



UNSW
SYDNEY

Energy Efficiency and Renewable Energy Systems

Energy efficient buildings, Building Integrated and Building Applied PV/energy systems for low energy buildings and highly efficient fluid handling systems.

Competitive advantage

- Expertise in analysis of energy systems to enhance energy efficiency and renewable energy integration, technical and economic optimisation.

Impact

- Step changes in energy performance through the integration of highly optimised efficient and renewable energy systems
- High-efficiency fluid handling systems capable of delivering significant energy and emissions savings for commercial and residential buildings

Successful applications

- Led the program for CRC for Low Carbon Living – many successful projects taken up by industry
- Algorithms to predict energy demand and solar system performance for individual dwellings were adopted by an industry partner
- Highly efficient fluid handling systems for HVAC in Buildings – optimised HVAC design, adopted by industry partner
- Highly efficient solar thermal, PVT fluid handling systems – world record COP for solar pool heating implemented with industry partner
- Energy efficient building modelling and designs adopted by industry partners

Capabilities and facilities

- Technical and economic analysis of energy and renewable systems, measurement, modelling, and forecasting
- Development of multipurpose renewable energy systems (PV/Thermal)

Our partners

- BlueScope Steel
- CSR
- AECOM
- Solar Analytics
- Simply Better Pools Savings

More Information

Professor Alistair Sproul

School of Photovoltaic and Renewable Energy Engineering

T: +61 (0) 2 9385 7347

E: a.sproul@unsw.edu.au

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61 (2) 9385 5008