

## A Beyond Zero Future for South East NSW

# People Power

## How to Electrify Everything!

### Why Electrify Everything?

• This is a huge, once in a generation, economic opportunity

for local communities.

 By changing our appliances, tools and vehicles to electric and transitioning the electricity supply to 100% renewable, we: access cheaper energy, unlock huge savings, and reduce carbon emissions.



Electricity and gas use caused 51% of all CO<sub>2</sub> emissions in South East NSW in 2019

### **Rooftop Solar is the Key**

- You will pay about \$1000 per kW of for a quality rooftop PV system. Most systems installed these days are 6kW or more.
- Even with reduced export tariffs, the system will pay itself off in 3 to 7 years. The life of a quality system is 25 years.
- After your system is paid off, your rooftop generated electricity is free!
- A local installer will be around to provide support. The
  <u>Clean Energy Council website</u><sup>1</sup> has excellent consumer
  guides and provides a list of accredited installers. Stick with
  <u>CEC approved retailers and accredited installers for quality
  assurance.</u>

## **How to Maximise Savings**

- Use as much as possible on site rather than exporting.
- Smart technology and monitoring that comes with rooftop solar makes it easy to manage costs.
- Appliances can be scheduled to run during times when the rooftop power is available e.g. dishwasher, washing machine, heat pump hot water system.
- Charge your Electric Vehicle from your rooftop PV during the day for extra savings.

## What about after dark?

Energy from rooftop solar is only available during day-

light. Batteries can store excess energy for later use. Batteries will be more affordable in coming years.

• If you can't install rooftop PV but still want to reduce your electricity emissions, switch to "GreenPower Accredited" with

your energy retailer so that all your grid power comes from Government accredited renewable sources.

## The Role of Community Energy—Transforming Energy Supply for our Benefit

- Within the South East area there are a number of active Community Energy Groups that are showing what can be done to empower and Repower communities with local renewable energy.
- Community Energy groups are arranging solar bulk buys and building community scale solar farms that will enable local microgrids.
- Community Energy provides local communities with more resilient networks, ownership of generation assets and energy cost savings.
- Money saved on energy bills can be spent locally and stay in the community.
- Transitioning to renewable energy, particularly Community Energy, will create new employment opportunities in the local region.





## Electrify Everything—2



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#### **CASE STUDY—Home Solar**

I have been extremely happy with our solar PV system since we installed it in 2019. We went with a quality system and a reputable local installer, to get the best performance and long system life.

Our bills are now zero during Summer with bill credits from our exports that offset the Winter bills. Even though the installation was a bit more expensive on our house than a standard install, we still expect the payback time to be well within 10 years.

At the same time we also replaced our old hot water heater with a heat pump system. This now heats our water during the day from our solar panels, so we have slashed out hot water costs as well.

The data available on our phone app is really useful to see how much the panels are generating and how to make the most of our rooftop generated electricity.

Ron from Jindabyne.

#### Would you like to do more?

Get behind Federal MP for Indi, Dr Helen Haines' Bill enabling community energy. Write to your federal MP, supporting the #repoweroucommities campaign at <a href="https://www.repowerourcommunities.org.au">www.repowerourcommunities.org.au</a>

#### Ask your Local Government to:

- Lead through sustainability and renewable energy projects for their own operations.
- Purchase locally produced renewable energy from community generation.
- Identify and zone suitable local land for renewable energy generation.
- Lease Council-owned land for construction of community power projects.
- Implement or support solar bulk-buy-and-install programs for residents and run information sessions on why people and businesses should go solar.
- Lead the transition to clean energy to the benefit of local communities

1. https://www.cleanenergycouncil.org.au/consumers/buying-solar

### **CASE STUDY—Shoalhaven Solar Farm**

The construction of a 3MW solar farm near Nowra delivers value to the developer/retailer, the local government, investors and key customers, and has been a genuine Community project. Community Energy group Repower Shoalhaven took a leading role, and:

- Identified the local demand for locally-generated power
- Partnered with Flow Power, a power supplier who wanted to develop community-based solar farms, and contracted to purchase all the generated power for 15 years at a pre-determined price



- Identified a suitable site with proximity to grid connection, (with Shoalhaven Council)
- Worked with Council to secure a suitable lease
- Worked with Flow to reduce community and Council risk, (Flow managed the construction and secured finance)
- Enabled community investment by aggregating local investor contributions into a loan-note facility for part of the construction cost
- Used its existing customer relationships to assist Flow to secure local customers to purchase the locally generated renewable power—a FIRST in Australia.

The Shoalhaven community will benefit from

- Local spending valued at \$2.1 M
- 40 local jobs during the construction phase and three ongoing operational jobs
- Generation of 5900MWh/annum, equivalent to the usage of 1140 households
- Reduced risk of external power interruptions
- Local public and private enterprises benefit from cost savings and price stability;
  and the opportunity to invest in a local,
  ethical and environmental project.

