

Submission Select Committee into Fair Dinkum Power

Community Power Agency

Introduction

Thank you for the opportunity to provide a submission to the Select Committee into Fair Dinkum Power established on the 28 November 2018 by the Senate. In the light of continuously growing appetite of households and communities to participate in clean energy deployment there is huge potential for empowering energy consumers to play a more important role in the National Electricity Market.

In our submission we focus on the following three main aspects:

- Why it is important to empower energy consumers;
- Examples and brief case studies how energy consumers are taking back control of their electricity supply;
- What challenges do they face in the current market environment and what regulator and policy changes are needed.

At the end of this document, we also provide a short list of further resources and material with more details about citizen energy, specific examples and recommendations for regulatory and policy changes to empower consumers in the energy market.

The experience and knowledge we bring to bear on these aspects are significant. Specifically, we draw on:

- International study tours conducted by three Community Power Agency Directors - Nicky Ison, Jarra Hicks and Franziska Mey. These study trips have taken place across the UK, Denmark, Germany, Austria, the US, Canada and of course Australia.
- Extensive, targeted research including two PhDs into community energy.
- Working directly with more than 50 Australian community energy groups for the past eight years and coordination of the Coalition for Community Energy which now has over 90 member organisations.
- Research, trainings and publications on Australian energy market development
- Our peer-reviewed publications, conference papers and reports. For example:
 - Ison (2018) Repower Australia Plan;
 - Hicks, J. and Ison, N. (2018) 'An exploration of the boundaries of "community" in community renewable energy projects: Navigating between motivations and context', *Energy Policy*. Elsevier Ltd, 113(June 2016), pp. 523–534. and
 - Mey F., Hicks J. and Ison N. (2018) *Taxonomy of Citizen and Community Energy: Analysing the drivers, models and real world outcomes of community and citizen energy initiatives in Australia, Germany, Denmark and Scotland*. Paper presented at the IPSA Conference in Brisbane July 2018.

About Community Power Agency

The Community Power Agency (CPA) was established in 2011 to grow a vibrant community energy sector in Australia. We work to support Australian communities to establish community renewable energy projects through the provision of resources, advice, training, workshops and mentoring. We also have significant experience in policy design and implementation to stimulate community energy. Examples include helping the NSW Government design their community energy policy, being part of the development of the ARENA funded National Community Energy Strategy and playing a review and assessment role in all of the Victorian and ACT Government's Reverse Auctions.

For more information:

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Why is consumer empowerment important? - Benefits of citizen participation!

The transition to clean energy systems is opening up spaces for citizen empowerment and participation in a multitude of ways, from individual household actions to collectivised community efforts. Across the world a diversity of models of citizen energy have emerged, influence by different political contexts.

Community Power Agency differentiates between two forms of consumer participation (citizen energy) in clean energy.

- Individual actions are the actions of households, organisations and businesses delivering projects by themselves, for themselves.
- Community action is where groups of people and/or organisations work together to deliver clean energy initiatives based on the values of citizenship.

Status of citizen and community energy in Australia

In the last decade a vibrant citizen renewable energy sector has emerged in Australia. The sector combines both supply (energy generation, distribution and retail) and demand side (energy use, including energy efficiency) activities.

Australians love solar! With more than 2 million solar households, a large number of consumers already enjoy the benefits of clean and cheap electricity from their own systems.

In addition, consumers engage in collective efforts to develop, manage and operate renewable energy or energy efficiency systems. There are already 105 community energy groups (see Figure 1) and more than 150 operating community energy projects in Australia.

Figure 1: Community energy groups and projects across Australia.



Source: CPA website. Link: <http://cpagency.org.au/resources/map/>

A key characteristic of community energy projects is the deviation from the norm of conventional power production – large-scale, centralized and mono- or oligopolistically owned either by the state or large corporate bodies. Indeed, individually or collectively owned energy projects offer a number of benefits at local level and empower consumers to influencing the social context of the energy transition.

International and national studies have confirmed that new technologies such as solar PV, wind turbines and batteries enable individuals and communities to take ownership and control of their electricity supply, as well as benefit from the outcomes.

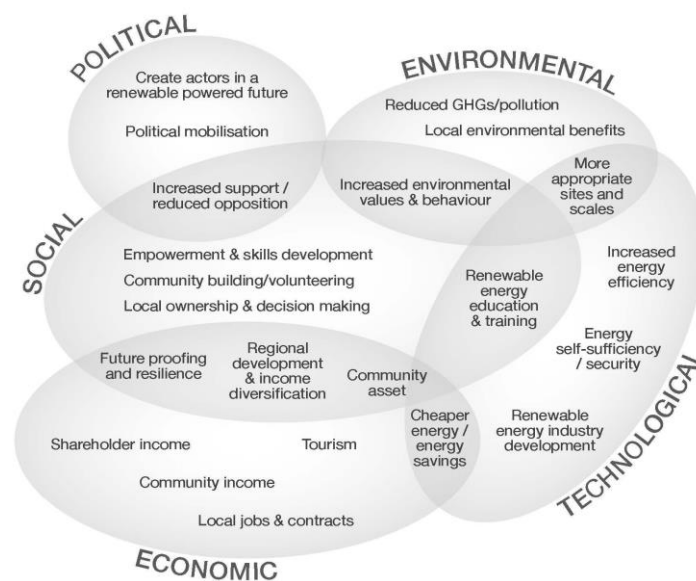
The main benefits of citizen or collectively owned renewable energy projects are:

- Obvious environmental benefits of carbon emissions reduction and technological benefits of more MW of RE installed.
- A range of social outcomes including:
 - Engaging people in renewable energy and energy efficiency development
 - Providing education opportunities for the local community
 - Involving them as co-owners
 - Increasing levels of social awareness of and support for renewable energy
 - Increasing opportunities for ongoing participation and benefit from renewable energy development contributes to build a strong social license for renewable energy developments in the region
- Increasing levels of active support for renewable energy uptake and for progressive renewable energy policy
- Control over their electricity bills – reduced electricity bills easing costs of living
- Increasing environmental behaviour (e.g. energy efficiency)
- Involving local stakeholders and being more integrated with local economies,
- Contributing significantly more per MW to local economies than absentee-owned projects e.g. local jobs, tax, return on investments and added local economic value through spill over effect

Arguably their most valuable and unique contribution is in the range of social outcomes, and the points where social outcomes overlap with economic, environmental, technological and political outcomes, as seen in Figure 1.

In conclusion, empowering citizens to engage in the energy transition will provide significant social, economic and environmental benefits at local, national and global level.

Figure 2: The range of outcomes citizen energy projects.



Source: Hicks and Ison, 2012, p.194.

Example of consumer empowerment

There are already a number of citizen energy projects and models in Australia that enable consumers to play a more active role in the National Electricity Market.

The following non-exhaustive list provides a selection of citizen and community energy projects in Australia. Yet, it is not exhaustive to the potential nor activities in the sector.

Citizen energy potential to providing diverse services in:	Examples	Contribution to Consumer Empowerment
i. energy generation	<p>BULK BUY PROJECTS are one of the most popular ways to engage citizen in renewable energy generation in Australia. These multi-household projects are where a community group aggregates households to bulk-buy and install renewable energy technology.</p> <p>In addition DONATION based projects are another form of renewable energy generation involving community members. This is based on a community raising funds through donations, either using a crowdfunding platform or more traditional fundraising programs. Typically, the host site and beneficiary of this model will be a not-for profit community organisation.</p> <p>A third option are INVESTMENT projects. Community investment projects are typically initiated and led by a community organisation such as a cooperative or company. Funds are raised by opening up the project to community investors on the expectation that they will receive a certain return on their investment.</p>	<p>For example the New England bulk buy and Victor Harbor Council led to 40% of residence having solar. Other examples include MASH Solar Bulk Buy and Batteries which has enabled more than 950 households to go solar since the organisations has started in 2014. MASH also offers battery systems. The current MASH and Hepburn Community Solar Bulk-Buy project offers solar and battery systems - with 260 households already gone solar since April 2018. The aim is to increase the Shires local solar installation by 800 kW and donate \$20,000 in free solar to community groups – as well as cut CO2 emissions by 1,100 tonnes annually.</p> <p>A very successful example is CORENA, a not for profit organisation, which raises funds to provide zero interest loans to non-profit organisations. The structure of this model results in a revolving fund, with donated funds being reused for multiple projects. CORENA has already 26 projects with a capacity of 238 kW and a value of more than \$360,000 implemented. Link: https://corenafund.org.au/</p> <p>Repower Shoalhaven is one of the most renown community groups implementing investment projects. Their model creates a proprietary company for each project, enabling up to 50 community members to co-invest in this “special purpose vehicle” (SPV). They have already set up seven projects. Link: https://www.repower.net.au/</p>

		Hepburn Wind , Solar Share and Denmark Community Wind are also community-owned renewable energy project examples.
ii. demand response and energy efficiency	<p>Zero Net Energy Towns, or Z-NET, or 100% Renewables Towns are pioneering initiatives throughout rural and regional Australia which aim to meet their energy needs through clean energy installations.</p> <p>Apart from local energy generation, these initiatives deliver demand response services and energy efficiency measures for their communities.</p>	<p>Z-Net Uralla in NSW is an initiative that aims to assist the shire of Uralla to become energy-self-sufficient. The initiative is based on four main pillars: use less energy; generate renewables energy on-site; import renewables and generate renewables nearby. The initiative has particularly shown that cost-effective strategies, such as LED lighting, insulation upgrades and on-site solar PV, can achieve 40 to 70% of the objective while saving businesses and residents money, and building deep community engagement. This also includes a significant increase of energy literacy supporting behaviour change and ultimately influences local energy demand.</p>
iii. grid stability and reliability services, iv. alternatives to conventional network investment	<p>Community initiatives that support grid stability and providing alternatives to conventional network investments are MINI or MICRO GRIDS, embedded networks or islanded systems in which a group of households are equipped with an individual energy generation (solar panels) and storage capability (battery).</p> <p>For this, establishing PARTNERSHIPS with energy retailers or network companies is an important element. It will help to also ensure communities are enabled to influence the local energy services incl. grid stability and reliability and offering alternatives of conventional network investments.</p> <p>In addition, research and capacity building in form of e.g. feasibility studies are essential to investigate the economic viability and technical feasibility to progress their project idea.</p>	<p>A successful example is the Totally Renewable Yackandandah (TRY) group in Victoria which develops one of Australia's first commercially operated mini grids in Yackandandah.</p> <p>TRY has established a partnership with Mondo Power, an energy retailer which facilitates community mini-grids and regional energy hubs. Both organisations have worked closely on the towns renewable energy journey, e.g. supporting a solar and battery bulk buy. Mondo Power has developed a device (Ubi) monitors electricity usage, generation, export and battery storage.</p>
v. peer-to-peer trading between households and businesses	<p>Incentivise using the local grid through revised tariffs and peer to peer trading, for example Solar Gardens. This model works by installing a central solar array, generally near a population centre. Consumers can purchase a share of the array, with the electricity</p>	<p>Community Power Agency and the Institute for Sustainable Futures has recently completed an ARENA funded feasibility analysis of Solar Gardens working with:</p> <ul style="list-style-type: none"> Community energy groups, such as Community Owned Renewable Mullumbimby,

	<p>generated credited on their bill. Solar Gardens are the only model that we know of that can support all locked-out energy users to access the benefits of solar.</p>	<p>Repower Shoalhaven and Pingala</p> <ul style="list-style-type: none"> • Community (and community friendly) retailers such as Enova Energy and Powershop, • Councils and lawyers. <p>This research found that Solar Gardens are feasible in Australia and viable with support.</p>
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What are the challenges?

Challenges facing consumer empowerment fall into two main categories:

1. Those that prevent locked-out energy users from accessing the benefits of solar, batteries, energy efficiency and other household clean energy measures and technologies.
2. Those that make community renewable energy projects difficult.

Challenges facing locked-out energy users

Note this section is drawn from the Repower Australia Plan.

Locked out energy users are those that cannot install solar, batteries, energy efficiency measures or similar. They include renters (private and social), people who live in apartments, have unsuitable roofs or cannot afford them.

Locked out energy users face fundamental market barriers that make solar, energy efficiency, storage and other clean energy solutions inaccessible and/or unaffordable. These barriers broadly fall into four categories – access to information, cost barriers, structural barriers and regulatory barriers.

Low community awareness and complexity

Most Australians concerned about rising energy prices are unaware of how efficiency and other clean energy improvements can help keep bills affordable. Even where people have a basic idea of what might be needed, people don't know where to turn to get reliable and trusted advice that suits their individual needs. This isn't helped by the fact that Australia's energy retailers are trusted less than the big banks¹, unfortunately with good reason.

Moreover, as our energy market continues to evolve and the range of energy products and services continues to expand, this complexity will only increase. For many people, this complexity undermines their ability to make the 'rational' decisions necessary for a truly competitive market to function.²

This is even truer for disadvantaged households, even though they are most in need of the bill saving and health benefits of efficiency. Consistent findings from projects funded under the federal government's Low Income Energy Efficiency Program highlighted the need for information and retrofit services to be delivered in the context of existing trusted services and relationships (such as community peers, financial counselling or home care services).

Another implication is that many households are prioritising investment in rooftop solar without making basic efficiency improvements at the same time. This means we are missing opportunities to maximise bill-saving and health benefits at the household scale, as well as capture demand management and emission reduction benefits across the wider energy system.

Unaffordable up-front costs

Unaffordable up-front costs are a significant barrier preventing many households from accessing efficiency and renewable energy upgrades to their homes. In fact, those households most in need of bill saving and health benefits are those most unlikely to be able to afford efficiency and solar. While

¹ The Guardian, 2015. Accessible at <https://www.theguardian.com/money/2015/jan/26/energy-giants-more-disliked-banks-guardian-icm-poll>

² Consumer Action Law Centre, 2016, Power Transformed

past and current government programs such as Victoria's Energy Upgrades Program have made a range of efficiency measures available at no cost, higher-value measures (such as efficient fixed appliances), which require a co-contribution payment, have generally remained inaccessible to low income households and those experiencing energy hardship. Furthermore, available finance products (like solar loans and leases) are typically not appropriate either as the interest rates are too high or some low-income households are not eligible due to credit-rating issues.

Lack of incentive

More than 6.5 million Australians who rent their homes are largely locked out of the clean energy transition because most landlords see little financial incentive to invest in property upgrades while the bill saving and health benefits are reaped by tenants. This is known as the 'split incentive' problem and it leaves renters bearing an unfair share of the financial and health costs of inefficient housing.

It's no secret that Australia is in the midst of a housing crisis with much of the younger generation locked out of home ownership (and thus currently locked out of solar ownership). This growing intergenerational inequality needs to be addressed urgently, within both the energy and housing sectors. Further, given that low-income households are more likely to be renters, they face the dual challenges of financial constraints and unmotivated landlords, further entrenching disadvantage.

Additionally, for many homeowners, their incentive to invest in improvements is undermined by the relatively high investment in time and effort needed to overcome the information and complexity barriers mentioned above.

Energy market rules and tariffs

Energy market rules and tariffs are preventing expansion of options for household scale solar beyond rooftop solar (e.g., for those without solar-ready roofs or tenants) and dis-incentivising existing solar homes to remain connected to the grid. For example, high grid costs, make models like Solar Gardens more costly in Australia than in most parts of the US where the model originated.

Challenges facing community energy

Note this section is adapted from the National Community Energy Strategy.

There are a number of challenges facing the setup of community energy projects, the following section outlines the main six challenges.

Lack of stable renewables policy.

Community energy groups like other renewable developers also experience a lack of investment certainty when energy policy keeps changing. However, in this case the investors are mums and dads and other non-sophisticated investors who want to do the right thing.

No policy support for mid-scale renewables.

In Australia, all policy support for renewables has either been at the household or small-commercial scale (feed-in tariffs, SRES and rebates) or large-scale renewables (RET, Solar Flagship and reverse auctions). To date there has been no policy support for renewable energy projects between 1-30 MWs. As such there are very few projects of this size in Australia, despite the fact that there are significant benefits of community-scale renewables, such as reduced line losses and increased diversity of sites.

Grid connection not set-up for mid-scale renewables.

The current grid connection approval process for distributed generators above the 'deemed' connection limit of 5 or 10 kW is often onerous, unclear, provides no certainty for proponents and offers limited effective means of negotiation or appeal. This results in community energy projects:

- Incurring significant risk of high development costs and long delays after committing to proceed; and/or
- Not proceeding due to this high degree of uncertainty.

Hepburn Wind and Solar Share are two examples of community energy projects that have both experienced these challenges.

Lack of microgrid rules

Regulatory structures are inadequate or cumbersome to develop both embedded microgrids and off-grid community microgrids. The Stucco Housing Cooperative solar and battery microgrid is an example of a project that faced serious regulatory hurdles from the AER to local council regulations.

Legal structures

The majority of community energy models are based on the idea of many small community investor-members, however current regulations, specifically the Corporations Act makes it very difficult. In particular, small (<100kW) behind the meter solar projects with many community investors are not economically viable. This is because the compliance cost and requirements for projects with more than 20 investors contribute to making community energy projects financially unviable.

While the Cooperative National Law is more conducive to community energy projects, most lawyers and accountants are unfamiliar with cooperative law and as such it is extremely costly to develop a community energy project based on a cooperative model.

Internationally, the UK and US have both reviewed their laws looking at small community equity investments in many types of projects, including energy. The changes made ensure community organisations' operations are still regulated ensuring investor/consumer protection, however the costs to community energy projects are lower.

Changes to allow Equity Crowd Funding in Australia have focused on commercial ventures looking to scale, instead of being designed to support community enterprises that will likely always be community scale.

Access to upfront funding

The 2012 *Australian Community Energy Opportunities and Challenges* report³ identified the lack of early stage funding as one of the biggest barriers to community energy projects in Australia. The early stage of community energy projects involves taking a project from an idea to a tangible plan: taking it through the pre-feasibility, feasibility and planning approval stages to a point where the projects are investment ready. These stages are the most risky for any renewable energy venture. However, unlike private enterprise or government bodies, community actors do not typically have large reserves of capital upon which to draw. Once a community energy project is investment ready, they regularly secure the community finance needed sometimes in under 10 minutes. This shows there is no shortage of community members wanting to put their money into community energy projects.

UK experience, particularly in Scotland and Wales, shows that a relatively small amount of money in the form of a government grants make a significant difference to the development of community energy projects and a broader community energy sector.²

Modelling conducted by Marsden Jacobs and Associates suggests that the funding required to unlock community energy is in the order of 10%, but over time could leverage \$17 of community investment for every \$1 of government funding.⁴

What changes are needed?

Numerous changes are needed to remove the substantive barriers facing locked out energy users and community power projects in order to empower more energy consumers. These include streamlining the grid connection process for renewables projects into the distribution network,

³ Ison, N., Hicks, J., Gilding, J. & Ross, K. (2012) *The Australian Community Renewable Sector: Challenges and Opportunities*. Accessible at: www.cpagency.org.au/index.php?pg=resources

⁴ <http://cpagency.org.au/wp-content/uploads/2014/03/MJA-Report-to-CCE-Final-14Jun13.pdf>

reforming equity crowd-funding, creating micro-grid rules etc. Detailed policy recommendations can be found in the Repower Australian Plan and National Community Energy Strategy.

However, in this submission we will focus on two program solutions that we believe will have the greatest impact in empowering energy consumers:

1. Smart Energy Communities
2. Solar for All Rebate

Smart Energy Communities - Landcare for clean energy

Structured similarly to the National Landcare Program, the Smart Energy Communities Program is a 10-year program that works as follows:

Organisations	Establish 50 Regional Energy Hubs – not-for profit organisations in 50 regions (urban, regional and remote locations) across Australia. Start-up funding for two years and ongoing matched operational funding. These Regional Energy Hubs would support many local volunteer community energy groups in their regions. They will also assist with advice about ways that lower and modest income households can reduce their energy costs.
Programs and Funding	A Smart Energy Communities Fund would provide funding for community clean energy organisations (both those with and without start-up funding) to: <ul style="list-style-type: none"> • develop local renewable energy plans • develop, pilot and scale-up new models of community clean energy that enable community members, renters, low-income Australians, Aboriginal communities, farmers, small businesses and more to participate in and benefit from clean energy.
Capacity Building Network	A Smart Energy Communities Network would ensure that models, business plans and implementation strategies developed are shared across the 50 hubs established, as well as more broadly to regions and communities that were not successful in receiving start-up funding. The network would also be tasked with developing case studies, running trainings, and holding a bi-annual conference.

The Smart Energy Communities Program would leverage the efforts of existing volunteers, willing contributions from the private sector and community enthusiasm for renewables to support access for all Australians to innovative and emerging energy technologies such as solar and battery storage.

Unlocking more than community energy

The Smart Energy Communities Program would, through the Regional Energy Hubs, provide legal and technical expertise and start-up funding to help kick-start DIY clean energy projects in towns and suburbs across Australia. Projects eligible for funding in communities across Australia could include

- ‘Solar gardens’ for renters
- Farmer bioenergy hubs
- Low-income energy efficiency (including retrofits of existing social housing stock)
- Solar programs using innovative finance like council rates programs
- Community wind farms
- Local clean energy fair days and open days and more
- Community-wide plans to transition to clean energy like Kangaroo Island would like to develop.

However, while the Smart Energy Communities program has a focus on unlocking community energy projects, a well-designed policy can also address a range of barriers holding back a fair transition to clean energy.

Trusted information

Regional Energy Hubs could provide a “Home Health Check-Up” service, particularly for low-income households. They would become a ‘one stop shop’ for information and delivery service. For example, when you’re sick you go to the doctor and get a range of referrals, e.g. a prescription you can get filled at the pharmacy or a referral to a specialist. You also can get bulk-billed – they handle the financial transactions for you. Regional Energy Hubs could do the same but for energy.

- They would provide a portal to independent advice and information services for homeowners, landlords, tenants, small-businesses and more. The advice available could cover tariffs, power plans, tailored efficiency options, fuel-switching and accessing renewable energy options (rooftop solar and community power / solar gardens) and more. This advice process should build on the learnings from the Low-income Energy Efficiency Program around engagement of diverse groups and need for delivery through trusted channels. It would also overcome the complexity and confusion barrier.
- They would provide household energy retrofit services including audits, affordable finance, accredited local trades and service providers.

Overcoming market barriers

While there are fundamental market barriers facing locked out energy users, the good news is that there are models that can overcome these barriers, from social access solar gardens to rates-based financing. The bad news is that these models come with their own set of challenges, namely higher complexity and thus high transaction costs.

These socially beneficial models of clean energy involve multiple partner organisations, which add transaction costs, which in turn means these models are more expensive for end users. In addition, these models require a duty of care to vulnerable households and require significant face-to-face time to build trust. These models are unlikely to be delivered by the market alone.

The Smart Energy Communities program is designed with this in mind. There is funding proposed for developing and deploying programs, hubs with the expertise and social purpose to coordinate the public and private partners involved, and a network to share information about what works and what doesn’t.

Evaluating the impact

To ensure that public funding is being spent well, it will be essential for the impacts of the Smart Energy Communities and other people-focused energy programs to be evaluated. The Smart Energy Communities Network should be charged with developing and implementing an evaluation framework that has all Regional Energy Hubs and local energy projects reporting their impacts – benefits and costs. An online portal and map could help visualise these impacts, showing how the local transition to clean energy is flourishing across the country.

Already starting

The Smart Energy Communities Program is the basis of policy being implemented by all sides of politics:

- The [NSW Regional Community Energy Program](#) and
- The [Victorian Community Power Hubs](#) Trial.

Solar for All Rebate

To date most policies that have supported the uptake of rooftop solar have been targeted at home-owner occupiers. These policies have been extremely successful, empowering energy consumers, lowering carbon pollution and lowering electricity bills for both [solar homes and electricity consumers](#)

[more broadly](#). However, there have been few policies at scale targeting locked-out energy users. This must change.

The Solar for All rebate would work by providing a rebate explicitly to households that either cannot afford to put solar on their roof or do not have a suitable roof are eligible, including those who:

- Are low-income (means testing, eligible for current energy concession schemes etc)
- Rent
- Have a shaded roof
- Live in an apartment
- Are a first-home buyer

The Rebate would be between half and the full-cost of solar. The Rebate would support various eligible models of solar access, for example:

- a) A direct rebate for low-income owner-occupiers
- b) A rebate for a household to buy into a Solar Garden (see Solar Gardens resources below)
- c) A rebate split between landlords and tenants ([similar to Victoria](#) or using a social enterprise model such as [Sun Tenants](#))
- d) A rebate that can be claimed by social housing providers, as long as they can prove the tenant will get the financial benefit of the solar
- e) A rebate for apartment owners to help fund an apartment micro-grid (assuming regulatory hurdles can be addressed)

Applicants to the Solar for All rebate would need to provide a year's worth of electricity bills (to provide a baseline) and watch a short video about how they can get the most electricity savings from their solar.

Further resources

Ison N. (2018) [Repower Australia Plan](#). Prepared by Community Power Agency for Australian Conservation Foundation, GetUp!, Solar Citizens, the Nature Conservation Council, Environment Victoria, and 350.org.

C4CE (2015) [National Community Energy Strategy](#). Sydney

Rutovitz, J., McIntosh, L., Ison, N., Noble, E., Hicks, J., and Mey, F. 2018. [Social Access Solar Gardens for Australia](#). Institute for Sustainable Futures, University of Technology Sydney.

Further resources on the Social Access Solar Gardens can be found on the project website: <https://www.uts.edu.au/research-and-teaching/our-research/institute-sustainable-futures/our-research/energy-and-climate/social-solar-gardens>

Hicks, J. and Ison, N. (2018) '[An exploration of the boundaries of "community" in community renewable energy projects: Navigating between motivations and context](#)', Energy Policy. Elsevier Ltd, 113(June 2016), pp. 523–534. and

Mey F., Hicks J. and Ison N. (2018) Taxonomy of Citizen and Community Energy: Analysing the drivers, models and real world outcomes of community and citizen energy initiatives in Australia, Germany, Denmark and Scotland. Paper presented at the IPSA Conference in Brisbane July 2018.

Community Power Agency. [Renewables for All. Resources](#).

Lane T., Hicks j., Memery C. and Thompson B. (2015) [Guide to Community-Owned Renewable Energy for Victorians](#). Melbourne.

C4CE (2017) [Small-Scale Community Solar Guide](#). Sydney.

Further links:

<http://c4ce.net.au/>

www.cpagency.org.au

<https://www.mefl.com.au>

