



UNSW
SYDNEY



Integration of Large-scale Variable Renewable Energy into the Electricity Market

Although there is a variety of technologies and market design features that can assist with the integration of large-scale Variable Renewable Energy (VRE), delivering reliable and low-cost electricity through the transition will require new approaches to planning, operation and market reform.

Competitive advantage

- Working in industry, and lead and participate in International Energy Agency collaborations on integration of high penetration DER.

Impact

- Provide data and tools to improve planning and operation of electricity industries with high VRE
- Inform appropriate electricity market design and regulation for high VRE

Successful applications

- Collaboration with many Governments and Regional Authorities, including the European Commission and Government of Greece.

Capabilities and facilities

- 20 years' experience in the integration of VRE into electricity networks
- Expertise in electricity market and distributed energy modelling, data science applications to energy problems and the development of open source tools
- Staff regularly consult to industry and government, and also work in industry, and so bring real-world experience to the team

Our partners

- All levels of Government
- NEM institutions
- Network businesses
- Industry associations
- NGOs
- Numerous consultants, renewable energy developers, distributed energy businesses and start-ups

More Information

Associate Professor Iain MacGill

Centre for Energy and Environmental Markets,

T: +61 (0) 2 9385 4920

E: i.macgill@unsw.edu.au

Dr Anna Bruce

Centre for Energy and Environmental Markets (CEEM)

T: +61 (0) 2 9385 5155

E: a.bruce@unsw.edu.au

Dr Rob Passey

Centre for Energy and Environmental Markets (CEEM)

T: +61 (0) 2 6688 4384

E: r.passey@unsw.edu.au

Dr Declan Kuch

Centre for Energy and Environmental Markets (CEEM)

T: +61 (0) 2 9385 1000

E: d.kuch@unsw.edu.au

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61(2) 9385 5008