

Community Energy Programs

Recommendations for Local Governments

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Delivering a Community Energy Program

All councils have reasons to be concerned about energy issues. Residents and businesses have noticed rising energy costs. Supply issues can highlight local vulnerabilities.

Access to energy can determine the affordability of living in a region, of running a business and, at times, can constrain development and growth.

Many councils have undertaken climate change planning and considered their role in reducing emissions and adapting to climate change. Community energy offers an opportunity for councils to:

- Fulfil council policy commitments to tackle climate change and improve resilience to a changing energy system;
- Create long term capacity for the community to respond more effectively to rising energy costs, energy security concerns and new technology opportunities;
- Respond to community needs and priorities which can vary significantly by location;
- Ensure economic outcomes from a region's energy resources and assets.

Most of all though, a community energy program is the best way for local governments to accelerate the renewable energy transition.

Rationale for a community energy program

The electricity system is undergoing a massive transition toward clean energy sources. Consumer uptake of technology is distributing energy supplies and capacity across the system, moving it away from a centralised model. Some of the demand for gas and transport sectors will also transition to electricity in the near future, with pressure on these sectors to also become renewable. Most of the institutions responsible for energy supply are not incentivised to, or not successful in, unlocking the consumer benefits at the local level. Hence, prices are rising and consumers are concerned about energy security and the speed of a clean energy transition. For every 1,000 households, a region will spend around \$2m per year on electricity and the same amount on transport fuels. Uptake of solar energy is already saving most regions around \$500,000 per year per '000 households because 25% - 30% of households have access to solar.

The endowment of renewable resources varies by region with many opportunities to increase the use of solar energy in particular. The challenge in moving toward 100% of locally supplied renewable energy is to develop resources in commercially viable ways. To become fully renewable will typically involve a mixture of variable solar and wind, dispatchable sources such as waste, biomass and storage. The economics and capacity constraints would be improved with flexible electricity loads, demand management and energy efficiency.

As the penetration of rooftop solar increases, many electricity feeders draw zero energy from the wider network in the middle of a sunny day. Some feeders export electricity at this time. This highlights the challenge that networks such as SA Power Networks face as more solar energy is installed. Peak usage on the network can still be a problem, but it occurs less frequently and mostly in the evening of a heatwave. Peak export can be mitigated by batteries but the system incentives might encourage people to charge and discharge at inconvenient times for the network.

Coordinating the assets, loads and supplies will be best done at a local level.

Community energy is emerging as a new sector across Australia as communities drive for changes that are different to market offerings. The projects and activities that communities choose to deliver vary widely. Some places have chosen electricity retailing or bulk buys to help customers benefit from aggregation. Some have developed opportunities for renewable generators that are community owned and supply cleaner electricity to the region. Many seek to include energy advisory services and support energy users. Councils, too, are leading changes and the ideal model for a

community energy program is one that can work as a strong partnership between councils and communities.

Councils have a role in energy

Councils can take an active role in energy efficiency and have done so in the past. Climate change leadership, community support and access to state and federal funding are all reasons that such programs have existed. The emergence of energy advisory services within many community-led programs suggests that communities continue to value access to trusted energy advice.

Councils have a key role in approving building works and could look more closely at the long term social and energy vulnerability ramifications of poor building design.

Councils need to consider a future responsibility for energy assets because the distributed energy model is becoming prevalent and communities may advocate for new communal assets.

Councils have always played a leadership role in their communities. Councils' approach to the energy transition and future energy sets a standard for the broader community.

Regional development (like energy) is not a policy area that sits with any one tier of government. Cross-government collaboration is required to ensure the benefits are experienced on the ground by communities. Councils have a stake in the economic outcomes of the energy transition.

Draft concept for a community energy program

In 2018, Moreland Energy Foundation (MEFL) and Tandem Energy were engaged by Resilient Hills and Coasts (a climate change partnership of six local governments in the Adelaide Hills and Fleurieu Peninsula in South Australia) to co-design a potential community energy program for the region.

[Figure 1](#) is a draft concept for a community energy program developed by Moreland Energy Foundation (MEFL) and Tandem Energy in discussions with the Resilient Hills and Coasts councils.

Both organisations have significant experience in the community energy sector and have advocated that a community energy program deliver a range of activities across the region in order to best serve community needs and also exploit renewable energy opportunities. At the heart of the model sits a Community Energy Foundation that can raise funds and deliver community energy activities. A community-based retailer is included in the model because a strong relationship between the retailer and the community helps with the viability of community energy projects and helps reach customers. In addition it can provide aggregation benefits and capture revenue for the region.

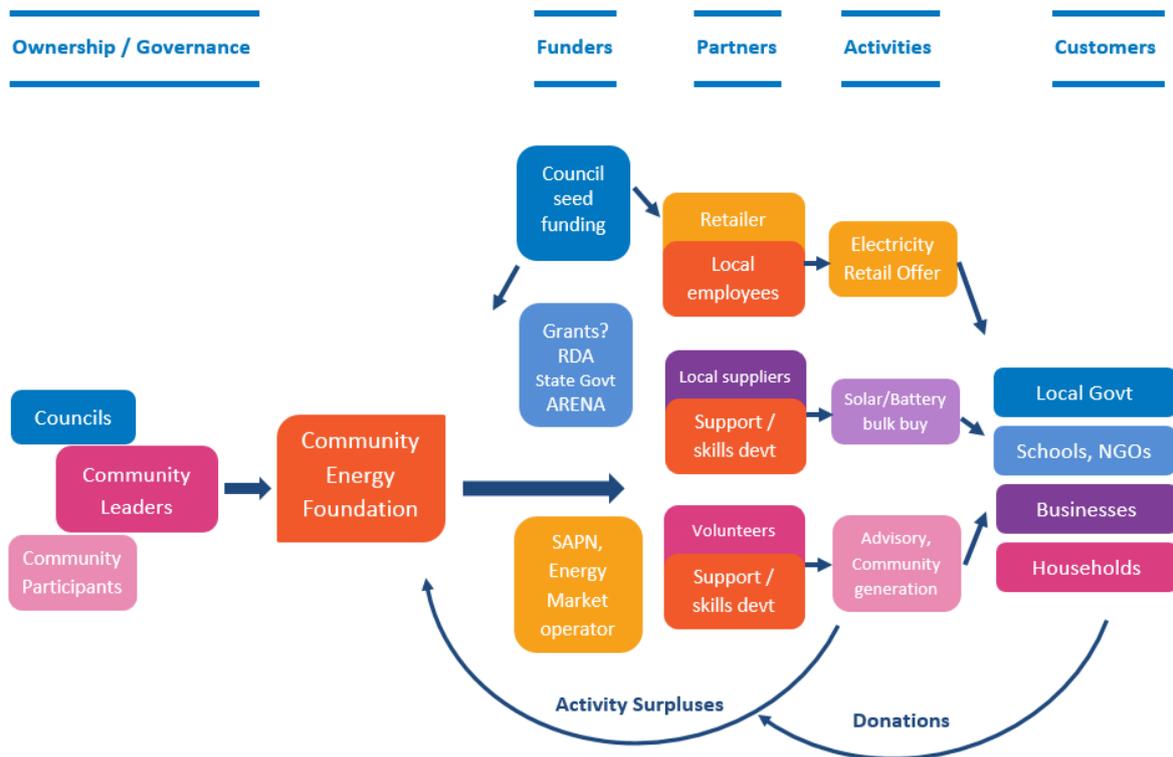


Figure 1 - Draft concept for community energy program

Community Energy Activities

A community energy program would deliver on local priorities once it has been established. It could commence with programs that are self-funding or can attract grants, in order to develop a critical mass of activities and financial capacity. The types of activities that communities are likely to prefer are:

1. Supporting local renewable generation
2. Solar and battery systems for emergency power and/or better power prices
3. A community-based electricity retailer
4. Solar and battery bulk buy
5. Energy advisory services for homes and businesses
6. Peer to Peer trading of surplus solar
7. Local action plans for energy and climate
8. Collaboration with developers, e.g. to build microgrids
9. Home renovation, building education and home improvement services
10. Renewables for All - helping those excluded from the energy transition to participate, such as renters and those on low incomes.

The activities listed have strong precedents, and examples of councils participating in all of the above can be found around Australia.

State and federal governments, energy market bodies, SA Power Networks and other energy corporates all have responsibility to energy consumers and should be considered potential funding partners of any community energy activities.

Design of a community energy program

Community energy activities can be community-led or council-led or somewhere in between. There are a number of reasons for establishing strong community leadership with councils as consistent, long-term, supportive partners:

Councils are hesitant to take on any risk in a sector where they have little expertise

Community leaders are less likely to emerge if councils are seen as the main body responsible for community energy

Councils often have limited capability to fund energy programs so government grants, profitable activities, partnerships with other suppliers and community volunteering will all be important sources of support.

Each town and place will have different challenges and priorities, even down to the street level in the case of electricity network solutions, and it is essential that the program design empowers communities across the region to participate.

At the heart of the model is a community-led Foundation with the ability to own resources and recruit staff with a Board at its helm. The retailer is another key element in the model. We recommend a retail partnership with an existing market participant as the easiest way to get started, with similar financial benefits from the outset and lower risk than building a community energy retailer from scratch. The opportunities for greater local participation, ownership and control over the retailer should be explored over time.

Figure 2 – Localisation – local jobs and participation over time



Getting started

Our recommendations for establishing a community energy program are:

1. Identify your boundaries: challenges, opportunities and partners:

- What scale will work for you? Should you work together with neighbouring councils as a region? Should you attract a branch office of something larger?
- How much value can be created within your council to help underpin longer term funding?
- What commitments has your council made already that a community energy program can deliver on?
- What does your community want to see?
- Who are the active groups and businesses within your region that you would like to work with?

2. Create the Community Energy Foundation:

- Establish a core group of community leaders to guide the establishment of a community energy Foundation and early community engagement. Support this core group with council staff resources and funding. Anticipate a need for 5 years of core funding plus additional set up costs. The foundation will have early legal costs and needs to cover the initial work of attracting additional funding, delivering a retailer process and programs.
- Transition the core group to become the founding board of the Foundation and continue supporting them to develop a funding agreement for council consideration. It is clear there are many activities a Foundation can deliver on behalf of councils and at better cost. These help justify the funding relationship.
- Councils then provide funding through a five year agreement with the Foundation which is aligned with council priorities and ambitions and the Foundation business plan.
- Recruit a CEO and agree in-kind resources from council to proceed as soon as financially possible.
- Engage early and often. Grow community support for the idea, find out what people value and invite them to become a partner, supporter or potential customer.

3. Invite a local energy retailer to your region:

The top priority of the Foundation will be to appoint a retail partner and agree the terms of a community energy retail partnership. A partnership with an existing retailer is recommended because the cost of energy retail licencing, regulatory compliance, market interactions and owning billing systems are best shared with an organisation that already has these systems in place. Our research has highlighted that a number of retailers are already thinking about retaining customers with offerings that benefit communities and all could be worthy retailing partners. These organisations are small and cannot be confident of entering new markets with products that outcompete the incumbents. The big three, Energy Australia, AGL and Origin have the advantage of scale and have lower costs for hedging against market risk.

- Establish the Community Energy Retail Offer via a partnership with an existing retailer through the Foundation (see the main report for more information about the structure and governance of the Foundation).
- Allow the Foundation to lead the RFQ process and partnership negotiations: i.e. identify the level of involvement / service delivery that the Foundation provides vs the retailer.
- Provide start-up funding for the Community Energy Retail Offer to ensure that it keeps value within the region.

- Agree marketing and promotion support for the Community Energy Retail Offer that councils can readily provide.

4. Develop community energy activities:

The second priority of the Foundation will be to deliver community energy activities and these need not wait for the retailer to be in place to proceed. The early work of the Foundation will be to identify activities that councils will be willing to fund for incorporation into the funding agreement. Councils and the Foundation should work together to approach other possible funding partners. A number of activities can be revenue neutral or positive for the Foundation and all need seed funding for covering the cost of initial project development.

- Develop partnerships with delivery organisations that have a depth of experience to ensure that opportunities to extend focus into broader energy activities can be maximised whilst the risk is minimised.
- Prioritise the development and delivery of energy activities in line with stakeholder engagement and feedback. This will include engaging with:
 - community groups, energy product suppliers, other community energy service providers to identify potential partnerships and activities; and
 - community members and begin to test ideas and participation rates.
- Develop relationships with potential funders and develop a range of well costed and researched proposals for proactively funding associated activities.