

# 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





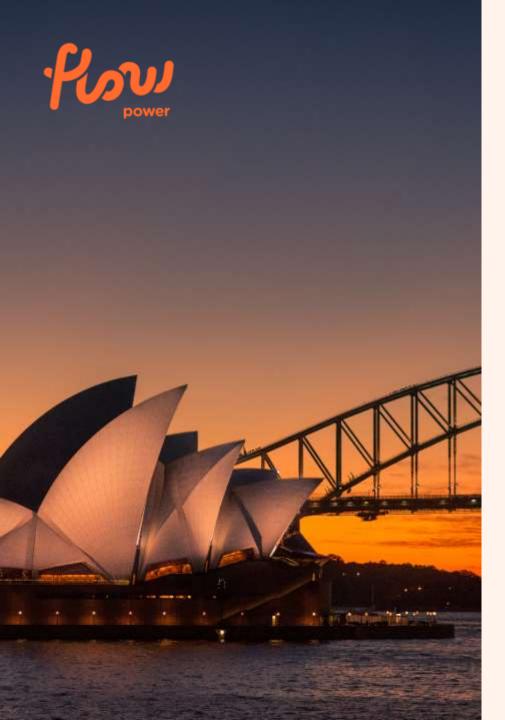
- Organised, effective community organisation
  - deep local connection and engagement
- Strong track record of community funding model working at a smaller scale
- Selected site and had in-principle agreement from council for the use case





### 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





