energy Cultures 2, funded by MBIE, $3,199,684
2012-2013 Lighting Vanuatu, funded by Australian Aid, $75,829
2012-2013 Energy Transitions: Home and Transport, funded by New Zealand Energy Efficiency and Conservation Authority, $40,000
Professional Activities

2019 Ofgem Network Innovation Competition Expert Panel member
2019-2022 Research Director and Executive Committee Member of EnergyREV Research Consortium
2015-2019 Research director at SEE Change Institute
2016 Co-convenor of the Energy Cultures International Conference
2014-2015 Co-chair of the 2050 Pathways New Zealand Steering Committee,
2012-2015 Steering Committee Member for the Otago Energy Research Centre
2012-2014 Leadership Council Member for the Garrison Institute’s Climate, Mind, and Behaviour Program

Employment History

2016-2019 Researcher, Environmental Change Institute, University of Oxford, UK
2015-2016 Deputy Director and Senior Research Fellow, Centre For Sustainability, University of Otago, NZ
2013-2015 Lecturer, School of Engineering and Computer Science, Victoria University of Wellington
2011-2013 Postdoctoral Fellow, Centre for Sustainability, University of Otago, NZ

Qualifications

Doctor of Philosophy, University of Oxford
9 Oct 2006 → 8 Jan 2010
Award Date: 8 Jan 2010

Master of Engineering, University of Oxford
1 Oct 2002 → 30 Jun 2006
Award Date: 30 Jun 2006