

RENEWABLE ENERGY SOLUTIONS

ELECTROCHEMICAL ENGINEERING LABORATORY



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

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Decarbonising industry with electrochemical technology development.

The Electrochemical Engineering Laboratory is developing innovative green technology solutions in hard to abate sectors. Specialising in complex electrochemical processing, projects range from carbon capture and transformation through to hydrogen, green metals, and recycling. The research laboratory was established in 2021 and to date has attracted funding from the Australian Research Council, CSIRO, Trailblazer for Energy and Recycling and direct industry funding. There is no challenge too big or too small to pursue for the team's vision of a sustainable future.

COMPETITIVE ADVANTAGE

- Specialty laboratory facilities to enable electrochemical technology development from lab through to pilot scale
- Expertise in molten salt electrolytic processing
- Technology integration expertise including design of balance of plant and process optimisation for electrochemical technologies, including hydrogen and ammonia
- Strong connections established across industry and government organisations working toward industrial decarbonisation.

PARTNERS

- BHP Innovation
- CSIRO
- PV Industries.

SUCCESSFUL RESEARCH APPLICATION

- Solar panel recycling process design
- Renewable energy driven generation of advanced carbon materials
- Innovation in novel electrolytic iron production approach (patent pending)
- High profile media expertise, recognised nationally in hydrogen energy and renewable energy solutions.

MORE INFORMATION

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