



Technically Speaking

The loss of power becomes more critical when it is unavailable for a longer time. Over the last few years, Venus Bay has experienced multi-day outages more than once and usually due to extreme weather. AusNet Services, who own and operate the electricity poles and wires, has a target to keep outages on its short rural lines below 6hrs/customer/year. In 2021, they achieved 41hrs/customer in Venus Bay and Tarwin Lower.

It is a good time to think about local energy backup options because weather events are getting more severe, our reliance on electricity is increasing and our options to produce electricity locally are more diverse and cheaper than ever been before. And persistent grid outages can be seen as an opportunity for innovation.

The Community Energy Study will look at several local energy options for Venus Bay that will form the basis of analysis over the next nine months.

At the smallest scale, replication of multiple stand-alone systems, like the one at the Venus Bay Community Centre, could be one option. The new battery, generator and solar system at the Centre operates by disconnecting from the main grid during outages. The Centre is powered by the battery when it's charged, by solar if the sun is shining or by the generator as a last resort. It can also combine solar with some generator.

At a middle scale, co-ordinating energy generation and export from clusters of building that are already connected via the local grid, could be another option. Historically, the cluster of shops in Venus Bay had its own backup generator. This cluster could be an ideal candidate for hosting a modern stand-alone system.

At the largest scale the option of a microgrid for the whole Venus Bay Peninsula warrants investigation. As with the cluster approach, microgrids rely on coordinating local energy supplies in order to power all the customers that are connected.

The task for the Project Team is to research the technical feasibility of any or all of these options, once community

needs and preferences have been surfaced and understood. Then the Project Team will work with the community to test financial viability of the community agreed priority option(s).

Community Workshop #1 – What does resilience mean for each of us and our community?

Saturday October 1st, 2022, Venus Bay Community Centre, 27 Canterbury Road, Venus Bay – 12 noon to 3pm

Lunch included - RSVP alyson@vbcc.org.au

Venus Bay Voices – Henry O'Clery

We moved to Venus Bay four years ago, and apart from an excess of mosquitos and power outages, we love the place. We can't do much about the mossies, but surely, in this day and age, it must be possible to improve the energy supply!

So how about we study what modern renewable energy technology can offer our community? Not what it can offer the network or the retailers, but how it might be able to improve the amenity, safety and economics for all of us while also contributing to a better environment?

Two years ago the Venus Bay Community Centre decided to take on this task.

First, we built a solar/battery demonstration system at the Centre so that the place can fully operate when the grid goes down. Then we obtained a substantial grant from the government to develop a feasibility study for the whole town.

We have now assembled a crack team of experts who are working with community members to develop a model of what is possible, and how we could build it.

If you think this is a good idea and might even be a bit excited, why not come along to our Resilience Workshop at the Venus Bay Community Centre?





Community Resilience and Reliable **Energy Feasibility Study at Venus Bay**

Brilliantly Resilient

The Venus Bay Community Energy Study is framed through a lens of resilience. So, logically, the Study is asking - Resilience to what? To help unpack that, people from across Venus Bay are being asked to think about and describe their social networks and their relationships with energy and infrastructure, including energy use, access and priorities, both during non-emergencies and emergencies.

The Study is also asking - When does a lack of electricity become an issue? Four main events may help us think through the impacts and possibilities.

Firstly, let's remember that the black summer bushfires of 2019/20 inspired this Study. Crises and disasters arrive suddenly. They are often driven by weather, and we are reminded that climate change will make extreme weather events more frequent. They also place significant demands on a community - dealing with a power outage is only one of a number of challenges being faced in that moment.

Secondly, it is important to highlight ordinary power outages. We know these happen relatively frequently because Venus Bay and Tarwin Lower are at the end of a long power line from Inverloch and are therefore very prone to equipment failures, fallen branches and other faults that trip the switch. Thinking about the way we currently respond to regular power outages can help us think about the changes we might like to see, if we could reduce their impact and the inconvenience.

Thirdly, thinking about resilience reminds us to think about long term stressors as well. For example, parts of the electricity network might be getting to the end of their life, climate change will bring longer heatwaves, and our energy system is under pressure of significant changes as we transition to renewable energy.

Finally, thinking about our vulnerabilities provides a useful provocation because vulnerability is the flipside to resilience. We all have elements of modern life that we are over reliant upon. Also, the single road in and out of Venus Bay is a constant reminder that every community has unique challenges that can amplify vulnerabilities.

This Study offers us a chance to think through our essential energy needs under each of these circumstances. From this deeper and shared understanding, we can shape our local energy systems and ambitions so they strengthen our resilience.

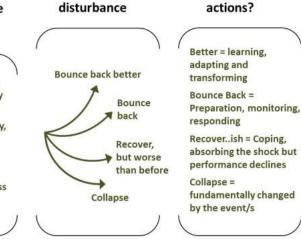
5. Due to what

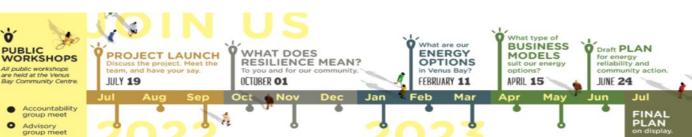
4. Reaction to



with disturbance What do you think? Being prepared Knowing who can help - connectivity Spare capacity, diversity, flexibility, alternatives / multiple options Adaptability Managing with less

3. Capacity to deal





Support from

authorities