



MEDIA RELEASE – Research into home battery storage secures Federal funding

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New research into how electricity customers can take charge of their energy use through batteries, while simultaneously being rewarded for helping manage the electricity grid, has been awarded \$2.9 million in funding by the Australian Renewable Energy Agency (ARENA).

CONSORT is a collaborative research project involving The Australian National University, The University of Sydney, University of Tasmania, battery control software business Reposit Power and network provider TasNetworks.

In the three-year project, up to 40 batteries will be installed and monitored in the homes of residents of Bruny Island in Tasmania. The batteries will include Reposit's ground-breaking energy management software that allows homeowners to sell their power back to the grid.

Bruny Island has been selected because of its unique combination of network limitations and customer desire of taking charge of energy use. The new technology will enable battery system owners and networks to work together to maximise the value of solar energy.

"Australia's high residential solar uptake is pushing networks to their technical limits," CONSORT project lead Professor Sylvie Thiebaut from The Australian National University said.

"Customers want innovative solutions that don't involve costly augmentation to the network or the need to restrict further renewable uptake."

As part of the project, researchers at the University of Tasmania will assess how battery owners involved respond to, and interact with, the new technology.

"CONSORT incorporates social science research, which will be important in enabling us to establish whether new technical solutions really work for the battery system owners using them," Associate Professor Heather Lovell from University of Tasmania said.

"CONSORT is aiming to demonstrate how networks and battery system owners can solve network constraints, enable more renewables and be fairly rewarded for their efforts."

CONSORT expects more widespread deployment of its technology could be possible.

"In the future, we anticipate this solution will carry over to other types of customer systems including electric vehicles, hot water heating and smart appliances," TasNetworks Innovation Team Leader Andrew Fraser said.

ARENA is a Federal Government agency established to make renewable energy solutions more affordable and increase the amount of renewable energy used in Australia. CONSORT is one of nine new research and development projects announced yesterday by ARENA.

ARENA CEO Ivor Frischknecht said the funding would create clear pathways for renewable energy technologies to move from the laboratory to field by fostering collaboration between research institutions and industry.

“Each successful project is focussed on delivering commercially viable solutions, aimed at solving a current industry challenge. The rich array of industry partners shows the breadth of sectors that will be involved in the transformation of Australia’s energy networks and systems,” he said.

“ARENA’s \$17 million funding is leveraging substantial contributions from private and public sectors, with combined project values totalling more than \$55 million. This will tap into our home-grown ingenuity and complement our existing portfolio of 144 R&D projects.”

TasNetworks will begin consulting Bruny Island residents about the project over the coming months and seeking expressions of interest via public forums on the island later in the year.

Project partners

- The Australian National University is researching new improved algorithms for network management using distributed energy storage. The results of this research will be used to improve the autonomous operation of energy storage
- The University of Sydney is investigating what tariff structures best reflect the value of energy storage to the networks and what incentives are required for customers to install and use batteries in the most beneficial way for both networks and customers
- University of Tasmania is investigating the social aspects of energy storage and how it influences customer behaviour
- Reposit Power is supplying the energy management and data collection software
- TasNetworks is trialling customer-led solutions to network limitations

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