

REPOWER SHOALHAVEN



30+

Businesses supported into solar power

60000kWh

Clean energy generated

3300+

Tonnes CO₂ emissions saved

100+

Members & community investors





Repower Shoalhaven thinks big

Mission: Support community uptake of renewables



- Established in 2013
- Innovative community investment model
- 7 companies >\$1m in community renewables investments
- 23 C&I solar projects with ~1MW of capacity
- Ongoing management of PPAs & companies
- Increased urgency to reduce emissions
- Improved technology & costs for large scale solar



The quest for a solar farm

- Solar farm idea from a community forum
- Sub-committee formed
- Solar garden concept explored with ARENA
- Engaged with Council staff to identify sites
- Preliminary design & costings
- High level engagement with DNSP
- Formal council support to provide site
- Where/how to secure financing???



Project timelines

Community / private partnership developed a 4MWdc solar farm with no direct government funding.

Activity	Date
Initial engagement with Council & identify sites	Mid 2017
Participation in ARENA Solar Gardens Study	Early 2018
Proof of concept developed	Late 2018
Framework agreement - MoU	Mid 2019
Joint development agreement	Early 2020
DA, lease negotiations, network approval & project development	2020
Investment company established & funds secured, procurement	Early 2021
Construction commenced	Mid 2021
Systems commissioned	End 2021



Starting the partnership



Strengths

- Organised, effective community organisation – deep local connection and engagement
- Strong track record of community funding model working at a smaller scale
- Selected site and had in-principle agreement from council for the use case



Strengths

- Established and trusted electricity retailer to offtake from project
- In-house engineering and advisory expertise
- Experience in building, owning and operating utility solar projects
- Investment – budget to spend to allow project construction

Key Drivers

Offtake agreement with City of Sydney

- Project formed a cornerstone of a broader renewable energy agreement between Flow Power and City of Sydney
- Firmed up business case for project investment

Lease with City of Shoalhaven

- Suitable site with low-value land
- Structured to give the council confidence in the project and minimise risks to the council
- Agreement for neighbouring council animal shelter to receive rooftop system

Solar farm metrics

- 7852 x 500W panels = 3.93MWdc
- Cost around \$5million, including development costs
- Forecast generation 5,900MWh/yr
- Commenced generation - January 2022
- Lifetime (30y) emissions reduction ~74,500 t CO₂
- SMA 3MW inverter - Battery ready for DC-coupled BESS



Project outcomes

- Collaborative model without direct government finance
- System achieving forecast outputs (3 MW) with battery option available
- 300 local workers utilised during construction plus ongoing employment and educational opportunities
- Supports circular economy with local businesses buying output.
- Provides financial returns for community investors and clean, affordable energy supplied to energy market



Key take home messages

- Community investment appetite
- Early and consistent engagement creates opportunities
- Forward contracting reduces risks (PPAs)
- Remain conscious of the full project duration

Project management lessons

- Regular, transparent updates between parties keeps everything moving – builds on the partnership
- Local, local, local!

Clear, effective agreements, structures

- Use a structure to suit each parties needs and strengths

