

Community Energy Project Case Study

August 2020



Proudly supported by the Government of South Australia, the Kangaroo Island and Hills & Fleurieu Landscape Boards, and Regional Development Australia (Adelaide Hills, Fleurieu Peninsula and Kangaroo Island).

Introduction

With high power prices affecting the cost of living and doing business in the Adelaide Hills, Fleurieu Peninsula and Kangaroo Island region, the Resilient Hills & Coasts partnership set out to explore options to cut those costs, while enabling the whole community to transition to renewable energy, through a three-year Community Energy Project.

Around Australia, communities and Councils have turned to community energy to cut living costs, keep energy spend in their community, and tackle climate change. Community energy can come in many forms, from locally owned solar farms to virtual power plants, energy advisory services to community retailers. It can be broadly defined as groups of people coming together to generate, own, manage, or benefit from renewable energy and energy efficiency.

For this project, the aims were to empower the whole community to both access and benefit from clean energy and improved energy efficiency. The project sought a solution that could ease electricity cost pressures for all residents and businesses, that would keep some of the energy spend in the regional economy, and that would help the region to both curb emissions and identify as climate-ready.

In the rapidly evolving community energy sector, a clear path is not always visible. It can take substantial investment and specialised expertise to establish a working model that complies with market regulations and minimises exposure to financial, legal and governance risks.

The proposal for a Resilient Hills & Coasts Community Energy Foundation did not go ahead. However, the project produced research and a suite of tools that are expected to significantly lower barriers to entry for any Council or community seeking to develop a community energy project, particularly in the form of a Community Energy Foundation. This case study, and associated toolkit, maps the project journey from mid-2017 to mid-2020, so that other local governments and communities can learn from our experience.

The proposed model

The proposed model was to establish an independent, not-for-profit Community Energy Foundation that would act on the region's behalf to drive renewable energy uptake, lower the cost of living, and deliver energy advice to the community. The Foundation would transition to being community led, but be driven by Councils in the immediate to medium term.

Specifically, the Foundation would:

1. Leverage the region's collective buying power to broker a competitive deal on renewable energy for regional households and businesses, via a partnership with an energy retailer
2. Transition to become a self-funding not-for-profit, by returning a dividend from each bill to the Foundation
3. Deliver an ongoing program of services and projects that would help regional households and businesses to use energy more efficiently.



Lower the cost of living

Using our collective buying power, we can negotiate a cheaper deal on clean energy for all



Power our local economy

A portion of each bill will be paid back to our Foundation, keeping money in the region



Energise our community

The Foundation will help our community reduce consumption and generate, share and store energy locally

This case study was prepared by Jen St Jack of JACK JENSEN, for Resilient Hills & Coasts.

Resilient Hills & Coasts is a cross-sector partnership working to strengthen the climate resilience of the communities, economies and natural and built environments of the Adelaide Hills, Fleurieu Peninsula and Kangaroo Island region. Resilient Hills & Coasts is one of eleven Regional Climate Partnerships across South Australia.

Origins, intentions and outcomes

Origins

In 2009, the three councils of Victor Harbor, Alexandrina and Yankalilla initiated the first solar bulk buy scheme in South Australia, unlocking access to affordable and vetted solar systems for thousands of local residents.

Key successes of that project included:

- Attracting \$8 million in Federal rebates into the Fleurieu region
- Engagement of 24 local electricians to install systems over 9 months
- The nominated solar supplier setting up shop in Victor Harbor and employing three staff
- Annual ratepayer energy savings in the millions of dollars
- A significant reduction in community carbon emissions.

The scheme was so successful that one in two households in the region now have rooftop solar – understood to be the highest uptake rate in Australia – and South Australia’s Local Government Association adopted the scheme, rolling it out to another 35 Councils.

However, when a similar initiative was attempted a few years later to target regional businesses, the subsidies, feed-in tariffs and hardware pricing had moved on to the point that such a program was no longer viable.

Despite this setback, the outcome of cheaper, cleaner power for all households and businesses was still considered a goal worth pursuing.

So in mid-2017, staff from Resilient Hills & Coasts partner Councils established a Working Party to explore how the Councils could work with each other, and their communities, to deliver a regional Community Energy Project.

Intentions

From the outset, the program was intended to fill the gaps left over from the initial bulk buy scheme. Its aims were to:

- Reduce cost pressures for as many in the community as possible – not just those who own their own home and can afford rooftop solar, but also renters and businesses.

- Work towards a self-funded model that would localise the economic benefits of energy supply – keeping some of the region’s \$150 million energy spend within the regional economy.
- Empower the whole community to participate in the transition toward a clean energy future, curbing emissions and helping to identify the region as climate ready.

Essentially, a solution was sought to deliver on the following principles:

Our communities deserve access to energy that is:



Affordable



Reliable



Good for the local economy



Good for our environment

Outcomes

The project sought advice from a range of sources – including industry experts, procurement specialists, community engagement practitioners, lawyers, elected members and the community – to design the best solution that would meet those aims.

In late 2019, the participating Councils unanimously determined not to progress with the proposed model, in part due to the initial budget pressure.

However, this innovative program developed numerous reports and resources that will be valuable to any Council or community exploring their own community energy options. These have been published alongside this case study so that others may benefit from the program’s experience.

Project outputs include:

- Project Design Report and summaries
- Legal advice
- White-labelled governance documents
- Community engagement resources
- Elected member briefings.

Project journey

Establishing the aims

The Working Party came together in mid-2017 to determine the expected aims of a Community Energy Project and to map the path to get there. The intentions of the program are listed above, but were based on the principle that “Our communities deserve access to energy that is affordable, reliable, good for the local economy and good for the environment.”

Designing the most appropriate model for the region

The six Resilient Hills & Coasts Councils partnered with Regional Development Australia (RDA) Adelaide Hills, Fleurieu and Kangaroo Island to jointly invest \$24,000 in a detailed program design report and associated community consultation.

In September 2017, consent was secured from the Southern & Hills LGA (S&HLGA) Board to call for proposals from the market.

In November 2017, the City of Victor Harbor issued a Request for Proposal (RFP) for the design and delivery of “an innovative Community Energy Project to serve 120,000 residents”. The RFP generated strong national interest, with ten proposals received and evaluated. The two shortlisted proponents were Australian Energy Foundation (then Moreland Energy Foundation, Victoria), and a syndicate between Enova (NSW) and Tandem Energy (Barossa, SA). The Working Party invited Australian Energy Foundation and local consultancy Tandem Energy to work together.

The consultants developed a conceptual delivery model, which Resilient Hills & Coasts presented to the S&HLGA Board in April 2018. The Board supported proceeding with a more detailed design process.

Between May and September 2018, the consultants developed the Project Design Report. The report was informed by research on successful models in Australia and around the world and the consultants’ own experiences developing and operating community energy projects, as well as the following engagement:

- Three workshops with Elected Members, council staff and key stakeholders, attended by approximately 60 people across the region
- An online ‘knowledge, attitudes and behaviour’ survey with over 350 responses received
- Key informant interviews with retailers, community energy groups and local community leaders.

The Project Design Report outlined the proposed model, as well as providing information on other community energy options and general advice for local governments.

Refining the proposed model

The Working Party then sought more detailed advice to resolve how partner Councils could establish the proposed Community Energy Foundation while minimising exposure to financial, legal and governance risks. These investigations were designed to ensure regional Councils were fully informed of the risks and resourcing involved in pursuing the proposed model.

In September 2018, Resilient Hills & Coasts secured \$45,000 in Local Government R&D Scheme funding to deliver:

- A legal review of the proposed program design
- White-labelled core governance documents to first draft stage
- A community engagement and marketing plan
- A case study and toolkit of the other deliverables for use by other councils.

Toolkit Resources

- Concept Plan
- Program Design Report
- Recommendations for Local Governments

After a request for legal advice was issued to five providers in December 2018, HWL Ebsworth was appointed to deliver the legal advice and develop the draft governance documents. The Working Party considered key questions raised in the draft legal advice, undertaking detailed consideration of how the Foundation would be established and operate. The final legal and governance documents were delivered in April 2020.

Australian Energy Foundation was engaged to produce the community engagement resources, which were delivered in August 2019 following consultation with the Working Party and Council communications officers.

Advice was also sought from LGA Procurement – which manages electricity contracts for South Australia’s local government sector – on the tasks, timelines and resourcing required to undertake electricity tendering. This advice was critical in forming a realistic view of how the Foundation would need to be resourced, some key challenges to expect, and the skillsets that would be needed for implementation.

Toolkit Resources

- Legal advice:
 - Request for legal advice
 - Summary of draft legal advice, with key decisions
 - Final letter of legal advice
- White-labelled governance documents:
 - Terms of Reference for Interim Committee
 - Foundation Constitution
 - Inter-Council Funding Agreement
 - Request for Proposals from Electricity Retailers
- Community engagement resources:
 - Community Engagement Plan
 - Draft engagement materials

Raising awareness and seeking buy in

In 2018, project consultants Australian Energy Foundation and Tandem Energy undertook community engagement associated with the Design Report process. This included in-depth community research, interviews, a survey, and workshops – including with Elected Members from each of the member Councils, and the S&HLGA Board.

In June 2019, Resilient Hills & Coasts hosted two Community Energy Forums in the region – in Port Elliot and Mount Barker. Attendees heard from Federal Member for Mayo Rebekha Sharkie MP, and the project consultants, on what community energy is, and how it could work in the region.

Securing the support of the local MP was a critical step in seeking buy in for the proposed Foundation. The Working Party also engaged with the member’s office to determine if there were any potential federal funding pools available (none were considered suitable) and to advocate for more federal support for community energy.

The S&HLGA Board was a critical channel for maintaining awareness of the program and seeking buy in at key project stages. The Board’s support was sought and secured to: move from concept design to a full design report (in April 2019); to seek funding to refine the project’s legal, governance and communications frameworks (in June 2018); and to undertake staged engagement with the community and Councils to test appetite for and establish the proposed Foundation (in June 2019).

Between 2 July and 9 September 2019, presentations was given at informal gatherings or workshops at each of the six regional Councils to update Elected Members on progress to date, and to seek advice on Councils’ appetite to invest in a Community Energy Foundation and what risks they saw in doing so.

Those informal briefings informed the first major stage gate for Councils – seeking endorsement to engage the community, aiming to sign up at least 750 future customers of the proposed Foundation.

Toolkit Resources

- Elected Member briefing
- Workshop presentation

Winding up

Between October and December 2019, the first major stage gate was put to Councils, to consider whether they wished to progress the project or wind it up. Two options were put to Councils:

1. That an Expression of Interest will be undertaken by partner Councils, to gauge community interest in an aggregated bulk purchase of retail energy, seeking a minimum threshold of 750 potential customers; OR
2. That resources developed under the Community Engagement Project will be published for use by the community, industry and local government sector, and Council involvement be wound up.

Councils unanimously decided to wind up the project, but three of the six endorsed a motion to continue investigating options to pursue in their own Council area (Alexandrina, Mount Barker and Victor Harbor). The decision to wind up was due to various factors, including:

- The project not being seen as core business of Councils, and therefore not a priority for investment, given the context of a broader push for rate capping
- The expense of underwriting what was to become a community-run initiative, with no financial return to Councils expected
- The complexities and uncertainties involved, with a number of risks to be managed
- Questions over the suitability of Councils driving a 'community' energy project
- Questions over whether the proposed model was the most appropriate.

The Working Party then finalised the remaining tasks from the LG R&D Scheme funded project, refocusing them for a broader audience, to enable others to benefit from the project's investment.

Other stages not delivered

The remaining planned stages, all dependent on the previous stage's success, were as follows:

1. Deliver an expression of interest campaign, seeking to recruit a minimum of 750 potential customers
2. Seek Council endorsement to continue the project (if threshold of 750 customers is met), including an initial commitment of one year's funding for a Foundation Manager
3. Recruit Foundation Manager (if funding secured), establish the Foundation and seek funding partners
4. Seek Council endorsement to co-invest seed funding for another four years (if Foundation Manager's KPIs are met).

For the first stage, the expression of interest process was estimated to cost approximately \$25,000, including some in-kind support, which would cover branding, community events and marketing, customer service and enquiries, and building and managing a secure microsite to collect 'pledges' and estimate demand using electricity bills or surveys (a Customer Relationship Management system).

An expression of interest process was proposed, rather than a 'customer recruitment' process, due to the complexities of project staging. A certain demand threshold needed to be reached to make an appealing pitch to a retailer partner, and a retailer agreement needed to be reached before actual customers could be recruited. The threshold of 750 customers across the region was the figure estimated by the consultants as the baseline to commence negotiations with retailers. Exact numbers to break even and become financially self-sufficient could not be known until a retailer agreement had been reached.

The estimated cost to seed fund the remaining stages was \$1,400,000 over five years. The target was to secure \$450,000 from Councils and \$950,000 from grants and partnerships, with funding weighted in years 1 and 2 and tapering off through years 3 to 5 as the Foundation transitioned to financial self-sufficiency.

Lessons learned

Good idea and intent

The basic principle of the project – that our communities deserve access to energy that is affordable, reliable, good for the local economy and good for the environment – was well received by the community and Councils.

Workshops with Elected Members indicated a strong willingness to achieve this aim, but an uncertainty that the proposed model was the best way for Councils to be involved.

Proposed model became too large and complex

The model recommended by the expert consultants was for a regional, community-led Foundation that would partner with an energy retailer to provide cheaper renewable energy and return a dividend back to the regional economy, helping to fund independent energy advice and services to the community.

While the model was considered to have merit, the intricacies and uncertainties of delivering such a model – particularly one that would be initiated by Councils then transition to community leadership – became too complex to be implemented without significant political will and funding to back it up.

Scheduling of tasks added to the complexity, with numerous inter-dependent stage gates required to ensure risks could be managed.

Community leadership and drive is preferred

This project was Council driven, with a proposal for regional Councils to collaboratively establish and seed fund a Foundation and transition leadership and management to the community over time. This transitional arrangement was intended to manage risks associated with Council's initial leadership role and investment.

As the name suggests, community energy projects appear to be more successful where they are initiated and driven by the community. However, the resourcing and expertise required may not be available. Given that community energy may not be considered core Council business, a support role that minimises Council risk exposure while reducing barriers for the community may be more suitable.

Strategic timing is critical

Cost of living impacts of rapidly rising power prices were the top State Government election issue in March 2018, and one of three core themes in the LGA's pre-election agenda.

However, when the local government elections were held in November 2018, there was a substantial cohort of new Elected Members, and a significant focus of those new members was on Council rate capping. This focus made new Councils less inclined to invest in an initiative that was not considered core business, despite the potential for cost-saving benefits to the region estimated at up to \$3 million per year.

Operational timing is critical

Because the price of energy fluctuates throughout the year, the timing of an offer going market will influence the offer returned by a retailer. March to May or August to September are favourable times.

If an offer were put to market, retailers would provide a price based on the load and the risk involved, subject to a 'Volition Period' that the offer is open for. This can be as short as 24 hours or up to 4-5 days if the market is good.

In that time, the Foundation would need to undertake a full evaluation, make a decision, then potentially seek written approval from Councils to accept the offer. If this is not achieved by the end of the Volition Period, the pool of energy would go back into the market and the process would need to be repeated.

Unless the approvals process could be avoided, regional cross-Council collaboration would likely be too slow to undertake this kind of process.

Local government could be an anchor customer

If the six Councils could have used their own collective buying power and entered into a Power Purchase Agreement (PPA) as an anchor customer, there may have been no need to seek pledges from residential customers to establish a demand threshold.

However, LGA Procurement was concurrently negotiating terms for a sector-wide electricity contract, so a regional PPA was not considered an option.

The energy sector is complex and dynamic

The community energy sector, and the energy sector more broadly, is complex and dynamic. In the rapidly evolving community energy sector, a clear path is not always visible. It can take substantial investment and specialised expertise to establish a working model that complies with market regulations and minimises exposure to financial, legal and governance risks.

Even working with expert advice, this project found the pace of change and complexity ran counter to the project's ability to progress.

The energy sector is tightly regulated

While there are no legal barriers to Councils establishing a Community Energy Foundation, there are a number of commercial and legal risks to manage, including those relating to organisational and tax structures, competition and consumer law, and energy licensing and regulation.

For example, there are Australian Competition and Consumer Commission (ACCC) requirements 'not to act as a cartel', and an ACCC authorisation would likely be needed to secure legal protection for collective bargaining.

Advertising potential savings is a critical consumer law issue, as illustrated by compliance action taken by the ACCC against One Big Switch, essentially for false advertising of cost savings. This project was restricted in what it could offer potential future customers – 'cheaper power' could not be guaranteed from the outset and therefore could not be advertised. It was expected that early adopters would instead be motivated by the community benefits of the Foundation.

Public funding to establish community energy programs is limited

There does not appear to be any established public funding mechanisms available for community energy projects to establish in the short- to mid-term (ARENA only funds R&D for first-of-a-kind technology and business models).

Most funding targets rooftop-scale projects (i.e. those eligible for Energy Efficient Communities or Home Battery Scheme funding).

However, the Supporting Reliable Energy Infrastructure fund may be a good option for remote communities at the fringe of the grid.

South Australia is already leading on residential renewables

Community energy is an emerging sector in Australia, with over 100 groups developing projects and more than 70 projects installed.

The sector is smaller in South Australia, and this appears to largely be a result of the leadership the State Government has shown in facilitating growth of the renewable generation industry and residential rooftop solar adoption. Market momentum has now taken over, and there is less need for intervention to support the generation industry.

Dispersed storage (i.e. batteries) and improved transmission solutions are now needed to support the low carbon transition in South Australia.

Residential rooftop solar remains a favoured solution, but not necessarily the most effective

Due to the established success of South Australia's rooftop solar industry, encouraging more of it is still seen by many as the favoured solution for enabling the transition to a low carbon future, even if market momentum has now largely surpassed the need for further intervention.

Councils seeking to manage their own operational carbon emissions are now becoming more active in undertaking emissions inventories and identifying the best 'bang for buck' investments, which may include accelerated LED streetlight transitions, efficiencies in waste and wastewater treatment, electric vehicle fleet transitions and rooftop solar on Council and community facilities.

Meanwhile, 18 leading South Australian Councils recently crowd-funded Snapshots community emissions profiles for every South Australian LGA. This tool can help Councils and communities to identify where the most significant opportunities are to target their efforts and investment.

Other community energy opportunities

In other parts of the world, particularly Denmark and Germany, community energy is the mainstream model. In Australia, the sector is rapidly emerging and evolving. Over a hundred groups are developing projects, and over 70 projects have been installed. Community energy can be broadly defined as groups of people coming together to generate, own, manage, or benefit from renewable energy and energy efficiency. The project's Design Report identified a range of community energy options, including:

- Supporting local renewable generation (e.g. wind, solar, biomass etc.)
- Solar and battery systems for emergency power and/or better power prices
- A community-based electricity retailer
- Solar and battery bulk buy (can include other technology)
- Energy advisory services for homes and businesses
- Peer to peer trading of surplus solar energy (Virtual Power Plant)
- Local action plans for energy and climate resilience
- Collaboration with developers – e.g. to build microgrids
- Home renovation, building education and home improvement services
- Renewables for All

Some specific examples of these alternative models are provided below.

- **Community Power Network:** In 2019, Port Pirie Council partnered with Cool or Cosy and Simply Energy to deliver an initiative combining a bulk-buy of solar panels and batteries, low-interest loans, and a Virtual Power Plant (VPP). Residents can purchase an entry-level solar system for under \$20 a week, and save about \$800 per year. Cool or Cosy administers the program, provides finance, and supplies the SA-made Tindo solar panels. Simply Energy accesses up to 400 kwh of power each year from each battery to sell on the market, and pays a credit to the household of up to \$5,100 over four years. Adding the \$6,000 subsidy from the State Government's Home Battery Scheme, a household will only pay approximately \$5,000 over four years for a large residential battery, saving two thirds of the original cost.
- **Solar Saver:** Darebin City Council pays the upfront costs for residents, businesses and organisations to install solar panels – the interest free loan can be paid off over ten years.
- **CORENA (Citizens Own Renewable Energy Network Australia):** Operating nationally, CORENA is a crowd-funded revolving loan fund to deliver small-scale community solar projects. With a \$250,000 funding pool, CORENA funded its 26th project for \$42,000 in 2019.
- **Positive Charge:** An Australian Energy Foundation program providing energy saving advice and linking customers to selected suppliers and installers of energy efficiency and renewable energy products and services. The program is funded by councils for customers in their constituency.
- **Curb Your Power:** As demand peaks, so do prices – so PowerShop sends their customers a text message when demand is peaking, asking them to reduce their demand for a couple of hours – such as by turning off the aircon or holding off on the laundry. If they do, they get a \$10 credit on their bill. PowerShop entered the South Australian market in 2019.
- **Hepburn Wind:** The first community-owned wind farm in Australia, built, owned and operated by the community co-operative Hepburn Wind. Twin turbines, named Gusto and Gale, generate 4.1 MW of clean energy to power over 2,000 homes.
- **Power Purchase Agreements:** Retailers or end-use customers can enter into long-term agreements to purchase power supplied from a renewable generator. These arrangements are commonly used to underpin finance for the private sector to install larger generation capacity.
- **Enova:** Australia's first community-owned renewable energy retailer, starting in 2016. As a social enterprise, they give half their profits back to the community via energy efficiency, education, and community projects.