



BUILDING RESILIENCE IN AUSTRALIA'S ELECTRICITY INFRASTRUCTURE

Thursday 10 November 2022
University of Sydney

[Register here.](#)



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SYDNEY
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Law School



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ONLINE CONFERENCE: BUILDING RESILIENCE IN AUSTRALIA'S ELECTRICITY INFRASTRUCTURE

Australia has been hit by successive extreme weather events and disasters in recent years. As the IPCC's Sixth Assessment Report has warned this is going to get worse. Australia has already warmed by 1.4° C. Each of the climate-induced disasters – floods and bushfires – has had a severe impact on our electricity infrastructure. When power is lost, telecommunications also fail meaning that communities are unable to stay in contact with emergency services and with each other. This conference assesses ways in which our existing grid can be made more resilient but it also looks to the resilience of our future grid in 2040. Experts from the disciplines of law, engineering, and physics, in Australia and the United States, will share their perspectives on how this can be achieved.

Thursday 10 November 2022

9.00 – 10.30am

Panel 1: Using the law to enhance resilience in the grid

Chair: Professor Rosemary Lyster

A legal framework for building resilience in Australia's electricity infrastructure

Professor Rosemary Lyster

Professor of Climate and Environmental Law, Co-Leader, Climate Disaster and Adaptation Cluster, Sydney Environment Institute, The University of Sydney

Protecting the grid from Texas sized storms

Professor Robert Verchick

Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law, Loyola University New Orleans College of Law

Climate-induced wildfires and strengthening resilience: a California case study

Professor Daniel A. Farber

Sho Sato Professor of Law, Faculty Director, Center for Law, Energy, & the Environment, Berkeley Law

The Electricity Sector Climate Information project for electricity infrastructure resilience

Ben Jones

Manager, Reliability and Operability Forecasting, Australian Energy Market Operator

10.30 – 11.00am

Break

11.00 – 12.30pm

Panel 2: Technologies for enhancing resilience

Chair: Associate Professor Gregor Verbic

Increasing grid resilience by decentralising the power supply

Associate Professor Gregor Verbic

Centre for Future Energy Networks, School of Electrical and Information Engineering, The University of Sydney

Smart sensors for situational awareness

Professor Benjamin Eggleton

Professor of Physics, Director of the University of Sydney Nano Institute, The University of Sydney

Cyclone resilience assessment of distributed civil infrastructure systems

Associate Professor Hao Zhang

School of Civil Engineering, The University of Sydney

Projects as a Vehicle to Build Resilience

Dr Nader Naderpajouh

Senior Lecturer, School of Project Management, Faculty of Engineering, The University of Sydney

12.30 – 1.30pm

Lunch

1.30 – 3.00pm

Panel 3: Planning for resilience in the future grid 2040

Chair: Professor Rosemary Lyster

Using the planning framework to build resilience: a national perspective

Professor Rosemary Lyster

Professor of Climate and Environmental Law, Co-Leader, Climate Disaster and Adaptation Cluster, Sydney Environment Institute, The University of Sydney

“Will Australia’s current state planning frameworks build resilience in the future grid 2040?”

Case study: Victoria

Dr Anne Kallies

Senior Lecturer at the RMIT Graduate School of Business & Law

Case study: Queensland

Dr Philippa England

Adjunct Senior Lecturer, Law School, Griffith Law School

Case study: New South Wales

Ms Stephanie Vatala

Partner in the Planning, Environment and Government Group, Dentons, Sydney

3.00 – 3.30pm

Break

3.30 – 4.30pm

Building community resilience to electricity infrastructure failures

Jean Renouf

Chair, Resilient Byron

Final reflections and close