Power in Partnership

A guide to developing a community stake in renewable energy

Community Power Agency





This Guide was written for industry, local government and community stakeholders seeking options for communities to directly participate and benefit from mid- to large-scale renewable energy and related infrastructure projects. It outlines a range of models that can be used to enable community legal and/or financial participation and sets out practical steps for implementation, from understanding community needs and improving social equity, to navigating potential risks and barriers.

It consists of five parts:

PART 1: Community partnerships in Australia's shift to renewable energy

PART 2: Nine models for community partnership in renewable energy

PART 3: How to deliver community partnerships

PART 4: Navigating barriers and risks in community partnerships

PART 5: Evaluating and improving social equity outcomes of community partnerships

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This Guide was prepared by Community Power Agency in collaboration with Akin Consulting. Community Power Agency is a not-for-profit organisation with a mission to put community benefit at the heart of Australia's renewable energy shift. Through collaboration, research, capacity-building and advocacy, we share knowledge and encourage community participation in energy policy and project development.

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Please note:
The information presented in this Guide is general in nature and does not constitute legal or financial advice. Organisations interested in implementing a community partnership model should seek independent legal or professional advice tailored to their specific circumstances.

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Glossary of terms

Ancillary services - Consumer batteries or controlled load that can rapidly charge or discharge to help stabilise frequency or voltage when required by the grid.

Capacity services - Where customers commit their storage or demand device to be available during a window of time to provide guaranteed grid capacity.

Co-development Agreement - A legally binding contract between two or more parties that sets out how they will jointly undertake the early stage development of a renewable energy project.

Co-investment - Where community members or a community entity contribute capital to a project and receive a proportional share of financial returns, rights or benefits.

Consumer energy resources (CER) - Small-scale, 'behind-the-meter' energy technologies owned or controlled by households and businesses, such as rooftop solar systems or batteries.

Contestable retail market - An electricity market in which customers can choose between multiple competing retailers.

Co-ownership - Where community members or a community entity jointly own and govern a project, sharing rights, responsibilities, risks and proportional financial returns.

Demand-response - Actions and programs that encourage electricity consumers to adjust their energy use by shifting, reducing or timing their consumption.

Distributed energy resources (DER) - An umbrella term that includes behind-the-meter CER and front-of-the-meter small-scale energy resources (such as community batteries) connected to the distribution network.

Distribution network service provider (DNSP) - An organisation responsible for owning, operating, and maintaining the electricity distribution network, including power poles, wires, transformers, and meters.

Equity joint venture - A partnership in which two or more parties co-invest capital in a shared entity or project, holding ownership interests (equity) in proportion to their contribution or agreed terms, and sharing risks, returns, and governance responsibilities as set out in a shareholder, partnership or joint venture agreement.

Heads of Agreement - A preliminary non-binding document that sets out the main terms and intentions of parties before a formal contract is finalised.

Impact and Benefit Agreement (IBA) - A legally binding contract between a developer and local groups or First Nations communities that outlines the terms of a development project, aiming to maximise local benefits while mitigating environmental and social impacts.

Joint and several liability - Where each member of a partnership is individually and collectively responsible for the partnership's obligations, meaning that, in the event that the partnership cannot meet its liabilities, any one partner may be required to cover the full amount, not just their share, regardless of who incurred the obligation.

Liquidity facility - A financial arrangement that provides short-term access to funds to ensure a project or organisation can meet its payment obligations as they fall due, particularly during periods of temporary cash-flow shortfall to manage timing mismatches between revenues and expenses, and help maintain financial stability and lender confidence.

Memorandum of Understanding (MoU) - A written agreement between two or more parties that outlines a preliminary, often non-binding, understanding of their relationship, collaborative goals, and responsibilities.

Option Deed - A legally binding agreement that gives a party the right, but not the obligation, to acquire an equity stake in a project at a later date on pre-agreed terms.

Power Purchase Agreement (PPA) - A long-term contract that sets the price and conditions for selling electricity over time. The contract is between an electricity supplier (for example, a solar or wind developer) and a buyer (which could be a utility, business, government agency or any other large electricity consumer).

Producer co-operative - A democratically governed co-operative entity in which citizens or local actors collectively establish, own and operate productive assets, with members recognised as producers through joint ownership, and with control and financial returns allocated according to co-operative principles.

Renewable Energy Zones (REZs) - Areas identified by governments as suitable for developing large scale renewable energy projects and that allow coordinated and efficient investment in generation, storage and transmission networks.

Retail investors - Individuals who invest money in financial products, and who are not classified as professional or sophisticated investors.

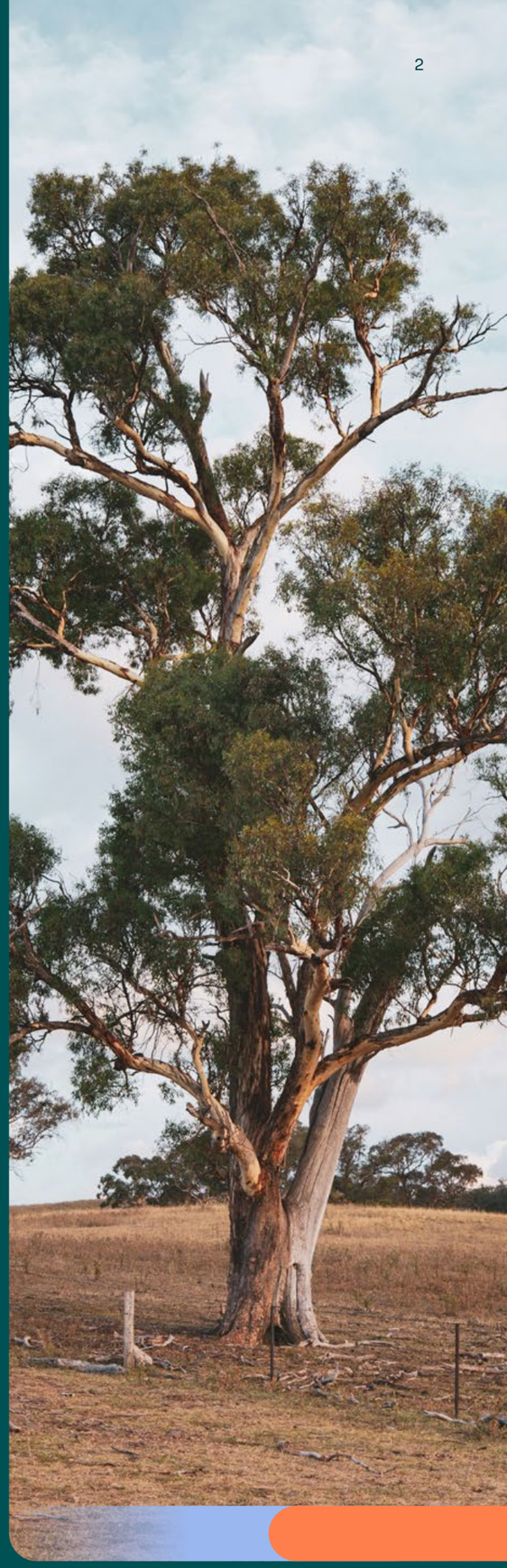
Senior loan - A form of debt that takes priority in being repaid, meaning that, if the borrower faces financial difficulties or bankruptcy, senior lenders are first in line to be paid out.

Subordinated loan - A form of debt that ranks below senior debt in priority for repayment, meaning that, in the event of a project or borrower defaulting, it is repaid only after senior lenders. Because it carries higher risk for the lender, it typically attracts a higher interest rate and is often used to bridge financing gaps or support projects that may not otherwise proceed.

Sustainable Development Goals (SDGs) - A set of 17 goals adopted by United Nations member countries in 2015 as part of the 2030 Agenda for Sustainable Development.

Virtual Power Plant (VPP) - A digitally coordinated network of CER, such as rooftop solar, home batteries, electric vehicles and flexible loads, that operates together like a single power plant, providing energy and grid services while sharing financial benefits with participating customers.

Wholesale investors - Investors who meets specific income, asset, or professional criteria under Australian financial law, and are therefore permitted to invest in non-retail energy and infrastructure projects without the same level of consumer protection that applies to retail investors.



PART 1

Community partnerships in Australia's shift to renewable energy

Part 1 of this Guide outlines what community partnerships look like and what role they could play in the Australian energy shift.



1. The opportunity to 2030

While Australia continues to see significant growth in renewable energy development, energy infrastructure is not being delivered at the scale and speed needed to achieve emissions reduction and energy targets.[1]

There is widespread underinvestment in energy infrastructure resilience, local opposition to renewables, and growing evidence that the current approach to delivering energy infrastructure is worsening energy inequality.[2] In addition, communities are dealing with a range of connected social, economic and environmental pressures that make it harder for people to get by and for places to thrive. All of these factors shape what communities prioritise and how they respond to new projects, including renewable energy developments. With a large number of renewable energy infrastructure projects to be developed by 2030, a growing number of stakeholders within communities, industry and government are calling for a new approach to energy infrastructure delivery[3] and to climate action more broadly.[4]

Surveys and consultations from around the country suggest that urban, regional and First Nations communities want genuine, timely and ongoing engagement in renewable energy projects.[5] They want the benefits of these projects to be shared early and directly with host communities in a transparent and coordinated way.[6] Community practitioners, developers and local councils need practical methods for delivering meaningful community engagement and local benefits.[7] At the same time, practitioners say that there should be flexibility for developers and communities to co-design tailored benefit sharing mechanisms that meet their specific needs and push the boundaries of 'business-as-usual' approaches.

To help address this need, this Guide showcases a range of innovative 'community partnership' models that enable communities to directly participate and benefit from mid- to large-scale (1MW and above) renewable energy projects.

> "A growing number of stakeholders within communities, industry and government are calling for a new approach to energy infrastructure delivery and to climate action more broadly."

2. What are community partnerships and why are they important?

There are a wide variety of community partnership models that have been deployed across Australia and overseas. Each model provides a different pathway for communities to directly participate and benefit from large-scale renewable energy projects.



Partnering with community represents a significant opportunity to build a proactive, positive and engaged relationship between communities, developers and projects, and to redistribute some of the economic benefits of renewable energy projects to communities. There is a rich international evidence base showing that community partnership models deliver strong social value, including by creating tangible community assets, pathways that enable community members to advocate for local projects, and driving a wide range of community initiatives and outcomes on broader energy and community needs. Specifically, community co-ownership and co-investment projects have delivered the following outcomes:

- Direct personal benefits for community participants - including financial, employment, health and cultural benefits.[8,9]
- Increased energy literacy, skills and knowledge - with flow on effects that enable participants to make more informed energy decisions and that build community organisational skills and expertise in commercial and utility scale projects.
- Better project design and siting - with pathways for community members to have 'a seat at the table' and to contribute to designing more locally appropriate and beneficial projects, such as through improved infrastructure siting, local employment, or legacy planning for worker accommodation.[10]
- Improved trust and social licence - which, if well-managed and integrated with leading development practices, can build long-term positive relationships with communities and foster a strong base of understanding and support, enhancing social licence for both the project and the broader energy transition.[11,12]
- Deeper community participation and capacity building - empowering communities to take on other development projects and assets, including other community projects, and leading to improved community development outcomes.[13]
- Community reinvestment of project revenues - generating substantial indirect economic benefits for the local economy that contribute to regional investment, economic diversification, and the resilience of regions.[14,15]

By embedding meaningful community partnerships into Australia's Electricity and Energy sector plan,[16] and by backing energy projects that deliver real value for communities now and for future generations, Australia can leverage the shift to clean energy to strengthen livelihoods and contribute to a better future for communities across the country. This Guide supports stakeholders to explore partnership options and implement community partnership projects, drawing on the wealth of international models, experiences and lessons learned.

In this Guide, we define **community partnerships** in renewable energy as any form of **financial and/or legal participation of community members in renewable energy-related projects**, including generation, storage, transmission, efficiency and demand management initiatives.

The focus of this guide is on medium to large-scale energy assets **over 1MW**, and on projects that are **developer-led**, or **co-led by a community and a developer**. Projects can include anything from a direct ownership stake through to subscription or lease options.

Throughout this Guide the term '**community**' is used broadly to mean First Nations communities, geographic communities and communities of interest that might not be geographically bound to each other. In other words, 'community' can refer to the close geographic communities that host large-scale renewable energy projects, and/or a more dispersed (regional or even national) community of interested or like-minded individuals. It can also include a community-based organisation, First Nations communities, or a group of landowners.



2.1 ‘Community energy’ vs. ‘community partnership’

Many communities in Australia are already initiating, developing, owning and running a variety of renewable energy initiatives, ranging from having their own rooftop solar PV and batteries on community assets to being part of bulk purchase initiatives and community education.[17] There are also some emerging small-scale battery storage facilities that are wholly community-owned, sharing value from rooftop solar at the neighbourhood level.

With some exceptions, most community energy projects have been under 1MW to align with community resourcing, needs and objectives. However, there are a growing number of community-led, mid-large scale (~5MW) energy projects within Australia and overseas, involving diverse innovations in energy practices, technologies, business models, planning and investment.

In **community-led** energy projects, meaningful participation processes and beneficial outcomes for communities are the main and often, the primary drivers. While commercial parties play a wide variety of roles in these projects, this is generally in a supporting capacity, or as a service provider to the community entity that is leading the project and/or will own it outright in the future. These projects are referred to as ‘community energy’ projects because they are predominantly led by communities, for communities – with private developers playing a secondary or limited role.

This Guide focuses on **community partnerships** that are **led or co-led by government, industry or commercial partners** – including large-scale renewable energy developers, utilities, businesses or public organisations – and which involve community legal and/or financial participation. These models can vary in terms of the level of community involvement and the extent of community ownership, investment or another kind of stake in the project. However, they tend to take on the following characteristics:

- Projects tend to be mid-scale (5MW) to large-scale (100s of MW).
- Projects are commercially driven, but with a genuine desire to involve and benefit communities.

In **developer-led** community partnership projects, renewable energy project leads may approach communities as partners, offering them a stake in the project in which they could play an active role.

Other community partnership projects are **co-led**, where government, industry or commercial parties co-develop energy projects alongside community partner organisations, Traditional Owners and broader First Nations Peoples, or a group of local farmers from the outset. In this case, the initial idea for the project might come from local people or from local government, with a developer playing a primary or active role alongside community partners.





3. What drives and shapes community partnerships in Australia today?

Across the world, community partnership models differ in their financial, organisational and legal structures, using various routes to market and sustaining different roles for community parties.

This Guide draws on stakeholder insights and projects from around Australia, as well as documented evidence from overseas experiences, to identify models and configurations that could be implemented and scaled within the Australian context.

Community partnerships for renewable energy projects over 1MW are in the early stages of development in Australia. There are currently few operational projects and models, but there are dozens of projects in planning stages. In particular, there is growing momentum for joint ventures with First Nations communities, which are widely seen as potential pathways to transformative, intergenerational benefits. Many of these projects are in early stages, and it is too soon to know what social outcomes they will deliver. **Part 2** of this Guide sets out what community partnership models have been developed in Australia in more detail.

Policy plays an important enabling role, shaping both the opportunities and pathways for community partnerships and determining how accessible these models are to communities across Australia. Policy can also be used to address the barriers currently facing community partnerships in Australia, as set out in **Part 4** of this Guide. In most Australian jurisdictions, community partnerships are currently seen as a voluntary and innovative mechanism for community benefit sharing (**Table 1**). In general, developer contributions to community benefits are calculated separately from, and in addition to, the cost of doing business and impact mitigation requirements under regulatory planning frameworks (**Table 1**). However, in recent years, community benefit sharing has increasingly become an extension or precondition of regulatory planning approvals in various states across Australia. Although understanding, responsiveness and capabilities to establish respectful and effective relationships with First Nations are highly varied across the sector, policies to ensure the recognition of First Nations peoples rights and pathways to reconciliation are also evolving. This trend is likely to continue as renewable energy development expands, especially in Renewable Energy Zones, and as state and federal governments seek avenues to promote tangible community benefits, align outcomes to priority public and social needs as well as addressing social opposition and polarisation on climate and energy. Community partnerships can contribute to achieving these wide ranging social goals.

Beyond policy drivers, there are also other drivers. Community partnerships align with the demand for positive social impact from large public and commercial energy consumers. For example, local governments using Power Purchase Agreements (PPAs) to source their energy supply often have standing commitments to 'buy local' and to support the local energy transition. Commercial parties and utilities also have standing commitments to demonstrate positive social impact, which are part of established sustainability reporting frameworks[18] and broader strategic frameworks such as the Sustainable Development Goals.

Table 1: Types of local contributions from renewable energy proponents, on a spectrum from regulated and business-as-usual to voluntary and innovative (adapted from the Renewable Energy Alliance, 2025).

Regulated, business-as-usual	**Cost of access to key resources and services**	*Contributions accepted as a necessary part of doing business in local context to access key inputs and services.* **Examples:** Costs enabling land/site access (land access agreements and payments to landholders, neighbour payments, Indigenous Land Use Agreements) and use of local infrastructure (infrastructure contributions, voluntary planning agreements, local government rates or payments in lieu of rates).
	Impact mitigation	*Contributions required by planning frameworks/access schemes to mitigate impacts on utilities, services, local economy and environment.* **Examples:** Road upgrades to facilitate heavy vehicle use, measures to mitigate pressure on local water supply, utilities and housing, minimising clearing, active and ongoing measures to support local threatened species, visual amenity measures, or offset plantings.
	Good practice	*Widely established contributions currently seen as 'good practice' to ensure locally appropriate development and fair distribution of benefits and burdens for hosting communities.* **Examples:** ▪ **Appropriate siting and project design** to improve compatibility with agricultural use or conservation efforts ▪ **Supporting local conservation efforts** in and around the project and the broader region. ▪ **Community benefit funds** that are distributed within host communities to generate positive social outcomes.
	Leading practice	*Activities that can generate significant local value by aligning projects with local needs and aspirations, and leveraging existing capacity and development on the ground.* **Examples:** ▪ **Community Partnership models** involving long-term community partnerships and community financial and/or legal participation in projects, ranging from local energy bill discounts, community co-ownership and co-investment, and mechanisms to support low-income households with access to energy efficiency upgrades. ▪ **Regional Benefit Sharing models** that involve pooled investment among multiple renewable energy (and sometimes other industry) projects that are governed by community to generate long-term legacy benefits. ▪ **Local workforce development and procurement**, reducing barriers and prioritising local skills, jobs, suppliers, affordable housing supply and First Nations focussed programs.
Voluntary, innovative		

4. How to use this Guide

The purpose of this Guide is to support the development of a diverse range of community partnership models that could bring significant benefits to communities, proponents and projects across Australia.

The focus is on enabling local communities to have a stake in large-scale renewable energy projects, allowing them to share the financial benefits, participate more actively in decision-making, align projects with local needs, and foster better engagement outcomes. This Guide offers practical insights on how models from across Australia and other countries might be adapted to enabling genuine community partnerships in different local contexts, as well as insights into emerging models that could be trialled to meet specific needs.

Specifically, this Guide:

- Presents an overview of the features, design options and status of various models, as well as their benefits and challenges.
- Provides practical guidance for community, government and industry stakeholders interested in pursuing community partnerships in large-scale renewable energy projects, including legal and governance, financial and community engagement elements.
- Details what various models look like in practice, illustrated by real-world examples and case studies.

This Guide is for:

- Developers, state utilities, and public sector organisations interested in partnering with communities to deliver successful large-scale renewable energy projects.
- Practitioners and consultants working in the sector who want to build their capacity and tools.
- Local governments who want to understand opportunities for themselves and their communities, and to use this knowledge to inform negotiations with developers and raise community awareness.
- Communities, including landowners, community organisations, First Nations and general community members who are interested in exploring ownership, investment or partnership options for large-scale renewable energy infrastructure projects in their area.

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It is important to remember that community partnerships are just one of many tools to engage communities and share the benefits of large-scale renewable energy development. Other forms of benefit sharing include developer contributions or funds (benefit funds), scholarships, training programs and long-term investments in legacy projects, among others (**Table 2**). As one form of 'benefit sharing', community partnerships can be used in combination with other mechanisms. Different combinations of benefit sharing will suit different needs. Community partnerships need to be negotiated between developers and communities and emerge from robust engagement processes. To work, it needs to be a good fit for the utility or developer, the project and community stakeholders.

Table 2: The spectrum of community benefit sharing mechanisms (adapted from Hicks and Lane, 2019).[19]

Mechanism	Examples	Benefits Delivered	Suggested Geographic Scope*
Neighbourhood benefit programs	Neighbour payments or electricity bill credits, gifted equity	Fairness for neighbours, reduce opposition, distribute benefits locally	**Neighbours**
Sponsorship, grants and legacy initiatives	Sponsorship of local groups/ events, community benefit funds, scholarships, legacy social programs, long-term foundations	Support local organisations, build long-term community assets	
Employee volunteerism	Staff time/expertise for community projects, contractor engagement in local initiatives	Direct community support, builds relationships	**Communities**
Community partnerships	Community co-ownership, co-investment, discounted electricity products, solar gardens, virtual solar and agri-solar initiatives	New business models, shared financial returns, empowerment, stronger local support, affordable clean energy access, resilience	
Local jobs, training and procurement	Local hiring, apprenticeships, training programs, procurement targets, industry capability networks	Boost local economy, skills development, long-term employment pathways	**Regions**
Regional benefit sharing	Pooling of benefit sharing funds for large initiatives, regional collaborations, biodiversity and resilience programs, cumulative impact management	Strategic regional benefits, environmental and social improvements	

*The suggested geographic scope of benefit sharing mechanisms outlined in **Table 2** is flexible and indicative only. In some cases, benefits will not be delivered to geographic communities, but to 'communities of interest'.

This Guide provides an overview of the project development process, and is a starting point for developers, industry practitioners, local government and communities to explore options for community partnership. While all of the community partnership models discussed in this Guide add complexity to projects, they also bring significant potential to deliver lasting community benefits, build local capacity and social capital, facilitate direct local economic benefits and foster trusted relationships. These outcomes can improve social acceptance for projects in ways that safeguard developers' ability to implement future projects in the same region and beyond.

PART 2

Nine models for community partnership in renewable energy

Part 2 of this Guide outlines nine models and design options for community partnership in renewable energy projects in Australia. It showcases a range of examples, both international and domestic, to illustrate the implementation of these models in practice.



1. Overview of models and design options

A variety of models for community partnership exist worldwide, shaped by different policies, markets, incentives, regulatory environments, industry culture, community sectors and local needs.

Some models are well established and well documented in other jurisdictions, such as Denmark, the UK, and the United States. Other models have emerged as pilots and innovation projects brokered and designed by grassroots organisations in collaboration with commercial developers or utilities, or led by First Nations organisations and/ or landowner collectives, and are yet to be deployed more widely.

Internationally, community partnerships have been delivered at scale in contexts where there are supportive ecosystems for implementation, involving specific policies or mandates, intermediary organisations, service platforms, and finance. Developing new and innovative models for deployment is challenging, and the models used by successful, pioneering projects are often influential in shaping subsequent projects and support mechanisms. However, not all delivery models are easily replicated across different community contexts, and project design should always reflect engagement with communities to ascertain local needs, priorities and aspirations.

Part 2 of this Guide outlines some of the established models enabling community members to access value from large-scale renewable energy infrastructure projects as either discounted electricity or as financial returns. Specifically it sets out:

- Existing operational models in Australia.
- Key models that have successfully been scaled up internationally but do not yet exist in Australia.
- An emerging model for co-ownership of transmission infrastructure that is likely to be of interest in the Australian context in the near future.

These models are summarised in **Table 3**. In the sections below, each model is set out in more detail, describing key elements, variations and deployment internationally and within Australia, along with illustrative case studies.

Models differ in terms of organisational structure, financing, risk profiles, extent of community participation and other aspects, with implications for both developers and host communities. As a result, many different model configurations are possible. Many of the delivery models set out in this Guide can be creatively adapted to any kind of technology or asset in the energy supply chain. While **Table 3** shows basic points of difference between models, **there are many variations possible that borrow different elements from across these models**. The flexibility of community partnerships models allows tailored design of projects to reflect the unique nature and needs of the regions that host energy projects.

Across the models and projects deployed, we see a range of options for community partnership in terms of stakeholders involved, beneficiaries and likely outcomes. Options for community participation in large-scale renewable energy projects - such as through ownership, investment, finance and energy access - vary widely and can affect the levels of risk, responsibility and influence held by different parties.

Some key design choices are:

- **Roles for each party:** The roles of community versus industry can differ across models and projects. Communities can play a role in engagement, communications, benefit distribution, design and decision making, whereas the developer often leads the commercial and technical aspects of the project.
- **The extent of engagement of the broader community:** The project may involve many community members (e.g. 1000s), or only a few (e.g. 30), or may involve one community-based organisation representing community interests.

- **Timing of community involvement in the project:** Communities may be involved in discussing and designing the community partnership from the very beginning, or get involved in the planning phase, or as late as post-commissioning. The timing of the community partnership model 'going live' can also vary, from prior to financial close to after commissioning.

- **Type of financial instrument:** Community financial participation can take the form of an investment in a project as a debt or equity stake, a subscription, or a shared revenue arrangement. In other cases, community participants do not invest or subscribe, but simply register and receive an on-bill credit.

- **The approach to raising finance for the community stake:** Finance can be raised from individuals in the community (e.g. via a share offer, prospectus, crowdfunding campaign or managed investment fund), or raised from other sources collectively by a community entity on behalf of its members or the wider community (e.g. via grants, donations, or equity options that may be exercised using bank finance). Alternatively, equity may be gifted to the community or allocated in return for in-kind services (sometimes called 'sweat equity').

- **The type of community stake:** The community may own a minority, a 50 per cent, or a majority stake in a project, or may not own a stake (but may instead have rights to a percentage of a project's revenue, or a fixed rate of return).

- **Legal and organisational structures used to facilitate projects on behalf of the community:** These range from First Nations corporations, distributing co-operatives, community based not-for-profits (e.g. associations, companies limited by guarantee, non-distributing co-operatives or trusts), and private and public companies. In some cases, a Special Purpose Vehicle (SPV), platform or intermediary entity (e.g. a managed investment fund or equity crowdfunding intermediary) is used to enable and 'de-risk' community participation. Each of these approaches are associated with different risks and responsibilities, membership requirements and capacity to pay dividends, raise shares, and involve larger numbers of investors.

- **Individual versus collective community interests:** The community stake may be held by individuals, collectively via a community ownership vehicle (e.g. a distributing co-operative or a private company) or by a community organisation on behalf of community members (e.g. an association, a company limited by guarantee, a non-distributing co-operative or a trust).

- **Timing of community partnership along the project development timeline:** Although co-ownership is often associated with community capital contributions at the formative stages of project development, it is important to note that ownership may be gifted in exchange for access or services, or purchased at any point in a project's development and operation (e.g. after commercial operations commence, to shield communities from construction risk). Community partnership models are ideally co-designed with community input early in the development cycle, but could be designed-in at any stage, if parties are willing.

As explored in more detail throughout this Guide, decisions in one area of a project will affect what is possible in another. For example, if the community only holds a minority stake in a project, and if this is via a debt instrument rather than an equity stake, then the community does not have legal ownership of the project.

Table 3: Summary overview of models for community partnership, showing different possible configurations, suitability in different contexts, and precedent in Australia.*

Model	What is it?	Suitable if	Examples
Co-investment via a fractional investment platform	Individuals living in or around the community hosting the project are invited to invest in the project using a third party Managed Fund (e.g. Assetora, which charges an annually-fixed administrative fee). In some cases, close neighbours may be gifted an investment by the proponent. Returns are generally fixed, but can be proportional to project revenue. Community has no direct ownership of assets and reduced exposure to project risk.	There is no established community entity willing to lead the community partnership, or the community prefers a low risk, low effort governance and administrative model.	**Australia** ▪ Sapphire Wind Farm Community Co-Investment
Joint ventures: co-ownership in generation	Two or more parties create an ownership structure that allows community members or groups to hold an equity stake (or equity options to secure a stake) in the project. Ownership structure may include a new separate legal entity or utilise existing legal entities, each of which contributes money, assets or resources to the project. Finance for the community stake may be facilitated by public-private bonds, federal grants, commercial loans, government loan guarantees, as well as private investment (which would usually need to be provided on concessional terms). The community may have a minority, 50/50 or majority ownership stake.	Community members or groups want active co-governance and control over the project. Community and developer have a good working relationship and trust.	**International** ▪ Marshill Wind Farm (Scotland) ▪ Henvey Inlet Wind (Canada) ▪ Mittelgrunden Vindmøllelaug (Denmark) **Australia** ▪ Bulabul Battery ▪ Baru-Marnda Renewable Energy Project ▪ Project Jinbi ▪ Coonooer Bridge Wind Farm ▪ Northam Solar Farm
Community solar garden or wind garden	Participating households become co-operative members, invest or purchase a stake in a wind or solar asset and receive returns on their investment. Returns take different forms: share dividends, returns on loan notes, or bill credits/discounts either based on real-time energy generation or fixed returns.	Participating stakeholders want the project to unlock access for households locked out of consumer energy solutions (such as renters and apartment dwellers). Community wants to be actively involved in the ongoing governance of the project.	**Australia** ▪ Haystacks Community Solar Garden **International** ▪ WindCentrale (Netherlands)

*__Please note:__ the information presented in **Table 3** and elsewhere in this Guide is general in nature and does not constitute legal or financial advice. Organisations interested in implementing a community partnership model should seek independent legal or professional advice tailored to their specific circumstances.

Model	What is it?	Suitable if	Examples
Solar lease or subscription models	Households pay a fixed subscription fee for an electricity retail offer from an off-site wind or solar asset and receive discounted electricity bills below retail price over a long term (e.g. 10 years). Community has no legal ownership of the project, but has a legal right to receive bill discounts under the subscription contract, in direct connection with the project.	Project is located in a contestable retail market or there is willingness of the monopoly retailer to collaborate. Additional social value can be delivered if the distribution network company and state government are willing to establish enabling policies (e.g. network tariffs and subsidies) to provide greater discounts, and/or enable vulnerable households to participate.	**International** ▪ Xcel Energy Solar Gardens (USA) ▪ Adopt-a-Panel solar project (Italy)
Crowdfunded projects	Individual 'retail investors' are invited to invest money into a project in exchange for a financial return and/or ownership stake. Returns may be in the form of dividends or loan repayments, and are typically proportional to project revenue (although can be fixed). Community investors may have ownership of assets (i.e. if crowdfunding is used to finance an equity stake), or may not (i.e. if crowdfunding is used to finance a loan).	Established crowdfunding platforms exist to facilitate crowdfunding in renewable energy projects. Crowdfunding regulations are aligned with capital raise requirements for renewable energy projects. Given that current Australian legislation is restrictive, with caps on fundraising and total asset value, crowdfunding is better suited to mid-scale projects.	**International** ▪ Lendosphere Crowdfunding (France) **Australia** ▪ Swarmer Crowdfunding for Manilla Solar
Intermediary enabled projects	Established intermediaries facilitate and secure a community investment stake in a project under a co-operative legal structure, simplifying the process for communities. The type of community investment (i.e. equity or debt) and nature of returns (i.e. fixed or variable) can be tailored to suit different needs and contexts.	Established intermediaries exist to structure community finance and to 'handhold' communities and project proponents on the ground.	**International** ▪ Energy4All and Falck Renewables (UK) ▪ REScoop (EU)
Community value sharing in aggregated energy solutions	Local households and businesses with consumer energy resources (e.g. rooftop solar PV) supply flexible demand, capacity, and ancillary services, and surplus electricity. Trading of electricity may be peer-to-peer (controlled by participants, with local consumers) or automated (in virtual power plants, controlled by a utility), depending on project objectives. Trading is metered and settled through distribution network infrastructure, private microgrids or embedded networks, and/or on the wholesale market. Participants get better returns for exported solar, recipients get zero to low cost electricity, and local balancing smooths power loads, reducing losses. Rights to returns from CER services differ depending on the agreement with the aggregator/retailer.	There is high local solar uptake. There is a willing aggregator/retailer to match sellers and buyers, account for flows, settle payment and trade on the wholesale market. This is more likely for projects that are located in a contestable retail market, otherwise the monopoly retailer must be willing to collaborate. Households do not mind switching to the participating retailer or can deal with multiple retailers on one National Metering Identifier (NMI). Distribution networks remunerate local energy sharing.	**International** ▪ PowerLedger Delhi (India) ▪ SonnenEnergie (Germany) **Australia** ▪ Onslow Microgrid ▪ Plico Energy
Transmission co-ownership	A community acts as a financial partner and/or shared owner in a transmission project. Community equity share can be financed from public-private bonds, federal grants, commercial loans, government loan guarantees, as well as private investment. In some cases, these projects have been led by First Nations groups, or led by utilities who have later sold an equity stake to First Nations groups after construction and commissioning. The community may have a minority, 50/50 or majority ownership stake.	Community and transmission utility have a commitment to developing a good working relationship and trust. Regulatory frameworks for electricity transmission are flexible to ensure compliance and accommodate new operational community partnership models.	**International** ▪ Wataynikaneyap Power (Canada) ▪ Saugeen Ojibway Nation (Canada)

Model	What is it?	Suitable if	Examples
Alternative approaches to delivering community benefits	**Installing energy equipment for host communities:** Developers fund programs that install residential renewable energy assets (like rooftop solar) and energy efficiency measures to reduce energy bills while generating broader community benefits such as improved resilience, health, and local economic activity. **Gifting host communities energy bill discounts:** Developers offer an on-bill credit program for local households, who register and receive discounted electricity bills. Discounts may be via a financial payment/subsidy of the bill, or may be linked to discounted generation (i.e. matched energy). Payment may be processed manually or via a service-enabled payment mechanism facilitated by a third-party technology platform (such as Reswitch or Enosi).	Community hosting a renewable energy project wants to see cheaper local electricity bills. Energy bill discount programs must be located in a contestable retail market or have willingness of a monopoly retailer to collaborate.	**International** ▪ Vineyard Power Co-operative (USA) **Australia** ▪ Dundonnell Community MiniGrid ▪ Squadron Energy's Power Promise program

2. Understanding the models in practice

2.1 Co-investment via a fractional investment platform

In the Australian context, an example of an operational project over 1MW of installed capacity that has adopted an innovative co-investment and shared energy generation model is the Sapphire Wind Farm (see **Case Study 1** below). This model uses a managed investment fund to facilitate retail investment in a renewable energy asset using a fractional investment platform called Assetora (formerly Domacom), subject to modest management fees. Assetora can host both debt or equity and can facilitate a unique delivery model for community investment in the Australian market. One advantage of using a fractional investment platform is that it removes the need for a community investment vehicle and therefore, the need for active and long-term community governance. However, if there is a desire for stronger community governance, investments via a fractional investment platform can also work within community organisational structures. Several wind farms and a battery storage project have signalled interest in replicating this existing model in Australia.

Key elements of the co-investment model include:

- A project developer works with a community and identifies co-investment through a fractional investment platform as one preferred pathway to delivering local benefits.
- The project developer and fractional investment platform outline intentions, roles, scope, payment structure, timelines, governance arrangements and key terms in a 'Heads of Agreement'.
- A Product Disclosure Statement is created outlining project information, fund details, terms and conditions, project governance, due diligence conducted to date, the role of community, fee structure, investment risks and how to apply to participate.
- The investment instrument is designed (e.g. unsecured loan notes, ordinary shares or co-operative capital units) and associated legal documentation is prepared. Due diligence is carried out to ensure that the instrument complies with relevant laws, is legally valid and enforceable, and that the project can service the obligations.
- The developer and investment platform undertake a community engagement campaign in the local community to allow residents to learn about the opportunity, meet project proponents and apply to invest.
- Community members apply and commit funding via the fractional investment platform and once the campaign is completed, the investments are processed and paid for.
- Community members invest through the fractional investment platform, either in the form of equity or a subordinated loan, depending on the structure of the fund.

Case Study 1: Sapphire Wind Farm

Pioneering community co-investment in Australia

Constructed 2017-2019, the Sapphire Wind Farm is a 270MW development in northern New South Wales and was the first large-scale commercial wind farm in Australia to offer public community investment. It is owned by the Grassroots Renewable Energy Trust (Grassroots Trust), initially a joint venture between Partners Group (a global private markets investment manager) and CWP Renewables, now owned by Squadron Energy. To share financial benefits with local communities, the group pioneered a community co-investment model, which was developed with community input through focus groups and surveys, leading to key changes from the initial proposal. This delivered high community engagement and a sense of ownership locally.

Community members invested through the Assetora platform in the form of a subordinated loan to Grassroots Renewable Energy Trust. Assetora has existed since 2011 as a financial investment platform that gives individual "Mum and Dad" investors access to high-value assets by pooling their resources, reducing risk for both community investors and developers. Formerly known as Domacom, it was the first fractional online investment platform available to retail investors in Australia and the only one to date that can fractionalise renewable energy assets. The Assetora Fund is a registered managed investment scheme with the Australian Securities Investment Commission. Assetora holds an Australian Financial Services License (AFSL) which means they can also offer a liquidity facility.



Image: Sapphire Wind Farm, northern NSW.
Image credit: Squadron Energy.

Assetora established a dedicated sub-fund called the Sapphire Wind Farm Community Co-Investment Fund. The investments made by community members do not grant them equity ownership, but entitle them to receive returns in the form of a targeted, fixed rate of return over an agreed loan term, with built-in caveats to enable an early pay out and a penalty interest rate if the project changes operational conditions. Community investors were not directly exposed to the operational performance of the wind farm. The underlying financial instrument is a loan agreement between Grassroots Renewable Energy Finance Pty Ltd (who co-owned the large portfolio of CWP assets at the time) and the trustee and custodian of the Sapphire Wind Farm Community Co-Investment Fund (see **Figure 1** below).

Over an 18 month process, the project tested local investment interest and formed strong partnerships with community energy groups. This resulted in $7.4 million in pledges from 500 contributors, with 74% being local residents of the Sapphire Wind Farm area. When the community co-investment through Assetora opened for investment in 2019, it raised $1.8 million from nearly 100 community investors. The co-design and implementation was led by Akin Consulting, while local partner Starfish Initiatives supported local promotions and engagement activities. Assetora provided the investment solution and CWP Renewables resourced the legal and financial administration. The community influenced the design of the model, favouring low-obligation community volunteerism, geographic prioritisation of investors based on proximity to the project, and a lower investment entry amount (reduced from a standard $2,500 on the Assetora platform to $1,250).

The initial Expression of Interest was open to residents in the local area. Once the local priority window closed, the EoI was opened to resident individuals and businesses in NSW and ACT.

The key terms were:

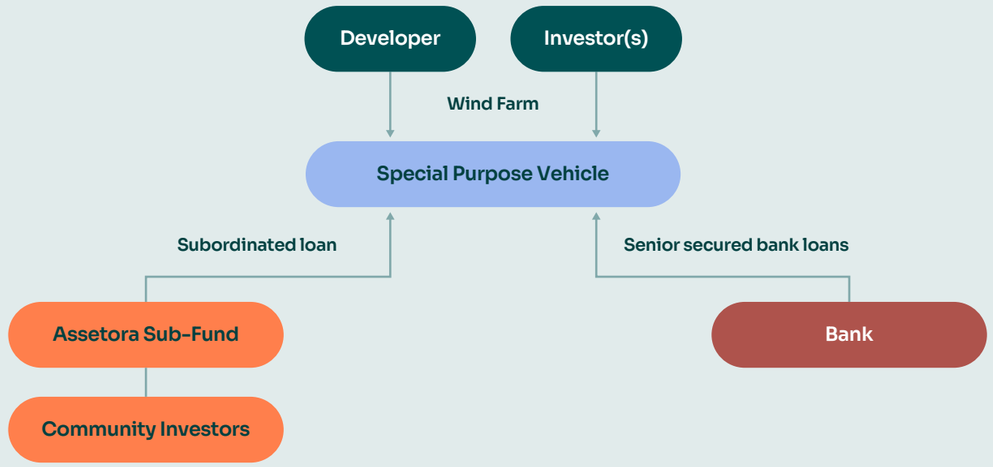
- Minimum investment: $1,250; maximum: $200,000.
- Six percent unfranked (before-tax) return paid quarterly.
- Ten-year investment term, with capital return at the end.
- Total fund cap: $10,000,000.
- Managed by Assetora Australia, which handles all administration and governance, relieving the community of these responsibilities.
- Community investors can join the Community Advisory Panel for communication and engagement opportunities.
- Co-investment functions as an unsecured loan, with no hidden fees, as Assetora's costs are covered by Grassroots Trust.

The key risks were:

- Insufficient community investment, which could halt the project.
- While community investment is low risk, returns are not guaranteed. Returns are subject to Grassroots Renewable Energy Trust receiving sufficient cash distributions to meet interest and principal payments.
- Liquidity risk, as investors cannot withdraw until the sub-fund is terminated, however investors can trade internally.
- Financial risk is primarily carried by Grassroots Trust and its partners.
- Potential damage or losses incurred by the wind farm (which is a risk for all energy projects).

Figure 1 below demonstrates this flow of funds and also identifies the senior bank debt ($330 million) that has contributed to the funding of the approximately ($580 million) Sapphire Wind Farm project.

Figure 1: The organisational structure for the Sapphire Wind Farm Community Co-investment initiative, adapted from Sapphire Wind Farm (2019).[20]



2.2 Joint ventures: co-ownership in generation

In a co-ownership or equity joint venture, two or more parties create a new, separate business entity and each contributes money, assets or resources, in exchange for equity ownership proportional to their contribution. The parties then subsequently share in the associated profits, losses and decision making rights to their proportional contributions. When community groups undertake joint equity ventures with industry partners, they will typically need to raise finance to secure a proportional equity stake in the project. If this is not possible prior to the project's financial close, a community group may be provided with an 'equity option' to buy-in after financial close, which reduces their risk exposure and makes it easier for them to secure finance (e.g. from a bank loan) to purchase the equity stake.

Key elements of this model are:

- The project lead creates a company usually known as a "special purpose vehicle" (SPV) whose sole purpose is to own and operate the renewable energy project. The SPV 'ring-fences' the project risk, so that the company and community organisation are only exposed to the extent of their financial investment (and any associated reputational risk).

- If no incorporated community entity exists, one must be established and governance arrangements put in place so that they can act as a legal entity in the venture.

- The project lead works with community and other investors to negotiate high-level terms of community equity participation in a Memorandum of Understanding (MoU) or Heads of Agreement (HoA). This sets out community rights to equity investment, time line, intended equity percentage that will be offered, and pricing principles.

- The community entity signs an Option Deed or Co-development Agreement, detailing community priority investment rights at a specific point in project development (for example, after planning approval, grid connection approval, or after financial close). This gives the community entity future access to equity at terms commensurate with the risk they take on.

- The community entity is given access to key commercial and financial information needed to make an informed investment decision, along with a draft shareholder agreement. The community may seek additional protection with the project lead via a separate shareholder agreement to ensure the timely distribution of financial information, board representation or other community-specific interests.

- The community entity raises funds through collective sources (such as grants), private (member) capital, debt, or a combination of these, and acquires equity in the project SPV.

- The community entity is treated as any other shareholder with a requirement to provide shareholder capital if and when required and entitled to equity distribution of profits throughout the life of the project.

Variations of this model involve:

- **Different approaches to structuring the community stake:** In rare instances projects have used split ownership where the community entity acquires a specific part of the project, for example, a single wind turbine in a wind farm or a section of a larger solar farm (see **Case Study 3**).

- **Different approaches to raising finance for the community stake:** Beyond options for community to invest in an equity share, equity can also be gifted or earned as 'sweat equity', where community members, organisations, and/or businesses receive equity in exchange for services and/or land access. In these cases, the MoU or HoA sets out agreed terms and works, which can involve community engagement campaigns, or cultural heritage studies to be carried out by community actors during development and planning. On reaching financial close, the equity stake is converted and realised. Another common deployment of this model is when a community proponent undertakes the early stages of a project's development and a commercial partner joins later. The community counterpart may provide sweat equity in exchange for the development value.

Co-ownership and equity joint ventures in generation are well established in the UK and Denmark, as well as in First Nations contexts in New Zealand and Canada (see **Case Studies 2** and **3** below). In the Australian context, more than two dozen equity joint ventures are under development with First Nations.[21] In many cases, the commercial prerogative for these partnerships has been driven by the social performance criteria under the Capacity Investment Scheme, but other regulations, such as those protecting Native Title interests, also play a role.

A range of barriers, including limited precedent, lack of (perceived) legitimacy, investor risk perceptions, lack of capacity and difficulty accessing finance, mean that most emerging joint ventures currently offer First Nations a minority equity stake with observer rights rather than decision-making power (for more information on how to overcome this, see **Part 4** of this Guide on navigating barriers and risks).

Case Study 2: Marshill Wind Farm

A farmer-led initiative[22]

Scotland currently has 23MW wind capacity under co-ownership with communities.[23] Marshill Wind Farm is a three turbine 3.9MW wind development near Lesmahagow in South Lanarkshire in rural Scotland developed over 2011 to 2015. A local farmer was approached by a commercial wind developer, but reluctant to lease land to a commercial developer, he decided to develop a wind farm for himself and the benefit of the local community. Initially, he had approached the local community's Lesmahagow Development Trust (LDT) about making community benefit payments to the organisation, but as the project developed, the potential for the community to buy into the development emerged.

The project is owned by an SPV comprising Stewart Energy (the farmer's family-owned business) and Lesmahagow Limited. The latter is a subsidiary of LDT and owns 25% of the project. The total capital cost was 8.1 million pounds, funded through the Scottish Government's Community and Renewable Energy Scheme (CARES) low interest loan funding, a loan from the Scottish Enterprise Renewable Energy Investment Fund, and a commercial loan.

The positive relationship between the partners helped to overcome unexpected barriers. A key issue for the community was minimising financial liability, so the project was set up in a way that, in the unlikely event of liquidation, only Stewart Energy could be liquidated, taking the burden off both LDT. It proved difficult to obtain information on pricing and payment terms for three different grid connection points from Scottish Power until the commercial lender intervened. Radar interference was raised by the UK Civil Aviation Authority, which required radar blanking at an additional cost and prolonged planning by a year, but was overcome thanks to the funding provided by CARES to cover the cost. There were access issues during construction, which required road widening and an additional payment to the local authority. Financial close was completed in time to commission the project in line with the pre-accreditation date. Stewart Energy has since invested in a fourth turbine.

Although it took five years for LDT to receive its first dividend, this project now gives LDT a six-figure annual income from electricity sales and feed-in-tariff subsidy payments over 20 years. The revenues are used to fund a community development officer who drives training, job creation, and revenue generation projects, which are currently focussed on social housing and retrofitting.[24] This project has served to combat youth unemployment, strengthen a community that was disjointed and experienced high levels of inequality, as well as secure the future of Stewart Farm.



Case Study 3: Middelgrunden Vindmøllelaug

A project enabled by municipal leadership and collaboration in a conducive policy environment[25]

As of 2023, 52% of installed wind capacity in Denmark was owned by local communities through co-ownership models.26 Middelgrunden was a pioneering 20 turbine 40MW offshore wind project co-owned by a local producer co-operative (Middelgrunden Wind Turbine Co-operative) and a municipal utility (Copenhagen Energy), built in 2000. The two parties collaborate on operations but run as separate entities, with the co-operative owning turbines 11-20 as well as switchgear and cables, and the utility owning turbines 1 to 10.

Located 3.5km east of Copenhagen harbour, the site had been identified by the Danish Action Plan for Offshore Wind, a Danish Energy Agency funded initiative that laid the groundwork to clarify feasibility of the site in terms of planning, geotechnology and environmental assessment. Despite this, the site was not given high priority by civil servants and the municipal utility servicing Copenhagen at the time.

Wind farm enthusiasts developed the idea for a project on the Middelgrunden shoal in 1993. The proposal was taken up and formally progressed by the municipal Copenhagen Environment and Energy Office (CEEO) in 1996 with the establishment of a working group and a public presentation of the proposal. The group of local enthusiasts formed the Middelgrunden Wind Turbine Co-operative to work collaboratively with CEEO and Copenhagen Energy to develop and co-own the project. The co-operative and the municipal utility signed contracts in 1998.

Municipal involvement helped to secure commitment and support from the local Parliament, which made funding available for further feasibility studies. The public grant also covered an analysis of the organisational and economic aspects of the co-operatively owned part of the project, since the co-operative did not possess any financial means during these early planning stages. From 1997 to 1999, two visualisations and an Environmental Impact Assessment Study were carried out, and a significant public debate took place following public hearings. After the first public hearing, the original proposal of 27 turbines in three rows was changed. Instead it was decided to place 20 turbines in a slightly curved line. Wind enthusiasts running the co-operative engaged directly with citizen concerns around noise, organising demonstration tours to a modern on-shore wind farm. Both the co-operative, the municipality and the mayor played a key role in messaging, encouraging people to get involved and pre-subscribe to shares. 10,000 people pre-subscribed for shares, and the project was approved in 1999.

> “Wind enthusiasts running the co-operative engaged directly with citizen concerns around noise, organising demonstration tours to a modern on-shore wind farm.”

Following the granting of planning consent in 1999, the project proceeded to capital raise, with shares sold and paid up front prior to construction and used to finance the co-operative capital share of the wind farm. 8,553 citizens invested a total of 48.5 million Euros in the project. Each share was sold for 567 Euros per 1,000kWh of estimated annual electricity generation, with many investors buying 5 shares, which was the optimum number under Danish tax regulation. As with most Danish wind turbine co-operatives, the co-operative was constituted as a partnership with joint and several liability. The Middelgrunden Wind Turbine Co-operative has minimised the risk of joint and several liability[27] by not being able to contract debt in the partnership. This is ensured in the bylaws, which maintain that the partnership cannot contract debt and that the turbines must be adequately insured.

During the lead up to construction, the working group conferred on turbine foundation, sea work, cables, switchgear, transformers, and structural design, engaging with over 50,000 people to garner local support for the project. All contracts were drawn up jointly by Copenhagen Energy and Middelgrunden Wind Turbine Co-operative during planning and construction, and all investment costs were shared between the two developers. During the construction and testing period, income from electricity sales as well as the costs were equally shared between the two developers.

The co-op now has 10,000 members, including individuals, companies, organisations and unions. 88% of members are from Copenhagen.

2.3 Community solar gardens and wind gardens

In community solar or wind gardens, multiple electricity consumers (through a community entity) purchase a stake in a wind or solar asset and receive returns on their investment.

The community solar garden model enables participation and ownership of solar PV for households and businesses who face barriers to installing rooftop PV, such as because they rent or live in apartments, have inadequate roof space or land, have aging rooftops or face other building restrictions. In addition, by aggregating consumers on larger projects to achieve economies of scale, community solar gardens can be more economically efficient than rooftop solar PV in certain contexts, especially if projects can be sited strategically to reduce interconnection costs and optimise network value. However, solar and wind gardens rely on using the grid to export electricity, and unless there are tariff deductions applicable, consumers must still pay for this service. The model also requires a partnership with an energy retailer to deliver the on-bill credit.

Key elements of the community solar garden and wind garden model are:

- Community finance is either raised through upfront purchase of equity shares, co-investment via a debt facility (see **Case Study 4** below), or an electricity production-sharing agreement (see **Case Study 5** below).
- Participants usually receive returns in the form of credits on their electricity bills (but returns could also be received in the form of co-operative share dividends, or repayments on loan notes).
- Where returns are received in the form of credits on participants' electricity bills, it may be either as kWs of electricity or as a dollar figure. Some projects are designed so that participating households can meet some or all of their electricity needs from their stake or subscription in the project, and in some cases, maximum deductions are capped at a % of a household's energy consumption.
- The more productive the asset, the lower the participant's electricity bill. Developers sometimes use interactive displays and apps to enable participants to track electricity generation, consumption and billing, allowing participants to be more aware of and actively manage their energy consumption to maximise bill savings (see **Case Study 5** below).

A number of variations of this model are possible, in terms of:

- **Financing and ownership:** Depending on whether the model uses equity shares or debt financing, the solar or wind asset is owned by either participating households, the utility or developer. However, special purpose entity models and not-for-profit models have also been implemented and allow for complex multi-party co-ownership arrangements.
- **Project delivery and extent of community involvement:** Community solar gardens and wind gardens have been delivered by both third-party developers (special purpose entities comprising a range of different parties) as well as investor, state, municipal and co-operative-owned integrated utilities or DNSPs. In the context of vertically integrated monopolies, projects led by third-party developers and non-utility special purpose entities involve project developers partnering with utilities to develop, manage, and maintain the solar array, assign subscribed generation or capacity to electricity bills, or sell their electricity to the retailer through a Power Purchase Agreement (PPA). In these cases, there can be extensive community engagement in the governance of the co-operative body (see **Case Study 4** below), but this is not always the case (see **Case Study 5** below).



Case Study 4: Haystacks Community Solar Garden

The first solar garden in Australia

Currently the only operational solar garden in Australia, Haystacks Solar Garden is housed within the 1.5MW Grong Grong Solar Farm, situated near the NSW Riverina town of Grong Grong. Haystacks Solar Garden Co-operative successfully raised $735,000 by selling solar garden plots via Co-operative Capital Units (CCUs), which partially funded the Grong Grong Solar Farm through a fixed term loan. The remaining portion of the capital was made up of a grant from the NSW Regional Community Energy Fund, private investors and community crowdfunding organised by Grong Grong Solar Farm (see **Figure 2** below). Grong Grong Solar Farm repays the loan over a 10-year period to the Haystacks Solar Garden Co-op, who in turn passes the funds on to its members, generating on-bill credits for the solar gardeners. These on-bill credits are delivered onto the solar gardeners' electricity bills by a partnering electricity retailer, Energy Locals, therefore providing tangible financial benefits to participants.

Grong Grong Solar Farm has secured a premium Power Purchase Agreement (PPA) due to the project's social benefit and community-led nature.



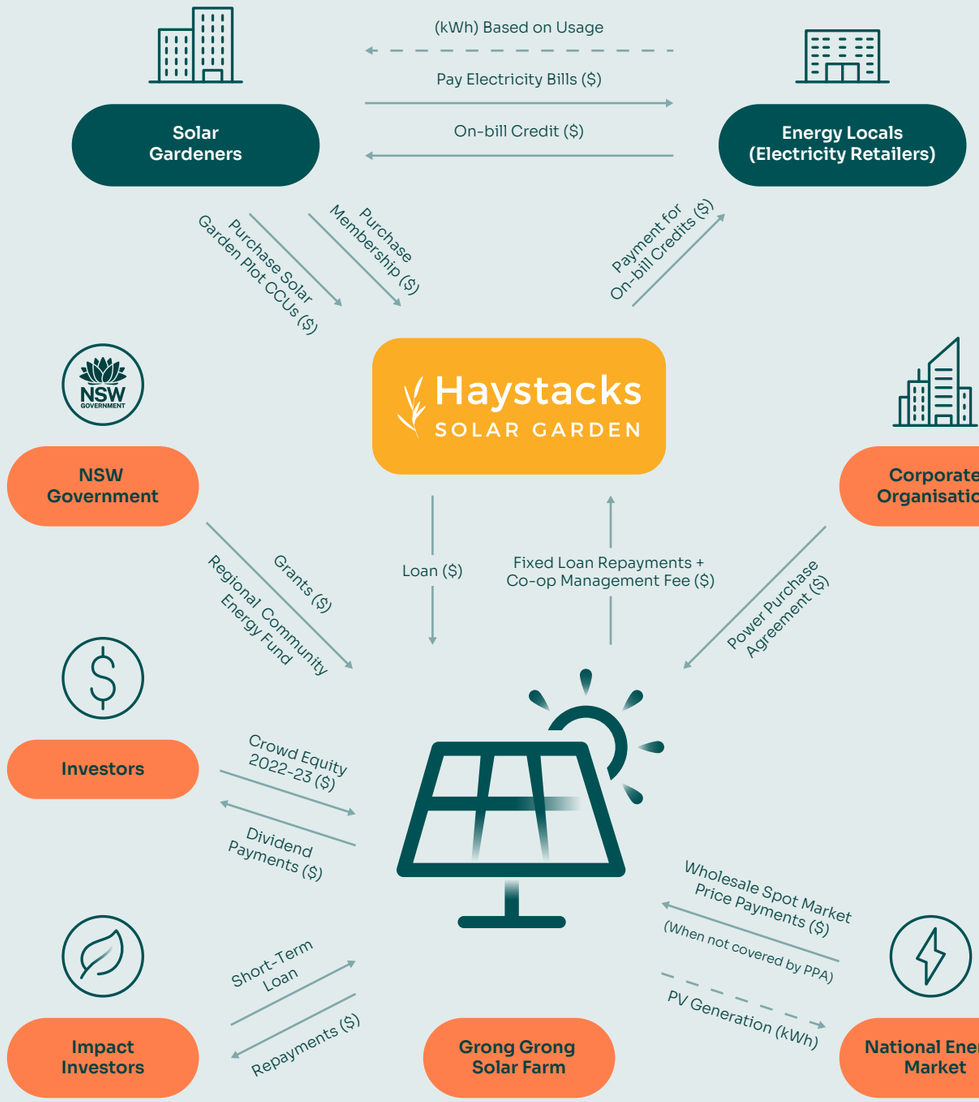
Image: Haystacks Solar Garden launch, 2024, Grong Grong NSW.

Haystacks Solar Garden is proof of concept for the solar gardens model in the Australian energy, legal, and financial context. Significant barriers were overcome to navigate a pathway to commissioning in 2024. These included undefined and scale mismatched grid connection processes, first-time application of CCUs to an energy project in Australia, energy market price shocks, and taxation of State applied renewable energy grants.

The Haystacks project has shown that a broader deployment of community solar gardens would require clear, transparent pathways for connecting and commissioning mid-scale solar projects. Project viability and participation would also substantially improve if State or Federal governments could extend rooftop solar rebates to solar garden participants, allowing them to offset the costs of purchasing solar garden plots. Drawing developers and necessary stakeholders into solar garden development could also by improved by more favorable market conditions and incentives, such as legislated carve-outs for community energy projects within state renewable energy targets.

Project size is also a key consideration for future solar gardens. While projects under 4.99MW avoid costly and complex grid connections in NSW and benefit from a better levelised cost of energy, smaller projects like the 1.5MW Haystacks Solar Garden face higher per-MW installation costs due to fixed expenses. Larger projects closer to 5MW achieve better cost-efficiency but require significantly more upfront capital, either by bringing in more participants or through partnerships with larger investors or developers. Future projects will have to weigh up these factors to optimise financial viability and community participation.

Figure 2: Cash and energy flows enabling Haystacks Solar Farm.[28]



Case Study 5: WindCentrale

Commercially spearheaded Community Wind Gardens

Windcentrale is a Dutch private limited company conceived by an entrepreneur who wanted to make renewable energy accessible to all, deliver electricity more cost-effectively, bring transparency to the energy value chain, and make renewable energy tangible and fun for consumers. To date it has enabled €15 million in citizen investment in 10 wind turbines, each financed by a combination of government subsidies, co-operative shares and bank loans.

For each wind project, Windcentrale sets up a special purpose vehicle (SPV) and a co-operative to facilitate purchase in co-operative equity shares that are linked to the wind turbine's electricity output. Dutch citizens can buy shares in the co-operative for €250-300 per share. The share price is set on the basis of project cost and number of shares per turbine, with a fixed Opex (operational expenditure) cost per year per share. Each member receives their pro-rata share of actual generation, and energy produced is deducted from participants' annual electricity bill at average annual retail price. The more productive the asset, the more kWh received per share, and the lower the participant's electricity bill. Maximum deductions are set at 85% of participants' own average consumption. In a windy year, it is possible that shareholders receive more power credit than their full power consumption, and in this case proceeds from excess electricity are socialised within the co-operative. Windcentrale works with a dedicated retailer and consumers are required to switch to this retailer. Members are not liable beyond the value of their share and are able to sell shares via an online marketplace, where trading is open 365 days a year.

Windcentrale does not own equity but manages the project (activities such as contract management, membership registrations, financials) and receives a yearly fixed fee per share (5-10%). Members are not actively engaged in the governance and operation of the wind co-operatives in this case. Windcentrale organises a yearly general membership meeting, during which it provides full transparency in the co-operatives' operational and financial results.









Images: Windcentrale projects across The Netherlands. Image credit: Windcentrale.

2.4 Solar lease or subscription models

Some of the largest and most successful community partnership models are based in the United States, where community members, organisations and businesses subscribe to a proportional share of the exported generation from mid-scale solar projects. While this is not an ownership stake, subscribers secure an entitlement to bill credits derived from the project's output. The model is commonly referred to as 'community solar sharing' but operates as a solar lease or subscription.

Deployed across 43 states and totalling 11GW of capacity in 2025,[29] this model allows consumers without upfront capital to participate and benefit from solar energy, and currently delivers financial and economic benefits[30] to over a million US customers.

Across states, 'community solar sharing' programs feature several common design characteristics:

- **Subscription-based participation:** Residential and small commercial customers subscribe to a defined share of a project's capacity (kW) or output (% allocation). Bill credits are allocated in proportion to that share.
- **Parallel anchor offtake:** Developers commonly secure a portion of project capacity under longer-term commercial or institutional subscription agreements, to anchor project revenue and maintain high subscription levels.
- **Contract duration:** Subscription terms vary by state and provider. Some programs offer flexible or portable arrangements, while others involve longer-term contracts (typically 15–20 years) aligned with program incentive structures. Commercial and industrial "anchor" subscribers often enter 20-year agreements.
- **Recurring subscription payments:** In most programs, subscribers pay an ongoing monthly fee to the project developer or subscriber organisation, typically set at a discount (e.g. 5–15%) of the bill credit value. In designated low-income programs, state incentives or regulatory requirements may enable no-cost subscriptions for qualifying households.
- **Bill credit mechanism:** Once operational, projects generate electricity into the local distribution network. Utilities allocate monetary bill credits to subscribers based on their share of generation. These credits are applied directly to participants' electricity bills.
- **Program-specific compensation structures:**
  - In retail-rate net metering states, bill credits approximate retail electricity rates.
  - In value-based compensation states (e.g. New York's 'Value of Distributed Energy Resources' framework), credits are calculated using multiple components - including energy, capacity, environmental value and demand reduction - some fixed and others variable over time.
  - In states such as Massachusetts and Illinois, long-term incentive contracts (e.g. 'Solar Massachusetts Renewable Target' (SMART) or Illinois' 'Adjustable Block Program') provide defined compensation structures for 15–25 years.

Who does what in project development?

Depending on the jurisdiction, subscriptions may be structured as a commercial product agreement, a utility-administered program, or as a membership program within a special purpose entity such as a not-for-profit or cooperative.

Although known as 'community solar sharing', many large-scale US programs are utility-administered and developer-owned and operated within specific utility distribution zones (see **Case Study 6** below). Utilities allocate and settle bill credits, while third-party developers finance, construct and manage the assets. In these projects, developers will:

- Secure site control and interconnection approvals.
- Apply for relevant state incentive programs or tariff-based compensation mechanisms.
- Undertake subscriber acquisition campaigns (often commencing several months prior to commercial operation).
- Contract with residential, commercial and low-income subscribers for fixed-term bill credit entitlements.

Community involvement is generally limited to subscriber participation rather than governance or operational control. In some cases, local entities may provide land access, host arrangements or advisory input, but they are not typically responsible for project governance or delivery.

Revenue model and policy drivers

For the developers and investors in US solar sharing programs, project economics are underpinned by a layered revenue stack, typically including:

- Subscriber payments linked to bill credits.
- Regulated retail-rate or value-based compensation tariffs.
- State incentive mechanisms (e.g. Renewable Energy Certificates, SMART payments, or Adjustable Block Contracts).
- Federal Investment Tax Credits.

Program costs are typically embedded within regulated tariff structures or state incentive mechanisms. The rapid growth of community solar sharing in the US has been driven by state-level mandates aimed at expanding inclusive access to mid-scale solar development on appropriate sites, often with specific targets and income-based participation requirements. For example, the primary drivers for Xcel Energy's Community Solar Sharing program (see **Case Study 6** below) were the expanded, 50MW state targets for community solar by 2026, set out under the State of Colorado's 2024 Access to Distributed Generation Bill. Under this regulation, to qualify as inclusive community solar, a solar garden must have a generating capacity ranging from 10kW to 5MW, or up to 10MW if located in 'preferred areas', and reserve 51% of its generation capacity for income-qualified subscribers, defined as households making up to 200% of the federal poverty line or up to 80% of the Colorado median income.

Variations: Lease and Rental Access Models

A variation on the subscription model involves renting or leasing access to generation, paid in monthly installments, in exchange for a discounted price per kWh. These models can be utility-led or privately developed and are structurally similar to subscription models, in the sense that benefits are delivered through bill credits rather than asset ownership. **Case Study 7** (Adopt-a-Panel) below describes a rental access project free solar power in Italy, led by a privately-owned, vertically integrated utility.

Beyond direct revenue, solar subscription or lease projects can support developers' long-term growth strategies by strengthening social licence, building recurring customer relationships and creating a pathway to expand into complementary energy products and services.



Case Study 6: Xcel Energy's Community Solar Sharing program

A large, centrally coordinated and utility-led community partnership model

Xcel Energy is a publicly traded utility company that generates, buys, moves, distributes, and sells electricity in the United States. They have established 'community shared solar' projects across 8 states in the USA.[31] State governments also have supporting agreements with other local electricity utilities to service areas within their states that are not part of Xcel's territory. Prior to 2024, most solar gardens were administered by Xcel, however more states, such as Minnesota, are now moving the administration of solar garden programs to the State Department of Commerce.

The 'Solar*Connect Community' or 'Solar*Rewards Community'[32] programs by Xcel Energy feature solar projects that are constructed, managed, and maintained by a developer partner and connected to the local electricity grid operated by Xcel Energy. Subscribers, or program participants, pay a one-time fee to join the program and receive a credit on their monthly electric bill based on the solar energy produced by the project to which the participant has subscribed. Subscribers benefit from receiving full retail credit for their share of the solar generation, along with a discounted charge to cover distribution costs.

For customers, the minimum subscription amount is 200 Watts and the maximum is 400 kilowatts. Subscriptions can be sized up to 100% of average annual electricity usage (or up to 400 kW). Xcel Energy has online residential and business subscription calculators to support customers. In 2019, Xcel Energy offered subscriptions at a cost of ~$1,600 per kilowatt.[33] The minimum subscription size of 200 watts costs $320 and would produce enough energy to offset about 3 percent of an average residential customer's usage.

The model commenced in 2010 when Xcel was required to purchase electricity from community solar gardens under the Colorado Community Solar Gardens Act (HB 1342).[34] The state has expanded the program since a 2016 settlement deal with Xcel Energy and through several rounds of legislation, gradually increasing the overall generating capacity limit.

Case Study 7: Adopt-A-Panel

Consumer bill credits enabled by real-time local electricity matching

Plenitude is an Italian large-scale solar developer and electricity supplier to nearly 3 million electricity customers across Italy. Plenitude partnered with Enosi to allow residential and small business customers to access energy generated at Plenitude's solar farms in Sardinia.[35] Customers pay a small monthly rental fee in return for zero priced energy when their consumption is matched to their share of the solar farm output.

A high proportion of Plenitude's millions of customers are living in apartments or renting residential or commercial premises without the ability to install rooftop solar PV to reduce their emissions and energy bills. The Adopt-a-Panel product is designed to help these customers participate in the clean energy transition and save money while doing so.

A household using 12 kWh a day might match 25% of that energy (3kWh per day) to the solar farm during hours of sunshine. A household paying a €5.00 per month fee for a 1kW solar panel at Plenitude's solar farm would match its output to their daytime consumption of 90kWh over the course of one month. Matched energy is priced by Enosi's Powertracer software at zero, saving the customer over €10.00 per month (which is more than double their €5.00 per month fee), and providing them with access to clean energy. In addition, any electricity produced by their panel that they do not use may go into a community pool, where it is purchased by another member of the program who may have used more than their own panels provided, at a price benefiting both customers.

Enosi have integrated their Powertracer technology with Plenitude's customer systems and automate the exchange of site, metering and billing data.

Future planned developments will allow for customers to share their own rooftop solar energy in a similar way to the solar farm.



Image: 31MW solar farm in Porto Torres, Sardinia, Italy. Image credit: Plenitude.

2.5 Crowdfunded projects

In crowdfunded projects, a developer builds in a financial facility that allows individuals to invest small amounts of money into a project in exchange for a financial return and/or ownership stake. In general, crowdfunding platforms are distinct from mutual investment platforms in that they are designed for one-off capital raising for specific projects, whereas mutual investment platforms are often designed for ongoing investment activity, but the differences are nuanced and platform-specific.

Individualised forms of community co-investment in large-scale renewable energy through crowdfunding platforms have a strong legacy in both the UK and France. Enabled by a range of regulations and policies, France has seen widespread deployment of crowdfunding in renewable energy, which raised €38 million for solar and wind energy projects in 2018, generating returns to citizen investors of around 4- 5% (see **Case Study 8** below).[36]

Crowdfunding in Australia is predominantly used to finance innovation start-ups and small-to-medium-sized enterprises, rather than functioning as an established financial instrument for large-scale infrastructure projects. Currently, the use of crowdfunding platforms in Australia is limited to mid-scale projects and complemented by a range of other funding sources, largely due to regulatory limitations (see **Case Study 9** below).

Current limitations to crowdfunding in Australia include:

- The Corporations Act Part 6D.3A Section 738G stipulates an investment cap of $5m in any 12 month period. This is a statutory limit intended to balance access to capital with investor protection.[37]
- Companies eligible for crowdfunding must be unlisted (i.e. not on the stock exchange) and cannot be foreign companies or managed investment schemes.
- Associated assets and turnover must be under $25m.

These regulations mean that crowdfunding cannot be used for large-scale or portfolio projects which are valued over $25m, or used by large renewable energy companies, many of which are listed on a stock exchange. By comparison, the French 2015 Energy Transition for Green Growth Act (Art 11) raised the crowd-funded collection ceiling to €2.5 million for renewable energy projects.[38] In response to the success of crowdfunded renewable energy in France, there have since been further regulatory amendments to raise investment ceilings per lender, introduce financial mechanisms such as bonds and minibonds that are easier to structure and less risky than equity, as well as raise the maximum amount that can be collected through crowdfunding to €8 million.[39,40] These changes enable crowd-funding for renewable energy projects, while balancing the need for investor protections.

In Australia, the Corporations Amendment (Crowd-sourced Funding) Act 2017 updated the Corporations Act 2001, establishing a framework for crowd-sourced funding (CSF), which has eased regulatory requirements for public fundraising while ensuring investor protections, but has stopped short of necessary amendments that could enable crowdsourced funding for larger-scale community partnerships.

Case Study 8: Lendosphere

Scaling community co-ownership through crowdfunding in France

Crowdsourcing in renewable energy in France has grown significantly as a result of formal legal recognition of the crowdfunding sector, regulation raising the collection ceiling alongside the integration of a bonus for local resident financial holdings in market-based incentives for renewable energy. This has led to the development of well-established crowdfunding platforms such as Lendopolis and Lendosphere, some of which have specialised in renewable energy.

Lendosphere[41] is one of the key intermediaries delivering French crowdfunding opportunities. They also deliver crowdfunding opportunities for renewable energy projects across the EU more broadly where there is a French entity who holds the assets and receives the funding.

In 2024, most crowdfunding opportunities for renewables in France had the following characteristics:

- Set interest rate (e.g. 6-7%)
- Biannual payments
- Capital returned at end of investment term
- 3-4 year terms
- Project developers take a percentage of funds raised as fees (for example, 2-4% Value Added Tax[42], excluding the amount collected upon campaign success)
- Were a green bond type of offer via a subscription
- No ongoing investor fees
- No cap on investment
- Interest payments are from generation revenues and capital return from refinancing at end of the term

Investors register their interest in a project and then pay shortly after subscriptions open. The crowdfunding amount depends on the bank debt level the project is able to leverage. As the instrument used (equity or convertible bonds) gives or may give the crowdfunders access to the capital of the SPV, the amount collected should never exceed 49% of total equity (capital + shareholder loan) to make sure a developer would hold the major shareholder at all times. A minimum of 40% was a guideline from the French government (the total amount to be funded = total CAPEX + financial costs). The length of term is also a guide from the government, being not less than 3 years after Commercial Operation Date when the project starts producing and selling power, triggering revenue/PPA obligations.

Case Study 9: Swarmer for Manilla Solar

Crowdfunding to raise community finance

The Manilla Solar Project[43] is a 4.6 MW solar and battery initiative located 2km south of the township of Manilla, near Tamworth in New South Wales. This project is community-led with a limited role for the partner developer (and is therefore more accurately called a community energy project rather than a community partnership), but still exemplifies the use of crowdfunding to raise community finance.

In 2023, MCRE raised $310,000 from seed investors under the small-scale offering exemption known as 'the 20/12/2 exemption', which exempts companies raising capital from investors from having to issue costly disclosure obligations provided they meet certain rules and criteria.[44] The majority of these funds were allocated to acquiring the development approval and grid connection agreement. Additionally, in 2023, the company undertook a crowd-sourced funding (CSF) campaign that raised $124,840.

In 2025, another 92 investors contributed $153,701 through Swarmer, an Australian equity crowdfunding platform that connects businesses with investors and holds an Australian Financial Services License. Swarmer will receive an administration fee, as well as a success fee equal to a percentage of the funds successfully raised upon completion of the offer. The funds raised are in the form of ordinary shares, with a minimum investment amount of $90.

The project also benefits from grant funding of $935,000 from the NSW Regional Community Energy Fund, which will help cover capital costs.



Image left: 100 Mile Dinner - 2019, Manilla Showgrounds. MCRE annual community dinner. The food is sourced within 100 Miles (160kms) of Manilla, 2346. It promotes local produce, growers, and celebrates our community. Image credit: Tess Reading.

Image right: Site visit with Manilla Solar Project + MCRE project team, 2023. Image credit: Henry Stilts.

2.6 Intermediary enabled projects

The successful scaling up of community partnerships in the UK and EU has been facilitated by umbrella service organisations that provide governance and set up support, and project guidance. In some cases, they also offer capital-raising backend and due diligence services, as well as ongoing financial and investor administration services for communities to invest in or own renewable energy projects of all scales and percentage stakes, essentially providing 'plug and play' solutions to facilitate community participation.

Two prominent and successful co-operative intermediaries, Energy4All and REScoop, use different mechanisms to mobilise and support community energy and community partnership projects (see **Case Studies 10** and **11** below). Energy4All provides a streamlined model to facilitate and secure community investment where the community entity buys the right to a future revenue stream and is a passive investor in the project. In this revenue share model, the key elements are:

- The community and developer negotiate a percentage of revenue as well as how it is calculated (gross versus net) and formalise it in a contracted revenue share agreement.
- The developer retains all the equity in the project.
- The community entity raises capital to pay an upfront amount to obtain the shared revenue agreement.
- The community entity does not have shareholder protection.



Case Study 10: Energy4All

A scalable model enabled by a service platform

Energy4All (E4A) is a not-for-profit co-operative established in 2003, inspired by the success of the Baywind Energy Co-operative in Cumbria, the UK's first community-owned wind project. E4A has since supported the establishment of 20 co-operatives with over 13,000 members across the UK. It works with communities to develop business cases for renewable energy projects, manage planning applications, create co-operatives, and raise funds through public share offers. As a developer, E4A also brings technical expertise to build and manage projects, which are typically funded through a mix of borrowing, government low-interest loans (e.g. the Scottish Community and Renewable Energy Scheme) and share capital.

In 2003, E4A formed a partnership with Falck Renewables, an Italian wind development company operating commercial wind farms across Europe. Together, they have co-delivered six wind farms in Scotland, each featuring a community investment opportunity facilitated through a special purpose co-operative. One example of this model is the Skye Renewables Co-operative ("the Co-op"), which was established as part of the Ben Aketil Wind Farm in northwest Skye. The 12-turbine, 27.6MW wind farm, located 7km east of Dunvegan village, was developed by Falck and became operational in 2008. The Co-op, designed and implemented by E4A, enables local residents to invest in and benefit from the wind farm's earnings.

Key features of the co-operative are:

- **Community Investment:** The Co-op attracted 600 members, mostly Skye residents, who collectively invested over £800,000, accounting for approximately 2% of the project's total costs.
- **Legal Structure:** The community investment was structured as a revenue share agreement, where the Co-op does not own an equity share in the wind farm, but instead holds a non-controlling, income-participating interest in the wind farm, entitling it to an agreed share of project revenues. Individual members do not have direct rights to wind farm revenues, instead, returns are received by the co-operative and distributed to members as interest on their co-operative shares. This model has delivered target annual returns of around 6.5%, with higher returns in particularly windy years.
- **Grant Distribution:** The Co-op can allocate up to 5% of its income annually to local green projects in the community.
- **Governance:** The Co-op's board, composed of five Skye residents and one E4A employee, was recruited by E4A and is responsible for engaging the community and managing the investment offer.

Falck Renewables led all stages of the wind farm's development, including site scouting, feasibility studies, planning applications, turbine installation, and maintenance. E4A's role focused on community engagement, establishing the Co-op, and ensuring community participation in the project's financial benefits. Local volunteers, supported by E4A, coordinated communications and engagement activities to encourage community involvement. While the Co-op has no direct role in the wind farm's operations or decision-making, it has successfully raised awareness and built local support for the project, ensuring that community members benefit both financially and socially.

The E4A and Falck partnership has fostered strong local support, easing the planning process and enabling smoother project implementation. The model has since been successfully replicated at seven other wind farms across Scotland, showcasing its scalability and effectiveness. For the renewable energy industry, it has created a model for community participation in developer-led projects, setting a benchmark for integrating community investment into commercial wind developments. For the community, the model has ensured tangible financial benefits from local renewable energy projects, fostered support for wind farms and provided an avenue for community action on climate change.

> "For the community, the model has ensured tangible financial benefits from local renewable energy projects, fostered support for wind farms and provided an avenue for community action on climate change."

Case Study 11: REScoop

A successful multicountry intermediary

REScoop is the European federation of energy communities. Representing more than 2,500 renewable energy communities across Europe, it is a recognised voice of citizen energy communities in Europe.

Local renewable energy communities supported by REScoop are citizen-owned, democratically governed organisations established to develop, own and sometimes operate energy assets and services in a defined local area. Citizens typically become members by purchasing one or more shares, gaining co-ownership and decision-making rights regardless of the amount of capital invested. Projects are diverse; from renewable electricity generation and supply, energy efficiency and savings, building renovation, sustainable heating and cooling, flexibility and storage services, tackling energy poverty, or sustainable mobility.

REScoop offers a range of services to support citizens, businesses, and local authorities interested in these initiatives, including:

- **Capacity building:** Training, coaching, and tailored support, both in person and online. This includes the Energy Communities Platform, which acts as an online one-stop shop for citizen energy groups, as well as other guidance and tools for local government, policy makers, and financial institutions. REScoop organises dedicated working groups for members (meeting monthly or bi-monthly across several themes) and an annual forum.
- **Advocacy:** REScoop represents and advocates for their members' interests at European level.
- **Communication:** REScoop supports its members by amplifying their work and strengthening the visibility of energy communities across Europe, mapping and reporting on the state of the sector across Europe.

REScoop.eu is a co-operative organisation governed by a Board of Directors elected every four years by the General Assembly, following the principle of "one member, one vote." A team of around 20 staff based in Brussels manages the federation's day-to-day work. REScoop is funded through a combination of EU project grants, membership fees and service contracts.

Image: REScoop European Energy Communities Forum in Kraków, Poland, 2025. Image credit: @rescoop.eu



2.7 Community value sharing in aggregated energy solutions

In community value sharing models, local households and businesses with rooftop solar and/or battery supply flexible demand (for example by adjusting electricity usage or battery timing), capacity, ancillary services and surplus electricity.

Returns from these CER services depend on agreements with the aggregator/retailer, but these projects are often designed to allow participants to get better returns for exported solar, to smooth power loads on the network, and to give other consumers without solar access to lower cost electricity. Community value sharing models are increasingly gaining traction as we seek pathways to managing a high penetration of consumer energy solutions that can simultaneously deliver local economic, social, environmental and grid benefits and that offer a better alternative compared to curtailment or restrictions.

In general, trading of electricity may be peer-to-peer (controlled by participants and sold to individual consumers locally), or automated in Virtual Power Plants (VPPs) (controlled by a utility and generally sold on the wholesale energy market), depending on the objectives driving the project. For example:

- Peer-to-peer trading to date has been taken up by smaller community-driven projects aimed at local control and social outcomes from distributed energy assets, in which participants gift or trade surplus electricity locally via a digital platform.[45] Producer-consumers can send excess solar power to nearby consumers, such as neighbours without solar, rather than exporting all the surplus to the grid at low feed-in tariff rates. Meanwhile, participating consumers without solar can pay less for locally generated renewable electricity than they would under standard retail rates.[46]
- Larger projects, typically implemented by utilities as part of network modernisation efforts, have adopted automated trading in VPPs (see **Case Studies 12, 13** and **14** below).

In both cases, an intermediary - typically a licensed retailer and aggregator - manages the platform, ensuring energy flows are accounted for and any untraded surplus is pooled for wholesale market participation. Depending on the context, trading is metered and settled through distribution network infrastructure, private microgrids or embedded networks, and/or on the wholesale market.

When deployed at scale in constrained distribution networks, these projects enable local balancing of supply and demand, reduce strain on distribution feeders, reduce technical losses and can also defer expensive network upgrades in the medium to long-term.[47] With over 4 million homes with solar PV installations in Australia,[48,49] this model can help DNSPs manage surplus electricity exports during sunny midday periods when many homes and businesses are generating solar power.[50]

The key elements of this model are:

- A project proponent (retailer, aggregator or network operator) works with local households, businesses and community organisations to identify options for demand-side participation and value sharing as a pathway to deliver community and grid benefits.
- Early engagement informs concrete proposals on how value sharing will be conducted, processed, billed and rules for participation, as part of new or existing service offerings.
- Project and funding agreements are developed outlining project objectives, roles, technical scope, data and hardware requirements, participating stakeholders, and governance. Key stakeholders are: a licensed retailer-aggregator, an aggregator or retailer, a DNSP, a digital platform provider, a smart meter provider, technology providers, consumers and relevant community organisations.

- A Participation Agreement or Customer Terms Agreement is created, outlining project information, the value sharing model, rights and responsibilities of participants, data access and privacy, remote-control or optimisation conditions (if relevant), as well as pricing frameworks, consumer protections, and opt-out pathways.
- Core infrastructure is configured and tested and legal advice obtained to ensure that metering, data integrity, cyber security and settlement processes all meet regulatory requirements.
- A community engagement campaign informs residents, businesses and stakeholders about the opportunity, how value sharing works, expected benefits, technical requirements, consent processes and enrollment steps.
- The proponent works to onboard participants, roll out required technology upgrades and support participants to make informed choices about demand-side actions.
- Digital tools and aggregated reports help participants see how much electricity is generated, consumed, traded locally, exported to the grid, or shifted in response to system needs, their financial outcomes, and community-wide benefits.

VPPs are a rapidly growing feature of Australia's energy system, operating in every NEM state in Australia and in West Australia's regulated system. Increasingly sophisticated solutions are being used to facilitate automated real-time trading to achieve optimised reliability, cost, emissions, and renewable energy utilisation in integrated energy systems (e.g. see PowerLedger and DERMS in **Case Studies 12** and **13** below). However, participation is still limited to homes with suitable solar, storage and internet connectivity.

Peer-to-peer trading models are at early stages and are not yet a mainstream offering from big retailers, although a number of trials, startup platforms and community projects have emerged in recent years.[51] A range of new energy platforms allow customers to freely buy and sell energy, choose trading partners and set prices for imports/exports (e.g. see Localvolts, or Powertracer). Introducing decentralised energy markets within our current electricity market and institutional settings comes with a range of regulatory, economic, technical and social challenges that would have to be addressed for this model to expand and become mainstream in Australia (see **Part 4** of this Guide).

Case Study 12: PowerLedger Delhi

A large-scale peer-to-peer trading project

The PowerLedger Delhi project is a pioneering large-scale peer-to-peer energy trading initiative in India, designed to empower consumers to trade excess solar energy directly with each other.[52] The pilot involved 65 residential solar PV consumer-producers totalling 2MW of solar PV systems to trade solar PV to each other and 75 other consumer sites across a total of 140 buildings, which comprised a mix of residential and commercial properties within an area in North Delhi licensed to Tata Power-DDL, the distribution company.

Tata Power DDL serves 7 million people and experiences regular grid stress. This pilot was implemented in order to test different approaches to trading logic and identify recommendations for the regulator as to how local energy trading can support network management within India's energy transition.

When solar PV prosumers generate surplus energy and a consumer purchases it, the trade is automatically executed based on pre-agreed rates. Smart meters installed at prosumer and consumer sites allow the collection of energy generation and consumption data, which is fed into the platform to match energy supply with demand in real time. The platform acts as a digital marketplace to allow direct trade, where prosumers can set their energy selling price, and consumers can choose their preferred energy sellers. Prosumers earn revenue from selling surplus electricity, while consumers benefit from lower energy costs compared to traditional retail prices. Tata Power DDL benefits through reduced grid congestion and improved grid stability and reliability.

“Prosumers earn revenue from selling surplus electricity, while consumers benefit from lower energy costs compared to traditional retail prices.”

Case Study 13: Horizon Power's Onslow Microgrid[53]

Unlocking customer DER in a low-inertia remote microgrid

Onslow is a remote coastal town of roughly 900 people in the Pilbara region of Western Australia. Like many communities in Horizon Power's vast, sparsely populated service territory, Onslow is supplied by a small, islanded microgrid with no connection to the wider Western Australian electricity network. Prior to the project, the town relied on a mix of natural gas and diesel generation (8 MW gas, 1 MW diesel), supplemented by a 1 MW lead-acid battery. This conventional system was expensive to operate, exposed to fuel supply volatility, and sensitive to disturbances because of its low inertia and small scale. Hosting capacity for rooftop solar PV had effectively been reached; early adopters had triggered voltage rise, reverse power flow issues, and instability, leaving residents unable to install solar despite strong local demand.

To address these challenges, Horizon Power sought a new approach that could support high levels of customer-owned distributed energy resources (DER), improve system reliability, and extend the life of existing utility infrastructure, providing shared value for all stakeholders while decreasing costs and emissions. As part of a two-year pilot, Horizon Power partnered with PXiSE Energy Solutions to deploy an advanced Distributed Energy Resource Management System (DERMS) alongside PXiSE's high-speed microgrid controller. The combined system provides real-time monitoring, optimisation, and control of both front-of-the-meter utility assets and behind-the-meter customer DER, treating the Onslow microgrid as a fully integrated, dynamic energy ecosystem.

Onslow's grid includes:

- 1,341 kW of residential solar PV (261 systems)
- 640 kW of commercial and industrial solar PV (8 systems)
- 190 kWh of residential energy storage (19 systems)
- 361 kWh of commercial and industrial smoothing storage (8 systems)
- 1 MW of utility solar farm
- 500 kWh of utility power station BESS
- 1 MWh of utility network BESS
- Centralised power station

The system enables full visibility, communication and remote control of behind-the-meter solar and battery assets at customer properties. As part of the pilot, households were offered discounted solar PV and battery systems, alongside new customer offerings.

Horizon Power worked with its customers to realise mutual benefits and maximise the emissions and bill reduction capabilities of behind-the-meter assets such as customer rooftop solar and battery energy storage systems.

The strong relationship with customers was critical to the success of the project, with customers benefiting from reduced energy costs.



> "Horizon Power worked with its customers to realise mutual benefits and maximise [their] emissions and bill reduction capabilities... The strong relationship with customers was critical to the success of the project."

Case Study 14: Plico Energy

An end-to-end solar, battery and VPP service

Plico established Western Australia's first Virtual Power Plant (VPP), benefitting both residential participants and the stability of the energy grid. At present, Plico has over 4000 households signed up – amounting to more than 50 MWh in battery storage.

Plico utilises a membership-based model, allowing households to sign up to receive a solar and battery or battery only system financed by Plico, for which they pay a weekly instalment fee under a 10-year service agreement, after which ownership of the system transfers to the member. This model allows households who would not otherwise be able to afford the upfront costs of a solar and battery system to finance their investment and benefit from reduced energy bills.

To minimise members' financial risk exposure, Plico works with prospective members to analyse their energy bills and savings potential prior to their investment in a solar and/or battery system. Additionally, during the 10-year agreement period, the system is under warranty and claims are managed by Plico on behalf of members.

Households also receive automatic membership of Plico's VPP, while others who already own an eligible battery can also join as members of the VPP. By joining the VPP, members agree that Plico can remotely operate their home battery at certain times to provide essential grid services, which is automated and managed through Plico's digital platform (though household energy use is always prioritised). In return, members receive financial rewards for the energy that their battery supplies to the grid, three times greater than their electricity tariff. Plico members are protected under a 'no worse off' clause that ensures their net financial benefit from the operation of the VPP. They also receive regular communications, including tips and optional alerts in the event that the VPP is activated.

All members are also part of the Plico Community Council, a not-for-profit body that represents customers and provides a formal way for members to have a voice in Plico's community activities and priorities. The Plico Community Council also has ownership interests in Plico Energy. The Plico Community Council oversees the 'Plico Hardship Support Fund' and the 'Plico Future Fund', which are funded through small financial contributions built into Plico's membership model. The Plico Community Council also oversees the Plico Hardship Support Fund and the Plico Future Fund, which is funded through small financial contributions built into Plico's membership model. The hardship fund provides payment support and donations for members experiencing financial hardship, while the future fund is used to support local community, environmental and sustainability projects through grants.







Image credit: Plico Energy.

2.8 Transmission co-ownership

In recent years, community ownership in transmission infrastructure has emerged out of Canada, Germany and the USA. In the USA, large not-for-profit investors like 'Citizens Energy Corporation' have partnered with investor and publicly owned utilities to invest in transmission projects since 2007, using revenues to finance solar and energy efficiency projects.[54] In Canada, pioneering transmission co-ownership projects like Wataynikaneyap Power have paved the way for other First Nations transmission ownership projects, including a wholly First Nations owned transmission line in Quebec.[55]

Although First Nations' co-ownership of transmission infrastructure in Canada takes on a variety of models, most projects are structured as joint equity ventures. These are incorporated as standalone entities with their own legal and financial frameworks, separate from the parent organisations of the shareholders, who typically include shareholders comprising First Nations, Crown corporations, private utilities and public entities. These projects involve broadly the same key elements as joint equity ventures in generation (see **Section 2.2**), but need tailored structuring and negotiations because transmission assets are subject to more complex regulatory frameworks. Many Canadian transmission co-ownership projects operate under long-term cost-recovery contracts with state utilities. Regulatory frameworks for electricity transmission have been amended or interpreted to ensure compliance while accommodating these new operational models. For example, projects are required to comply with the same or similar obligations around licensing and permits, adherence to grid codes and reliability standards, planning and approval, environmental and cultural protections as well as operational standards and rate-setting set by provincial or regional authorities.

Transmission co-ownership projects in Canada have utilised different financial instruments, from public-private bonds to federal grants, commercial loans and government loan guarantees, as well as private investment. Projects like Wataynikaneyap Power involved upfront First Nations investment and were conceived of and driven by First Nations groups in order to power their communities (see **Case Study 15** below), while other projects involved selling equity stakes to First Nations communities long after construction and commissioning, and were led by utilities in order to supply other demand centres (see **Case Study 16** below). Most projects designed with First Nations communities at the outset have involved Participation Agreements, training and employment of First Nations people, in addition to First Nations equity stakes.

In Australia, benefit sharing for transmission infrastructure is just emerging, but has to date been limited to community participation on project design, community benefit funds and long term access to low-cost electricity for host communities.[56] For example, Barngarla Determination Aboriginal Corporation was involved in siting, and monitoring aspects of the Eyre Peninsula Link from Cultana to Port Lincoln, where they set their own protocols for engagement, consultation and approvals and ensuring job pathways for the community.[57]

The First Nations Clean Energy Network has set out a wide range of regulatory and policy provisions that would enable transmission co-ownership with First Nations people in Australia.[58] Transmission operators manage both regulated and non-regulated assets. Non-regulated assets serve as connectors into the main transmission network and are financed by developers, and may more readily provide openings for co-ownership.

Case Study 15: Wataynikaneyap Power

A transmission project led by First Nations

Wataynikaneyap Power[59,60], translating to "line that brings light," is a project consisting of 1800km transmission lines, 22 substations and facilities to connect 17 remote First Nation communities to the provincial (Ontario) power grid. Although the majority of this project was completed as recently as 2024, the idea for this project was first conceived by the Indigenous People 30 years prior. Wataynikaneyap Power was incorporated in 2013, and initial feasibility, community consultations, funding acquisition and regulatory approvals were obtained. Additional communities joined the partnership up until 2019, bringing the total partnership to 24 First Nation communities.

The 24 First Nations communities maintain 51% ownership of Wataynikaneyap Power, in partnership with Fortis Inc. (49%). Negotiations for support from the Ontario and Canadian governments were crucial to the development and building of the transmission system. On March 22, 2018, Canada announced $1.55 billion in federal funding to pay for the Ontario government's loan and other costs. The cost to complete the construction of the transmission system was approximately $1.8 billion plus additional costs, and was financed by Ontario and Senior Bank lenders alongside equity contributions by owners.

HydroOne Remote Communities Inc (HORCI) is the distribution operator responsible for power distribution to communities connected by the project, and Wataynikaneyap Power has a cost recovery contract in place with HORCI to allow the project to recover the cost of building the transmission line. The Ontario Energy Board regulates electricity transmission rates in Ontario and approved the cost recovery framework underpinning this project. This framework set the terms for how costs were allocated to uniform transmission rates versus fixed charges to HORCI, to ensure that project expenses were appropriately distributed among province ratepayers, including directly served communities. The partnership of 24 First Nation communities will own Wataynikaneyap at 100% after 25 years from the project's operational date (May 2024).



Case Study 16: Saugeen Ojibway Nation

A coordinated approach to First Nations co-ownership of transmission infrastructure[61]

Ontario's 2007 long-term energy plan states that First Nations communities should be invited into transmission projects that cross their traditional territory. Given that a large number of projects would be sitting in their territory, Saugeen Ojibway Nation (SON) near Southampton began to explore opportunities for their people to be involved in the planning of benefit sharing from the project.

In 2013, SON formed a limited partnership with Hydro One, Ontario's largest electricity transmission and distribution service provider, called B2M LP. The partnership wholly owns two 500kV 180km transmission circuits, which run through SON territory between Bruce and Milton in Ontario. The Ontario Energy Board reviewed and approved the proposed ownership arrangement to ensure it met regulatory standards and served the public interest. After obtaining regulatory and government approvals, SON acquired a 34% interest in B2M LP. Valued at $72 million at the time of the deal, the capital was raised from financial institutions with a loan guarantee through the Province of Ontario's Aboriginal Loan Guarantee Program. Energised in June 2012, the line transports power from wind and solar farms to major demand centres in southern Ontario. The line is co-owned, operated and maintained by Hydro One.



2.9 Alternative approaches to delivering community benefits

Alongside community co-investment and co-ownership opportunities, developers are also increasingly implementing other benefit-sharing measures to support local energy needs. These initiatives are wide ranging and tailored to locally specific needs, from alleviating energy hardship, to improved housing and living conditions, to more affordable energy. There may be a direct link to the renewable energy project under development, for example through local energy matching, or there may be no direct physical link with the project beyond branding. Here we set out two examples of developer-community collaborations on local energy initiatives.

Installing energy equipment for host communities

Because energy efficiency initiatives are a cost-effective way to deliver social value alongside emissions reductions, developers have funded programs that deploy residential behind-the-meter renewable energy assets (e.g. rooftop solar PV) and energy efficiency initiatives in the host community as part of community benefit sharing schemes. This model results in lower energy bills for community members who receive those assets (see **Case Study 17** and **22** below). Beyond more reduced energy bills and more comfortable homes or community centres, this model also generates wider community benefits, including improved local energy resilience, health and wellbeing gains, emissions reduction, greater local business participation and associated economic benefits.

Key elements of this model are:

- Research is undertaken via desktop sources such as Australian Photovoltaic Institute (APVI) to understand local energy asset context.
- Catchment area and target recipients are decided on with input from local residents and stakeholders, influenced by the overall budget available. Target recipients could be only residential or include businesses/community facilities such as neighbourhood centres.
- The community is surveyed to assess local desire and participation and focus of program delivery, communication strategy etc.
- An indicative budget cap per household is allocated, and an additional administrative component of the overall budget is allocated to support delivery. For example: a $2m program for 100 households, with a $200k delivery budget for either an implementation partner or in-house delivery including marketing campaign.
- The developer looks for organisations that have done similar work and trusted relationships in the community, and assesses the capability and readiness of local organisations that could serve as delivery partners. It is important to choose a partner with strong local relationships to effectively engage target participants, coordinate with local suppliers, and establish service agreements with local installers and tradespeople.
- The developer decides on either an in-house delivery model, a partially outsourced, or fully outsourced model, depending on local context and the availability of partners (e.g. a marketing partner).
- The delivery lead assesses local trades and service providers to deliver the program and the product list that is available locally/regionally. Suppliers, installers and products must all be appropriately certified.
- Depending on the local/regional product list and what are local needs, the delivery scope could include the installation of solar PV, batteries, heat pump hot water systems, EV chargers, electric appliances such as split-system air conditioners or induction cooktops and other energy efficiency measures. Offering a diverse product list ensures that households or businesses that have already taken steps to reduce emissions can still participate and build on their progress.

- The developer sets up service agreements with two or three local tradespeople. These agreements describe how the costs of supplying and installing equipment will be handled, including any government subsidies or financing arrangements. These agreements typically specify that payments will be processed in bulk rather than through multiple small transactions, and set expectations for regular reporting. They may also include fixed product pricing for the duration of the program.

- The program is marketed and delivered to the local community.

Home energy programs can be implemented during and/or post-construction of the renewable energy project, but are ideally delivered during construction of the renewable energy project if funds are available. To work as a benefit sharing model and be resourced through part of a benefit sharing budget allocation, this model may require fast tracking expenditure over 1-3 years to have meaningful and equitable deployment, rather than over the lifetime of the renewable energy project.

To delineate program participants, beneficiary communities can be defined by location, interests and practices, groups adversely impacted, organizations, or other attributes, such as demographic characteristics. For smaller host communities (under 200) this model could cater to everyone who wants to participate with a broad range of technology options. If the population is too large for a direct delivery model, an alternative approach could be working with local partners (Council, Foundation, Neighbourhood centres) on a local subsidy program (for example, around $2,000 per household per upgrade, to allow more members of the community to be able to participate).

Generally speaking, an expenditure of over $10,000 per household is needed to make a meaningful difference to household energy bills.[62] To demonstrate social value, programs could be evaluated on the basis of number of beneficiaries, technologies delivered, emissions saved, funding deployed, marketing statistics, annual bill savings delivered, and self-reported impacts on financial stress, health, and well-being.

Table 4 below outlines additional considerations that can help determine whether this model is suitable.

Table 4: Key considerations for home energy asset initiatives.

Complexity	▪ Relatively complex from a coordination perspective with resourcing, administrative, community and marketing context. ▪ Can borrow from preceding well established similar programs deployed across Australia by councils, NFPs and utilities. ▪ Financial and legal agreements are relatively simple compared to other pathways.
Resourcing administration cost	▪ Relatively high administration cost load. ▪ Administration needs to be well funded (suggest minimum 10% of overall program), and could be delivered in house or via a partner.
Co-funding	▪ Current federal and state government subsidies can enhance the outcomes of this model. ▪ Finance providers such as Brighte and banks offer low interest loans for the balance of upgrade costs.
Portfolio replicability	▪ High level elements of the program are highly replicable. ▪ Local alignment and need would have to be assessed on a site by site basis.
Branding and social license	▪ Significant branding and profile raising opportunity. ▪ Can be linked to project benefits particularly if done during the construction phase (e.g. “Green Banks Wind Farm Local Energy Program”).
Long term risks	▪ Warranties and guarantees around products need to be carefully considered. ▪ Working with local maintenance providers can ensure longevity.



Case Study 17: Dundonnell Community MiniGrid

A home energy equipment subsidy program to lower energy bills

The Dundonnell Community Mini Grid has been deployed by Tilt Renewables in order to provide an innovative and cost-effective energy supply solution to the Dundonnell community.

In 2018, Tilt Renewables sought feedback from the Dundonnell local community about what they would like to see as benefits from the project. The most common response was a desire for cheaper electricity prices.

The Dundonnell Community Mini Grid program gives eligible dwelling owners the opportunity to participate in a renewable electricity project that consists of the installation of a solar PV system coupled with a suitably sized battery at a discounted price. Tilt Renewables subsidises each system with a lump sum payment of $15,000 per installation, no matter what the total install costs for each dwelling.

Tilt Renewables also fully funded a backup generator for the Dundonnell Country Fire Authority, identified in consultation with local volunteers as the most appropriate solution given the likelihood of power outages during fire events.

Image credit: Tilt Renewables.



Gifting host communities energy bill discounts

Gifting host communities bill discounts is an emerging tool in sharing local benefits of renewable energy projects in which the developer provides direct financial relief on energy bills for residents, businesses or community facilities within or near the project area. There are various approaches to delivering bill credits for local energy consumers, ranging from simple manual approaches suitable for a small number of participating customers, to technology platform enabled bill credit delivery suitable for large numbers of participating customers (see **Table 5** below). This model can operate over varying timeframes and can be delivered directly by the developer or through trusted partners. It can be scaled for different community sizes and can complement other benefit sharing mechanisms.

Key elements of this model are:

- Research is undertaken in the host community to understand local willingness to participate and assess options for retailer partnerships and technology platforms, such as Reswitch (see **Case Study 18** below) or Enosi (see **Case Study 7: Adopt- A - Panel**).
- The developer defines project catchment and eligible participants based on community input, local context and available budget.
- The developer determines in collaboration with project partners how discount amounts are set and delivered; for example, through an annual allocation per household or facility, or tied to a portion of generation from a project, delivered through direct bill pay, retailer-integrated bill credits, or by matching a share of project generation to local customers (see **Table 5**).
- Local partners are assessed alongside the desired role of the developer to determine who will lead on marketing, engagement and campaign strategy. These can be neighbourhood centres, trusted local NFPs, billing service providers (e.g. Reswitch), or retailers.
- Administrative levies or service fees are agreed and service agreements, contracts and administrative arrangements (including reporting processes) are established.
- A local engagement and marketing campaign is designed and implemented to ensure participation, particularly from priority groups.
- Uptake and bill savings are monitored and program performance is periodically reviewed (e.g., at years 5, 10, 15), and adjusted as needed.

Table 5: Different ways to deliver bill credits for local energy consumers.

Direct bill pay model	A developer pays a proportion of utility bills monthly through direct payment via established payment mechanisms such as BPAY. Participating consumers may be households, local community buildings and/or businesses.
Accounting platform model	A developer works with an accounting platform provider in order to deliver monthly bill credits on household utility bills in exchange for a service fee. The service provider has contractual arrangements that allow it to work directly with retailers to integrate the bill credit into bills and billing statements of participating households. Reswitch can provide power bill reductions for residents within the host community as a project benefit without requiring participants to switch energy providers.
Local energy matching model	A developer partners with a technology platform to allow customers to access discounted electricity generated from the project. Participants have access to a small proportion of the generating asset (for example, per panel, or a fragment of plant output) and receive reduced or zero-priced electricity when their consumption is matched to that output. Technology providers like Enosi can match electricity output to daytime consumption (24 hours after actual), facilitate peer-to-peer trade and integrate electricity matching and trade into retail billing systems. The retail offer can be targeted to specific consumer segments, such as socio-economically disadvantaged households locked out of rooftop solar PV, or inclusive to all consumers.
Retailer-led local energy product model	A developer partners with a single retailer to allow local residential, small business, and commercial and industrial customers to access discounted electricity generated at a local utility-scale wind farm through a dedicated and branded retail offer. The PPA with the retailer enables more mid-term pricing certainty and less exposure than standard retail offers. Participating households and businesses must 'switch' to the retail offer and remain with it in order to benefit from it.

Bill discounts provide a direct, visible and easily understood financial benefit, and can be valued by communities who express a desire for near-term cost-of-living relief, enabling developers to link a renewable energy project to ongoing household affordability. Although this model provides less opportunities for deep and long-term community wealth building than the co-investment and co-ownership models set out in this Guide, it can provide targeted and direct cost-of-living relief, with low barriers to participation.

Table 6: Key considerations for bill discount initiatives.

Complexity	▪ Direct bill pay is low complexity but onerous. ▪ Community engagement campaign for technology-platform mediated bill payments can be challenging. ▪ Technology platforms can take care of complex technical, financial and legal elements. ▪ Consumers are familiar with bill subsidies due to state and federal energy subsidies.
Resourcing administration cost	▪ Requires an ongoing engagement campaign to ensure onboarding of new residents, and facilitate updating of details upon change of retailer or residence. ▪ Requires clear arrangements in place for carrying out ongoing administrative work.
Co-funding	▪ Can complement any existing state and federal government bill subsidies. ▪ In areas that have multiple projects, there may be opportunity for a joint program with other developers to split ongoing operational costs.
Portfolio replicability	▪ Highly replicable across different locations, depending on the participation population. ▪ Local alignment and need has to be assessed on a site-by-site basis.
Branding and social license	▪ Significant branding and profile raising opportunity over the long term; e.g. onboarding pages can be project-specific and show project narrative and key metrics, or retailers can have project name on the electricity bill to create direct tie to a project that is meaningful.
Long term risks	▪ Retailer churn can mean ongoing administration cost. ▪ Future redundancy risk due to rooftop solar. ▪ May want to set it as a 5-7 year program and then assess it, rather than a 20 year program.

Case Study 18: Squadron Energy's Power Promise program

An innovative bill discount trial in Queensland

Squadron Energy is running a two-year pilot offering a $1,000 annual bill bonus under their 'Power Promise' program, in partnership with Reswitch.[63] The offer targets residents and businesses within 20km of a major wind farm in Central Queensland. The goal is to assess the local take-up and impact of the offer, as well as the potential for broader roll out. The program is one aspect of their broader community investment initiatives like infrastructure upgrades, housing initiatives, sponsorships and community benefit funds.



Image credit: Squadron Energy.



PART 3

How to deliver community partnerships

Where Part 2 of this Guide set out different models for community partnership in renewable energy, this part (Part 3) outlines how to get started on delivering community partnership projects. It highlights key aspects of project development, supports decision making around project design and community engagement, sets out options and supports decision making around community engagement, legal structures and finance.



1. Designing a fit-for-purpose community partnership project

Because community partnerships vary across legal, financial, governance, roles, engagement and other aspects, and every community and project context is different, crafting a suitable project will involve mixing and matching options to build a workable model. A suitable model will need to be desirable, viable and feasible.

Different model configurations carry different pros and cons when it comes to the level of risk and obligation on the community stakeholders. For example, whilst common elsewhere, models that involve community purchase of a distinct component of the assets (for example, one specific turbine in a larger wind farm) have been perceived as having an unfair risk profile in Australia, compared to models that can aggregate the risk/benefit across the entire project. Models in which the community acts as a debt financier (as facilitated by a managed investment fund or through a co-operative) have been successful in Australia to date, largely because they facilitate a simple relationship between the developer and the community, allowing the developer to control the prioritisation structure for their different financial stakeholders and to shield community participants from project risk. In other First Nations and community projects, community co-governance is considered important to enable community influence and control over the development. Understanding these dynamics and considerations is part of designing a community partnership model that is fit for purpose in a local context.

Designing a suitable model

What is desirable?

- What are the motivators driving community partnership?
- What benefits do you want to deliver?

What is viable?

- What is possible within the regulatory and financial landscape?
- What legal models and governance roles are appropriate?

What is feasible?

- What are the technological and physical limits?

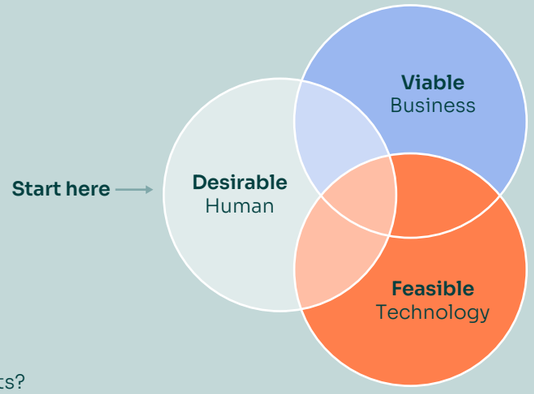


Figure 3: Factors to consider in building a suitable model for community partnership.

When designing the community partnership model, it is important to consider the role of community members and other key stakeholders, such as local governments, landowners and First Nations organisations, and to be clear about how and where community input can shape design, decisions and direction. Questions that can help to guide the process of crafting a suitable community partnership model include:

- **Priority outcomes desired by community members:** Is participation, empowerment, capacity building, or community wealth building important? Are there specific priority outcomes, such as energy poverty alleviation, better home energy performance, employment or regional development? This will determine whether bill reduction models, home energy asset models or financial stake models are within scope.
- **Form of participation and level of involvement:** Is participation primarily about empowerment and influence, or about affordability and service outcomes? Does the community want (and is it feasible) to pursue co-ownership or co-investment with governance rights, financial participation without control, or access to discounted or locally sourced electricity?
- **Equity, debt or revenue share:** If the involvement is financial, should the community's stake be structured as an equity stake with variable returns and ownership rights, or as a debt instrument with fixed returns, or as a subscription to generation from the project?
- **Decision-making role:** Will community members have/want a role in the governance of the project and influence over decision making? How will decisions be made? What will community representation in decision-making look like?
- **Terms of investment:** Will the community's returns fluctuate with the project's performance, or will there be fixed returns or an energy bill component?
- **Number of participants:** How many community members do you want to be involved as co-owners, investors or subscribers?
- **Membership requirements:** Should there be restrictions on who can be a member, such as geographic limitations or preferences? Do you want to target a certain demographic through community partnership?
- **Size of the community stake:** How large a stake is the community able to invest, own or subscribe to (in total)? What is the minimum outlay for community members? Is this accessible for the target participants?
- **Risk and responsibility:** What level of risk and responsibility can community members take on and sustain over time? How will risks be managed for the community, the developer and other key stakeholders such as financiers?
- **Policy opportunities:** What policies or regulations might provide a window of opportunity to leverage public or commercial counterparts to engage in a community partnership?
- **Regulatory risks and tax implications:** What are the regulatory risks, and who will bear them? Are there any relevant tax implications that need to be considered?
- **Administration and set up costs:** What are the resourcing considerations for the administration of the model? How will these costs be covered? How much will the model cost to establish and who will cover this cost?
- **Roles:** What roles will the developer and community partners play? What role(s) will the distribution network operator and local retailer expect, or play? Will Local Government play a role in introducing the options to a community or negotiating with developers on a community partnership stake for community?
- **Timing:** When will the community partnership be introduced, designed and actioned within the project lifecycle?

Different models for community partnership allow for greater and lesser levels of community involvement. For example, a community and developer co-led partnership gives a strong role to community members (usually via a community organisation of some kind), where they participate in decision making, planning and delivery of aspects of the project throughout its development cycle. Other models that tend to be developer-led, such as co-investment via a managed investment fund, can be designed to have a very light touch role for community members, without necessarily needing a community organisation of any kind.

These two very different roles for the community come with different levels of community engagement and involvement over time. With an increased role for community comes the potential to involve more people, build more social capital, increase local capacity and create a sense of empowerment. However, it also comes with risks and responsibilities that need to be sustained over time. This can be particularly challenging if the model relies on community volunteer labour.



2. Where community partnerships sit in the project development timeline

Firstly, it is important to understand the broader development timeline for a project. The following generic stages are common across all large-scale renewable energy projects, although the time taken to work through each will vary by technology and scale.

For example, a wind farm can expect to take 4-7 years to reach financial close and then another 2-3 years in construction before a 25-35 year operation period, whereas a large-scale battery project may take two years to complete from planning to commissioning.

It is important to consider that community engagement, particularly when adding in community partnership elements, must flow through all stages of the project.

A community partnership model may be initiated by community members or by a developer or emerge from conversations between the two. Either way, there are some key steps in the process of turning an idea into a fully-formed project plan.

1	2	3	4
Site selection Scoping potential viable sites. Establishing initial communication with landowners and councils.	**Feasibility** Conducting studies on social, technical and financial aspects while getting to know the neighbourhood and community.	**Design** Testing ideas with the community and refining the design.	**Planning and approvals** Planning the details of the project and undertaking specialist studies to inform the environmental impact statement (EIS). This is usually the height of community engagement activity and includes the design of the project's community benefit sharing program. All going well, this phase culminates in planning approval.
5	6	7	8
Financial close Securing finance for the project and establishing necessary legal vehicles. In this phase, engineering, procurement and construction (EPC) contracts are put in place and benefit sharing is established.	**Construction** Managing peak level of local activity, change and disturbance, and implementing benefit sharing.	**Operation** Project is connected to the grid and starts operating. Community relationships and benefit sharing matures.	**Decommissioning** After a span of 20-30 years, the project undergoes re-commissioning or decommissioning.

Figure 4: Eight stages of renewable energy project development.

Table 7 below outlines the basic steps to follow to develop and implement a community partnership model. This will require working closely and collaboratively with the key players that need to be involved to deliver the model and make it work.

These steps can inform the project management approach to developing the project.

Table 7: Steps to establish a community partnership project.

Step	Detail
1. **Ignite the spark**	Whether as a community or developer, pinpoint your initial ideas and motivations.
2. **Generate buy-in**	Get key (community, developer) players crucial to delivering community partnership on board with the idea.
3. **Identify parameters and motivations**	Work together to identify common motivations and the community partnership models that are open for consideration; clarify key parameters to work within.
4. **Socialise early ideas**	Gain high-level input and feedback with wider stakeholders.
5. **Refine early ideas**	Create a high-level concept of a viable, feasible and desirable community partnership model based on the initial exploration.
6. **Seek relevant approval**	Ensure the model aligns with project development, financing, risk requirements and legal and regulatory environment; get CEO/ board approval where needed.
7. **Plan the broader engagement and co-design process**	Work with key players to develop an agreed approach to community engagement and co-design to ensure that the model meets community needs and expectations.
8. **Engage and co-design the model with community**	Secure feedback and input from a wide range of people in the target community; run co-design workshops; collate a registry of interested participants.
9. **Refine the model**	Integrate feedback, develop the detail of the model; report back to the community what was heard and how it impacted the model.
10. **Seek advice**	Seek specialist financial, legal, tax, etc. advice where needed.
11. **Secure final feedback**	Secure final feedback from key stakeholders (community, internally); secure sign-off required.
12. **Develop the community partnership offer**	Distribute documents and resources to the public, e.g. prospectus, website.
13. **Promote the offer**	Undertake community engagement and promote the offer widely; garner interest to sign people up.
14. **Implement the model**	Action and implement the model in line with community and stakeholder needs.
15. **Operate, evaluate and refine**	Operate the model; undertake evaluation to ensure objectives are being met; adapt and refine as needed / possible.
16. **Share and celebrate**	Tell the story, share the outcomes and successes; bring people together to celebrate, and continue communications.

3. Getting started: building relationships toward a proposal

Developing a community partnership takes time, requires buy-in from different stakeholders, and involves problem-solving along the way. Strong and long-term relationships are therefore the foundation of any successful community partnership.

Good quality engagement is the key first step to exploring community partnership. Spending time doing in-person engagement will help to build relationships. Listening to community voices and using conversations to explore people's ideas and motivations behind being interested in community partnership will help to guide what an appropriate form of community partnership could be, and will help to identify and nurture allies and partners to develop the project. Setting clear expectations, being transparent, and following through will help to build trust. These approaches could be led by developers, all levels of government, third parties, and/or community actors.

Finding common interests and motivations will facilitate successful and meaningful partnerships that are able to deliver mutual gains. Take time upfront to establish a good understanding of each party's motivations and interests:

- Why is the community/interested in community partnership?
- Why does the community/ think it will be worthwhile?
- What benefits (monetary and otherwise) are you wanting the partnership to deliver for the community?

These questions will help to inform a common understanding of areas of mutual interest and mutual gains. It might also reveal points of difference or tension, which are important to identify and talk through up front. As long as there is enough common ground and transparency between parties, it's okay for parties to have differences in their motivations and interests (see **Table 8** below).

In many cases community members may not know a lot about options for community partnership at first. Sharing information, resources, ideas and options as a good space to start. Spend time raising awareness and getting input, first in smaller group conversations, then in bigger more public sessions. Ask people for their ideas on what they would like to see the project deliver and how they think it could be done well. Use the feedback received to co-develop suitable models and options for the given context.

Ideally, developing a community partnership model will involve iterative co-design processes involving willing developers with trusted community partners and stakeholders, alongside some elements of broader public input.

Community and industry readiness for the implementation of community partnership models will require:

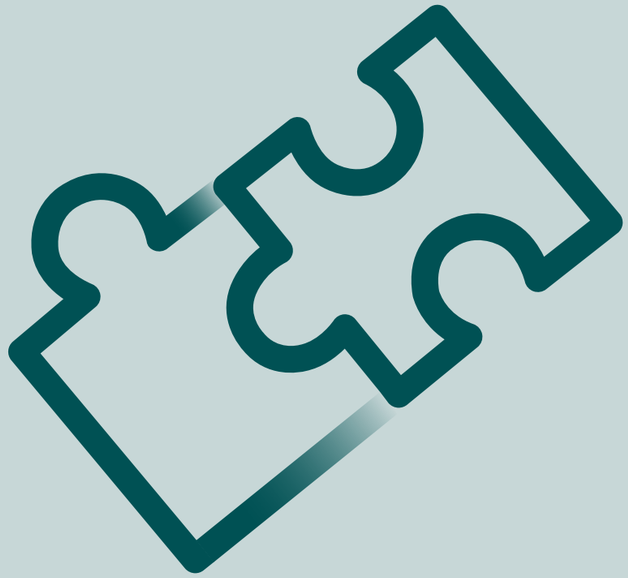
- An awareness of the associated benefits of community partnership projects, including local economic development (and, in locations with state-owned energy companies, the benefits of this above and beyond public ownership).
- Adopting shared goals for community access and wealth creation that are based on principles of fairness and social justice.
- An understanding that genuine community participation leads to project risk reduction and that offers must be structured to also manage long term risk for community actors.
- Familiarity and involvement of investors (both commercial and community) with community partnership models, to alleviate (perceived) risks of minority interest on balance sheets, and the potential for negative publicity if community interests are taken away.

Many community partnerships begin initially by developing a Memorandum of Understanding (MoU), or an Impact and Benefit Agreement (IBA), outlining the intent for developing the partnership and plans for delivering community benefits.



Table 8: Common stakeholder motivations for pursuing a community partnership.

For communities	For developers	For government	For financiers
▪ Have a direct stake and involvement in projects in their region. ▪ Generate income and deliver tangible, direct benefits to people/ communities. ▪ Opportunities for benefits to flow to 'have nots' in rural communities. ▪ Be involved in carbon reduction / supporting renewable energy.	▪ Build stronger, deeper relationships with communities. ▪ Deliver social value and community benefits. ▪ Enhance social licence. ▪ Branding and reputation that affects future pipeline. ▪ De-risking development and improving project timelines by incorporating local knowledge and participation into the planning process.	▪ Building social licence for the shift to clean energy. ▪ Meet community needs and expectations. ▪ Delivering on social and economic priorities. ▪ Extend the commitment to public ownership in a new direction.	▪ Ensure the projects they finance, increase social infrastructure. ▪ Ensure the projects they finance, deliver social value. ▪ Ensure the projects they finance, have social licence.



3.1 Building strong social licence

Building strong social licence to operate for large-scale renewable energy projects is likely to be a key driver for community partnership projects. Understanding what contributes to social licence will help to ensure that partnership projects are able to contribute to this.

Social licence can be understood as the level of ongoing acceptance or approval held by the local community and other stakeholders for a project, proposal or company. Social licence is something that is dynamic and can change over time, so it needs to be continuously maintained. It is founded on quality relationships, trust, respect and genuine engagement with communities. This is aided by giving communities some degree of influence over aspects of a project, and the ability to provide input to solve problems and address feedback. Social licence is also built through delivering tangible local benefits to host communities, in ways that feel important and relevant to them and which feel fair relative to the nature and scale of the project. It's important to understand that lack of social licence can be rooted in deep-seated perceptions of private or foreign-owned renewable projects as representing profit extraction, limited local benefits, opaque decision-making, and limited community control. Importantly, the process elements (relationships, engagement, trust building) must go hand-in-hand with outcomes elements (benefit sharing) for efforts to be most effective in building social licence.

Community partnership can offer an excellent avenue to enhance all of these contributors to building a social licence. It is a way to provide people with a direct interest in projects, meaning they are literally and emotionally invested in the project's success. This helps to build understanding of the project and increases people's ability and likely to be advocates for it. Social licence should also be viewed from a commercial perspective as a key tool for minimising and mitigating risk. Investing in the social licence for a project is consequently critical for the commercial success of a project.[64]

It is important that community partnership opportunities are never perceived as tokenistic attempts to win favour or buy-off communities. For community partnership to be received by communities as a genuine and legitimate effort to share benefits, conversations will need to start early, demonstrate good engagement and be developed in partnership with communities. If the discussion around community partnership is initiated too late, when there are already strong negative sentiments about the project, this will pose a significant challenge to meaningful engagement. It is also essential that the partnership development process is aligned with the broader approach and character of the project, particularly how community engagement is done.

Although a community partnership initiative may be discussed, planned and the idea socialised from the early phases of a project, the actual investment, ownership or energy generation stake generally does not materialise until financial close or operations, which can be 2-5 years after initial engagement. Typically, this is the approach followed in Australia to date, as projects may have complex construction governance and finance arrangements that then transition to a mid to long-term operating and investment structure, once projects are commissioned and operational. This also acts as a way to de-risk the community investment by avoiding direct exposure to construction and commissioning budget blowouts or delays.

To manage these risks in developing and designing community partnership it is advisable to take the following approach:

- **Engage early and offer a clear pathway to build trust and legitimacy.** There is a need for project proponents to get the timing right, which often comes down to managing a combination of (and making some trade-offs between) early participation and offering a clear pathway. It is best to begin discussing community partnership options as early in project planning and development as possible. That being said, as planning and approval needs change alongside community expectations, it is never too late to begin the conversation about a community partnership for any project and work out what pathways may exist to deliver them.

- **Be transparent about what is known and unknown at each stage of project development, and explain how details will be worked through with the community.** Early engagement will necessarily be high-level, as the partnership model and benefit-sharing options may still be undefined, but signalling an intention to pursue a community partnership creates early expectations of participation. Making the specific offer later allows key uncertainties to be resolved first, striking a balance between inclusive engagement and keeping complexity manageable.

- **Aim to find agreement with the community on high-level design choices parameters in pre-negotiations.** Key parameters are:

  - Community role, ownership and extent of engagement: Communities may also wish to pre-negotiate the scale of stake they could have access to as part of the partnership discussion (i.e. up to 20% stake convertible at operations).

  - Risk exposure: There may be other risk reduction strategies put in place as part of the offer, such as mechanisms to fully pay out community shareholders should the project cease to operate into the future.

Early-stage exploratory discussions with developers can be expedited by Council and community providing clear direction on how they wish to be engaged with and benefit from renewables. When it comes to First Nations community engagement, a range of resources exist to build the capability of proponents.[65] For example, Indigenous Energy Australia is supporting the development of Community Energy Strategies that can guide local renewable energy developments (see **Case Study 19** below).

The Yamitji Marlpa Aboriginal Corporation in Western Australia has developed its own standards for stakeholder behaviour in order to create mutually beneficial working relationships in regard to projects proposed on their Country,[66] and many other First Nations communities around Australia are also developing their own principles and protocols to articulate processes and protocols to be followed for engagement and project development.

Likewise, Hay Shire Council has developed Principles for Successful Renewable Energy Development to guide developers in terms of engagement approaches and priority impacts and opportunities to align projects with.[67] Similar guidance could be developed to set out priority community outcomes sought from community partnership, with specific guidance on potential models and pathways to engagement and co-design.

Once the partnership model has been developed and the lead party is communicating the offer to the community to get participation, it is important to:

- Use clear and accessible language.

- Check the legalities around which parties can promote what kinds of offer (e.g. is a financial services licence needed).

- Think about how to communicate the potential financial benefits and risks.

- Be realistic about timelines for implementation and ongoing levels of community involvement, risk and responsibility.

- Be realistic about community benefits that will be received.

Case Study 19: Wanaruah/Wonnarua people Community Energy Strategy[68]

Community Energy Strategies to guide local energy development

One approach to ensure that local aspirations guide local renewable energy developments is to find ways to empower community to define their own strategic vision.

Ausgrid partnered with Indigenous Energy Australia (IEA) and the Wanaruah/Wonnarua people to co-design a 'Community Energy Strategy' that could guide and enable self-determined benefits sharing. The strategy provides a framework for respectful, community-led energy development in the Upper Hunter, a region central to New South Wales' energy transition.

IEA is currently working with both First Nations and remote/regional communities to develop other community energy strategies as a way to ensure these communities benefit from the energy transformation, in a way that is self - determined and aligned with Free, Prior, and Informed Consent principles.

The process involved:

- Partnering with First Nations led organisation.

- A program of in person engagement that focused on 'all voices'.

- Meeting community where they are, and building energy literacy.

- Empowering community to define how they would like the energy projects to fit into their generational goals.

- Developing a written document that community can give to developers and Governments, that clearly defines their aspirations, preferred ways of communication, and vision for energy for the region.

The Wanaruah/Wonnarua people Community Energy Strategy is already influencing renewable energy planning, delivering social, cultural and environmental benefits, and setting a benchmark for First Nations engagement across Australia's energy sector.

3.2 Partnering with First Nations

Australia's transformation of its energy sector will require access to large areas of land and waters, including for new transmission infrastructure and access to critical minerals and other resources. Net Zero Australia modelling shows that almost 45% of the clean energy infrastructure required under a net zero pathway would be located on land where First Nations have legally recognised rights or interests.[69] First Nations hold significant rights and interests across Australia pursuant to native title, statutory land rights and cultural heritage schemes, and also hold enduring cultural authority and responsibility for Country. This suggests that there is great potential, in addition to a genuine need for projects to be done differently by ensuring First Nations participation and benefit, and by embedding principles of Free, Prior and Informed Consent and self-determination in project inception, design and delivery.[70]

In December 2024, all Australian State and Territory energy ministers endorsed the First Nations Clean Energy Strategy,[71] the development of which was a priority action under the National Energy Transformation Partnership. The Strategy highlights the importance placed by Australian energy ministers on ensuring positive First Nations outcomes from Australia's energy transformation.



Image: Mannalargenna Day, Little Musselroe Bay, Tasmania. Image credit: Simon Holmes, Big Shed Studios.

A range of guides[72] exist to support the process of partnering and engagement with First Nations communities, which include recommendations to:

1. Engage respectfully - starting right at the initial planning stage and meeting the principles of Free, Prior and Informed Consent.
2. Prioritise clear, accurate and accessible information - about the project's design, impacts, benefits, risks and full life cycle impacts on Country.
3. Ensure cultural heritage is preserved and protected - damage to sites must be avoided without exception, and cultural heritage protection must be ongoing and First Nations obligations to access and care for Country accommodated throughout the project's life.
4. Protect Country and the environment - by respecting First Nations authority and responsibility to protect environmentally sensitive areas and values and build that into project design and operations.
5. Be a good neighbour - First Nations communities must be consulted about potential visual, noise, traffic, water, waste and social impacts, and be involved in shaping mitigation efforts.
6. Ensure economic benefits are shared - which meet the aspirations of the First Nations community and may include ownership, equity, revenue-sharing or other locally-defined arrangements and including procurement and employment outcomes.
7. Provide social benefits for First Nations communities - consider benefits like improved local energy security (individual or community solar), better essential services, and community-controlled investments that lift health, education and wellbeing outcomes.
8. Embed land stewardship - clean energy can and should model a better kind of development than past extractive industries and aim to enhance ecological, cultural and agricultural value on Country.
9. Ensure cultural competency - embed ways for staff, especially senior leaders, to learn about local culture and heritage.
10. Implement, monitor and report back - commitments to community must be built into the project lifecycle, resourced properly, and bind future owners/operators.

Supporting genuine First Nations ownership, partnership and participation in clean energy projects delivers clear commercial upside and risk reduction for proponents and project financiers. Projects are more likely to move faster through land access and planning approvals, attract broader and potentially lower-cost capital (including socially responsible pools), secure better offtake outcomes by strengthening tender competitiveness, achieve higher secondary-market valuations through reputation and ESG alignment, and realise local workforce and cost efficiencies, particularly in regional and remote areas.[73]

The clear and emerging message is that First Nations partnerships are not an ‘extra’ but are a strategic and commercial advantage, and around Australia there are many examples of First Nations partnerships emerging, and First Nations leadership in the energy transformation, including through community energy projects.[74]

International examples further assist to highlight the mutually beneficial approaches from engaging with First Nations communities based on principles of inclusion and partnership. For example, New Zealand also has a strong history with First Nations partnerships. In particular, Māori-led land trusts have been early adopters of clean energy. Canada is setting an example in renewable energy projects that include Indigenous ownership. Between 2010 and 2020, more than half of the renewable energy projects developed on reserve lands or within traditional Indigenous territories were either fully or partly owned by Indigenous communities. Since 2020, Indigenous involvement in clean energy has continued to rise. By 2022, First Nations, Métis, and Inuit communities were partners or beneficiaries in almost 20% of Canada’s electricity generation. Most of these projects produce over 10 megawatts of power, with solar and biomass being the primary technologies.[75]

It’s essential to appreciate, by enabling processes built on principles of self-determination and Free, Prior and Informed Consent, the unique goals and priorities of First Nations communities.

Each group will have its own aspirations, which may include:

- Strengthening culture.
- Ensuring housing is accessible, affordable and appropriate.
- Improving access to consistent and affordable electricity.
- Building local job opportunities and training programs.
- Securing long-term income through ownership or equity in projects.
- Supporting sustainable management and protection of Country.
- Playing a role in addressing climate change and reducing emissions.
- Improving health.
- Building and growing intergenerational wealth.
- Economic development opportunities.

In addition to community partnership opportunities (i.e. financial arrangements), benefit sharing from large scale renewable energy projects with First Nations communities typically also include other elements:

- Preferential jobs, training and procurement arrangements – by working with an engineering, procurement and construction (EPC) company who will actually deliver (local) First Nations employment and contracting outcomes.
- Strengthening cultural connections - by working with Traditional Owners on opportunities to celebrate, maintain and enhance culture and Country through First Nations design, which may include cultural heritage storyboards, environmental conservation projects and cultural awareness training.
- Supporting community initiatives – such as by funding a local clean energy project that supports First Nations social housing.
- Sponsorship, grant and legacy initiatives - such as by establishing or contributing to a community fund over the life of the project to support local initiatives like local energy resilience projects, community health, environmental or housing programs.

There are a range of First Nations community partnership models emerging across Australia. The following case studies illustrate the diversity of projects and approaches.[76]



Case Study 20: Yindjibarndi and ACEN joint venture

A joint venture journey

The Yindjibarndi people in Western Australia explored opportunities for renewable energy development on their traditional lands by engaging with multiple clean energy companies. After careful consideration, they formed a joint venture with ACEN, a renewable energy developer.

Two key aspects helped build their confidence in ACEN:

1. **Consultation with other First Nations groups:** Yindjibarndi representatives visited one of ACEN's existing projects in Australia, where they spoke directly with other Aboriginal communities who had worked with the company. To further assess ACEN's track record, they also traveled to the Philippines to observe how the company engaged with First Nations communities there.
2. **Relationship building on Country:** ACEN's senior leaders, including the CEO, visited Yindjibarndi Country and stayed overnight with the community before any business discussions took place. These visits allowed both sides to establish trust and understand one another. Over time, more ACEN executives from both Australia and the Philippines made similar visits.

Before committing to any partnership, Yindjibarndi set clear expectations across several areas:

- **Commercial:** They required substantial equity participation during both the project development phase and post-construction.
- **Cultural oversight:** The community reserved the right to approve project locations. They also led all heritage-related assessments and required access to environmental reports.
- **Community benefits:** The partnership needed to deliver multiple layers of value, such as priority contracting for Yindjibarndi-owned businesses, along with meaningful opportunities for employment, training, and commercial involvement.
- **Partnership experience:** They sought a developer experienced in joint ventures with First Nations groups.
- **Proven capability:** Their partner needed to have a solid reputation, the ability to raise capital, and a track record in developing and managing large-scale renewable energy infrastructure.
- **Shared values:** Trust, respect, and mutual commitment were considered essential.

Negotiations took approximately nine months and resulted in an agreement that reflects Yindjibarndi's priorities. Key terms include:

- Yindjibarndi holding 25% to 50% equity in all projects.
- The right to approve all project site proposals.
- Priority contracting for Yindjibarndi-owned enterprises.
- Creation of jobs and training pathways for Yindjibarndi people.



Images credit: Yindjibarndi Energy.

Case Study 21: Bulabul Battery

Tailored terms for equity joint ventures to suit community risk appetite

The Bulabul Battery (Stage 1) is a 300MW Battery Energy Storage System (BESS) project that is being developed in Wellington, Central West New South Wales. AMPYR Australia is developing the project in partnership with Wambal Bila – a newly established company limited by guarantee, which functions as the community investment vehicle for the Wellington Aboriginal Community. AMPYR has agreed to provide up to $300,000 for Wambal Bila to establish its business operations.

As part of the project's bid under the Federal Government's Capacity Investment Scheme, AMPYR directly engaged with the Wellington Aboriginal Community to understand their interest, capacity and risk appetite to join the project as equity co-owners.

Assessing the risk and returns associated with three alternative pathways to equity co-ownership, the two parties together agreed on the terms that grant Wambal Bila an option to purchase a 5% equity stake in the project at development cost (i.e. lower than market price). Wambal Bila can exercise this option in a reasonable period after the project's financial close, which reduces the risk of their investment and makes it significantly easier to secure finance (e.g. a bank loan) to fund their purchase of the 5% equity stake. The investment will be guaranteed through a non-recourse loan so that Wambal Bila has no liability if the project under-performs.

As equity co-owners, Wambal Bila will receive an entitlement to an annual priority distribution amount – which is a preferred, fixed return, further reducing the risk of their investment – as well as the ability to share in project revenues on equal terms with other investors, although this is capped to account for Wambal Bila's lower-price purchase at development cost.

Wambal Bila says the equity stake could deliver $20-$30 million in revenue to the community over the 25-year lifespan of the project, which will be re-invested in the future of the Wellington Aboriginal Community.



Images: Bulabul Battery in Wellington, Central West New South Wales. Image credit: AMPYR.

4. Identifying suitable legal structures and options

Please note: this information presented in this section and elsewhere in this Guide is general in nature and does not constitute legal or financial advice. Organisations interested in implementing a community partnership model should seek independent legal or professional advice tailored to their specific circumstances.

Legal ownership (via equity investment) carries governance rights and responsibilities (e.g. decision-making), as well as exposure to associated risks. By contrast, holding a purely financial stake in a project (through e.g. investment in a loan) does not come with formal governance rights and responsibilities, and is associated with lower risk exposure. In these cases, informal governance structures (such as a community advisory group with no legal governance rights or responsibilities) may be designed into a model to increase community participation. The key relevant features of common legal structures for facilitating individual investment by community members are outlined in **Table 9** below.

Although co-ownership is often associated with community capital contributions at the formative stages of project development, it is important to note that ownership may also be gifted or earned in exchange for access or services (i.e. 'sweat equity'), and can be bought in at any point in a project's development and operation. For example, a community organisation might assist with community engagement activities, relationship building and promotion for a project and, in exchange, receive a portion of shares in that project, the returns on which would go towards the community organisation's charitable purposes. This was the case with the Denmark Community Wind Farm in Western Australia and the associated Denmark Sustainability Fund Incorporated.

There are a range of different types of legal structures available to communities in Australia who want to participate in a community partnership project. Each of these structures differs in terms of regulatory, legal, financial and administrative requirements.

The key legal entity structures relating to community partnership are:

- Proprietary company.
- Proprietary company with crowdfunding intermediary.
- Unit Trust.
- Sub trust of managed fund.
- Public company.
- Co-operative (distributing).
- Not-for-profit organisations (associations, companies limited by guarantee, non-distributing co-operatives, trusts and foundations[77]).
- First Nations organisations (for profit or not for profit).

The structures outlined below in **Table 9** are typically used to facilitate individual community member investment/ownership. Community not-for-profit organisations and First Nations organisations may also invest alongside individual community members (i.e. in one of the structures outlined in **Table 9**), or on their own by partnering directly with commercial developers (or through a separate legal entity to minimise their risk exposure).

Table 9: Common legal structures for facilitating individual investment and ownership.*

		Common legal structures for community investment					
		Proprietary company	**Proprietary company with crowdfunding intermediary**	**Unit Trust**	**Sub trust of managed fund**	**Public company**	**Co-operative (distributing)**
Key features	**Separate legal entity as a community investment vehicle**	✓	✓	✓	✗	✓	✓
	Limited liability of members/ unitholders/ beneficiaries	✓	✓	✓	✓	✓	✓
	Membership requirements for community investors	✓	✓	✗	✗	✓	✓
	Ongoing administrative burden for community investors	Medium	Medium	Medium	N/A	High	Medium
	Ability to raise capital by issuing shares (or equivalent e.g. units)	✓ (subject to certain exemptions)	✓ (subject to new equity crowd-funding legislation)	✓	✓	✓	✓
	Ability to pay dividends/ distributions	✓	✓	✓	✓	✓	✓
	Capped number of investors (20/50 rules[78])	✓	✗	✓	✗	✗	✗
	Examples	Shoalhaven Community Solar Farm	Manilla Solar Project	N/A	Sapphire Wind Farm Co-Investment	Solar Share Majura solar farm	Haystacks Solar Garden

* **Please note:** the information presented in **Table 9** and elsewhere in this Guide is general in nature and does not constitute legal or financial advice. Organisations interested in implementing a community partnership model should seek independent legal or professional advice tailored to their specific circumstances.

In summary, a community stake (whether purely financial investment or equity ownership) can be facilitated in three main ways:

- Pooled financial investment from community members via a community entity (e.g. co-operative, company etc.), where this entity then holds the equity ownership or financial investment stake on behalf of its community members. This model promotes greater visibility and collective identity for the community stake, and can facilitate broader participation and reach in the community.

- Individual financial investment via a managed investment fund or crowdfunding platform, in absence of a community entity. Depending on the makeup of the community, this can tend to benefit fewer and wealthier community members.

- Community stake being held by a not-for-profit community organisation or First Nations organisation on behalf of their community at large, where returns go toward organisational purposes (rather than back to individual community members). **Tables 10** and **11** below outline in what context these may be appropriate in more detail.



5. Finding and packaging suitable finance options

Please note: the information presented in this section and elsewhere in this Guide is general in nature and does not constitute legal or financial advice. Organisations interested in implementing a community partnership model should seek independent legal or professional advice tailored to their specific circumstances.

5.1 Individualised vs. communal/collective approaches to raising finance

Broadly speaking, finance can be raised through either individualised or collective approaches. Individualised approaches refer to where individual people contribute finance (via an equity ownership or financial investment stake) to a project. Collective approaches refer to where community organisations raise finance (such as by drawing on commercial loans, grants or donations) to contribute to a project, without direct financial investment by individual community members. This model is widely used by community development trusts in Scotland, as well as by community energy projects in Australia during early stages of the development process.

For individualised approaches to raising finance, Australian legislation enables wholesale (sophisticated) investment but restricts retail (unsophisticated) investment, due to the need for higher protections for small retail investors.



5.2 Aggregated financial contributions from community investors

Table 9 (above) lists several legal structures that can be used to aggregate contributions from community investors. While each legal structure is subject to different rules for aggregated finance that may suit different contexts, the broader goals of community partnership should also shape the choice of legal and governance structure. For example, co-operative models are often structured around commitment to shared goals and designed to give members ownership and influence in organisational governance. A co-operative can aggregate the contributions of its members to invest in large scale projects, and is a popular approach in Denmark and the UK, partly due to supportive policy and regulation in those jurisdictions. Crowdfunding is a more recent approach that has seen rapid growth in the UK and France, and is partly owed to supportive regulation and policy (see **Case Study 8:** Lendosphere).

In the Australian context, community partnership can occur through a managed investment fund using a sub trust, without the need for a community entity (such as a co-operative or purpose built company). However, this can mean there is no collective identity associated with the project, as community members are just individual owners or investors in the project. This can reduce the level of community spirit and shared affinity with the project. At the same time, these models are also some of the simplest and cheapest to establish and operate, as they use established service providers to facilitate and manage the community stake in a project, at a known cost over the lifecycle of the stake. Collective identity can also be developed through parallel processes, such as an informal community engagement committee made up of local investors who coordinate annual wind farm tours. A widely applicable model for co-investment in large scale projects is via Assetora (previously Domacom), which is a fractional investment platform outlined in **Case Study 1:** Sapphire Wind Farm.

For small-mid scale projects (under $5m investment and with an asset cap of $25m), there is a widely applicable model via crowdfunding intermediaries, as described in **Part 2** of this Guide (see **Case Studies 8** and **9**). Crowd-sourced funding (CSF) in the Australian context can be only used for small to mid-scale projects due to asset value thresholds. It provides a streamlined pathway that allows start-ups and small businesses to raise money from many investors, each contributing small amounts. The Corporations Amendment (Crowd-sourced Funding) Act 2017 updates the Corporations Act 2001, providing a framework for CSF while maintaining investor protections. CSF intermediaries can facilitate these investment raises, but they must hold an Australian Financial Services (AFS) licence.

Eligible public and proprietary companies can raise funds via CSF, allowing unlisted public companies with under $25 million in assets and annual turnover to offer shares and raise up to $5 million within a year.

Key investor protections include:

- An annual investment cap of $10,000 per company for retail investors.
- A required CSF offer document providing essential information and a risk warning.
- A five-day cooling-off period for investors.

A list of CSF Intermediaries is provided below under **Section 6. Useful Resources.**

5.3 Gifted and earned (‘sweat’) equity

Community entities can also be gifted equity by being allocated a proportion of shares (gifted equity), or allocated equity in return for specific community engagement activities (sweat equity). Examples include the Denmark Community Wind Farm in Western Australia and the Earlsburn Wind Farm with Fintry Development Trust in Scotland.

First Nations groups often take their own initiative to source philanthropic funding for seed-financing feasibility studies. To financing capital costs, special investment vehicles exist at the national scale, including Indigenous Business Australia, the Northern Australia Infrastructure Facility (NAIF), the Australian Renewable Energy Agency (ARENA), and the Clean Energy Finance Corporation (CEFC), as well as private capital foundations with First Nations streams. Impact investors and clean energy funds will often be very open to considering finance for First Nations outcomes in the renewable energy sector.

5.4 Financial and legal variations for community partnership models

The two tables below outline how community partnership models vary depending on the choice of financial and legal vehicles, noting that mid-scale projects (**Table 10**) differ in important ways from to large-scale infrastructure projects (**Table 11**).

Please note: the information presented in the below tables and elsewhere in this Guide is general in nature and does not constitute legal or financial advice. Organisations interested in implementing a community partnership model should seek independent legal or professional advice tailored to their specific circumstances.



Table 10: Mid-scale models.

Type of project	Community stake options	Direct ownership level	Financial instrument	Legal vehicle
Mid-scale generation and storage assets (e.g. wind, solar, batteries, pumped hydro etc.) Mid-scale aggregated energy solutions (e.g. peer to peer trading, virtual power plants, etc.)	Co-investment - debt with financial returns or Co-investment - debt with bill credits	None to some	Crowd-sourced funding - debt (sub $5m/$25m cap on asset)[79] Loan Unsecured loan Unsecured loan note Co-operative captial units Co-operative debentures	**Individual:** ▪ Crowdfunding intermediaries; fractional investment platform (sub trust with no community investment vehicle); co-operative; public company **Collective:** ▪ For profit: proprietary company; distributing co-operative; some trusts; some First Nations organisations ▪ Not-for-profit: company limited by guarantee; non-distributing co-operative; some trusts; some First Nations organisations
	Co-ownership to wholly owned - equity with financial returns or Co-ownership to wholly owned - equity with bill credits	Some to all	Crowd-sourced funding - equity (sub $5m/$25m cap on asset)[80] Co-operative capital units Public share offer Options agreement for future equity stakes (Note: equity can be gifted or exchanged in-kind)	
	Subscription to receive energy (e.g. via bill credits; financial PPA)	None	None	No legal vehicle required
	Direct access to energy produced (e.g. via a retail or physical PPA, or contractual agreement)	None	PPA Retail contract Contract for difference Market allocations	**Collective only:** ▪ For profit: proprietary company; distributing co-operative; some trusts; some First Nations organisations ▪ Not-for-profit: company limited by guarantee; non-distributing co-operative; some trusts; some First Nations organisations

Table 11: Large-scale models.

Type of project	Community stake options	Direct ownership level	Financial instrument	Legal vehicle
Large-scale generation and storage assets (e.g. wind, solar, batteries, pumped hydro etc.) Transmission infrastructure Large-scale aggregated energy solutions (e.g. peer to peer trading, virtual power plants, etc.)	Co-investment - debt with financial returns or Co-investment - debt with bill credits	None to some	Loan Unsecured loan note Co-operative capital units Co-operative debentures	**Individual:** ▪ Fractional investment platform (sub trust with no community investment vehicle); co-operative; public company **Collective:** ▪ For profit: proprietary company; distributing co-operative; some trusts; some First Nations organisations ▪ Not-for-profit: company limited by guarantee; non-distributing co-operative; some trusts; some First Nations organisations
	Co-ownership - equity with financial returns or Co-ownership - equity with bill credits	Some	Co-operative capital units Public share offer Options agreement for future equity stakes (can be gifted or exchanged as sweat equity)	
	Subscription to receive energy (e.g. via bill credits)	None to some	None needed but could be delivered via subscription shares in a distributing co-operative if desired	No legal vehicle required but can be delivered via co-operative (distributing) model if desired
	Revenue sharing	None	Royalties	**Collective only:** ▪ For profit: proprietary company; distributing co-operative; some trusts; some First Nations organisations ▪ Not-for-profit: company limited by guarantee; non-distributing co-operative; some trusts; some First Nations organisations
	Direct access to energy produced (e.g. via a retail or physical PPA, or contractual agreement)	None	Retail contract Contract for difference Market allocations	

6. Useful resources

6.1 Delivery partners

Key delivery partners available in the Australia market include the following:

Fractional investment platform

Assetora (formerly Domacom) is the only managed investment fund currently fractionalising renewable energy project investments. Fractional investing allows high-value alternative assets to be divided into smaller, tradable shares, making them more accessible to a wider range of investors. Assetora facilitates this process, enabling broader participation in markets that were traditionally limited to larger investors.

Visit assetora.com.

Crowd Sourced Funding Intermediaries

The following three intermediaries have all done renewable energy project CSF offers:

Birchal is an Australian online platform that helps private companies raise funds from both retail and wholesale investors. It allows businesses to share their story, connect with their community, and manage capital raising through a digital marketplace. Since 2018, Birchal has hosted about 300 successful crowd-sourced funding (CSF) offers, raising around $218 million from more than 130,000 investments.

Visit birchal.com.

Swarmer is an Australian equity crowdfunding platform that connects businesses with investors. It is designed to help start-ups, growth companies, and scale-ups raise capital. The platform provides access to professionals with experience in fintech, venture capital, and private equity to support companies through the fundraising process.

Visit swarmer.com.au.

OnMarket is an Australian capital raising platform that helps companies at all stages of growth—listed and unlisted—access funding efficiently and transparently. Supports companies from early-stage funding through to IPOs and follow-on placements. Uses a proprietary digital platform to automate distribution, payments, and allocations, partners with investment funds, brokers, and advisers to connect companies with a wide range of investors, including a 50,000+ member database.

Visit onmarket.com.au.

Technology platforms/services

Enosi is a technology platform provider that has a product called Powertracer that matches electricity output to daytime consumption (24 hours after actual), facilitates peer-to-peer trade and integrates electricity matching and trade into retail billing systems. It can integrate bill discounts linked to generation from a project onto a retail offer that can be targeted to specific consumer segments, such as socio-economically disadvantaged households locked out of rooftop solar PV, or inclusive to all consumers.

Visit enosi.energy.

Reswitch is an accounting platform that can deliver monthly bill credits on household utility bills in exchange for a service fee. Reswitch has contractual arrangements that allow it to work directly with retailers to integrate the bill credit into bills and billing statements of participating households. Reswitch can provide power bill reductions for residents within the host community as a project benefit —without requiring participants to switch energy providers.

Visit reswitch.com.

6.2 Support organisations

Indigenous Energy Australia (IEA) collaborates with Indigenous communities, industry, and government to support infrastructure development in Australia. The organisation engages with communities, provides technical support to organisations, and offers strategic guidance to decision-makers.

Visit indigenousenergyaustralia.com.

Original Power is an Aboriginal, community-focused organisation that strengthens the capacity, skills, and leadership of Indigenous people to achieve self-determination in their communities and on country. The organisation supports communities through three interconnected approaches: building individual capacity and agency, empowering community-led campaigns, and providing research and resources to develop sustainable, community-driven solutions.

Visit originalpower.org.au.

First Nations Clean Energy Network is a coalition of First Nations communities, organisations, and industry partners working to ensure Indigenous participation and benefits in the clean energy sector. It supports household solar, community-owned projects, and large-scale renewable developments, while advising on barriers to affordable power, economic opportunities, and export-focused clean energy initiatives.

Visit firstnationscleanenergy.org.au.

Community Power Agency (CPA) is Australia's leading organisation dedicated to ensuring communities actively participate in and benefit from renewable energy development. Their expertise spans community and co-ownership models, community engagement, benefit sharing and improving biodiversity outcomes for renewable energy developments.

Visit cpagency.org.au.

6.3 Written guidance

The First Nations Clean Energy Network (FNCEN) has released several handbooks to support First Nations, including:

- Community Energy Planning Toolkit for First Nations, 2024, FNCEN.
- Clean Energy Negotiation Guide for First Nations, 2022, FNCEN.
- Best Practice Principles for Clean Energy Projects, 2022, FNCEN.

Some other key resources are:

- Leading Practice Principles: First Nations and Renewable Energy Projects, 2024, Clean Energy Council & KPMG.
- Investor Benefits of First Nations Participation in Clean Energy Projects, 2025, FNCEN & EY.

For broad community engagement, benefit sharing and community partnership case studies, see:

- Best practice community engagement, Australian Energy Infrastructure Commissioner.
- Lakey, M. and McElnea, H., Collaborating for a fair energy shift: A handbook for communities, 2025, Community Power Agency.
- Hicks, J. and Lane, T., A guide to benefit sharing options for renewable energy projects, 2019, Clean Energy Council.

If you are interested in pursuing a community-led model of renewable energy (small, medium or large scale), there are a range of helpful resources available, including:

- Buckley, E., Walters, K., Marshall, J.P. and Ford, A., Australian community energy collective impact assessment, 2023, Community Power Agency.
- Mallee, K., Walters, K., Hancock, N., Prendergast, J. and Arends, G., Haystacks Knowledge Sharing Report, 2024, Community Power Agency, Pingala Community Energy and Komo Energy.
- Rutovitz, J., McIntosh, L., Ison, N., Noble, E., Hicks, J. and Mey, F., Social Access Solar Gardens for Australia, 2018, UTS Institute for Sustainable Futures and Community Power Agency.
- Knowledge Hub, Coalition for Community Energy.
- Resources, Community Power Agency.

PART 4

Navigating barriers and risks in community partnerships

Part 4 of this Guide outlines some of the risks and barriers to implementing community partnerships in renewable energy, as well as tips and strategies for navigating and overcoming these challenges.



1. Overview of barriers and risks associated with community partnerships

Community partnership in Australia is emergent, and stakeholders point to a range of barriers to implementing community partnership models, particularly in the context of mid- and large-scale renewable energy projects.

Table 12 below summarises general barriers for community partnerships, alongside implications and steps to overcome them.

Please note: the information presented in **Table 12** and elsewhere in this Guide is general in nature and does not constitute legal or financial advice. Organisations interested in implementing a community partnership model should seek independent legal or professional advice tailored to their specific circumstances.



Table 12 Barriers to community partnerships and steps you can take to overcome them

Barrier	Implications	Steps you can take
Lack of awareness and legitimacy of community partnership models	Stakeholders (network reps, financiers, regulators) may dismiss community partnership as untested. Developers may not want to be first or early movers. Communities may be unsure how to start.	▪ Facilitate co-design workshops. ▪ Run educational campaigns using simple explainer materials and showcasing local/international precedents. ▪ Include information on community partnerships in general community engagement and outreach activities. ▪ Build cross-stakeholder collaborations between trusted parties to increase credibility.
Ideological and regulatory barriers related to public versus community ownership	Public ownership commitments in some jurisdictions may be interpreted as limiting community partnership. Potential regulatory grey areas. Limited pathways for model delivery. In some contexts there may only be one viable delivery partner.	▪ Engage early with policymakers to frame community partnership as complementary to public ownership. ▪ Propose co-ownership models involving state and community partnerships. ▪ Highlight benefits of community partnership for state owned utilities. ▪ Commission legal advice to clarify compatibility with project structure.
Developers' reluctance to engage with complexity and risk	Complexity of community partnerships and lack of 'plug-and-play' models. Difficulty in convincing boards and institutional investors to accept risks associated with community partnerships. Desire for portfolio appropriate models rather than community- centric models. Reputational fear associated with First Nations partnerships.	▪ Present model templates and showcase delivery pathways. ▪ Highlight benefits of enhanced social licence and reputation. ▪ Partner with First Nations organisations with strong governance capacity. ▪ Engage early with First Nations entities holding native title to co-design agreements.
Lack of technology platforms to facilitate community partnership	Limited ability to scale participation and investment. Reliance on ad-hoc solutions.	▪ Explore partnerships with fintech/crowd-funding platforms. ▪ Pilot smaller-scale local projects with new technology platforms to demonstrate feasibility. ▪ Lobby state/federal agencies to support enabling digital platforms.
Lack of capacity and expertise, local resourcing and facilitation	Community groups stretched. Few opportunities for support and funding. Projects stall due to complexity and long lead times. Weak local champions can stall projects.	▪ Build partnerships with technical advisors, pro bono legal/finance teams, and universities. ▪ Apply for capacity-building grants. ▪ Leverage peer-learning networks and existing intermediaries. ▪ Train and support local champions.
Barriers to financing the community stake (co-investment or co-ownership)	New groups face credit history barriers. Limited seed funding available.	▪ Use mixed financing (impact investors, foundations, local councils, First Nations Prescribed Body Corporates, Indigenous Business Australia, the Northern Australia Infrastructure Facility, etc.). ▪ Start with small community offers to build track record. ▪ Consider subscription models.



Community partnership comes with some risks that will need to be managed. These will be different for different models.

At a high level, these include:

- Promising benefit but not delivering.
- The project being sold in the future and this affecting the ability to deliver/ continue community partnership.
- Project lead and community interests and motivations diverging.
- The benefits of community partnership not reaching the whole community, or not to the extent expected.
- A community partnership model becoming redundant over time due to market/legislative changes.
- Overlapping community partnership models being delivered across a REZ area that aren't collaborative and the most strategic outcome for the local community.
- Developer-led community partnership models not being informed enough by the local community/ council ahead of implementation.

Managing these risks is something that needs to be considered in the design phase of the community partnership. For example, the question of 'who benefits' or should be able to participate in a community partnership project could be addressed via a geographic prioritisation formula to avoid over- or undersubscription. Likewise, it is helpful to plan for the possibility of a future project sale or structural change, by explicitly addressing this in the partnership agreement. For example, in the event of a force de majeure scenario, the agreement could include a clear buy-out clause that sets the conditions and any penalty or compensation payable for the early repayment or acquisition of a community equity or debt stake.

When developing a community partnership model, it is important to undertake desktop research, consider how historical offers have been designed to reduce risk for key stakeholders, and seek formal legal advice. Generally speaking, community participants may have less appetite for financial risk, while developers may have less appetite for reputational risk.

The sections below provide more detail on each of the key barriers associated with community partnerships, along with strategies for overcoming these barriers and managing actual and perceived risks.

Overall, these challenges point to a need to do three key things in tandem:

- Ensure renewable energy development practice is aligned with best practice learning from across the country and internationally.
- Ensure there is investment in the social context of the energy change, so that communities understand, are brought along and have opportunities to participate and benefit.
- Incentivise and resource communities to enable them to participate in community partnership.

2. Understanding and overcoming barriers to community partnerships in practice

2.1 Lack of awareness and legitimacy of community partnership models

Many stakeholders, including communities, developers, utilities, financiers and government, have limited understanding of models and options for community partnership, their potential benefits, and how to implement them. There is a perception that community actors are not legitimate or appropriate business partners, and it can be challenging for community representatives to secure a seat at the table to negotiate.

Shifting corporate culture to be more open to community partnership models requires efforts to:

- Raise awareness of the associated benefits of community partnerships, including local economic development and improving social licence.
- Promote goals for social impact and community shared value that are based on principles of fairness and participation.
- Build an understanding that genuine community participation leads to risk reduction and that offers must be structured to manage long-term risk for community actors.

These efforts can be organisation-led, encouraged or mandated via government policy and incentives, promoted through industry practice and resources, and advocated and driven by community actors, First Nations groups or local governments.

Practical steps that can be taken to achieve this include:

- High level leadership and articulation of the benefits of and options for community partnerships, e.g. via co-design workshops, forums, conferences, webinars, and via trusted local advocates such as local councils, regional representative bodies and local reference groups.
- Education and awareness targeting community and industry, including press releases, guides, fact sheets, media articles, radio interviews and other awareness raising activities.
- Inclusion of practical information on community partnership in ongoing community engagement activities relating to renewable energy projects and REZs.
- Cross-stakeholder collaborations to increase understanding and take up of community partnerships across industry, industry bodies, market, finance and government stakeholders.

2.2 Ideological and regulatory barriers related to public ownership over community partnership

In some jurisdictions, there are legal and regulatory requirements for energy infrastructure to be publicly owned by the state, which can inadvertently present ideological and, in some cases, regulatory barriers to community ownership and other forms of community partnerships. Likewise, due to regulatory and market conditions in some areas, there may only be one relevant delivery partner (e.g. transmission or distribution network operator) which can present a barrier to community ownership if there are ideological and/or regulatory limits on the scope of their activities and delivery models.

In such cases, community partnership projects may represent novel operational models that require amendment or reinterpretation of ideas and regulations over public ownership. For state-owned entities, realising the benefits of community co-ownership or co-investment alongside conventional public ownership may require deliberate institutional support and cultural change.

Practical steps that can be taken to address ideological and regulatory barriers related to public ownership over community partnership include:

- Engagement with policymakers to explore possibilities for community partnerships alongside conventional public ownership.
- Proposing co-ownership models that involve both state ownership and community partnerships.
- Articulating the benefits of community partnerships for state owned utilities, including in terms of improving 'social license to operate' and social value outcomes for communities in the vicinity of a project.
- Commissioning legal advice on specific legal issues with respect to project ownership structure and options for implementing community partnerships in alignment with legal and regulatory requirements.



2.3 Developers' reluctance to engage with complexity and risk

A common perception in the renewable energy industry is that community partnership models, due to the complexity that they may add to a project, will increase the risk, timeline and cost of project delivery. Both state-owned and private developers report a lack of 'plug-and-play' model options, lack of familiarity with models and concerns around additional administrative complexity, delays and costs associated with extensive community engagement processes, and the high initial transaction cost of shaping a community partnership offer for market. These risks increase the difficulty of 'selling' the value of community partnerships to board members and institutional investors. For example, institutional investors may have concerns about minority community interests on balance sheets and the potential for negative publicity should projects change ownership or direction.

Likewise, some developers have expressed concerns around unduly exposing community investors to project risks and causing financial harm to community groups and retail investors. For example, some community partnership models may bind participating households to a single energy retailer (or require an onerous retail campaign to encourage households to switch retailers). Due to a lack of cultural competency and trusted relationships with First Nations communities, some developers may fear First Nations partnership projects failing and resulting in reputational damage to the developer, and potentially financial and other losses for First Nations communities.

These risks and barriers are not insurmountable, and there are several practical steps that can be taken to help address them, including:

- Presenting model 'templates' showcasing community partnerships that have been successfully delivered.
- Highlighting the benefits of community partnerships, such as by researching outcomes from successful partnerships in relation to enhanced social licence and reputation for developers, or the value of community partnerships in winning competitive tenders for government underwriting schemes and other policy incentives.
- Partnering with First Nations organisations with strong governance capacity and ensuring that they receive legal and professional advice in relation to any proposed partnership.
- Engaging early with First Nations entities holding native title rights to increase trust as the foundation for meaningful co-design of a partnership model that meets community needs and aspirations.

2.4 Lack of technology platforms to facilitate community partnership

Technology platforms can play a key enabling role in scaling up participation in community partnerships by facilitating and simplifying community investment and returns. Without a range of technology platforms available, it can be difficult to implement the full scope and diversity of community partnership models and options that stakeholders may wish to deploy.

The services provided by technology platforms can range from purely financial (e.g. facilitating community investments and returns), to translating project power outputs and dividends into electricity bill credits, or even real-time matching and settling energy production and consumption and associated bill integration. However, in comparison to the UK, EU and USA, there are currently few technology platforms providing these services in the Australian context.

While there remain gaps in the availability of technology platforms that are tailored and aligned to community partnership (and community owned renewable energy more broadly), there are some key steps you can take to build upon the technology that is available in the Australian context:

- Explore partnerships with fintech/crowd-funding platforms, such as Swarmer (see **Case Study 9**: Swarmer for Manilla Solar), Birchal or OnMarket, or fractional investment platforms like Assetora (see **Case Study 1:** Sapphire Wind Farm).

- Pilot smaller-scale local projects using new technology platforms to demonstrate feasibility, such as Reswitch (see **Case Study 18:** Power Promise) or Enosi (see **Case Study 7:** Adopt-A-Panel).

- Lobby state and federal government agencies to enact regulatory and policy changes to better enable the use of fintech and digital technology platforms in the community partnership and community owned renewable energy context.

2.5 Lack of capacity, expertise, local resourcing and support for facilitation

Community partnerships remain relatively unfamiliar and underdeveloped in Australia, creating capacity and expertise challenges for all parties involved. These challenges are particularly acute for community members and organisations, many of whom already face limited resourcing and institutional capacity. Community partnership projects are inherently complex and often take several years to materialise, requiring participants to navigate and align engagement, technical, legal and regulatory processes over long timeframes.

Many communities lack energy literacy, established networks, and access to tailored advice to effectively pursue partnership opportunities. Community organisations may also require governance support to manage long-term decision-making, including leadership continuity, internal accountability, and risk-sharing arrangements. While partnership concepts are often discussed and socialised during early project phases, community investment or ownership stakes typically do not crystallise until financial close or the operational phase of a renewable energy project. As a result, community organisations must be able to resource sustained engagement over extended periods, often without certainty that a project will go ahead.

In addition to capacity constraints, access to land and project scale present significant barriers. Community-led projects are frequently dependent on specific local sites, yet community groups often struggle to secure land for development due to competing land uses and limited bargaining power. Where access is achieved, projects below a certain scale face structural economic disadvantages. Planning, development, and compliance costs for many mid-scale projects (e.g. ~5MW) led by communities are often comparable to much larger projects, while lease payments and operations and maintenance costs are typically charged at a premium. As a result, projects at this scale are disadvantaged by a lack of economies of scale, undermining their financial viability.

In jurisdictions like the UK, EU and USA with more mature community partnership sectors, capacity and coordination challenges are often addressed by intermediary organisations operating at regional or national scale. These are typically independent not-for-profit bodies, often supported by government, that play a critical 'middle-level' role linking communities, industry and government (see **Case Studies 10:** Energy4All and **11:** REScoop). They support community partnerships by building awareness and capacity, aggregating and sharing technical and financial expertise, brokering partnerships and access to funding, and tracking sector-wide impacts. Comparable intermediary organisations in Australia are Community Power Agency (CPA) and the Coalition for Community Energy (C4CE), yet both are much smaller and less-resourced than their global counterparts.

Nonetheless, there are steps that can be taken to overcome this lack of capacity and expertise in the Australian context, including:

- Build partnerships with technical advisors, pro bono legal/finance teams, and universities who may be able to offer free or low-cost support for community organisations.

- Apply for capacity-building grants offered by government, philanthropic and industry players, to increase community capacity to develop and sustain technical, governance and engagement skills over the life of the project.

- Leverage peer-learning networks and existing intermediaries, such as Community Power Agency (CPA) and the Coalition for Community Energy (C4CE), to build upon existing knowledge in the Australian context, and explore resources and support from overseas where applicable.

- Train and support local champions who may be motivated well-placed to progress community partnerships over the long-term.

2.6 Barriers to financing a community stake

Financing the community stake in renewable energy projects involving certain community co-investment or co-ownership models remains a significant challenge in Australia. Loans for community actors are difficult to obtain, as banks typically require security that these projects cannot provide, and other finance providers often expect commercial returns that may be hard to achieve. New organisations without an established credit history face particular difficulty accessing seed funding for feasibility studies and raising capital for project development.

Community-led projects often struggle most during the feasibility and planning phases, with limited funding available for early-stage costs such as feasibility studies, communications and community engagement that must occur before establishing a community share offer. Grants are commonly used to cover these early-stage costs, but these are typically insufficient. While share offerings can generate substantial capital once development approvals are in place, loans are often still required to cover a portion of capital costs.

In comparison, international models provide examples of how these barriers can be overcome. In the EU, access to feed-in tariffs, secure power purchase contracts, or government-backed contracts for difference enable communities to secure loans to finance part or all of their stake. Green bond structures have also been used to reduce risk for both developers and individual community investors.

Australia remains less advanced in this regard, limiting the range of financial instruments available to support community co-investment. Existing Australian Government financiers, such as the Australian Renewable Energy Agency (ARENA) and the Clean Energy Finance Corporation (CEFC), focus on technological innovation, have complex application processes and place restrictions on funding early-stage costs, making it difficult for community-led projects to rely on them.

Addressing these barriers requires a range of government policy interventions, but there are also some practical steps that can be taken in the meantime, including:

- Using mixed financing from impact investors, foundations, First Nations Prescribed Body Corporates (PBCs), Indigenous Business Australia, the Northern Australia Infrastructure Facility (NAIF), local councils and other sources to reach the requisite amount needed to finance the community stake.

- Start with small community share offers to build a positive track record, before expanding the offering to a greater number of community investors.

- Consider subscription models (outlined in **Section 2.4** of **Part 2** of this Guide) that do not require an upfront community investment to finance the community stake.



PART 5

Evaluating and improving social equity outcomes of community partnerships

Part 5 of this Guide explores social equity considerations for implementing community partnership in renewable energy, and provides practical tools that you can use to assess and improve social equity outcomes.



1. Why social equity matters

There are a number of social equity issues that community partnership projects and support frameworks need to consider. In regional agricultural communities, there is a clear need for models that can break through historical wealth divides.

Renewable energy projects that enable small landholders (not just large landholders) to participate, and that prioritise and recognise First Nations rights and interests, even where there is no legal requirement to do so (see **Case Study 21:** Bulabul Battery),[81] are much needed. More generally, community partnership projects may need to be deliberately and carefully designed in order to reach and benefit underserved households and communities. Underserved households and communities typically have limited disposable income, high energy costs, and lack of access to credit or financing mechanisms. They may reside in rental or multi-unit housing, older or substandard housing, and/or remote or off-grid locations, further entrenching energy poverty. Other potential factors may include limited information and awareness of the opportunities or benefits of renewable energy, lack of technological and energy literacy, and lack of trust.



2. Measures you can take to improve social equity outcomes



Enabling successful participation of underserved groups in community partnerships requires targeted approaches to overcome barriers to entry.

For example, models that involve no to low upfront capital investment, simplified application processes, and targeted incentives for low-income households, are more likely to generate wider social equity outcomes. It is also important to work with trusted community organisations to increase engagement, deliver projects, and co-ordinate investment of project revenues in ways that maximise social impact.

This section outlines several approaches, design aspects and models that can facilitate participation of underserved communities.

2.1 Assessing community capacity and embedding partnerships in ongoing, placed-based and community-led programs

Communities vary widely in their ability to participate. Some have strong networks, established leadership and have a good sense of the challenges their community face and possible solutions, which makes it easy to engage collaboratively. Others may face structural disadvantage, time constraints or reliance on social services, limiting their capacity to engage without additional support. Knowing where a community is at will greatly affect the way in which an engagement strategy and project are planned.[82]

Working to align common interests across stakeholders may help you identify opportunities to work with specialised partners with experience in supporting underserved communities. For example, community organisations have worked together with network service providers to implement community led solar and energy efficiency retrofit and advice programs that serve as cost-effective approaches to alleviate grid constraints and demand response programmes in specific areas.[83,84,85]

If an ownership or investment stake in a project is held by a not-for-profit and/or charitable community organisation that has a legal remit to benefit the community, then the income received from their share of the project can be directed back into programs and initiatives for the strategic benefit of the community that they are established to serve. Community organisations can be highly proficient at supporting community development strategically, building strong local networks for engagement and deploying sophisticated tools for impact assessment to support funding allocation. This approach is widely used by First Nations organisations.

> “Knowing where a community is at will greatly affect the way in which an engagement strategy and project are planned.”

2.2 Considering the social equity implications of your project

As a general principal, it is useful to begin by creating an opportunity to consider how to improve social equity in any community partnership model or project. It just takes openness and a curiosity to ask the right questions locally, and to understand exactly for whom and how the impact could be expanded or made more targeted.

Key social equity elements to consider when designing a model include:

- **How Traditional Ownership of the project location can be recognised and incorporated (irrespective of tenure arrangements):** For example, how will the model enable principles of Free, Prior and Informed Consent (in accordance with the United Nations Declaration on the Rights of Indigenous Peoples) and self-determination?
- **How cost to entry barriers can be removed or addressed for particular community cohorts:** For example, can low-income households or low-capital community organisations participate? Is there a sliding scale for participation or discounted access that enables particular groups to be part of the opportunity? Can the financial access threshold be set low to increase access? Is there room to gift a stake to local community organisations or First Nations groups, or support access to grants or concessional loans to fund the community stake to allow participation? Is it possible to provide flexibility around ongoing options for equity stake to be taken up throughout the project lifecycle to give community participants time to assess risk and raise funds?
- **How situational barriers can be removed or addressed in the design:** For example, can renters and those without stable housing participate? Can community organisations with limited resources participate? Is there support for them to do so as part of the model design (i.e. paying for staffing or legal support)?
- **How marginalised groups can be included and targeted to address existing social inequities:** For example, does the model ensure that marginalised community members will receive the most benefit? Is there a need for a prioritisation methodology to ensure participation from particular community cohorts? Is there an element of free or discounted access and how is this marketed to the relevant groups, are they supported to participate?
- **How governance and decision-making power is shared with communities:** For example, is there a role for the community to co-design the project, or could the community get involved beyond the partnership element to support decision making on project siting, or long term operations? Is this a formal seat at the table or an informal advisory group?
- **How investment risk is minimised for communities:** There are different risks associated with debt versus equity, or revenue sharing stakes. Is the type of benefit and the risk profile is fit for purpose for target community participants? For example, is a financial stake structured as debt, with targeted annual interest rate returns that are not linked to project revenue or performance more preferential? Is there an ongoing option to invest in an equity stake, giving the community organisation time to fundraise and see the performance of the project once operational?
- **How it can build capacity for communities:** Are there technical, legal and governance skills that can be built by being a part of a community partnership? Does it build energy literacy further? For example, if a community has no formal governance role in the controlling project entity, are there other pathways for participants to connect to the project via an advisory group?

Table 13 below can be used as a self-assessment tool for understanding the social equity implications of a community partnership project and to identify and improve social equity outcomes of projects under development.

Table 13: Social equity dimensions and indicators to assess social equity of a renewable energy project.*

Cost barriers	**Very Low Cost Barriers** Cost barriers are almost entirely removed; participation requires little or no cost and is accessible to nearly all target groups.	**Low Cost Barriers** Most major costs have been addressed; participation is broadly affordable for financially constrained households or organisations.	**Moderate Cost Barriers** Meaningful participation still requires financial capacity that many low-income or low-capital groups do not have.	**High cost barriers** Significant costs remain; only a small portion of financially constrained participants could take part.	**No participation possible**
Situational barriers	**Very Low Situational Barriers** Participation is fully accessible regardless of tenure type, housing stability, or organisational capacity; the model is designed to include renters, transient populations and resource-constrained community organisations.	**Low Situational Barriers** Most renters, mobile households, and low-capacity community organisations can participate with reasonable support, streamlined processes, or flexible eligibility.	**Moderate Situational Barriers** Some pathways exist for renters or low-capacity organisations, but practical barriers (permission, mobility, staffing, continuity) still limit widespread participation.	**High Situational Barriers** Renters or low-capacity organisations can participate only in limited or exceptional circumstances; significant structural obstacles remain (e.g., landlord permission, multi-step processes, documentation burdens).	**No Participation Possible** The model structurally excludes renters, people without stable housing, and/or low-capacity community organisations; participation is impossible regardless of support.
Marginalised groups are targeted to address existing social inequities	**Highly inclusive of marginalised groups** The model is explicitly designed to prioritise marginalised groups; benefits are targeted, guaranteed, and reach those with the greatest need through dedicated mechanisms (e.g., quotas, targeted eligibility, tailored support).	**Inclusive of marginalised groups** Marginalised groups are actively prioritised and well supported, and most are likely to benefit, though not all mechanisms are fully guaranteed or comprehensive.	**Somewhat inclusive of marginalised groups** The model includes some measures to reach marginalised groups, but targeting is partial or indirect; benefits may reach vulnerable groups but not consistently.	**Less inclusive of marginalised groups** Marginalised groups may participate, but the model does not meaningfully prioritise them; benefits are more likely to flow to better-resourced or already advantaged participants.	**Not inclusive of marginalised groups** The model provides little or no consideration of marginalised groups; benefits predominantly accrue to those already well positioned, with existing inequities largely unaddressed.

*__Please note:__ the information presented in **Table 13** and elsewhere in this Guide is general in nature and does not constitute legal or financial advice. Organisations interested in implementing a Community Partnership model should seek independent legal or professional advice tailored to their specific circumstances.

Governance and decision-making power is shared with communities	**Substantial, formalised decision-making power** Communities hold substantial, formalised decision-making power (e.g., board seats, veto rights, shared equity ownership, co-governance agreements); community organisations meaningfully shape strategy, operations, and benefit allocation.	**Structured and influential decision-making power** Communities have structured and influential roles in governance (e.g., advisory groups with real influence, participatory decision processes, delegated authority in key areas), though ultimate control may remain with the proponent.	**Involved in some decision-making** Communities are consulted and involved in some decision-making processes, but influence is limited; governance mechanisms exist but are mostly advisory rather than determinative.	**Low involvement in decision-making** Community engagement occurs, but governance remains largely proponent-controlled; communities have little influence on decisions or benefit allocation beyond feedback opportunities.	**No decision-making power** Governance and decision-making power are entirely retained by the proponent.
Investment risk is minimised for communities	**Very High Risk Minimisation** Community exposure to financial loss is almost entirely eliminated; risks are absorbed by the proponent or buffered through guarantees, fixed returns, or non-financial participation models. Communities cannot lose capital.	**High Risk Minimisation** Most financial risks are mitigated through structured safeguards (e.g., capped liability, guaranteed minimum returns, government or proponent guarantees), leaving communities with only limited or indirect exposure.	**Moderate Risk Minimisation** Some protections are in place (e.g., limited-recourse structures, diversified revenue streams), but communities still bear noticeable risk if the project underperforms or fails.	**Low Risk Minimisation** Communities bear significant investment risk (e.g., capital at risk, variable returns, performance-dependent income) with limited safeguards or guarantees.	**Not applicable**
Builds capacity for communities	**Substantial Capacity Building High** The model delivers substantial, long-lasting capacity building through formal training, institutional strengthening, governance development, skills transfer, and resourcing that enables communities to lead future projects independently.	**Strong capacity building** The model provides strong capacity-building opportunities—such as training, mentoring, or organisational support—that significantly improve community skills and capability, though not to full independence.	**Moderate capacity building** The model includes some capacity-building elements (e.g., workshops, limited training, involvement in delivery), providing useful learning but with modest long-term effect.	**Limited capacity building** Capacity building is minimal or incidental; communities may gain limited experience but there is no structured effort to develop skills or organisational capability.	**No capacity building**

Some models are more accessible to vulnerable or marginalised community groups than others (see **Table 14** below). For example, a co-investment or solar gardens models may require a minimum investment amount of several thousand dollars upfront, which many people do not have available, thereby cutting them out from receiving the ongoing benefits of participating in the project.[86,87] Models such as subscription connected to discounted energy, and/or shares held by community not-for-profit organisations can help to specifically target certain demographics, and can be used to benefit disadvantaged groups in particular. If a community partnership model explicitly targets vulnerable communities, it is worth noting that an educational campaign may be necessary for the broader community to understand needs on the ground and to give the project legitimacy.

In many cases, projects can be adapted to create additional entry points and meet different needs, improving social equity outcomes. **Tables 13** and **14** can be used as a self-assessment tool to redesign community partnership projects with social equity outcomes in mind and identify concrete measures to improve social equity outcomes.



Table 14: Example analysis of community partnership models set out in this Guide.

	Cost barriers are removed or addressed	Situational barriers are removed or address	Marginalised groups are targeted to address existing social inequities	Governance and decision-making power is shared with communities	Investment risk is minimised for communities	Builds capacity for communities	Adaptations to improve social equity outcomes of the model
Questions for self- assessment	**Can low- income households participate? Can community orgs with limited resources participate?**	**Can renters and those facing housing insecurity participate? Can those who are time poor, have limited capacity, face digital access barriers or language constraints participate?**	**Does the model ensure that marginalised community members will receive the most benefit?**	**Are communities formally represented in governance structures? Does the community have real decision-making power in the project?**	**Does the model limit or eliminate the risk of financial loss for community participants?**	**Does the model actively build skills, knowledge, and/or governance capability within the community?**	**How can the model be adapted to improve social equity outcomes?** **What variations or additions to the model might enable wider and deeper community participation?**
Standard commercial RE project	No participation	No participation	No consideration	No decision-making power	N/A	No capacity building opportunities	Explore community partnership models. Build community capacity to undertake future partnerships.
Co-investment via a fractional investment platform e.g. Sapphire Co-investment	Moderate cost barriers	Low situational barriers	Less inclusive	Low involvement in decision- making	High risk minimisation	Limited capacity building	Lower the minimum $ amount for individuals to invest. Actively target participation among priority cohorts (e.g. through discounted investment offerings for lower income households). Gift an investment stake to local community organisations (e.g. those representing First Nations communities). Establish pathways for participants to connect to the project (e.g. by establishing an advisory group). Enact measures to protect the community investors across the investment timeline (e.g. clarifying circumstances in which they will be paid out).
Co-ownership or equity joint venture e.g. Bulabul Battery	High cost barriers	High situational barriers	Highly inclusive of marginalised groups	Involved in some decision-making	Moderate risk minimisation	Substantial capacity building	Gift or provide sweat equity in return for project delivery services (e.g. cultural heritage services, land access etc.). Provide resourcing and support services for community organisation and assist them to secure concessional finance for the community equity stake. Provide ongoing options throughout the project lifecycle for community to acquire an equity stake, allowing them time to minimise risk and secure finance. Consider end-of-life options that deliver more control to community (e.g. through project life extension with greater community ownership stake). Provide special governance rights for community partners (e.g. strategic partner status; a seat on the board etc.).

Community solar garden or wind garden e.g. Haystacks	Moderate cost barriers	Low situational barriers	Less inclusive	Structured and influential decision- making power	High risk minimisation	Substantial capacity building	Lower the minimum $ amount for individuals to participate. Provide discounted offerings for priority community cohorts (e.g. low income households). Enable participants to trade their unit or share holdings.
Solar lease or subscription e.g. Xcel Solar Sharing	Very low cost barriers	Very low situational barriers	Highly inclusive of marginalised groups	Very low involvement in decision- making	Very high risk minimisation	Very limited capacity building	Provide targeted access for marginalised groups, either individually or via representative organisations. Apply 'sliding scale' access fees that enable low-income households to participate. Provide donated or subsidised subscriptions for income-qualified participants. Increase the length or term of the offering, to provide participants with longer-term financial certainty and impact.
Crowdfunded projects e.g. Lendosphere	Moderate cost barriers	Low situational barriers	Less inclusive	Low involvement in decision- making	High risk minimisation	Limited capacity building	Lower the minimum $ amount for individuals to invest. Provide discounted offerings for priority community cohorts (e.g. low income households). Ensure participants can trade their unit or share holdings. Provide a formal or informal governance role for participants.
Intermediary enabled projects e.g. Energy4All	Moderate cost barriers	Low situational barriers	Somewhat inclusive of marginalised groups	Structured and influential decision-making power	High risk minimisation	Strong capacity building	Lower the minimum $ amount for individuals to invest. Provide discounted offerings for priority community cohorts (e.g. low income households). Co-design the project's legal and financial model with the community to align with their aspirations and risk appetite. Enable participants to trade their unit or share holdings. Provide a formal or informal governance role for participants.
Community value sharing in aggregated energy solutions e.g. Piico Energy	Moderate cost barriers	Moderate situational barriers	Less inclusive	Involved in some decision-making	High risk minimisation	Some capacity building	Consider subsidising CER solutions and/or income-qualified discounts on electricity tariffs to support low income / marginalised participants. Community participation on design features such as trading and sharing principles.

Transmission co-ownership e.g. Wataynkaneyap Power	High cost barriers	High situational barriers	Highly inclusive of marginalised groups	Structured and influential decision-making power	Moderate risk minimisation	Substantial capacity building	Gift or provide sweat equity in return for project delivery services (e.g. cultural heritage services, land access etc.). Provide resourcing and support services for community organisation and assist them to secure concessional finance for the community equity stake. Provide ongoing options throughout the project lifecycle for community to acquire an equity stake, allowing them time to minimise risk and secure finance. Consider end-of-life options that deliver more control to community (e.g. through project life extension with greater community ownership stake).
Local energy asset initiatives e.g. Vineyard Power Co-operative	No/very low cost barriers	Very low situational barriers	Highly inclusive of marginalised groups	Very low involvement in decision-making	Very high risk minimisation	Limited capacity building	Prioritise participation among priority cohorts (e.g. by providing assets of greater value for lower income households, using a 'sliding scale' approach). Ensure that renters and those facing housing instability can benefit equitably (e.g. working with landowners and real estates to ensure financial benefits are passed on to renters). Provide a formal or informal governance role for participants.

Gifting host communities bill discounts e.g. Power Promise	No/very low cost barriers	Very low situational barriers	Highly inclusive of marginalised groups	Very low involvement in decision-making	Very high risk minimisation	Very limited capacity building	Apply a 'sliding scale' approach to calculating bill discounts based on need (e.g. household income), ensuring that financial benefits flow to those who need it most. Provide a formal or informal governance role for participants.

2.3 Stacking models to meet different needs

Different groups within the community may have distinct entry points, risk profiles and benefit flows, as well as varying capacities to take on leadership roles. These differences affect the needs for support roles from other parties, such as local government, which can vary from 'getting out the way' and alleviating regulatory barriers, to working collaboratively with local not-for-profits, or undertaking project facilitation, leadership and investment.

If a community partnership model that is less-inclusive is selected as the best option in the circumstances (for which there can be very pragmatic and legitimate reasons), then it will be important to consider how the other benefit sharing streams from the project can be used to target the broader community, or specific demographic groups to help address this imbalance.

For example:

- Delivering a solar garden in which marginalised groups have a lower entry threshold and/or receive a portion of free energy as a targeted benefit.
- Pairing a co-investment model with a scholarship program for children from low socioeconomic backgrounds and/or a long term funding partnership for youth programs through a local First Nations organisation.

Case Studies 22 and **23** below provide two examples of how developers are stacking different benefit sharing mechanisms and community partnership models to meet different needs.

2.4 Working with relevant government agencies

Government agencies can play an important role in facilitating targeted and inclusive community partnership models, by:

- Ensuring supportive conditions for a diversity of models.
- Providing targeted support for benefit sharing and community partnership models that reach the most marginalised community members, such as community solar gardens (and especially those using subscription models).
- Implementing targeted incentives, such as set asides and tiered compensation rates (e.g. progressive grants and no- and low-interest loans) for low-income households, affordable or social housing and public interest groups to ensure vulnerable communities can access programs.

Case Study 22: Vineyard Power Co-operative

Stacking different avenues for community benefit sharing to meet different needs

In 2009, in response to low social support for the Cape Wind Project, which ultimately failed, the Vineyard Power Co-operative, a community not-for-profit organisation, initiated a process to identify the types of offshore wind projects that were acceptable to the island communities off Massachusetts. Community partnership was part of their vision.

Initially aiming to own and operate an offshore wind farm, the community shifted its approach due to challenges in developing a viable ownership structure. Since the community did not function as a network distributor, it was challenging to develop an ownership structure that included an energy product. As a result, the community began collaborating with developers, including Vineyard Wind.

In 2015, Vineyard Wind signed a Community Benefits Agreement prior to bidding for an 804 MW offshore wind farm. This agreement outlined the partnership with the community and specified local development, job creation, and Power Purchase Agreement opportunities. This collaboration was incentivised by federal legislation that gave the US Bureau of Ocean Energy Management (BOEM) authority to issue renewable energy leases using a multi-factor auction that combines the cash bid with non-monetary bidding credits.

BOEM provided bidders a credit equal to 10% of its cash bid if it has a Community Benefits Agreement with an eligible community-based organisation.[88]

In 2019, Vineyard Wind collaborated with Citizens Energy and the Vineyard Power Co-operative to create the Resiliency and Affordability Fund, which includes a $1 million annual contribution over 15 years.

The focus of the fund includes:

- Ratepayer relief in communities hosting the project in the form of electricity bill-credits for low-income residents.
- Distributed battery energy storage that enhances systems reliability and resiliency through community-based deployment. Communities in New Bedford, Martha's Vineyard, Nantucket, Barnstable, Yarmouth and surrounding communities across Bristol County received funding for energy-storage and solar projects that supply backup power and deliver energy-cost savings for public buildings.

The Fund also explored additional local discounted power products that could be made available as part of a municipal energy procurement aggregation initiative for the broader local community.



Image: Vineyard Power Co-operative, Martha's Vineyard, Massachusetts. Image credit: Vineyard Power.

Case Study 23: Cellars Hill Wind Farm

Cellars Hill Wind Farm in Tasmania's Central Highlands is a landowner-led project under development, initiated by six local farming and forestry families seeking to retain control over how large-scale wind and storage infrastructure is developed on their land. Motivated by a desire to deliver tangible local and environmental benefits, the group partnered with developer Alternate Path (and later, infrastructure company Gamuda) to co-found Cellars Hill Wind Farm Pty Ltd, a special-purpose vehicle established in 2023. The project company is linked to unit trusts - The Trustee for Cellars Hill Wind Farm Unit Trust and Holding Unit Trust - through which the landowners hold equity, allowing them to share directly in project value rather than simply leasing land. This structure embeds local agency in both governance and financial returns, aligning renewable-energy development with regional economic development and stewardship goals.

The project proposes a 350 MW wind farm and a 600 MW / 2,400 MWh battery, strategically located beside existing 220 kV transmission infrastructure to minimise grid-connection costs and land impacts. It has been granted 'major project' status under Tasmania's planning framework, enabling coordinated assessment.

Community benefit-sharing is built into the project design:

- Households and businesses within 12 km of any turbine will receive an annual $1,000 energy-bill rebate for the life of the project, administered by the Central Highlands Council.
- The proponents are working with stakeholders to facilitate the development of new local energy-intensive industries, such as data processing or timber manufacturing, that could be powered by locally generated renewables.

Cellars Hill Wind Farm represents an emerging hybrid model of local ownership and commercial partnership, but shows that landowners can co-develop utility-scale clean energy assets while embedding long-term community benefits and control.

> "Cellars Hill Wind Farm represents an emerging hybrid model of local ownership and commercial partnership, but shows that landowners can co-develop utility-scale clean energy assets while embedding long-term community benefits and control."

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