Victorian Community Solar Alliance

Submission to

Parliament of Victoria

Economic, Education, Jobs & Skills Committee

Inquiry into Community Energy Projects

September 2016

This submission is supported by members of the Victorian Community Solar Alliance:

1. **Ballarat Renewable Energy and Zero Emissions (BREAZE)**
2. **Bendigo Sustainability Group**
3. **Energy Innovation Cooperative**
4. **Geelong Sustainability Group**
5. **Goulburn Valley Community Energy**
6. **Locals Into Victoria's Environment (LIVE)**
7. **Macedon Ranges Sustainability Group**
8. **Melbourne Community Power**
9. **Moreland Community Solar**
10. **Moreland Energy Foundation Limited (MEFL)**
11. **Solar Citizens**
12. **Surf Coast Energy Group**
13. **Totally Renewable Yackandandah**
14. **Yarra Community Solar**

The Victorian Community Solar Alliance (VCSA) thanks you for the opportunity to present our views to this Inquiry. The VCSA comprises 14 organisations committed to developing a sustainable future through both the involvement of the community and the use of solar energy. We have come together to represent our common interests, and this paper documents our position on the many important issues raised by the Terms of Reference of this Inquiry. Individual member organisations will also be lodging submissions that will focus on their own particular experience and issues.

By way of background we believe that it is appropriate for the Committee to have an understanding of the type of community solar projects that our groups intend to undertake. These are best described as either investment model projects or donation model projects. The workings of these two models are described in Appendix 1.

Term of Reference 1 - look at the potential role of co-operatives, mutuals, social enterprises and community ownership in the energy sector

Each of the organisational types mentioned in TOR 1, i.e. co-operative, mutual and social enterprise, is a specific type of legally constituted, formal organisation, subject to regulatory oversight, financial auditing, management rules and standards. Each is publically accountable in ways similar to corporations and companies; each is much more publically accountable than individually run business operations.

The crucial difference between co-operatives, mutuals and social enterprises compared to corporations, is that the former have as a core and integral feature, social goals and values beyond the corporate priority goal of producing maximum financial returns for shareholders/ owners.

Co-operatives (both trading and non-trading), mutuals and community-run social enterprises (usually companies limited by guarantee) aim to bring people together for a shared purpose, to work closely together to deliver social or environmental outcomes. Financial goals and outcomes are there, are important, but are not primary.

This “bringing people together for a shared social and/or environmental purpose” is their strength, their “niche” in a crowded market.

Co-operatives and community-run social enterprises are a relatively safe investment for governments. There is institutionalised organisational oversight and accountability. There is also community oversight and direct accountability to the local community, which can be even more powerful.

“Community ownership in the energy sector” is not in itself a type of organisation. **Co-operatives, mutuals, and social enterprises are vehicles for community ownership in the energy sector.**

Community owned energy generation is happening within that accountable, ethically based organisational framework of mostly Co-operatives and social enterprises. The highest priority goals are to deliver social and environmental outcomes.

Financial sustainability is an essential priority for all of them. Profitable financial returns for local community participants are priorities for some. But financial gain is not **the** primary driver. Locally based financial returns provide further social benefits. The multiplier effect is ongoing and significant. The finances are one part of achieving those broader social goals.

Community energy is a fast growing niche in the energy market. It's needed. It's happening because it is needed. It's being driven from below, from communities in search of better answers to their needs and their priorities.

The currently dominant energy industry structure is failing to meet community needs and priorities.

This is a failure in the current market. Co-operatives, mutuals and social enterprises are addressing that market failure via a range of community owned energy models. They have the potential to fill that gap and address those market failures in a way that no other business can. They have the potential to provide wider social and environmental gains in a way that no other business can.

With some further focused government regulatory and financial assistance Co-operatives, mutuals and social enterprises will be able to address that market failure ethically, with positive social and environmental outcomes, more efficiently, than is possible in Victoria at the moment. Other states have done more than Victoria so far. Other countries have been doing it for years. We can and should be doing more.

Term of Reference 2 - investigate the benefits of community owned energy programs

Community owned energy projects result in many benefits. The more significant are listed below -

i. Securing new sources of funding for renewable energy.

There are few opportunities for individuals to directly invest in renewable energy. Community Solar Organisations (CSOs) provide such an opportunity bringing new money into renewable energy.

ii. Reducing greenhouse emissions

CSOs aim to accelerate the implementation of renewable energy and in so doing reduce greenhouse gases earlier than would otherwise be the case.

iii. Creating greater engagement of community participants with energy issues and environmental values.

By their nature, CSOs involvement with the community expands people's awareness of climate change issues and the opportunities available to deal with them.

iv. Developing new renewable energy capacity through creating scalable, replicable ownership and operating models.

Current CSOs are well aware that they are early adopters of this form of social enterprise and are keen to ensure that their approach to sustainable.

v. Increasing and mobilising public support for the renewable energy industry more broadly.

CSOs advocate for and publicise the benefits of renewable energy.

vi. Delivering (often local) sustainable employment, education and training opportunities.

The greater the deployment of renewable energy in the community the larger the sector grows in Victoria, creating a variety of employment opportunities in the state.

vii. Building community resilience, empowerment and pride.

By working together to achieve a common good a local communities grow and the more that these activities are undertaken the stronger the community becomes.

viii. Supporting regional communities and fostering local economic development.

Community energy projects in regional communities bring both investment and added income back into their community.

ix. Creating steady income streams to fund community development or environmental projects over the 25+ year time horizons.

In a number of instances CSOs use the donations model as a means of creating an income stream for a local community development or environmental project.

x. Enabling renters, apartment dwellers and people with unsuitable roofs to also access the benefits of renewable energy generation;

There are many people who do not have the opportunity to install solar panels where they live as they don't own the property or the property isn't suitable for such an installation. CSOs provide an opportunity to directly participate in this necessary change in the way energy is generated.

Term of Reference 3 - investigate the best ways to encourage the uptake of community energy projects

Community solar organisations (CSOs) are run by volunteers. Whenever the government wishes to engage with a CSO it should bear in mind our capacity to perform tasks will be determined by both the range of skills available to the organisation as well as the time that the volunteers have at their disposal. Another very important point to consider is that, without diminishing the government's responsibility to protect the interests of Victorians, it is reasonable to assume that a CSO has the well being of the community at the forefront of its considerations and will not seek to exploit others.

It follows that without opening up any possibility of creating legal or safety risks, everything should be done to remove obstacles to community organisations successfully undertaking renewable energy projects.

Structures that served a different commercial paradigm of energy generation and distribution in the past must be modified to remove irrelevant imposts to the different models we need to facilitate accelerated progress towards zero carbon energy generation.

Instead of needing to reinvent the wheel each time a small community group wishes to embark on a project with regard to legal and financial structures, great benefit would be provided by a range of model templates to suit various operational plans.

Work which requires high level business, legal, and accounting skills is difficult and attracts considerable expense. Government funding and support to alleviate start-up tasks and cost would be of enormous assistance.

There are now some existing resources such as the very welcome Victorian Government's "Guide to Community-Owned Renewable Energy" which provides an introduction to many of the issues faced by Community Solar Organisations. In addition, the VCSA welcomes recent advice that our application for funding under the New Energy Jobs Fund (NEJF) has been successful. This grant will support the development of a range of templates for legal documents required by CSOs across Victoria; as well as the development of a web portal. Workshops across the state to assist CSOs to use these tools have also been funded.

A proposal to produce a sales and marketing toolkit was also included in our NEJF application however funding was not provided for this vital and needed tool.

A range of options for the business model need to be tailored to suit the diverse aspirations of community groups, including but not limited to donation, co-operative, not for profit, and investment. The larger the range of options the more likely it will be that individual group goals and sensibilities will be achieved.

Impartial financial modelling in the form of a spreadsheet tool that allowed for different inputs dependant on the investment structure combined with host site usage profile along with supply and feed-in tariffs would enable objective selection of suitable ownership vehicles. We are aware that such a model is near completion thanks to a grant provided by ARENA and we welcome the development of this tool which we understand will be made available to CSOs.

The restriction that a CSO can only sell surplus energy to an authorised retailer limits the financial attractiveness of any CSO proposal to a potential customer. It is another example of energy rules and regulation that were appropriate at the time they were devised, as they were reflective of the prevailing energy generation technology of the time. However the continuation of such an approach limits the speed that Victoria can meet its renewable energy targets.

Rather than relying on small groups to initiate communication strategies and information distribution platforms it would be extremely helpful for independent but interlinked local/regional *Community Powerhouses* to provide information hub/s that community groups can access to ensure accuracy and currency of content.

Once in place and in addition to an integrated information portal there is scope for *Community Powerhouses* to roll out a state-wide workshop/roadshow program to educate and enthuse groups to consider local/regional projects in order to ensure as widespread distribution of sites as possible.

Beyond commercial, technical and environmental considerations an information package should be developed to outline the potential advantages and sense of self-reliance for community groups taking control/ownership of their energy demands.

Communication, which may be in the form of case studies, can drive the understanding that community dividends from local energy projects are multivalent. A financial imperative in the form

of monetary distributions to local interests may be more reliable and controllable than needing to depend on grant applications.

Term of Reference 4 - investigate the ability to expand community energy projects outside of solar and wind power

Calculating the financial costs and returns on investment for both solar and/or wind, essential parts of establishing any community energy project, is now relatively straightforward. It is probably the easiest part of planning any project.

There are still other very significant hurdles to establishing community energy projects in Victoria: regulatory restrictions, access to expertise, the need for standardised and broad acceptance of the necessary documentation such as leases and power purchase agreements, achieving equitable access to start-up funding so as not to provide impossible barriers to mostly volunteer organisations.

Once these barriers above have been addressed, and once the many groups working towards community energy projects have built their capacity, then other forms of energy generation will and should be explored.

It is hard enough to work out the organisational and financial viability of a project using known data from mature industries such as solar and wind technology. Finding investors when cost and ROI of newer technologies is not known would be much harder.

But give the sector time. We will be more interested once we have built our financial and organisational capacity, and our communities have experienced the financial, social and environmental benefits from a few more of our own locally developed and locally owned community solar or wind projects.

Term of Reference 5 - review the best practice models of other Australian and international jurisdictions for supporting community ownership options in the energy sector

Types of projects

There are currently very limited options for Community Solar projects in Victoria, and indeed Australia. The sole Community Solar model that is commercially feasible in the Australian energy scene at present is known as “behind the meter, below the load”. See box 1.

While communities are motivated by a great deal more than commercial feasibility and success, they still have to be financially viable. Communities have identified a very narrow niche that is open to them and within it they are working hard to set up successful projects. Communities have successfully implemented projects using the donations-model for community solar, while the implementation of an investment model project has yet to be achieved in Victoria.

In contrast in Germany, models other than “behind the meter, below the load” have been available to communities for many years resulting in private individuals, farmers, cooperatives and small enterprises owning a significant stake in Germany’s solar power industry. According to Co-power

Europe, "around 15,000 MW of installed capacity in PV sector is in community hands, which is nearly 50% of the total installed PV capacity."[1]

The high level of community involvement in renewable energy projects in Germany has been facilitated by a very accessible funding system for building new capacity, based on a feed-in-tariff. This system has offered a wider range of models for community solar projects than are available in Australia, including solar farms comprising large numbers of ground-mounted solar panels in rural areas. Here are two examples of community-owned solar farms in Bavaria in southern Germany, the first on the outskirts of the city of Augsburg, the second located next to the small village of Holzgrünz: http://www.lew-buergerenergie.de/; and http://www.hoschmi.com/der-pv-park/

Box 1. Behind the meter, below the load

Community Solar projects are limited to roofs with very specific characteristics:

- ✓ the building must have the right orientation, size and be structurally sound
- ✓ preferably the building will be owned by the occupier - to avoid complex issues of risk relating to tenancy in a solar project with a life of 7 years or more.
- ✓ the owner & occupier, or roof host, will have sufficient electricity demand to consume on-site virtually all of the solar power generated by the roof-top solar array, preferably 7 days a week.
- ✓ all or most of the power must be consumed on site to avoid grid connection issues and costs and to avoid selling the solar power into the grid at the current very low Feed-in Tariff.

In the case of investment model CSOs

- ✓ the CSO must be able to offer the roof host an attractive electricity tariff – to compete with the often absurdly low tariffs available to commercial and industrial enterprises
- ✓ the CSO must get sufficient income from the sale of the power to the roof host to cover the capital costs of the solar array over time.
- ✓ the tariff paid must also allow for payment of a small dividend to members/shareholders.

Types of organisations

Communities are using one of a range of organisational structures to support community ownership of "behind the meter, below the load" solar projects in Australia, not all of which exist in Victoria at present, so far as we are aware.

In an international survey of 26 Community Owned Renewable Energy projects Nicky Ison & Jarra Hicks* classify community energy projects into three organisational types. In Table 1 we use their classification to describe the organisational structures being used by community solar groups in Victorian and Australia.

[1] http://www.communitypower.eu/en/germany.html

Community Energy Organisation Type	Characteristics	Victorian Community Solar groups	Other Australian Community Solar examples
Community organisation	Usually Geographically defined community. Includes not-for profit structures like incorporated associations, trusts, community institutions (schools, kinders, clubs, churches). Local community can be members and/or beneficiaries. Projects small (5kW-1MW) Generate energy &/or income. Funding through grants, donations, loans. Not through equity or shares.	Bendigo Sustainability Group Ballarat Renewable Energy and Zero Emissions (BREAZE) Macedon Ranges Sustainability Group Surf Coast Energy Group Energy Innovation Cooperative (Gippsland, a non-trading co-op). Geelong Sustainability Group (parent group of GS CORE below)	CORENA
Community investor vehicle	Community can be geographic and/or interest-based. Initiated by 'purpose-built' cooperative or company to develop, own and operate project/s. Community involved as members-owners-investors. Internationally, project range is 50kW-10MW. *At present Community Solar limited to bottom of range in Australia – up to 99kW.* Funding from, at least in part, investment of money by the defined project community. Funds can also be from grants, loans (and sometimes equity from institutional investors).	Moreland Community Solar Cooperative Yarra Community Solar Cooperative Melbourne Community Power Geelong Sustainability CORE *(NB both MCP and GS CORE have not yet made a final decision about becoming a co-op or other)*	Pingala - Sydney
Community-Developer Partnership	Projects larger, often 5-100MW. Involve a partnership between either of the two above and a renewable energy developer. Community can own part of a large project that the developer is establishing.	Macedon Ranges Sustainability Group in discussion with a partner to develop a wind project Goulburn Valley Community Energy	Clearsky Solar Investment – NSW

Table 1 Types of Community Energy Organisations and Victorian and Australian updated from the framework developed by Nicky Ison & Jarra Hicks*

* In forthcoming paper "Navigating between motivations, theory and the practical realities of community renewable energy"

Term of Reference 6 - investigate the challenges to community energy projects in metropolitan areas

We believe that there are 7 challenges that community solar groups are grappling with. All of them affect groups in metropolitan areas as well as those in the rest of Victoria. These are described below -

i. Start up Issues

The 'behind the meter, below the load' model that Community Solar Organisations (CSOs) are using effectively makes us social enterprises that will trade as a provider of finance to businesses, enabling them to 'go-solar'. We begin with little or no initial capital and we use volunteers as our source of labour. The challenges associated with these issues are exacerbated as it is highly unlikely that the skill set of the volunteers perfectly matches the skill set needed to start up such a business.

To date, some of these start-up issues have been dealt with thanks to the State Government issuing the Guide to Community-Owned Renewable Energy which provides an introduction to many of the issues that a CSO will face. In addition the State Government, through the New Energy Jobs Fund has provided 6 members of the Victorian Community Solar Alliance (VCSA) with a grant of $164,000 (to be auspiced by MEFL, another VCSA member) that will enable a number of business tools to be generated that will assist CSOs in conducting their business in a professional manner.

However, the skill sets issue still remains as any small business needs a range of skills and experience that are unlikely to be completely provided by the volunteers in an organisation.

A further issue associated with volunteers is that the pace at which business is conducted is inevitably slower than that of a staffed enterprise.

ii. Maintenance and Development of Community Involvement

One of the great benefits provided by a CSO is the enhancement of community engagement that comes with involving yourself in a local activity that is for the good of that community. Establishing and sustaining ongoing involvement of volunteers as well as engagement with members and the wider community though is not an easy task and requires constant attention irrespective of the location of the organisation, be it a rural, regional or metropolitan organisation.

iii. Finding the right roofs

The 'behind the meter, below the load' model severely limits the range of roofs suitable for community solar projects. Identifying roofs that meet the strict criteria can pose a challenge.

Large roofs that are suitable are often occupied by large businesses that have negotiated a very low tariff with their electricity retailer. Using the investment model, we must be able to offer the roof host an attractive electricity tariff, while getting sufficient income from the sale of the power to cover the capital costs of the solar array and allowing for payment of a small dividend to members/shareholders. A large business on a low tariff will not fit the bill.

A second challenge is finding the first customer or roof host. The investment model that we are using is new and a business signing a long term electricity supply agreement with any organisation,

let alone one that is community based, involves them taking that business on trust. Without successful Victorian projects up and running to point to CSOs have yet to demonstrate that they can conduct business of this type and that they will be able to do so for the time it takes for ownership of the solar installation to transfer to the roof owner.

Interstate experience has shown that it is hard for CSOs to obtain the initial roof host that demonstrates to the market that a CSO is a legitimate business vehicle for solar installations. In contrast, experience in New South Wales demonstrates that obtaining investors for community solar projects is not currently an issue as all projects have been fully subscribed in very reasonable time.

iv. Building Ownership

The target customers of CSOs are often medium to large businesses with significant roof space and an energy usage of over 40 kWh during day light hours. Often these businesses rent the buildings which they occupy. In these circumstances entering into a long term supply agreement can be challenging from an equity perspective as there are many issues surrounding who bears the risks, shares the costs or reaps the rewards associated with the solar installation.

v. Sale of Surplus Renewable Energy

Often the roof of a potential client has a capacity for panels that generate more energy than is used by the occupant. In those circumstances usually the system will be sized to fit the current occupant's energy profile as it is not economically viable to sell the surplus energy to the occupant's retailer.

Two factors are in play here. First, it is not economically viable for CSOs because the Victorian Feed in Tariff is too low. Second currently regulatory arrangements do not permit us to sell energy on a peer to peer basis (sometimes called virtual net metering).

The observation that we make here is that clearly the legal and procedural arrangements supporting the local energy market have been structured around the prevailing technologies, in particular large coal fired power stations. We now know that this source of energy is significantly detrimental to life on this planet and an alternative form of energy is possible that is not harmful.

One of the roles of government in this switch is to anticipate the legal and procedural changes that will facilitate a speedy, efficient and effective transition and no doubt this Inquiry is part of the process. Effectively dealing with feed in tariff and peer to peer trading issues are important steps in this transition.

vi. Solar Farms

A number of CSOs are examining the possibility of establishing a solar farm of some size. The current regulatory exemption limits the size of these farms to 5 MW and prohibits the sale of the energy directly into the National Energy Network. We are not aware of the position that the Department of Energy will be taking on this matter when it concludes its Review of the General Exemption Order but it is clear that prohibitions of this type will constrict the growth of the community energy sector in the medium term.

vii. Competitive Markets

We are concerned that Distributors have at times imposed seemingly costly and unnecessary requirements on new solar installations. Further, some existing operators in the energy market conduct activities in both the regulated market and de-regulated energy market, creating the opportunity to unfairly access privileged regulated market information.

Term of Reference 7 - investigate ways to support communities to surmount challenges to community owned energy in metropolitan areas

This section of our submission offers proposals to address the challenges facing community energy projects described in 6. above. The VCSA believes there are six ways that the Victorian Government could support community ownership for solar developments:

a. Policy to support for community energy

- Adopt a target for community energy, including community solar. The VCSA welcomes the Victorian Government's announcement of Victorian Renewable Energy Targets (VRET) of 25% by 2020 and 40% by 2025. We strongly support the proposal for a 10% carve-out of the 5400MW VRET for community energy.

  Setting a target for community energy will help to provide a focus for the regulatory, resourcing and forms of support that are necessary to ensure that community energy can reach its potential.

b. Regulations and licensing

- Ensure that Community Solar Organisations are exempt from the requirement for a complex and costly licence to sell electricity to the businesses on whose roofs their projects are located
- Ensure that businesses that are not community-owned do not claim to be, or use language in their advertising and marketing that implies community ownership when this is not the case
- The licensing and regulatory structure of the energy industry in Victoria reflects the technology that dominated the industry when these rules were established. However we now understand that this centralised and capital intensive technology is harmful to life on our planet and energy sources that are decentralised and carbon neutral are taking their place. These changes need to be accelerated rather than hindered. Unfortunately our regulatory and licensing arrangements are hindering this change. Specifically the inability to sell into the National Energy Market or to any other 3rd party is limiting the financial attractiveness of renewable energy in general and community solar organisations in particular.
- As electricity distributors expand their non-regulated business activities to include renewable energy generation, it is critical that the unregulated business is sufficiently separated from the regulated business so as to not access privileged information from the regulated business for commercial use in the unregulated business. Failure to implement adequate safe guards by electricity distributors and failure by government to ensure compliance of these safeguards will provide an unfair business advantage to electricity distributors compared to other businesses trading in this market space.
- We would like to see more transparency in the requirements imposed by distributors on new solar installations and an easy to access review process with penalties imposed if it can

be demonstrated the distributors requirements are motivated to be an obstruction and not justifiable on safety or operational grounds.

c. Financial support

Start-up

- Provide grant funding to support community solar groups to become established and to investigate feasible options for projects, through a fund clearly targeted to community energy groups

- Funding should be available through a simple process with a quick turnaround; and which allows straightforward reporting reflecting the fact that, as community solar organisations, we rely entirely on volunteers to undertake this work.

  To date funding for community solar has been available through grants from some Councils to some local groups, though this is the exception rather than the rule. More recently some funding has been available through the New Energy Jobs Fund (NEJF). The VCSA is a recipient of an NEJF grant, as are two members of the Alliance. These grants are most welcome and will provide much needed strategic support.

  However many of our members applied for grants under this program and were not successful. Under the NEJF small community organisations with a handful of volunteers found themselves competing for grants against businesses, universities, and other larger staffed and comparatively well-resourced organisations.

  We would urge the Government to establish a grant program that is tailored to support the start-up of community energy projects and takes into account both the voluntary nature of groups involved, the scale of projects as well as their location.

New models for community solar

- Develop funding mechanisms to support the establishment of a wider range of community solar projects than is currently feasible, including:
  - A Community Feed-in-tariff to enable surplus solar energy generated by community solar projects to earn a reasonable return
  - A Community Feed-in-tariff would open a new and attractive model of community solar – the community solar farm comprising a large number of ground-mounted solar panels.
  - Simple mechanisms to allow community solar organisations to sell energy directly into the National Energy Network would also open up options for solar farms
  - Peer to peer trading of renewable energy (also known as virtual net metring)

    As a first step the Government could set up some trials using community projects to pioneer peer to peer trading. For example, the Government might have a building with a large roof that could accommodate a large solar array, but which has low energy consumption. Nearby it might have another, smaller building with large energy use. This scenario is crying out for a trial of peer to peer trading using a local community solar organisation.

d. Focused support for community renewable energy: Community Powerhouses

- Establish 8 - 10 *Community Powerhouses* across the state to provide ongoing support for communities seeking to establish and operate community energy projects

  The VCSA strongly supports the proposal for *Community Powerhouses – who's role would be to enable households, communities and local businesses to lead on clean energy.*

  The Alliance as a whole, as well as many of our members, have received assistance and support over the last few years from the Moreland Energy Foundation. This support has included advice, information, feedback, practical support such as meeting space and phone conference facilities etc. MEFL organised a small community energy conference which began to establish the network of CSOs, which has gradually evolved into the VCSA. It is clear to us that the support so far provided has made a significant difference for groups at the start-up stage and beyond. MEFL has assisted groups as we have painstakingly walked through the process of setting up, engaging with the community, defining the type of project that we wish to undertake and now, navigating our way through the complexities of getting a project off the ground.

  MEFL has a much wider role in the Moreland community also providing assistance to individual households, community organisations and local businesses to save money by becoming more energy efficient and by installing renewable energy where appropriate.

  MEFL's independent structure ensures that it remains focused to its mission of *"an active, inspired community tackling climate change with sustainable energy solutions."*

  The valuable role that MEFL plays in Melbourne's inner north could be replicated across the state through the establishment of 8-10 independent but interlinked *Community Powerhouses.* We believe this would really help to drive the development of community energy in Victoria. It is vital that the *Community Powerhouses* are equitably spread across all parts of the State.

  Within Government, the responsibility for supporting the growth and development of community energy, including administration of grant funding, and the establishment of Community Powerhouses would logically rest with an expanded Sustainability Victoria.

e. Finding the right roofs for community solar projects

State and local Government roofs

- Establish a system that facilitates the establishment of community solar projects on the roofs of appropriate Government buildings

  For example the recently announced *Greener Government Buildings Program* could include mechanisms to give priority to community solar projects where a local community-based organisation is able to participate. Were a CSO to be involved it would be appropriate that the applicable processes recognise the volunteer based nature of the organisation. In addition it is likely that the mandatory payback period of 5 years be extended with the specific period to be determined once the project details are analysed.

- Encourage local Governments and local authorities to work with community solar groups to identify suitable roof hosts

- CSOs could be used to finance solar installations on low rise State-owned Housing and housing co-ops.

Private sector roofs

- Develop standard terms for commercial leases that deals with the installation of solar panels

  The VCSA urges the Government to work with the Property Council and the Solar Council to develop a framework for equitably sharing the costs and benefits of installing solar between building owners and their commercial and industrial tenants.

f. Volunteer-friendly processes

To support the development of Community Energy to reach its full potential it is vital that Government adopts volunteer-friendly processes and approaches for all interactions with community solar organisations.

Appendix One: Business Models Case Studies

Yarra Community Solar & Bendigo Sustainability Group

Yarra Community Solar Co-op Ltd. (YCS) was established as a registered trading co-operative in 2014. The intended business model for YCS is illustrated in Fig 1 below along with a description of the major activities.

Fig 1: Business model Yarra Community Solar

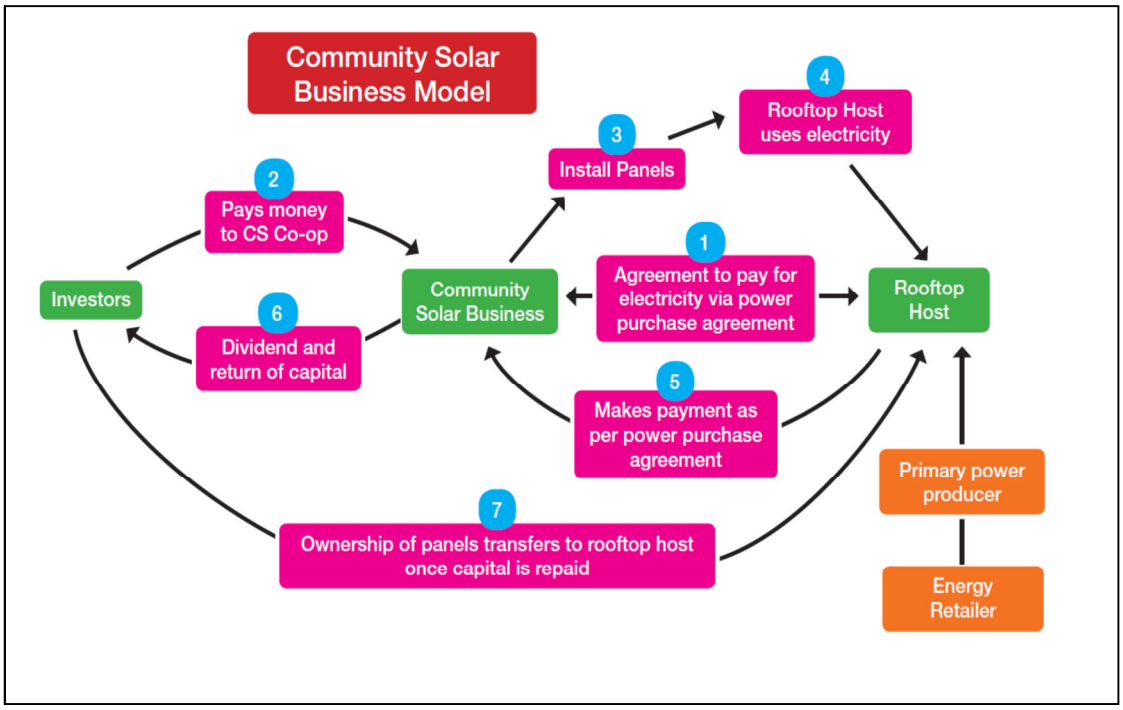
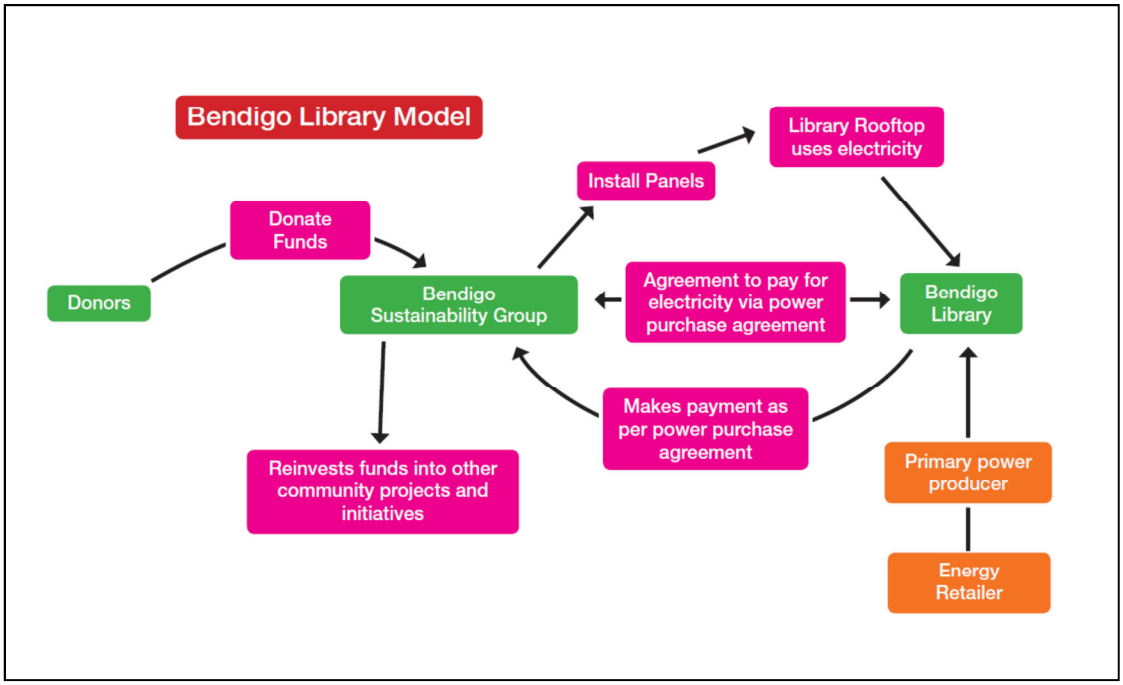


Fig 2: Business model Bendigo Sustainability Group



The business model planned by Yarra Community Solar is as follows:

1. **Yarra Community Solar (YCS) forms agreements with roof owner.** YCS will enter into a solar power purchase agreement (SPPA) with a suitable roof owner where YCS installs solar panels on the roof. The roof owner will pay YCS for electricity generated by these panels, as determined by a Power Purchase Agreement.
2. **Community Investment.** Members of the community will be invited to become members and shareholders of YCS, providing investment for the capital required for individual solar installation projects. Under Co-operative rules members will be able to purchase shares up to no more than 20% of the total share value. YCS envisages a minimum shareholding of around $2,500; and other Coops envisage different minimum shareholdings (e.g. Moreland Community Solar's minimum shareholding will be $500).
3. **YCS buys, installs and owns solar panels.** YCS will use the funds provided by the community to purchase and install the solar panels as agreed. The equipment and the installers will be selected from a panel of suppliers selected by YCS. The criteria for selection of suppliers and a list of those selected will be shown in an Appendix to the project Disclosure Document.
4. **YCS sells power to roof owner (and the grid).** The panels generate electricity that is used by the roof owner who pays YCS at a rate per kW specified in the SPPA .
5. **YCS Receives revenue from power sale.** Information from the inverter will be electronically sent to the admin service provider who will generate an invoice, deduct funds from the roof owner's bank account and will transfer them to YCS's account. Surplus electricity will be sold back to grid at the prevailing feed in tariff**.**
6. **YCS Pays dividend and returns capital to community investors.** The only costs YCS anticipate incurring following the installation of the equipment are maintenance at 1% of capital cost per annum, a community donation at 2% of revenue per annum, annual admin service cost of $5,500 in the first year, annual audit fees, some marketing and incidental costs and tax. An indicative profit and loss statement is shown below. Out of the anticipated profits YCS intends to pay an annual dividend and an annual return of capital in accordance with the policy described below. The intent is to return capital to investors as quickly as possible.
7. **Ownership transfers from YCS to roof owner.** Once YCS has made sufficient profits to fully pay all debts related to the project and return all funds provided by project investors, in accordance with the terms of its SPPA with the roof host, ownership of the equipment will transfer from YCS to the roof host. YCS will then extinguish the shares for this project. The timeframe involved will be dependent upon the capital cost of the equipment, the energy use of the roof host and the rate for kW paid. It is hoped that this transfer will occur in about 7 years.
8. **YCS and Community Involvement.** Each year YCS intends to donate 2% of gross revenue to a community project selected by the Board. The project will be one that is predominately conducted within the City of Yarra and will not necessarily have an environmental focus. Details of the project selected will be included on the YCS website.
9. **Dividend and Capital Return Policy of YCS.** On the assumption that the financial returns for the project are generally in accordance with plan, YCS will pay an annual unfranked dividend to shareholders similar to a competitive term deposit rate of return as identified on Canstar's website. It is the intention of the YCS Directors that capital will be returned to shareholders annually and as quickly as is financially prudent. Both the dividend and the return of capital requires formal approval by members at the annual general meeting of shareholders.

Yarra Community Solar Anticipated Financial Outcome in a full year

Once the equipment is installed and operating the financial affairs of YCS should be straight forward and a full year's Profit and Loss Statement will look something like -

Sale of Electricity	31,320
Membership Subscriptions	510
Total Income	**31,830**
Less Operating Costs	
Administration	5,500
Audit fees	1,500
Maintenance	1,665
Depreciation	14,520
Community Fund	637
Other costs	1,000
Total Operating Costs	**24,822**
Net Profit	7,008
Less Tax Payable	242
Net Profit after Tax	**6,766**

Notes

1. Other costs includes an allowance for advertising, directors insurance, fees for lodging returns with Consumer Affairs Victoria and any unanticipated costs.
2. Administration costs and equipment maintenance would be the subject of supplier agreements.
3. Each year YCS will make a Community Fund payment equal to 2% of revenue to a community organisation providing services in the City of Yarra.
4. YCS pays tax at a rate of 28.5% however the tax payable is significantly less than 28.5% of net profit ($1,997) due to tax depreciation provisions available to small businesses.
5. The cash surplus anticipated in the first year is significantly greater than Net Profit after Tax as Depreciation is a non-cash expense.