The Renewable Technology Fund

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The SA Government Energy Plan



Emergency generation



Government load contract



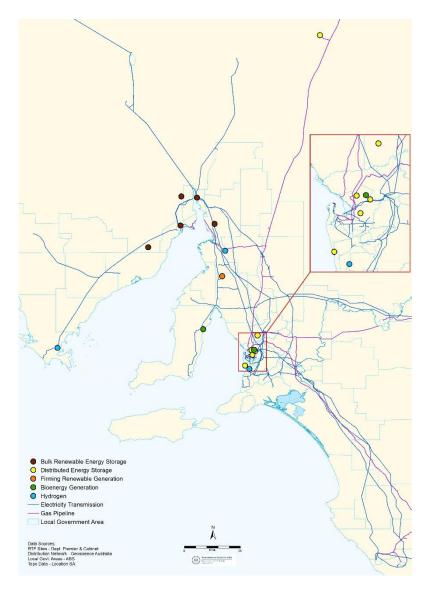
100 MW battery



Renewable Technology Fund







RTF Objectives

- catalyse private sector investment to support further integration of renewable technologies and demand management technologies in South Australia
- collaborate with ARENA and CEFC in relation to investment opportunities in South Australia; and
- fast-track South Australia's energy transformation and improve electricity market competition.



RTF Announced projects

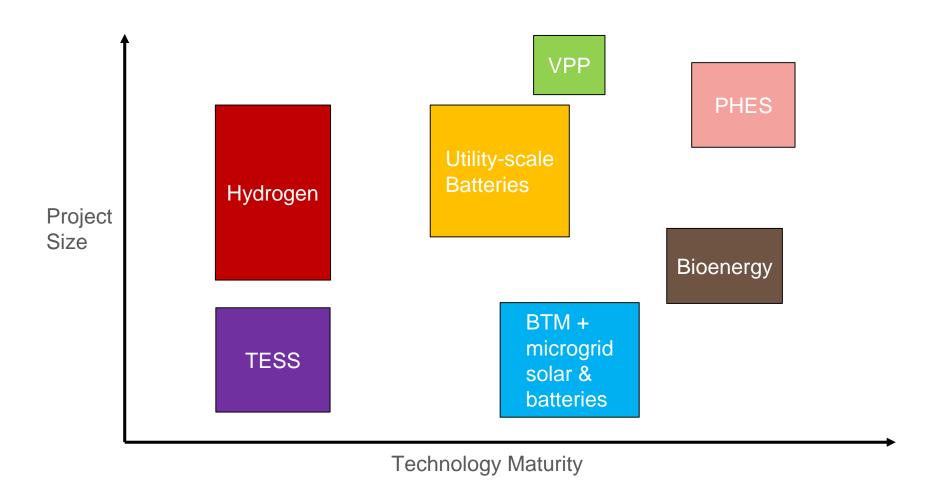
DISTRIBUTED ENERGY PROJECTS		Project value	RTF assistance
UniSA	Mawson Lakes "Renewable Energy" Campus – hydrogen, thermal storage and solar PV	\$6.9m	\$3.6m
Adelaide University	Battery storage and solar PV at the Roseworthy Campus	\$5.8m	\$0.8m
Planet Ark Power	Battery storage and solar at Edinburgh Parks Distribution Centre	\$13m	\$1.9m
1414 Degrees	Thermal Energy Storage System using biogas at SA Water's Glenelg Waste Water Treatment Plant	\$3.2m	\$1.6m
Carnegie	Battery storage and solar PV at the former GMH site at Elizabeth	\$8.2m	\$3m
Sunshift	Modular battery storage and solar PV located at a remote mine site	\$2.7m	\$1m
Tesla	A 250MW/650MWh Virtual Power Plant comprising 50,000 household systems	\$800m	\$32m
BIOENERGY PROJECTS			
Delorean Energy	15 MW anaerobic digestor to provide power, gas and heat to Edinburgh Parks Precint	\$66.6m	\$6m
Yorke Biomass	Feasibility for 15MW straw fuelled generator at Ardrossan	\$2.1m	\$0.5m

BULK ENERGY STORAGE AND FIRMING RENEWABLES PROJECTS		Project value	RTF assistance
OneSteel	Feasibility for 90MW/390 MWh pumped hydro plant in the Middleback Ranges.	\$1.7m	\$0.5m
Energy Australia	Engineering & design for 225MW/1770 MWh sea water pumped hydro plant at Cultana	\$8m	\$0.5m
Rise	Engineering & design for 200MW/1600 MWh pumped hydro plant at SA Water's Baroota Reservoir	\$6.3m	\$3m
Altura	Engineering & design for 230MW/1840 MWh pumped hydro plant near Port Augusta	\$9.4m	\$4.7m
Simec Zen	120 MW/140 MWh grid connected battery at Playford A switchyard in Port Augusta	~\$105m	\$10m
Tilt	21MW/26MWh battery and 44MW solar at Snowtown WF	\$91m	\$7.1m
HYDROGEN PROJECTS			
H2U	15MW hydrogen and ammonia plant at Port Lincoln	\$118m	\$12.2m
Neoen	50MW hydrogen plant at proposed Crystal Brook solar and windfarm	ТВА	\$25m
AGIG	1.25MW hydrogen plant for gas injection at Tonsley	\$11.5m	\$4.9m





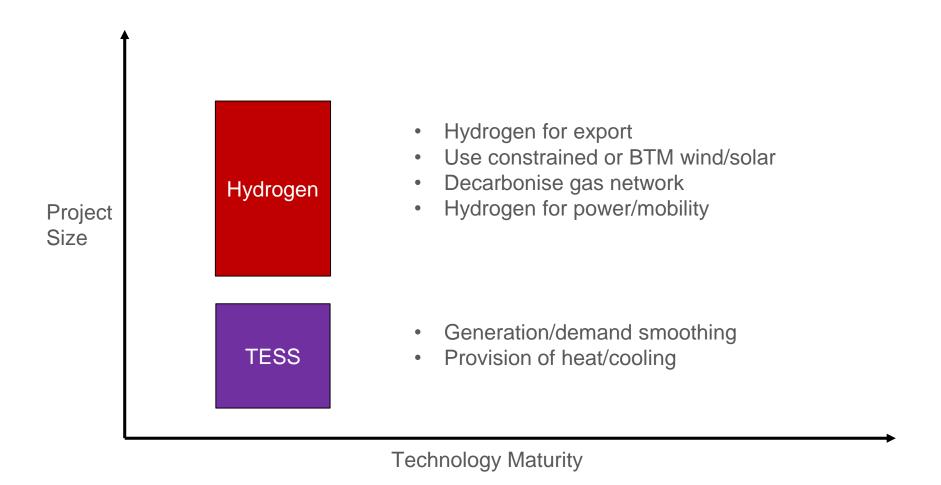
Summary of RTF Projects







Markets/Drivers







Markets/Drivers

VPP

- Generation time shifting
- Network stability
- Energy affordability

- Firming up generation
- Corporate PPAs
- Provision of FCAS/FFR

Utility-scale Batteries

Project Size

- Reduce onsite costs
- Towards carbon-neutral precincts
- Reducing network constraints
- Creating research hubs

BTM + microgrid solar & batteries

Technology Maturity





Markets/Drivers

Generation time shifting Increasing competition PHES Enabling more renewables **Project** Size Enabling microgrids for power, gas and heat Bioenergy Providing firm, synchronous grid energy









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