

Community power agency – Dr Jarra Hicks

Question 3: To what extent are the requirements for carrying out competitive tenders of Long Term Energy Service agreements appropriate? Are there any other requirements that should be considered?

The long-term financial value to consumers of the tender participant's achieving and maintaining a social license and contributing to the local community and local economy adjacent to their projects also needs to be taken into account. If these things are neglected, then the long-term negative impacts to the consumer of withdrawal of social license will not be taken into account. Not having social license can stall renewables and transmission projects, increase costs and timelines and sometimes make them untenable - not just for individual projects, but for the whole industry. In addition, the long term financial benefits of investing in NSW regional communities and economies needs to be taken into account and given preference over tender participants who have no local content or local benefit sharing. The tender process needs to include merit criteria around:

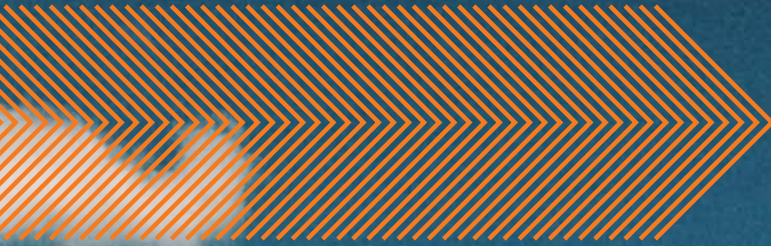
- the quality & outcomes of community engagement done to date
- plans for future community engagement
- plans for local industry activation (including any training programs) and details of local procurement
- plans for benefit sharing with the local community

Question 4: Do you agree with the matters the Consumer Trustee must take into account when preparing the Infrastructure Investment Objectives Report? Are there any other matters that should be taken into account?

They are currently very technocratic. While this is obviously an essential element, it fails to take into account the social context of the REZs and the fact that REZ success is founded on social acceptance. In addition, to uphold the NSW government commitment to benefit regional communities through REZ delivery, social license, local procurement, local benefit sharing and quality community engagement also need to be included as merit criteria in the tender process.

If you have additional information you would like to provide to support your views, please provide it here

Community Power Agency have assisted in the design and evaluation process for the social criteria of the ACT and Victorian Renewable Energy Auctions. We are happy to provide detailed advice about this if desired.



A GUIDE TO BENEFIT SHARING OPTIONS FOR RENEWABLE ENERGY PROJECTS

October 2019



FOREWORD



KANE THORNTON

CEO, Clean Energy Council

October 2019

Renewable energy has long enjoyed strong public support in Australia.

While this support represents a very powerful foundation for our transition to a clean energy future, the industry recognises that it cannot be taken for granted and that it is shaped by the way that each and every project engages and operates within their local communities.

Benefit sharing – which aims to ensure that communities as a whole benefit from a new development – has been a growing feature of many renewable energy developments for many years now. Some approaches, however, are more established than others.

The Clean Energy Council would like to see benefit sharing, tailored to the local context, become a feature of all renewable energy projects.

With support from ARENA, we have commissioned this guide to share examples of leading practice and help proponents expand the options available to them so that we can maximise the positive local impacts for host communities.

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Lane, T. and Hicks, J. (2017). *Community Engagement and Benefit Sharing in Renewable Energy Development: A Guide for Applicants to the Victorian Renewable Energy Target Auction*. Department of Environment, Land, Water and Planning, Victorian Government, Melbourne.

Lane, T. and Hicks, J. (2014). *Best Practice Community Engagement in Wind Development*. ACT Government Environment and Planning Directorate, Canberra.

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The views expressed herein are not necessarily the views of the Australian Government, and the Australian Government does not accept responsibility for any information or advice contained within this report.

Cover image:

Community event at the Hepburn Community Wind Farm.
Photo credit - Studio Aton for Hepburn Wind

ABOUT THIS REPORT

As the renewable energy industry matures, community benefit sharing is becoming increasingly commonplace as a means to integrate renewable energy developments into local communities in ways that are positive, rewarding and beneficial for both project proponents and local communities.

This guide includes strategies and case studies on different forms of benefit sharing, including:

- > neighbourhood benefit programs
- > the creation of grant funds
- > innovative financing methods that enable community co-investment or community co-ownership.

It also discusses benefit sharing strategies that go beyond making cash-based contributions, such as:

- > creating impact through regional economic development approaches (e.g. local jobs and contracting)
- > in-kind contributions (e.g. employee volunteerism)
- > partnership benefits (e.g. industry capability networks and education opportunities).

The guide is intended as a practical tool to assist project proponents, financiers, policy makers and communities in understanding the range of benefit sharing methods available.

It presents the key principles underpinning an effective benefit sharing strategy and looks at current benchmarks for benefit sharing in Australia across different projects and technology types.

The document emphasises the importance of integrating benefit sharing with robust community engagement processes and includes details to assist practitioners and advocates to develop benefit sharing strategies that are tailored to local context.

Some forms of benefit sharing are more established than others in Australia, and different forms will suit different situations. This guide aims to share knowledge about leading practice and extend the repertoire of benefit sharing practice in Australia. The guide outlines examples of effective benefit sharing strategies being deployed overseas, particularly where it has become commonplace due to policy frameworks.

The guide also outlines methods for developing a benefit sharing strategy and working in partnership with local communities. It outlines ways to:

- > calculate a benefit sharing budget
- > develop a theory of change to deliver the desired impact
- > undertake social feasibility to refine and test the strategy in the community
- > implement, monitor and evaluate the project in the community.

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Run With The Wind fun run at the Woodlawn Wind Farm. Photo credit - Infigen

WHAT IS BENEFIT SHARING?

Community benefit sharing involves sharing the rewards of renewable energy development with local communities. It aims to integrate a development in the local community by contributing to the future vitality and success of the region. It is based on a desire to establish and maintain positive long-term connections to the area and to be a good neighbour.

The concept of benefit sharing is based on acknowledging that the siting of renewable energy infrastructure – especially when it is large scale – results in changes in the local landscape and community. Sharing the financial and other benefits of a project enhances the social and economic outcomes for the local community, thereby making the change worthwhile. A successful benefit sharing strategy requires consideration of how a renewable energy project can add value in a local area and what it takes to be a welcomed development in a host community.

The form that benefit sharing takes is necessarily dependent on the type of technology, scale of project and project context. Benefit sharing might include providing funding (e.g. grants, sponsorships or scholarships), establishing partnerships with important local groups or projects, providing in-kind support or developing education and tourism initiatives. It might also include innovative options for financing (e.g. community co-investment) or innovative products (e.g. energy retailing options).

The boundary for the 'community of benefit' may be defined in different ways. Benefits might be shared with residences within a certain number of kilometres of a project or it may be open to all people from identified local settlements and townships. What is appropriate will be different in different contexts.

A benefit sharing strategy might involve a number of individual benefit sharing techniques, which together make up a benefit sharing strategy. Different benefits may be offered to different segments of the community. For example, it is common for near neighbours of a project to be offered specific benefits and the general local community offered others. Often, a project will offer several benefit sharing techniques as part of their benefit sharing strategy to deliver a range of desired benefits to different stakeholders in the local community.

Importantly, the way in which a benefit sharing strategy is developed and when it is introduced is key to how it is received in the community. Benefit sharing needs to be integrated within a broader approach to community engagement.

As such, benefit sharing may take many different forms and is necessarily contingent on the local context and the characteristics of the development. Within this diversity of options, the following principles on the following page will provide guidance.

PRINCIPLES OF BENEFIT SHARING

The following principles provide a useful framework for developing or assessing a benefit sharing strategy.

Table 1: Key principles that underlie effective benefit sharing

| Principle | Description |
|---------------------|---|
| Appropriate | <p>Benefit sharing is tailored to local circumstances, culture and needs, helping to address (not create or reinforce) patterns of conflict or inequality. It makes sense and is appropriate in the local context.</p> <p>The benefits are perceived as being appropriate and proportionate to the scale of the project and the level of change or disturbance experienced by local people. Given that community members living closest to the project will generally experience greater impacts, they should receive a proportionate benefit.</p> <p>The local community provides guidance on how benefit sharing can create a positive, lasting and meaningful impact for their local community. The developer works with the local community to develop specific benefit sharing strategies that respond to their unique local context and need.</p> |
| Flexible | <p>Benefit sharing is an aspect of project development that will greatly benefit from being open to community involvement, influence and negotiation. Having the flexibility to respond to local context will ensure benefit sharing has the best and biggest positive impact (for locals and for the project).</p> <p>The lifecycle of renewable energy developments is significant (25 years or more), and much can change in a community during that period of time. It is therefore important to build in flexibility so that benefit sharing can evolve with community needs.</p> |
| Transparent | <p>The benefit sharing strategy is transparently available to the community and provides a clear and understandable rationale for the various programs and who is eligible to participate. Benefit sharing is managed in a transparent and accountable way that involves local stakeholders.</p> <p>Benefits are given for the sake of sharing the proceeds of the project and building positive relationships. Benefit sharing should not come with conditions of silence or consent.</p> |
| Integrated | <p>Benefit sharing seeks to integrate the developer and the project as valuable community members by building links and relationships with the community.</p> <p>The benefit sharing approach is integrated with the company's broader approach to community engagement and project development.</p> |
| Mutually beneficial | <p>The approach is designed to bring mutual benefit to local communities, the project and its owners and financiers.</p> |
| Strategic | <p>Benefit sharing creates a positive legacy in the local community and seeks to bring ongoing and lasting value to the local area. The programs seek to integrate benefit sharing opportunities with broader strategies by building local partnerships.</p> <p>Benefits should be provided from at least the start of construction and throughout the operational phase. One-off initiatives do not provide ongoing sustainability or support.</p> |

POLICY AND FINANCE DRIVERS



Viewing platform at the Waubra Wind Farm. Photo credit - ACCIONA Australia

Several factors are driving the increased interest in benefit sharing. Firstly, **investors and financiers** are seeking to ensure that their investments enjoy a strong social licence to operate in the community. It is increasingly common for financiers and all levels of **government** to require that renewable energy developments actively show they have a social licence to operate in the local community in order to gain long-term contracts, access support schemes or secure finance. Incentivising the renewable energy industry to value benefit sharing has multiple benefits. It encourages a fairer allocation of benefits among hosts, neighbours and the local community and helps to position communities to maximise the benefits of renewable energy developments. Benefit sharing is thus recognised as a strategic means to enhance social licence and maintain it over time.

For example, the ACT Reverse Auctions and Victorian Renewable Energy Auction Scheme (VREAS), conducted in 2016 and 2018 respectively, had community engagement and benefit sharing as a cornerstone of the evaluation process. Proponents were required to meet a minimum level of engagement and benefit sharing and submit detailed plans as to how these would be implemented and reported on. These commitments were contractually binding.

Entities entering into contracts for the sale of electricity are also acutely aware of the social and community outcomes of the project they purchase from. **Private power purchase agreements (PPA)** between renewable energy developers and **large energy users** – such as universities, councils and manufacturing businesses – are increasingly common. Such agreements are attractive for project owners in the highly variable energy market and energy policy context. Quality community engagement and benefit sharing can increase the attractiveness of a project for potential PPA clients. For example, the Sapphire Wind Farm has secured a 12-year PPA with the Commonwealth Bank and a 10-year PPA with the Sydney Opera House, in large part because of its benefit sharing program that included community co-investment.

Stricter guidelines around community engagement and benefit sharing within the Victorian and ACT renewable energy auctions is changing how developers do business.

According to Tilt Renewables:

“Traditionally, ‘benefit sharing’ has included sponsorship activities, education programs, host and neighbour payments, local employment and community funds. This approach has been further developed in response to changing expectations (and needs) and government best practice guidelines for the Dundonnell Wind Farm, which was successful in the first round of the VREAS.”

Tilt Renewables’ Dundonnell Wind Farm worked with the local community to design long-term legacy programs based on community needs. As a result, Tilt Renewables’ benefit sharing model included funding for a dedicated staff role for 10 years at a regional suicide prevention program and another program funding 10 years of priority access for safe housing for local domestic violence victims and their families. In addition, the developer will make up to 45,000 MWh per annum available for a regional industry energy supply program.

WHAT VALUE DOES BENEFIT SHARING PROVIDE?



Snowtown Wind Farm. Photo credit - Tilt Renewables

COMMUNITIES

Communities that host renewable energy developments have an interest in seeing the development benefit their local community and economy. In part, this is seen as a fair response to the changes incurred as a result of hosting the development. It is also seen as allocating a fair share of the increased productivity (from the use of local land and resources) to local benefit. Renewable energy developments are located within active landscapes in which local communities live and work. As such, benefit sharing offers the opportunity to integrate the development into people's lives in a positive way.

For local communities, effective benefit sharing strategies contribute to:

- > a feeling that the project is "giving back" and contributing fairly to the local area
- > opportunities to see important benefits flowing from local developments
- > developing positive and direct relationships with the project and project staff
- > the ability to have renewable energy contribute to achieving local plans and goals
- > developing positive and tangible associations with the project
- > increasing people's active support for the project.

INVESTORS AND OWNERS

Investors and project owners have an interest in reducing the risk of projects with poor support that can become more costly and longer to progress, as well as protecting their long-term reputation. They will seek to take on projects that can demonstrate strong and positive local relationships. Increasingly, investors also seek assets that align with certain interests or values, such as providing a community benefit and having a clear social licence to operate. This can create positive outcomes and prevent negative consequences that can impact project delivery and returns.

For investors and project owners, effective benefit sharing strategies contribute to:

- > increasing social licence to operate
- > reducing the risk of social opposition
- > controlling the reputational and investment risks that can result from social risks.



DEVELOPERS

Developers have an interest in renewable energy developments that take place as quickly and smoothly as possible. Good working relationships within communities facilitate this. Benefit sharing can be an important contributing factor to building a positive local reputation that is built on trust and goodwill.

For developers, effective benefit sharing strategies contribute to:

- > reducing complaints by developing long-term, productive relationships within the local community which can foster local support for a development
- > developing a project that is likely to be more attractive to and eligible for PPAs and financing options
- > increasing project cost savings
- > minimising project delays
- > a smoother development application process.

REGIONAL DEVELOPMENT

Hosting a renewable energy development can bring about significant regional economic benefits throughout the lifecycle of the project (e.g. via local procurement, upskilling and industry development). Furthermore, the benefit sharing strategy can be fit-for-purpose to create strategic opportunities, drive local innovation or meet significant needs in the local region. However, the opportunities for regional development can only be maximised if they are included in project development and benefit sharing plans.

For example, existing local government strategic plans (which are generally developed with community input to reflect community priorities) may have identified that investing in new stock saleyards will support a local farming community to thrive. This may be something the benefit sharing strategy could contribute to. Or maybe the development is taking place in a community with high levels of low-income households, many of whom face energy poverty. In this instance, benefit sharing may be able to help address social hardship through energy efficiency, solar PV installations or innovative energy retail products. Alternatively, the local community may have education institutions and benefit sharing could look to establish relevant training or scholarship programs. The possibilities are endless and should be maximised. Identifying regional development opportunities stems from first having a good understanding of the local community context.

WHY WE DO COMMUNITY BENEFIT SHARING

CWP RENEWABLES

“Benefit sharing is the right thing to do. It increases social licence and it enables us to develop better projects with happier communities.

We believe that our combination of community benefit funds, neighbour agreements and community co-investment represents a comprehensive suite of community benefit sharing initiatives. It represents our company standard and provides a basis for industry best practice. We have been informed by the experience of community investment and community ownership from Europe while shaping our Sapphire community investment initiative. This has reassured us that, whilst it is still novel in Australia, it has successful precedent overseas.”

GOLDWIND

“For Goldwind, it helps us build a social licence to operate. Our benefit sharing approach has evolved over several years as we have gained more experience in Australia. We see a lot of value in benefit sharing. It can potentially enable a smoother project planning process, and the positivity generated from benefit sharing also creates an environment in which people want to work. Host communities become a valuable source of personnel, hired skills, experience and supplies. It helps if the community is generally supportive.

In terms of neighbour benefit sharing, we see it as a tool to help alleviate some of the divisions that can happen between those hosting turbines on their land and those that aren't hosting turbines but are still close to the project area. Wind turbines are getting bigger and bigger, which allows more efficient projects and lower cost of energy but means there is sometimes not much difference in effect on a landowner who hosts a turbine on their land versus a landowner who has one a few hundred metres away from their fence. In our experience, tailored neighbour benefit sharing schemes can have a positive impact in this space.”



Inauguration event at the Longreach Solar Farm. Photo credit - Canadian Solar

PACIFIC HYDRO

“It’s the right thing to do. It is embedded within our culture and Community Charter. We provide a portion of revenue from each of our wind and solar projects to the local community. Everything we do is entirely voluntary. We do it as corporate social responsibility, and it’s valuable to our business.

We don’t take a one-size-fits-all approach. Rather, we tailor our benefit sharing program to the local context, increasingly seeking to empower communities to be the decision makers, where possible, and broaden our philanthropic giving to include as many beneficiaries as possible.

Good community engagement and benefit sharing can be a cost-saving exercise. Sometimes you need to invest money upfront. Think about things like the cost of double glazing compared to the cost of ongoing complaint management over 25 years.”

WINDLAB

“Positive community engagement is the key to successful renewable energy development. At Windlab, we are guided by a number of key principles. The first and most important is to believe and act like the project is not just ours, but the community’s.

It will be a part of their surrounds for the next 30 years, and must provide a net positive impact to both the nearby landowners and the community at large. Windlab achieves this outcome through a mix of conventional community enhancement funds, equitable distributions of the direct financial benefits of the project to the host landowners and nearby neighbours and working hard on local business and job creation opportunities in an open, transparent and honest way. Windlab seeks to be a catalyst to bring communities together in pursuit of a successful transition to a renewable energy future, which can provide a positive impact to all stakeholders.”



CASE STUDY

LOCAL CONTRACTS SUPPORTING LONG-TERM BUSINESS GROWTH

R&M MENZEL, PORTLAND, VICTORIA

R&M Menzel is a family company based in Portland, Victoria. In 2008, it was engaged to work with Pacific Hydro on the Cape Bridgewater Wind Farm as part of Pacific Hydro’s commitment to use local contractors. At that time, R&M Menzel was a very small electrical company that had never previously worked on a wind farm, and it had to build its expertise and processes to complete the works.

Pacific Hydro has continued to work closely with R&M Menzel and has supported the company by providing ongoing business at subsequent wind farms. R&M Menzel is now a leading industrial electrical company specialising in wind farms, having installed more than 1200 wind turbines, both in Australia and overseas. Its work in Australia and overseas has enabled the company to employ over 25 people and support many more through apprenticeships. This example indicates the valuable and ongoing contribution that supporting local businesses can make to regional development.



Members of the Dundonnell
Wind Farm community visiting
the nearby Salt Creek Wind Farm.
Photo credit - Tilt Renewables

CONTEXT AND COMMUNITY

A good benefit sharing strategy creates a model to deliver maximum positive impact.

To create maximum local benefit, a good benefit sharing strategy must be tailored to the local context. To determine this, the local community must be engaged and unique local opportunities sought out. A sound understanding of the local context is essential for creating an appropriate benefit sharing approach. The best way to do this is to spend time in the local area talking to a wide range of local stakeholders, as well as undertaking desktop research to learn as much as possible about local demographics, identity, culture, aspirations, values, economy, politics and history. The best people to inform you on the local context are local people. Learn what is important:

- > What are the community needs?
- > What are the existing programs or development themes in the local area?
- > What do local people care about?

Looking at local government plans and strategies is a good place to start.

The Victorian Government's *Community Engagement and Benefit Sharing in Renewable Energy Development guide* (Lane and Hicks, 2017) provides further details and practical tools for understanding and tailoring your benefit sharing approach to the local context. In particular, see the 'Context narrative' (p.27-29) and 'Benefit sharing program' (p. 45) sections.

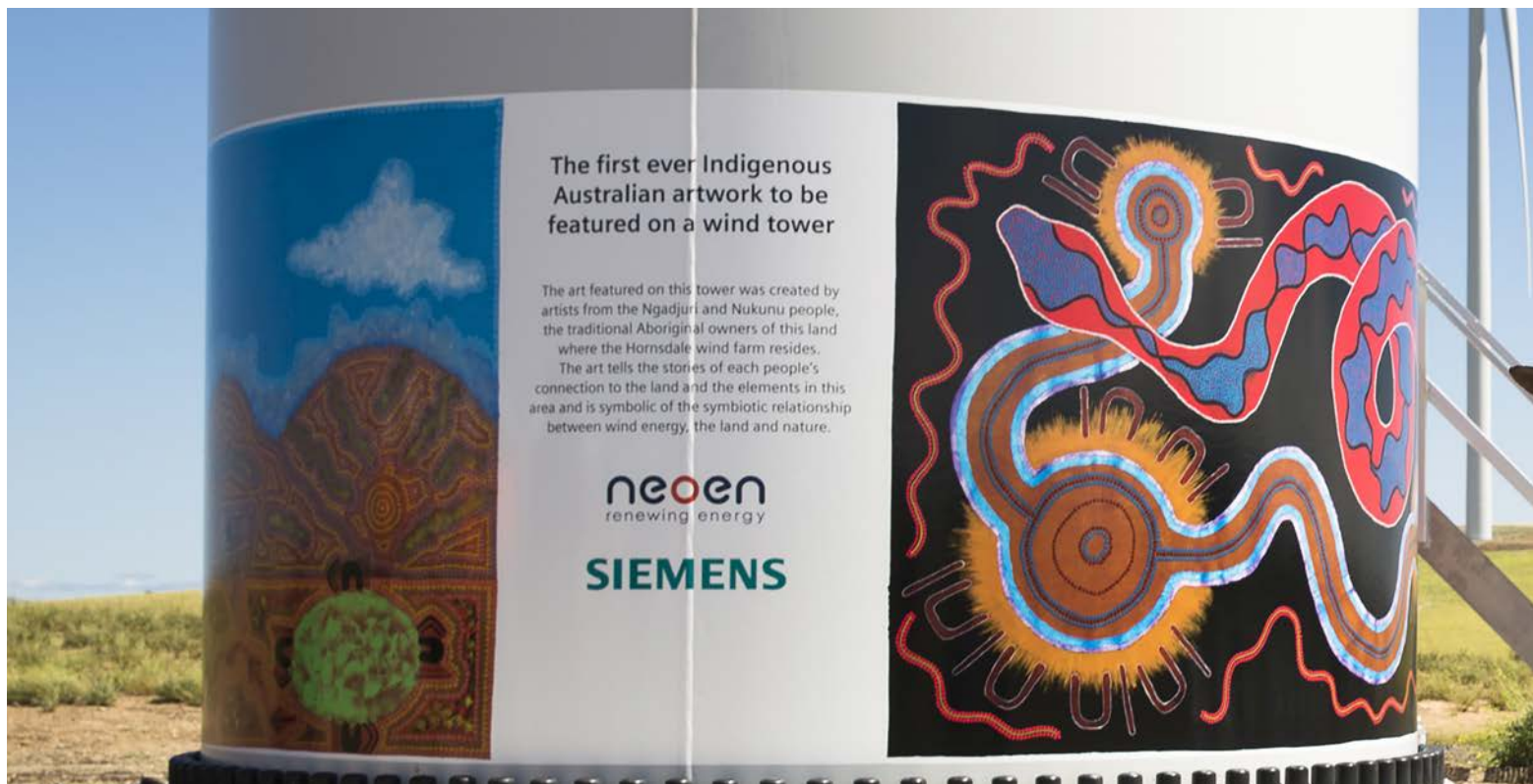
THE INTRINSIC RELATIONSHIP WITH COMMUNITY ENGAGEMENT

How benefits (financial and otherwise) are received and taken up by a local community relates directly to how the idea is developed and introduced. It will be imperative that benefit sharing occurs in a context of good community engagement so that people see both the processes and outcomes of benefit sharing as being fair and equitable. If benefit sharing is financially generous and proposes to deliver excellent local outcomes but is not matched with good community engagement, it may be seen as a dishonest effort to buy community support.

A fair process will increase people's acceptance of the outcomes, even if the outcomes are not strictly what they would have preferred. Conversely, and particularly for benefit sharing, if the outcomes are at odds with people's expectations and experience of the process, it can reduce acceptance.

Deploying innovative benefit sharing models takes consistent engagement to both design and implement with a community. Ambitious benefit sharing programs generally need on the ground local resourcing to design and implement them well.

For a detailed exploration of the relationship between community engagement and benefit sharing, and for an understanding of the different things that can impact how a benefit sharing offer is received within a local community, see the Clean Energy Council's *Enhancing Positive Social Outcomes from Wind Farm Development* report (Hicks, Lane, Wood and Hall, 2018) and CSIRO's *Exploring Community Acceptance of Rural Wind Farms in Australia* (Hall, Ashworth and Shaw, 2012).



TRADITIONAL OWNERS

Acknowledgement and respect of Aboriginal and Torres Strait Islander cultures, values and practices is at the heart of successful engagement. As developers locate new sites, Traditional Owners are integral stakeholders and are increasingly involved in benefit sharing programs.

A place-based approach to engagement and benefit sharing with Traditional Owners can provide opportunities to foster greater collaboration to address complex and social issues in a manner that is sensitive to the local context.

For more information, see the 'Considerations for appropriate engagement with Victorian Aboriginal groups' section in the Victorian Government's *Community Engagement and Benefit Sharing in Renewable Energy Development* (Lane and Hicks, 2017).

Further information on respecting the cultures and values of Traditional Owners can be found in the National Heritage Commission's *Ask First: A Guide to Respecting Indigenous Heritage Places and Values* and the Energy Change Institute's *Ensuring Indigenous Benefit from Large-scale Renewable Energy Projects: Drawing on Experience from Extractive Industry Agreement Making and the Importance of Policy Settings* (O'Neill, Thorburn and Hunt, 2018). See the 'Useful Resources' section for full references.

INDIGENOUS LAND USE AND NATIVE TITLE RIGHTS

ASIAN RENEWABLE ENERGY HUB, WESTERN AUSTRALIA, CWP RENEWABLES

To date, most large-scale renewable energy projects in Australia have been developed on freehold land on which Native Title rights have been extinguished. Approximately 40 per cent of the Australian landmass is 'Indigenous Estate', which Indigenous people own or have controlling interests in under various forms of title and legislation, so it is increasingly likely that renewable energy projects will involve engagement and agreements with Indigenous communities.

The Asian Renewable Energy Hub is a very large wind and solar project in development in the Pilbara, Western Australia and is located on Nyangumarta land. As part of the project consortium, CWP Renewables is helping to negotiate an Indigenous Land Use Agreement that will share the project's opportunities and benefits with the Traditional Owners.



CASE STUDIES

COLLABORATION WITH LOCAL ABORIGINAL PEOPLE

HORNSDALE WIND FARM, SOUTH AUSTRALIA, NEOEN

Neoen developed strong working relationships with local Nukunu and Ngadjuri organisations in the early feasibility stages of the Hornsdale Wind Farm and worked with them throughout planning and pre-construction. Neoen worked collaboratively with both groups to develop Cultural Heritage Management Plans. Stemming from this relationship, Neoen commissioned local indigenous artists to do artwork for two of the turbines to launch as part of their energisation celebration. The artwork tells the story of the land and the ongoing connection that local indigenous people have with it. As the then SA Minister of Aboriginal Affairs Kyam Maher said: “The use of Aboriginal paintings on wind towers at Hornsdale is recognition of the importance this land holds for the Ngadjuri and Nukunu people. These towers symbolise the coming together of the world’s oldest culture with the technologies of the future for the benefit of the nation”¹.

¹ Northern Argus (2017). ‘Hornsdale’s arty installation’, 8 February 2017. <https://www.northernargus.com.au/story/4454060/hornsdales-arty-installation/>

SECURE AND RENEWABLE REMOTE ENERGY SUPPLY²

SOLAR ENERGY TRANSFORMATION PROGRAM (SETUP), NORTHERN TERRITORY, POWER AND WATER CORPORATION

Remote Indigenous communities are reducing their need for diesel and increasing their energy independence by deploying hybrid solutions coupling solar PV, battery with existing diesel generators. Energy security can be a pathway to encourage people to ‘Return to Country’ and improve the resilience of remote communities.

The Northern Territory Government and ARENA funded SETuP to deliver 10 MW across 25 locations. The benefit sharing plan was co-designed with the Traditional Owners and the benefits include personal comfort levels being boosted, increased economic activity with a focus on local contracting opportunities and upskilling for essential service operators. Lease payments are made to the traditional owners and the social arrangements mean that the benefit is shared across the broader community.

Different approaches were developed for the context of each community. For example, at Daly River, seven locals were employed to install fencing. The local Aboriginal corporation in Gunbalanya was employed to clear land. In Maningrida local workers and rangers cleared dense woodland for the solar farm where the resulting bark was donated artists to use for bark paintings, with the remaining mulch used in community landscaping. The supporting eco-management strategy documents were written to reflect the cultural and communication needs of the local community and Indigenous rangers. The project will reduce diesel usage by 15 per cent and deliver cleaner and quieter energy that can be scaled up as the population changes over time.

² Johnston, C. 2017. *Setup for Life*, ARENA. <https://arena.gov.au/setup-for-life/>

CURRENT BENEFIT SHARING BENCHMARKS: HOW MUCH IS APPROPRIATE?

The forms of benefit sharing deployed across Australia vary widely and may involve a range of measures that leverage the resources and opportunities of the project, from local employment and contracting to in-kind opportunities and financial support for community initiatives.

There is no single form that benefit sharing should take. In fact, there are some concerns that setting an explicit benchmark for contributions could limit future improvement and diversity and the ability to be flexible and tailor approaches to local community context. The best approach will be one that is developed in cooperation and consultation with the local communities of the project. However, some benchmarks are emerging.

For wind energy projects, the level of funding given to benefit sharing programs has historically ranged from \$500–\$1500 per MW of installed capacity per year for large-scale commercial wind farms and from \$6000–\$8000 per MW of installed capacity per year for community-owned wind farms for the 25-year life of the project³. It should be noted that the value has been highly varied across projects, with a more recent trend of increasing the level of funding per MW.

For large-scale solar projects, which are much newer in the Australian context, there is less industry experience to date. So far, the level of contribution varies significantly by project timeline, ranging from \$130–\$800 per MW (AC) per year over 10 to 25 years, with the higher amounts being deployed across shorter timelines.

The level of funding allocated to benefit sharing and the types of benefit sharing offered depends on a number of factors, including the type of technology, the scale of the project and the local context (including characteristics of the topography and the community) in which it is developed. It is also necessary to balance different interests and motivations, as well as working within the commercial needs of the project. Because of these differences, it will not be financially viable to offer the same amount to a community benefit fund across different projects, and especially not across different renewable energy technologies.

Funds allocated to benefit sharing are additional to other activities such as those required by compliance, or internal activities such as legal fees for neighbourhood agreements or the costs of establishing co-investment programs.

CUMULATIVE IMPACT AND TRANSMISSION INFRASTRUCTURE

In regions of intensive renewable energy development, the ways in which a 'community of benefit' is identified and benefit sharing options are developed is becoming more layered with the activities of other renewable energy developments as well as the development of transmission infrastructure to support these zones.

A density of renewable energy projects has the opportunity for strong and transformational regional economic development. There may be mutual benefit in exploring collaborative and larger benefit sharing models that would only be possible through multiple contributions. A collaborative approach between renewable energy developers could provide strategic and long-term programs in such areas in order to maximise the cumulative benefit for the surrounding communities.

Transmission and distribution infrastructure is a key component of many renewable developments. A common feature of this part of the project is that landowners hosting powerlines receive payments for leasing their land, providing access and easement management. Although there are not any direct benefit sharing examples around transmission infrastructure currently in Australia, there should be a consideration of how the location of new electricity lines relates to the community of benefit boundary in a benefit sharing strategy.

The key social licence issues relating to transmission lines, which increasingly need to be considered in large-scale developments are:

- > visual impact and landscape changes
- > biodiversity (flora and fauna) impacts
- > construction and traffic
- > socio-economic (unequal distribution of project benefits)
- > glare, glint and light (especially near roads)
- > safety/obstruction (roads and fire access).

For further guidance on how to manage community engagement throughout the development cycle of new transmission infrastructure, refer to the Clean Energy Council's *Community Engagement Guidelines for Building Powerlines for Renewable Energy Developments*.

³Australian Wind Alliance (2018). *Building Stronger Communities*.
Hicks, J., Lane, T., Wood, E., and Hall, N. (2018). *Enhancing Positive Social Outcomes from Wind Farm Development: Evaluating community engagement and benefit-sharing in Australia*.
Clean Energy Council, Melbourne.

TYPES OF BENEFIT SHARING

There are many possible forms that benefit sharing can take throughout a project's development. The following have emerged as the main types of benefit sharing being deployed in the Australian context:



Neighbourhood benefit programs



Sponsorship, grant and legacy initiatives



Local jobs, training and procurement



Employee volunteerism



Innovative products



Innovative financing and co-ownership



Beyond compliance-level

Each type of benefit sharing is described in detail in this section, along with case study examples for each. They are intended as a starting point to guide the consideration of different possible benefit sharing options that might be appropriate for specific projects. As the industry matures and innovates in response to local opportunities and needs, new forms of benefit sharing are continuously emerging.



NEIGHBOURHOOD BENEFIT PROGRAMS

Neighbourhood benefit programs are developed to address concerns about fairness that can arise when neighbours receive no direct benefits from a development which alters their experience of their place and community. Neighbourhood benefit programs address the benefit sharing principle of being 'appropriate', which are outlined the 'Principles of benefit sharing' section of this guide.

While host landholders have always received payments for hosting renewable energy developments, neighbours traditionally have not. This can lead to divisions in a neighbourhood, which can have substantial negative impacts for local people and the project. An Australian study found that neighbours of a proposed wind farm are three times more likely to oppose the development than members of the general public⁴. Neighbourhood benefit programs help to address this issue by distributing the benefits of a development more fairly and in a way that is proportionate to the level of change and disturbance experienced by all living in close proximity to the development.

Given this consideration, neighbourhood benefit programs are increasingly common. These initiatives are well established in the wind industry and are emerging with other technologies that are building large-scale projects in populated areas. It is important to note that there is a difference between neighbour payments that are required as part of planning approval conditions (e.g. wind farms that require consent to higher noise levels) and profit sharing or 'goodwill' payments.

Some examples of neighbourhood benefit sharing include:

- > energy efficiency programs, the installation of residential solar PV or contributions/discounts to electricity bills for neighbours or neighbourhood community facilities (e.g. local hall, local fire-fighting facilities)
- > giving the neighbourhood area priority in a community benefit grant fund to ensure that there is a funding allocation specifically for those nearest to the project
- > contributions to neighbourhood infrastructure (e.g. painting the local hall)
- > annual payments to neighbours (including payments during the development, construction and operating phases)
- > one-off payments at the commencement of a neighbour agreement
- > giving neighbours a share in the equity of the project, either as a gift or offer of investment
- > Indigenous Land Use Agreements.

Neighbourhood benefit programs should be tailored to the local community immediately surrounding the boundaries of the project.

⁴ Hall, N., Ashworth, P. and Shaw, H. (2012). *Exploring community acceptance of rural wind farms in Australia*. CSIRO, Brisbane.

NEIGHBOURHOOD SOLAR BULK BUY

CARWARP SOLAR FARM, VICTORIA, CANADIAN SOLAR

Canadian Solar's 121 MW Carwarp Solar Farm, funded under the Victorian Renewable Energy Auction Scheme, is located 30 km south of Mildura near the small townships of Carwarp (10 dwellings) and Red Cliffs (5000 people). The region is a drought-impacted dryland farming zone with an excellent solar resource. To share the benefits of hosting a solar farm, Canadian Solar plans to partner with local solar installers to coordinate the bulk buy and installation of solar PV on nearby residences. Despite the nearest residence being 2.7 km away, Canadian Solar is motivated to offer surrounding residents and nearby townships the chance to access the benefits of household solar PV.

NEIGHBOURHOOD MINI GRID

DUNDONNELL WIND FARM, VICTORIA, TILT RENEWABLES

In addition to neighbour payments, Tilt Renewables is developing the Dundonnell Community Mini Grid. The objective of this program is 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. While the existence of a wind farm next door to a home cannot directly impact the cost of energy to that resident, Tilt Renewables set out to develop a concept that aligned with the company's values, resources and skill set.

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. The program has been offered to 35 dwelling owners (those within 5 km of the wind farm and then progressively extended to a greater distance if the initial dwelling owners decline to participate). In addition, Tilt Renewables has offered to fully fund a solar PV and battery system for the Dundonnell Country Fire Authority.

NEIGHBOURHOOD ELECTRICITY CONTRIBUTIONS AND ANNUAL NEIGHBOUR PAYMENTS

GOLDEN PLAINS WIND FARM, VICTORIA, WESTWIND ENERGY

After discussions with many stakeholders, including door knocking the local neighbourhood, WestWind Energy identified that one of the best ways that the wind farm could share the benefits of the project with neighbours would be to offset electricity costs with renewable energy. They found that people's most common question was "will the wind farm make my electricity cheaper?" To address this desire and build a tangible link between the local community and the wind farm, WestWind decided to develop an electricity offset scheme for all neighbouring residents. The scheme will offset the electricity costs of all non-host, habitable and registered dwellings within 3 km of a constructed turbine to an amount equal to the average Victorian home, regardless of usage.

In addition to the electricity offset program, all neighbours (excluding host dwellings and dwellings located within the Rokewood township boundary), will be provided with an annual payment based on their proximity to the wind farm and its impact. This financial incentive is based on the number of turbines constructed and the distance of a dwelling from the turbine towers. The formula for calculating the incentive is that each eligible neighbour will receive \$1000 for each of the first three turbines and \$750 for each additional turbine that is constructed within 2 km of their dwelling. The annual payment will begin when construction of the foundations for each turbine within 3 km of their dwelling is complete. This payment will be adjusted according to the consumer price index and will continue while the wind farm is operational.

Golden Plains Wind Farm is also offering benefits to the broader community in the form of a community benefit fund and an opportunity for all residents within 10 km of the wind farm to invest. The community benefit fund will contribute \$1000 per turbine per year for the life of the project "for community-based initiatives, projects and events" and will be managed by local community members.

NEIGHBOURHOOD GIFT OF EQUITY AND NEIGHBOURHOOD FUNDING

HEPBURN COMMUNITY WIND PARK COOPERATIVE, VICTORIA, HEPBURN WIND

The Hepburn Wind Community Fund offers a gift of 1000 (\$1100 value) shares in Hepburn Wind to all ratepayers within 2.5 km of the wind farm. This gives each neighbour membership in the cooperative and an equal voice in decisions, with each member receiving one vote. This is an ongoing offer as new residents buy or build new homes in the neighbourhood. There are 69 households in this catchment, with the majority of neighbours signing up prior to construction in 2010.

Hepburn Wind also provides an annual cash contribution for infrastructure support to three local neighbourhood facilities: the community hall, the Country Fire Authority and the recreation reserve. The neighbourhood area also has priority under the Hepburn Wind Community Fund for identified local needs on a rolling basis. This has enabled the purchase of a neighbourhood defibrillator, the painting of the local community hall and the installation of solar PV systems on the hall and recreation reserve.

NEIGHBOURHOOD AGREEMENTS FOR A CASCADING PAYMENT SCHEME

COPPABELLA WIND FARM, NEW SOUTH WALES, GOLDWIND

Goldwind has found it useful to have benefit schemes that suit the context of a particular wind farm site. Elements of the project context that can influence the design of a neighbour benefit sharing strategy include the project topography, visibility and density of residences close to approved turbine locations. These issues have been considered in rolling out the neighbourhood payment scheme at the 75-turbine Coppabella Wind Farm, where a 'cascading payment structure' has been implemented.

The neighbours who live closest to wind turbines are eligible to receive the greatest financial benefit if they choose to opt into the scheme. For example, residences within approximately 2.5 km of an approved turbine location could receive approximately \$5000 per year, while those located 5 km away could receive approximately \$1500 per year. The base amount (for those 5 km away) is intended as a contribution toward the cost of electricity for that residence. However, how the money is spent is left to the discretion of the residents.

Goldwind is transparent and open about who is eligible, what they will receive and how it is calculated in order to reduce division between the "haves and have-nots". It views the scheme as a tool for building relationships that will enable residents to raise any concerns they might have with the project now or in the future.

INTEGRATING BEST-PRACTICE BENEFIT SHARING WITH COMMUNITY ENGAGEMENT

COONOOER BRIDGE WIND FARM, VICTORIA, WINDLAB

Good community engagement and benefit sharing practices strengthen the connection of local communities to a wind farm and demonstrate a commitment to providing mutual benefit.

Windlab understands that benefit sharing is inherently linked with community engagement. As such, the company seeks to engage directly with the immediate community about the project and its benefit sharing opportunities from the very early stages of project development. It sees building a social licence to operate as an essential project development activity, and one that is based on two fundamental aspects: developing trusted relationships and delivering positive benefits locally.

The CSIRO study *Exploring community acceptance of rural wind farms in Australia*⁵ identifies that neighbours living near a wind farm are the least likely group to support a project. They found that there is almost three times the level of opposition (40 per cent versus 15 per cent) from this group compared to general members of the public. As a result, Windlab has put a strong focus on project neighbours when carrying out community engagement.

In terms of delivering positive local impacts, Windlab has implemented Australia's first co-ownership model at its Coonooer Bridge Wind Farm. This benefit sharing strategy offers all neighbours with any land within 3 km or a house within 3.5 km of a turbine a share in the equity of the project company. In addition, Windlab's community grant program is specifically targeted towards project neighbours, with each having an equal vote in determining the allocation of community funding. Windlab has gone on to implement similar benefit sharing arrangements at subsequent projects, such as the Kiata Wind Farm.

THE DESIGN PROCESS

In order to build trust and relationships on its Coonooer Bridge project, Windlab prioritised face-to-face engagement with landowners and neighbours on a regular basis. At key times, Windlab, neighbours and hosts all met as a group to discuss options. These mechanisms of community feedback provided guidance and design advice that informed the benefit sharing strategy. This approach enabled high levels of transparency, and the opportunity for the community to ask questions and discuss solutions.

⁵ Hall, N., Ashworth, P., and Shaw, H. (2012). *Exploring community acceptance of rural wind farms in Australia: A snapshot*. CSIRO, Brisbane.

When Windlab proposed to increase the project by one turbine, this raised some concerns in the community. After discussions with project neighbours to address these concerns, Windlab decided to provide additional shares to the community so that they could also share in the proceeds of the additional turbine.

In response to community feedback on the need for a democratic decision-making process about the allocation of grant funding, Windlab sought design advice from the community. The design of the Community Grant Fund that emerged includes a role for all neighbours to vote to determine funding allocations.

In addition, other key project decisions have been informed by direct discussion with project neighbours and hosts. These include micro-siting of wind turbines, aviation lighting, traffic routes, allocation of community equity and the operation of the grant program. By being open, available and including the community in the design process, Windlab has built a high level of trust amongst hosts, neighbours and community groups near the wind farm.

THE BENEFIT SHARING OFFER

Windlab understands that successful benefit sharing needs to balance the financial and security needs of five main players: debt, equity, landholders, neighbours and the developer. Finding a solution in this context was challenging, and Windlab identified this as a barrier to benefit sharing model innovation in the industry. However, Windlab (and others after it) have found innovative ways to overcome these barriers.

Windlab offered free shares to all neighbours of the project within a certain distance from the turbines. This offer was taken up by 100 per cent of those project neighbours and constitutes a 3.5 per cent ownership stake in the Coonooer Bridge Wind Farm. In addition, Windlab made a further 10 per cent of the project shares open for investment to this same group, with a small number of neighbours accepting the offer.

To maintain transparency and trusted relationships between the developer and the local community, a Community Board Observer was elected by project neighbours and hosts. This person has full access to Coonooer Bridge Wind Farm board information and meetings for the lifetime of the project.

The Community Grant Fund allocated \$1315 per installed MW per year to community initiatives. All project neighbours get to vote on which applications should receive funding. So far, the grants have supported the Charlton Bowling Club, the Coonooer Bridge Recreation Reserve and a number of other local groups.

AUSTRALIA'S FIRST RENEWABLE ENERGY CO-OWNERSHIP MODEL

EVALUATING SUCCESS

Windlab's benefit sharing strategies have contributed to a strong level of support from project neighbours. To measure this support, Windlab produced a list of internal success criteria. If all the success criteria were achieved, it was clear that support from project neighbours was gained and a social licence to operate existed.

The elements for success were:

- unanimous council vote to approve the project
- no appeal to the Victorian Civil and Administrative Tribunal
- host and neighbours are on good terms
- neighbours are active in project designs
- neighbours accepted all positive impacts offered to them
- commitment to allow the community to invest
- community share in payment at financial close
- Windlab has directly funded community groups.

Windlab was successful in delivering these, thanks to its proactive and responsive community engagement and benefit sharing strategies.

THE VALUE OF BENEFIT SHARING TO WINDLAB PROJECTS

Windlab has calculated that the risks of poor relationships with the community pose significant and calculable risks for project development. For example, responding to objections, failure to secure planning approval from council, appeals processes, reputational damage, failure to secure finance or an off-take agreement, loss of landholder support and damage to team morale are all risks associated with not achieving a social licence to operate. Windlab calculated that these risks could cost the project in excess of \$5 per MWh and 36 months of time. As such, the company sought to implement quality community engagement and benefit sharing strategies that cost less and take less time than these possible risks.



Coonooer Bridge Wind Farm. Photo credit - Windlab



Community grantees, including Portland District Hospital. Photo credit - Pacific Hydro



SPONSORSHIP, GRANTS AND LEGACY INITIATIVES

Providing funding to community initiatives is commonplace across all renewable energy technologies and in other industries, such as mining. Such funds are often delivered as sponsorship, grants or legacy initiatives that make a valuable monetary contribution to various groups, initiatives, projects and causes in the local community.

The ability for a project to develop a community benefit fund is influenced by the technology, scale and potential economic return of the project. What might be an appropriate fund amount per MW for a wind or hydro project may not be equitable, or possible, for a solar or bioenergy project. If a community benefit fund is used, it is strongly recommended that the local community be involved in its management and governance.

Often, a project will choose to start its benefit sharing fund by sponsoring local groups before moving to a co-managed grant fund later in the project, once there has been time to establish an appropriate, accountable and commonly agreed structure for governing the grants.

Sponsorship

Sponsorship programs contribute to community groups and events in return for marketing and promotion to build the local reputation of the project. Sponsorship decisions are made solely by the project developer and are limited to opportunities that will offer public exposure opportunities. Sponsorship is often applied to local community events, sustainability groups and sporting clubs. The level of sponsorship may start at a low level during the early stages of a project proposal (e.g. the site selection stage) and increase once a project moves into construction and operations.

Grant funds

Grant funds are often established at the start of construction or operations and involve establishing grant guidelines, applicant eligibility and selection criteria. Often, grant funds are delivered by or in partnership with local councils or local not-for-profit organisations. Community members will typically play a role in the governance and decision making of the grant fund.

Legacy initiatives

Legacy initiatives are delivered in partnership with local organisations and are larger and longer-term programs aimed at delivering a strategic local benefit to a local community. For example, it might be used to develop a program in conjunction with local service providers that addresses structural social issues affecting at-risk populations (e.g. unemployed, homeless or marginalised people). Scholarship programs are an example of a legacy initiative.



In regions where there are multiple renewable energy developments, significant levels of funding may be flowing into the community from community benefit funds. There is the potential for such funds to be pooled and applied for strategic, long-term impact. For example, when pooled, the funds could cover local infrastructure costs that may not be possible for a single grant fund. In addition, there is some concern about the long-term impacts on communities when grant funding from projects with a 25-year life ceases. Some renewable energy projects are now thinking about how to manage their benefit sharing funds in such a way as to ensure longevity of funding.

The following key factors should be considered when establishing community benefit funds:

- **Align with broader, longer-term local and sustainable development initiatives.** These may be targeted at in-need or at-risk populations or have a particular focus on a locally-identified development agenda for the future sustainability and vitality of the community. Applying a meaningful longer-term strategy that is community led and collaboratively designed will lead to better outcomes.
- **Be generous, clear and transparent and base the funding amount on MW capacity.** Companies should think creatively about how community benefit funds are designed and delivered. Financial contributions should be considered in line with project capacity (e.g. \$ per MW) and be developed collaboratively and cooperatively with communities.

- **Community benefit funds should be separate from sponsorship programs.** As sponsorship is linked directly with brand and marketing benefits for the proponent, community benefit funds should be separated from any sponsorship activities. However, community benefit programs can complement a sponsorship program for a well-rounded community presence. As with any community program, it should be designed collaboratively with the community, with the needs of the local context in mind.
- **Be independently governed by the local community.** This can be facilitated through a purpose-made organisation, an existing trusted community charity or foundation, a community board (with local council representation) or a community consultative committee (if well-governed) working in partnership with the developer.

Some examples of how community benefit funds are being applied outside of a typical grant framework include:

- allocating funds towards building a community solar project in collaboration with a local group or business or developing a micro grid in the community
- allocating the profits from a portion of the project to a revolving zero- or low-interest loan fund that can operate in perpetuity
- allocating funds towards working with a local partner to roll out a bulk buy program for solar, battery storage and heat pumps in the local area
- tourism and education programs at the facility, which could include initiatives such as an electric vehicle charging station at a viewing location to encourage engagement and generate additional funds.

HIGHER EDUCATION SCHOLARSHIPS

CARWARP SOLAR FARM, VICTORIA, CANADIAN SOLAR

A pillar of the Carwarp Solar Farm's community benefit sharing strategy is to offer higher education scholarships for locals. Canadian Solar aims to provide 15 energy-focussed higher education scholarships per year for the initial five years of the auction scheme and then another four per year for the remaining 10 years of the support scheme.

COMMUNITY FUND KEY TO SECURING A PPA

BOMEN SOLAR FARM, NEW SOUTH WALES, SPARK INFRASTRUCTURE

Spark Infrastructure's 120 MW Bomen Solar Farm near Wagga Wagga is deploying a community grant fund worth \$1 million over 10 years in partnership with the purchaser of its electricity, Westpac. As part of their PPA contractual arrangements, companies such as Westpac are looking to make a positive on the environment while contributing to the local community where their clean electricity is sourced. Therefore, the community fund that was established as part of the PPA was an important consideration in Bomen Solar Farm being chosen by Westpac as its first PPA.

ESTABLISHING AND GOVERNING A COMMUNITY GRANT FUND

CROWLANDS WIND FARM, VICTORIA, PACIFIC HYDRO

The Crowlands Wind Farm, constructed in 2019, will invest more than \$2.2 million into the local community over a 25-year period through an annual community grant program, in-kind contributions and direct philanthropic support.

As part of its benefit sharing approach, Pacific Hydro is working with the local community to establish the Sustainable Communities Fund, an annual community grant program that will share a portion of revenue from Crowlands Wind Farm with the community. As part of this process, Pacific Hydro is gathering community input into what the geographic reach of the fund should be. Ongoing governance of the annual grant program will consist of a panel of three members of the community, representatives from the two local shire councils (Ararat and Pyrenees) and Pacific Hydro representatives. Pacific Hydro advertises expressions of interest for community members to apply to serve on the committee each year. In recognition of their contribution, community members are paid for the time they contribute to the panel. The fund operates according to clear guidelines and will support a range of eligible local initiatives.

While engaging with the community as part of this process, it was revealed that the local community hall needed maintenance. Instead of spending money to organise an event to mark the start of construction of the wind farm, Pacific Hydro installed a 6 kW rooftop solar system with a 7 kW battery that was supplied and installed by a local business.

EVOLUTION OF A COMMUNITY FUND

HEPBURN COMMUNITY WIND PARK COOPERATIVE, VICTORIA, HEPBURN WIND

The Hepburn Wind Community Fund is an example of a mature and flexible fund that changes over time in response to community needs and member feedback. A minimum of \$30,000 per financial year is available through the fund via four streams:

- > community grants program
- > energy fund
- > sponsorship program
- > neighbourhood benefits program.

In 2011 when the fund was established, Hepburn Wind was the only micro grant opportunity in the shire. By 2018, the council and all local community banks were also micro granters, so Hepburn Wind decided to focus on longer-term legacy programs that it identified with its members and the local community. In 2019, Hepburn Wind helped establish a collaborative fund called the Z-NET Climate Resilience Fund with other local funders in the Hepburn Shire to create more meaningful zero net emissions programs and an education program for schools.

Every few years, Hepburn Wind surveys its membership and key stakeholders around the funding streams. This feedback resulted in the inclusion of an energy fund stream in 2016. Hepburn Wind has since installed seven solar systems on community buildings and an electric vehicle charging station through this stream, which has also received contributions from the wind farm's energy retailer, Powershop.

CREATING ONGOING LEGACY THROUGH A FOUNDATION

UPPER LACHLAN FOUNDATION, NEW SOUTH WALES

The Upper Lachlan Valley Foundation was established by local residents to “improve the social capacity of the communities of the Upper Lachlan by providing a secure platform and income stream for local community, health, sporting, educational, environment, religious and other groups, associations and bodies”. The Foundation seeks to make the best use of multiple sources of local funding, including contributions from nearby wind farms and local donors.

Through the foundation, the community is creating a lasting impact with community benefit funding. Money received by the fund is treated as capital that is preserved in perpetuity. The foundation, via the Public Trustee for the ACT, invests all money provided to it, and the interest is paid out as grants to community causes. Two local wind farms have made contributions to the foundation.

SUPPORTING A HOSPITAL AS A LEGACY INITIATIVE⁶

MULTIPLE PROJECTS SURROUNDING PORTLAND, VICTORIA, PACIFIC HYDRO

Pacific Hydro owns and operates six wind farms in the Portland region of Victoria. In response to a local newspaper article about the Portland District Hospital struggling with rising electricity costs, Pacific Hydro offered to make a one-off contribution to install a solar PV system on the hospital’s roof. Pacific Hydro identified this as a way to allow this essential community service to take control of its electricity bill as part of the company’s commitment to philanthropic giving (providing donations and sponsorship).

Pacific Hydro has a Sustainable Communities Fund for its wind farms in the region, which has provided more than \$3.15 million to over 700 local projects since 2005. Pacific Hydro held an online voting process with the Portland community to gauge interest in directing some of the fund’s annual distribution toward the hospital’s solar project. Nearly 100 people voted, with 75 per cent supporting funding for the project.

In total, Pacific Hydro contributed \$110,000 towards the installation of solar PV at the hospital, which it estimates will be enough to install a 60 kW system. Over time, the hospital is hoping to expand the system to 350 kW and save \$84,000 on its power bill each year.

The hospital’s Director of Corporate Services, Karena Prevett, sees this program as a huge boost to its financial security. “The money we save on power bills will go straight back into providing better services for Portland District Health’s clients” said Ms Prevett.

⁶ Bray, A. (2018). *Wind brings out the sun for Portland District Health*. https://www.windalliance.org.au/portland_s_wind_brings_out_the_sun_for_portland_district_health



LOCAL JOBS, TRAINING AND PROCUREMENT

Prioritising local jobs and procurement and providing opportunities for training are significant ways that renewable energy developments can contribute to a local community while delivering positive outcomes for the project.

Local job creation and service delivery is extremely important to most host communities as it is crucial in securing local economic benefits. This is particularly the case where the development is located in a sparsely populated area where other forms of benefit sharing (such as neighbourhood benefit programs) may not be relevant. Supporting local businesses and people to take up local jobs enhances a project's contribution to regional development.

When considering employment, training and procurement programs as part of a development, it is important to give the community significant notice to allow them to prepare for and make the most of the opportunities. Steps to consider in this process include:

- > Establishing local procurement policies for the company/project and considering the inclusion of a target percentage of local spend in the project budget.
- > Promoting available opportunities at each stage of the development cycle and communicating budgets and realistic timelines.
- > Developing a register (e.g. online) where local contractors and suppliers can sign up for updates on upcoming contract opportunities.

- > Providing briefings or training to support local suppliers' ability to respond and meet the project's needs. Align with organisations that can support this.
- > Partnering with local education and training providers to develop education opportunities to encourage skill development, apprenticeships and employment pathways. Consider establishing a trainee, apprenticeship and/or scholarship program and tying this in with the project development timeline.
- > Advertising locally for contracts and jobs.
- > Employing and training local people for ongoing employment in community engagement/liaison, maintenance and operation.
- > Including local procurement preferences or requirements in the EPC contract for development. This could include a target spend for local content.
- > Introducing local suppliers to the EPC contractor.

Local businesses and services can contribute to many aspects of project development, including venue hire, catering, accommodation, transport services, manual labour, community engagement/liaison, fencing, vegetation and screening, feedstock provision (for bioenergy), groundworks, media, photography and printing. In addition to the suite of local procurement opportunities, developers are recommended to consider the value of a regular local presence such as through a dedicated shopfront and a local community officer.

Installing panels at the Karadoc Solar Farm.
Photo credit - Beon Energy Solutions



PROCUREMENT

VICTORIAN RENEWABLE ENERGY AUCTION SCHEME, VICTORIAN INDUSTRY PARTICIPATION POLICY AND INDUSTRY CAPABILITY NETWORK

To stimulate procurement from local small-to-medium enterprises when delivering projects under the Victorian Renewable Energy Auction Scheme (VREAS), the Victorian Government applied the Victorian Industry Participation Policy (VIPP) and promoted the Industry Capability Network (ICN).

The VIPP encourages procurement of local content, which is defined as content coming from Australia and New Zealand in an added-value capacity. Proponents applying to the VREAS were required to “attempt to meet a minimum local content target and submit a local industry development plan, a local investment plan and a major project skills guarantee.”⁷ For this auction, a local content target of 64 per cent for was set for all projects, as well as a target of 90 per cent for local operations and 90 per cent for local steel. Projects that exceeded the threshold were scored higher than those that only met the minimum threshold.

The ICN is a not-for-profit organisation that helps to connect the Victorian public and private sectors via an online portal that registers projects and suppliers. To ensure industry participation, the ICN streamlines the procurement process by providing connections with appropriate and qualified local contractors and suppliers. ICN Gateway holds 70,000 suppliers, making it a simple way to engage with and maximise Australian content.

LOCAL COMMUNITY LIAISON OFFICER

MOREE SOLAR FARM, NEW SOUTH WALES, FRV

FRV’s Moree Solar Farm is a 56 MW facility located 10 km south of Moree in northern New South Wales. FRV helped to integrate the project into the local community by hiring a local community liaison officer.

In addition to creating a local job with the associated flow-on benefits for the local economy, hiring a local person facilitated the effective implementation of other aspects of the benefit sharing program through building local relationships and connections. Because this person was already local to the area, they brought with them local knowledge and networks.

The role began early in the project, just after the site was deemed feasible, and continued throughout the development process.

TAFE TRAINEESHIPS

WINTON SOLAR FARM, VICTORIA, FRV

When planning for the Winton Solar Farm near Benalla in Victoria, FRV identified that there were low rates of professionally skilled workers and qualifications in building trades within the local community.

To address this, FRV approached the locally-based Goulburn Ovens TAFE to devise and provide specialist training apprenticeships in solar electrical engineering. The traineeship program sponsored three local apprentices to undertake electrical engineering and high voltage courses, which allowed the trainees to upskill and FRV to recruit locally. Where possible, trainees undertake site visits to the Winton Solar Farm as it moves through construction in order to gain ‘real world’ experience in renewable energy.

This partnership serves to enhance the offerings of the local TAFE and encourages diversification of the region by investing in local trades and skills development.

⁷DELWP (2017) *Reverse Auction Outcomes Questions and Answers*. Available: https://www.energy.vic.gov.au/__data/assets/pdf_file/0023/391172/VRET-auction-frequently-asked-questions.pdf

LOCAL EMPLOYMENT AND TRAINING

KARADOC SOLAR FARM, VICTORIA, BAYWA/BEON ENERGY SOLUTIONS

Beon Energy Solutions (Beon) was appointed by BayWa to be the EPC contractor and developed a strategic employment and training program in the Mildura community for the nine-month construction period of the 112 MW Karadoc Solar Farm.

The program had three principles:

1. hire local
2. provide employment opportunities for people facing barriers to employment
3. provide training and support to young people that would enable them to develop skills for a potential career in the solar industry.

With a focus on hiring local, but no requirement under their contract, Beon employed over 200 locals over the life of the project. This included:

- > 90 long-term unemployed people
- > 12 people on community-based orders
- > 14 people from culturally and linguistically diverse backgrounds
- > 38 Aboriginal people
- > 4 people with a disability.

Beon worked with Jobactive (a Jobs Australia employment services program) to identify candidates for its employment and training program. It also engaged with the local Mallee District Aboriginal Service, the Mildura City Council's employment program, the Victorian Department of Justice and the Jobs Victoria Employment Network.

Beon and partners needed to be flexible to meet the needs of these groups. For example, Beon provided transport to and from the site, given that many long-term unemployed people did not have access to a vehicle or a current driving licence. A week-long training program was run by labour hire company Chandler Macleod for the long-term unemployed as part of a final-stage selection process and to ensure that the candidates were job ready.

In addition to this employment program, Beon partnered with Mildura's SuniTAFE and local group training organisation SMGT on a training program for 25 new electrical apprenticeships. Of these 25 apprentices, nine were Aboriginal, including one Aboriginal woman. Beon also worked with SuniTAFE to offer several positions in the Certificate II in Electrotechnology (Career Start) course.

SuniTAFE varied the course so that instead of pure course content, Beon was able to provide hands-on work experience with training for two weeks prior to starting on site, then during construction they undertook one week of training per month, finishing with two weeks training post-construction. This effectively fast tracked their traineeships. Beon paid for the training courses and for the trainees' time to participate.

The program was very successful, with many of the workers subsequently going on to work at the nearby Yatpool Solar Farm, also being built by Beon,

Embarking on this process, Beon found that the key to a successful employment and training program was to:

- > start the process early
- > partner with local organisations who specialise in employment and training
- > be prepared to be flexible, supportive and adaptive in order to deal with a large proportion of your workforce who may face challenges
- > have all levels of management on board.

This training model is replicable around Australia with the Certificate II in Electrotechnology available at most TAFEs. However, construction timelines of at least six months are necessary for trainees to reach their certification.

Apprentices at the Karadoc Solar Farm. Photo credit - Beon Energy Solutions





EMPLOYEE VOLUNTEERISM

Employee volunteerism, which is often considered a part of corporate social responsibility, is common in many large corporations and is gaining traction in renewable energy project developments. It refers to companies providing labour and equipment free of charge on an in-kind basis to assist the local community with projects that might require expertise. For example, a company might choose to allocate a number of hours per staff member per month for them to contribute to local not-for-profit organisations such as Landcare. Alternatively, this can involve a developer directly assisting the local community to build a small-scale community energy project by utilising their existing skills, knowledge and networks to fast track the development process. Another approach is to allocate contractor time to providing services to local organisations on an in-kind basis. This is a good way to socialise contractors more deeply with the local community and to ensure local communities benefit during the construction phase.

CASE STUDIES

COORDINATED CONTRACTOR ENGAGEMENT

SAPPHIRE WIND FARM, NEW SOUTH WALES, CWP RENEWABLES

The Construction in the Community program at the Sapphire Wind Farm involved CWP Renewables partnering with major contractors Vestas, Zenvion and TransGrid on a coordinated approach to deliver benefits in the local community throughout the construction phase of the wind farm.

This program was delivered through a \$120,000 cash co-investment, which was used to support local community organisations to complete necessary construction works through the provision of monetary grants, resource support and technical oversight by the skilled workers on site. This joint approach enabled each company's unique capabilities and resources to benefit the community collectively.

To garner community interest, the Construction in the Community program was promoted in the local media, project newsletters, social media, landowner meetings and community group meetings. Applications were then received from local community groups, which were jointly assessed by Vestas, Zenvion, TransGrid and CWP Renewables. There were two rounds deployed during the construction phase, which included supporting initiatives such as the refurbishment of a community hall, constructing a loading ramp at a theatre and replacing the ceiling at a memorial hall.

Given the intensive contact that contractors will usually have with a community over several years, this is a model that can better integrate the onsite workers with the communities in which they are working.

VOLUNTEERING FOR CONSERVATION

PACIFIC HYDRO

Pacific Hydro encourages employee volunteerism as a way to contribute to and be part of the communities in which it operates in and build local relationships. For example, the company arranged for Pacific Hydro staff to do a weekend of bush regeneration and maintenance work at the viewing platform at the Major Mitchell Cairn at Picnic Hill (a public reserve with great views of one of Pacific Hydro's wind farms). Pacific Hydro's employee volunteerism also responds to community needs by providing services such as graphic design and copywriting skills.

Pacific Hydro staff participating in revegetation
works near Cape Nelson Wind Farm.
Photo credit - Pacific Hydro





INNOVATIVE PRODUCTS

Benefit sharing can involve the development of innovative products that serve the local community.

Some examples include:

- corporate or micro PPAs
- behind the meter arrangements (where a portion of electricity is used/sold onsite rather than being exported to the grid)
- making an electricity retail offering available for the local community or local businesses from a portion of the generation output of the renewable energy project (this could be an approach for both vertically-integrated developers and developers of projects with retailer partnerships)
- making other value chain products such as compost or high-value organic fertiliser (with bioenergy) that can be managed by a community enterprise
- making carbon offsets (large-scale generation certificates) available to help 'green' local businesses.

Other innovative products include the development of tourism opportunities. Energy tourism is a growing sector in Australia and is well established in certain regions of Europe and Asia. Individuals and groups, such as schools, often want to visit large-scale renewable energy projects to see how technologies operate and hear the story of how they originated, the lessons learnt along the way and how they contribute to the local community. Viewing platforms, interactive storyboards, live generation data, events and project tours are ways to develop these opportunities. They also assist to educate the broader community, promote the benefits of renewable energy and demystify the technology.



Construction of the Bulgana Wind Farm. Photo credit - Neoen

BEHIND THE METER PARTNERSHIPS FOR LOCAL INDUSTRY DEVELOPMENT

BULGANA GREEN POWER HUB, VICTORIA, NEOEN

Nectar Farms is a high-tech greenhouse company that selected the Stawell region in Western Victoria to develop and build its first project in Australia. However, a key barrier for the food producer was the high cost of electricity, which was a significant hurdle considering that it required up to 75 GWh per annum to heat its greenhouses.

In 2017, Neoen proposed the Bulgana Green Power Hub, an integrated wind farm and battery project, adjacent to the Nectar Farms development.

The two companies were brought together by the Victorian Government, and the three parties struck a mutually beneficial agreement whereby:

- > the Bulgana Green Power Hub supplied 'behind the meter' energy to Nectar Farms at a cost well below the grid connected price
- > the Victorian Government provided a contract-for-difference PPA for the remaining 90 per cent of the output of the Bulgana Green Power Hub.

This agreement guaranteed the feasibility of the Nectar Farms project, allowing it to construct a 30 hectare greenhouse facility and deliver hundreds of direct long-term jobs into the local community, and provided Neoen with the necessary assurances to finance and build the project.

ELECTRICITY, CARBON OFFSET AND TOURISM PRODUCTS

HEPBURN COMMUNITY WIND PARK COOPERATIVE, VICTORIA, HEPBURN WIND

Hepburn Wind has combined with its retailer, Powershop, to create an electricity offer for households and businesses that it markets to supporters of the cooperative. In addition, neighbours within 2.5 km of the wind park are eligible for a contribution of \$200 per annum to their electricity bills if they subscribe to the offer with Powershop. It also has an independent product – the Hepburn Wind Community Green Offset – which allows individuals, businesses, community groups and events to offset their carbon footprints by purchasing Large-scale Generation Certificates. In addition, the cooperative undertakes paid tours of the wind farm and has a live generation sign at the site.

MULTI-PARTY CORPORATE PPA

CROWLANDS WIND FARM, VICTORIA, PACIFIC HYDRO

The Melbourne Renewable Energy Project (MREP) involves 14 well-known Melbourne institutions and organisations (including leading universities, cultural institutions, corporations and local councils) directly purchasing the output from Pacific Hydro's Crowland's Wind Farm. Through a tailor-made PPA, the MREP partners agreed to purchase 88 GWh of electricity per year from the wind farm. The agreement enabled Pacific Hydro to progress financing and construction arrangements for the project, which commenced in 2018. The MREP represented the first time in Australia that a group of energy consumers had collectively purchased renewable energy.

Companies and institutions are recognising the value of direct purchasing of renewable energy through large-scale, long-term contracts. Renewable energy PPAs have been adopted by many major international and local brands in recent years, including Lego, Apple, IKEA, Coca-Cola Amatil, Telstra, Bluescope Steel, Westpac and the University of Technology Sydney. As the MREP team explains:

"Through their purchasing decisions, large organisations such as councils, universities, corporations and infrastructure authorities have the power to drive investment in new renewable energy projects such as wind farms and solar parks. They also deliver a host of benefits to the purchasers, including stable electricity prices and lower costs, as well as a reputation for leadership, innovation and investment in community programs."



INNOVATIVE FINANCING AND CO-OWNERSHIP

Innovative financing is emerging internationally as a strong social acceptance pathway⁸, but it is yet to be widely tested in Australia. Innovative financing refers to a public offering for co-investment in a portion of a renewable energy project or it may be structured as co-ownership.

Investing in a local energy asset can operate much the same way as investing in a local bank. In addition, it creates a direct connection between the development and local investors/owners and delivers benefits in the form of financial returns. Importantly for the project, it creates a group of stakeholders who are literally invested in its success. It is also a way to act to support the move to a lower carbon economy, while making reasonable returns on an investment. Currently, there are few direct investment opportunities in renewable energy as ethical or environmental funds are yet to create investment opportunities that meet the demands of many potential investors.

Co-investment or co-ownership can:

- > empower communities to participate in the renewable energy transition
- > enhance regional economic benefits
- > create greater community wealth and community assets
- > provide a way for the community to directly invest in large-scale renewable energy
- > assist community groups and individuals to engage with other locals with common values
- > build a basis of local support and advocates for the project.

Research from the US and Germany has shown that community co-ownership increases the local economic benefits of wind energy projects by 3.5 to 8 times compared with projects that are absentee owned⁹.

There are currently two fully community-owned wind farms in Australia – Hepburn Wind in Victoria and Denmark Community Wind in Western Australia. The first public investment in a large-scale renewable energy project in Australia is the Sapphire Wind Farm Community Co-Investment Initiative. The project received \$7.5 million in local community pledges and officially opened for investment in 2019.

Many variations of these themes exist, and the key is to support the community to explore options that best suit them. An alternative approach to standard financing models is that a local group undertakes some of the community engagement activities and receives in-kind support in exchange for “sweat equity” (an interest earned in return for voluntary labour) provisions should the project go ahead. The sweat equity could be an exchange for a single shareholding that would deliver annual returns to enable community or environment groups to undertake local activities.

This has been used in the Denmark Community Windfarm, where a local environmental organisation was gifted 200,000 shares in return for sweat equity related to community engagement activities. The returns on these shares are contributing to a grant program run by the organisation.

The following sections explore the differences between innovative financing and ownership models. Each section outlines the method, models, partners and platforms that can assist it to become a reality.

COMMUNITY OWNERSHIP

Community ownership is where an entirely community-owned vehicle such as a cooperative or company owns and operates a renewable energy asset. This generally applies to mid- and small-scale projects, and there are now more than 100 community-owned renewable energy projects across Australia. The largest such projects are Hepburn Wind, the Denmark Community Wind Farm and SolarShare’s Majura Community Solar Farm.

For more information, see the Victorian Government’s *A Guide to Community-Owned Renewable Energy for Victorians* (Lane, Hicks, Thompson and Memery, 2014).

COMMUNITY CO-OWNERSHIP

Co-ownership is where a community-owned vehicle owns a portion of a renewable energy asset and plays an active role in decision-making about the project. The community vehicle may have initiated the development and own a controlling interest in the project (i.e. more than 50 per cent) or it may have a smaller role. Typically, the community vehicle carries risk and responsibilities for the life of the project and is responsible for the aspects of development that capitalise on the community vehicle’s strengths, such as delivering community engagement, relationship building and communications.

Community co-ownership occurs most commonly with joint venture projects with a community and developer (community-developer partnerships). This is where the community or a renewable energy developer initiates a renewable energy project and both parties agree to deliver it in partnership. This structure is used typically for large-scale renewable energy projects where a community investment vehicle is part owner, along with the renewable energy developer and possibly other entities. The community vehicle often leads community engagement and consultation activities, while the developer leads the technical studies. In many cases, the developer owns a majority of shares and holds most of the decision-making power.

Infigen's Flyers Creek Wind Farm and the Macedon Ranges Renewable Energy are two examples of this model. The Macedon Ranges Sustainability Group's renewable energy plans have been in development for almost a decade. With recent changes in planning to allow the group to progress the project, it has partnered with Windlab. The parties intend to jointly develop, build, own and operate a community energy park in a pine plantation near Woodend in Victoria.

CASE STUDY

COMMUNITY-DEVELOPER PARTNERSHIP TO DELIVER A WIND FARM

FLYERS CREEK WIND FARM, NEW SOUTH WALES, CENTRAL NSW RENEWABLE ENERGY COOPERATIVE AND INFIGEN

The Central NSW Renewable Energy Co-operative (CENREC) was created to facilitate the community purchase of the equivalent of one turbine in the proposed 38-turbine Flyers Creek Wind Farm, which will be located between Orange and Blayney in NSW. Using a community-developer partnership model, the cooperative has played an important role in community engagement and education around the project.

The expectation is that CENREC will raise the funds for investment in a share offer in the cooperative, which will be run independently of Infigen. CENREC will then invest directly with Infigen, which will pay CENREC a return for its distribution to members/use as per their cooperative purpose. While the maximum value of the total community investment or the finer details of the governance and structure have not yet been finalised, it's expected that CENREC will run as a cooperative and will have an interest in the Flyers Creek Wind Farm and any other projects they may be interested in. A representative from Infigen currently sits on the CENREC board.

Once constructed, the wind farm will provide a direct injection of approximately \$1 million per annum to the local community through payments to landholders, permanent staff and community fund contributions, in addition to returns paid to cooperative investors. The community benefit fund element involves contributions of \$107,000 per annum (plus CPI) to Blayney Shire Council.

COMMUNITY CO-INVESTMENT

Community co-investment is where a community investment vehicle invests in a renewable energy asset and in return acquires rights to a portion of the earnings of the renewable energy project but has no decision-making power or control over the operation of the project. The investment could be in the form of debt, royalty rights or equity.

Community co-investment can be facilitated in two main ways: via a purpose-built community investment vehicle or a third-party investment platform. The community investment vehicle could be a company, cooperative, association or trust. Third-party investment platforms include management investment funds and crowdsourcing platforms. The returns on community investment are linked to the performance of the project as a whole and may be variable or fixed. While the investment and its return are not associated with individual turbines or panels, there may be a symbolic connection developed to a certain turbine or part of the solar panel array through the community engagement aspect of the co-investment.

Co-investment is a common method for medium- and large-scale renewables globally. For example, in Denmark, it is legislated that every wind project must offer up 20 per cent for local community investment. This is an emerging model in Australia, with Sapphire Wind Farm in New South Wales being the first commercial project to open up to public investment. Co-investment in local renewable energy assets is a method to further enhance regional economic benefits. It can create greater community wealth via a community stake in the asset and a deeper sense of connection to renewable energy developments.

Building on the model developed by CWP Renewables for the Sapphire Wind Farm, several other developers are actively exploring this model, including OSMI's proposed Delburn Wind Farm in the Latrobe Valley and WestWind's Golden Plains Wind Farm. As part of WestWind's commitment to sharing financial benefits with the community, a program is being initiated to allow host landholders and those living within approximately 10 km of the wind farm to invest in the project.

⁸ Hicks, J., Lane, T., Wood, E. and Hall, N. (2018). *Enhancing Positive Social Outcomes from Wind Farm Development: Evaluating community engagement and benefit-sharing in Australia*. Clean Energy Council, Melbourne.
WISE Power Consortium. (2015). *Report of Innovative Financing Models for Wind Projects, Expected to be supportive of Social Acceptance* (No. D3.3 p. 47). http://wisepower-project.eu/wp-content/uploads/20150401_WISEPower_Deliverable_3-3_Final1.pdf

⁹ Lantz, E and Tegen, S. (2009). *Economic Development Impacts of Community Wind Projects. A Review and Empirical Evaluation*. Conference paper. National Renewable Energy Laboratory.
Gottschalk, M., Hoppenbrock, C., Kucharczak, L., Schäfer, S. and Wetzel, H. (2016). *Regionale Wertschöpfung in der Windindustrie am Beispiel Nordhessen*. Kassel.

GOVERNANCE AND REGULATORY CONSIDERATIONS

Pursuing a community co-investment and co-ownership model requires the establishment of a legal vehicle to facilitate and govern the community involvement. In particular, it is necessary to choose a legal model that allows a significant number of owner/investors. Private companies are limited to 20 investors signing up within 12 months, a total investment of \$2 million and a maximum of 50 investors overall. As such, private companies are unlikely to be attractive for community co-investment or co-ownership in medium- and large-scale projects. In order to raise community capital without running into limitations around the number of shareholders or the amount of money invested, there are several legal models and model variations currently available in Australia:

- > public company
- > cooperative
- > trust
- > sub-trust in a managed investment fund
- > proprietary limited company working with an accredited crowdfunding-approved intermediary.

In the context of the proposed project, it is important to consider and seek legal advice on:

- > how any new structures set up for the community investment would interact with the existing asset and financing structure
- > ongoing administrative and governance requirements
- > requirements regarding capital raising and disclosure documents
- > whether these structures can be used in conjunction with one another.

The legal models available for community investment vehicles in Australia are listed in the following table, along with the key features of each.

Some of the key questions to consider when developing a model are:

- > Is it a co-ownership model or co-investment model?
- > Is it better structured as an equity or debt instrument?
- > Will there be a role for community members in governance and decision making?
- > Will it be an investment on the same terms as other investors (i.e. fluctuating with performance) or will it have a floor and cap or a fixed rate of return?
- > Will there need to be limits on who can be a member (e.g. geographic requirements)?
- > How large a stake is the community able to invest or own?
- > How will the community investment be structured in regard to other financiers?
- > How will risks be managed for the various parties?
- > Is the investment risk appropriate for the type of investor?
- > What are the regulatory risks and who is taking them?
- > Are there any relevant tax implications?



Landowners at the Sapphire Wind Farm. Photo credit - CWP Renewables

Table 2: A summary of the features of different legal models.

| FEATURES OF THE LEGAL MODEL | TYPE OF LEGAL MODEL | | | | | | |
|-----------------------------|---|--------------------------------------|---|--|--------------------------------------|----------------|-------------|
| | | Proprietary (private) company | Proprietary company with crowdfunding intermediary | Trust (unit) | Sub-trust of managed investment fund | Public company | Cooperative |
| | Separate legal entity that can act as a community investment vehicle | ✓ | ✓ | ✗ (is a form of legal agreement, not a legal entity in its own right) | ✗ | ✓ | ✓ |
| | Facilities limited liability of members/unitholders | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Ability to have membership requirements (who can/ cannot be a member) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Ongoing level and cost of administrative responsibility for community investors | Medium | Medium | Medium | N/A | High | Medium |
| | Ability to raise capital by issuing shares (or equivalent) | ✓ (subject to certain exemptions) | ✓ (subject to new equity crowdfunding legislation) | ✓ | ✓ | ✓ | ✓ |
| | Ability to pay dividends /distributions | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Limitations on the number of investors | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | Limitations on the amount that can be raised through investment | ✓ | ✓ | ✗ | ✗ | ✗ | ✗ |

PLATFORMS

There are several platforms that are already active in, or keen to facilitate, community investment participation with renewables that can simplify the process. Developers are required to work with platforms to roll out co-investment models if they wish to access some regulatory exemptions (e.g. to enable crowdfunding or to avoid needing an Australian Financial Services Licence). The following is a selection of the platforms available, and it is expected that they will expand over time.

DomaCom

DomaCom Australia Limited is the manager of the DomaCom Fund, which is the first fractional online investment platform available to retail investors in Australia. It was developed to fractionalise large assets into affordable investment amounts that are accessible to retail (mum and dad) investors and provide them with exposure to assets that are otherwise generally not available to them (and often only available to institutional investors). The DomaCom Fund is a registered managed investment scheme under the Corporations Act and the Australian Securities Investment Commission. DomaCom Australia Limited holds an Australian Financial Services Licence, which allows investors to invest under its general advice licence and means that DomaCom can also offer a liquidity facility. The DomaCom Fund has its own professional trustee (Melbourne Securities Corporation Limited) and custodian (Perpetual Corporate Trust Limited).

CWP Renewable partnered with DomaCom for the Sapphire Wind Farm Community Co-investment, which was the first time the platform had gone beyond property and into renewable energy. Domacom can fractionalise equity and debt instruments related to renewable energy projects. The clear benefit of the platform is that it provides strong due diligence and removes the need for a community investment vehicle, thereby eliminating the requirement for a long-term community administration and governance role.

See domacom.com.au

Birchal

Birchal is an Australian equity-based crowdfunding platform. Brands and companies profile their business on Birchal to engage with new and potential stakeholders. Birchal was one of the first licensed platforms to allow everyday Australians to buy shares directly in private and unlisted public companies under the new Australian Equity Crowdfunding Legislation. This legislation has certain caps, such as a limit of \$5 million raised per annum and a cap on the total project value of \$25 million. Therefore, it is best suited to mid-scale renewables projects or to partial investment in larger renewable energy projects.

See birchal.com

Future Renewables Fund

The Future Renewables Fund by superannuation provider Future Super is another recent innovative platform. The fund directs funding to new solar farms through both equity and debt financing. It is supported by the Array App, which focuses on targeting a broader, younger investor base into Australian renewables. The target return of the fund is 5.2 per cent per annum after fees and expenses and including distributions. The fund is also partnering with Impact Investment Group to deliver new solar farm developments.

See www.futurerenewablesfund.com.au



COMMUNITY CO-INVESTMENT IN A WIND FARM

SAPPHIRE WIND FARM, NEW SOUTH WALES, CWP RENEWABLES

The Sapphire Wind Farm located in northern New South Wales is owned by Grassroots Renewable Energy Trust (Grassroots Trust), which is a joint venture between CWP Renewables and Partners Group. The Grassroots Trust wants to share the financial benefits of its projects with its local communities, and therefore pioneered a community co-investment approach at the Sapphire Wind Farm that it will extend across its project portfolio. The Sapphire project was the first commercial large-scale wind farm in Australia to be opened up for public community investment.

The investment model was co-developed with the local community through a testing process that addressed details such as governance structure, investment length and rate of return. It was implemented through an innovative partnership with DomaCom Australia, an online fractional investment platform that is scalable and cost effective.

PROCESS

The community co-investment initiative undertook extensive consultation using a multi-stage process.

Step 1: Introducing the concept

In 2017, public events were held in Inverell and Glen Innes with over 300 attendees at which Danish community renewables expert Søren Hermansen discussed the European experience with renewable energy community investment.

Step 2: Design and road test the process

The project team worked with local stakeholders to design and road test the survey and promotional plan. Three focus groups with 40 attendees were held that included residents, banks, representatives from sustainability groups, government agencies, local universities, the Community Consultative Committee, landowners, self-managed superannuation fund account managers and the site project team.

Step 3: The discovery phase

Eight 'discovery sessions' were held with 130 participants at six locations: Inverell, Tamworth, Armidale, Moree, Wellingrove and Glen Innes. Promotions was done through a social media campaign, a letterbox drop for neighbours, local newspapers, events and partner networks. This was coupled with an online survey that was open for two months and asked community members for investment 'pledges'. Around 500 people responded to the survey. In parallel to the public-facing consultation, there was considerable in-house work to understand and reach agreement about community investment within CWP Renewables and Partners Group. This was important given the pioneering nature of this approach – all stages had to receive approval from the Sapphire Wind Farm Board prior to the community investment testing.

Step 4: Assess and decide

The community survey findings were assessed and a decision was made to proceed. The decision was communicated to the local community via email and media in 2018. Key changes were made to the proposed model to incorporate community feedback from the survey.

Step 5: Development

The model deployed was co-developed from this feedback and an innovative partnership was established with DomaCom Australia, an online fractional investment platform. This partnership removes the administration and governance responsibility for community investors and is easily replicable across the industry.

Step 6: Implement

The investment offer was formally opened from February 2019 to June 2019. The opportunity was formalised legally and marketed to the community via Sapphire Wind Farm and the DomaCom websites, email lists and social media. Roadshows occurred across the region to market the offer and to enable community investors to have support in the investment application process.

FIRST LARGE-SCALE PROJECT IN AUSTRALIA TO BE OPENED FOR PUBLIC COMMUNITY INVESTMENT

CO-DEVELOPMENT

The co-investment model was tailored to local community needs through focus groups and the survey. The key changes made by CWP Renewables from the proposed model were:

- a 10-year term instead of a seven-year term
- minimum investment \$1250 instead of \$5000
- fixed rate of return rather than variable
- remove the need for a purpose-built community investment vehicle and the ongoing community role in administration and governance that this would require due to low interest in this component.

KEY TERMS

- Minimum investment of \$1250 per investor account and maximum of \$200,000.
- Six per cent unfranked return paid quarterly.
- \$1 per unit.
- Length of term is 10 years, with capital return payment at last payment cycle.
- Total fund cap of \$10,000,000.
- Investors from NSW and ACT were able to participate, including individuals, businesses, family trusts and self-managed super funds.
- The DomaCom partnership removed the administration and governance obligation for the community. Instead, the structure is a sub-trust fund managed completely by DomaCom.
- Community investors can apply to be on the Community Advisory Panel and act as a conduit for wind farm tours, unit sales and ongoing communication between the co-investment community, Grassroots Trust staff and DomaCom.
- The co-investment functions as an unsecured loan to Grassroots Trust and is ranked below other secured creditors, but before equity shareholders.
- No hidden fees. DomaCom's fees are paid by CWP Renewables and Partners Group so there are no charges to investors. This includes the investment offer campaign, due diligence and ongoing platform costs to manage the investment of 0.44 per cent of total funds per annum.

KEY RISKS

Several risks were relevant to a community co-investment, including:

- Minimum level of community investment not reached, which is related to value for effort. If there was insufficient investor interest, the co-investment may not proceed.
- No guarantee of returns for community investors. Like other investors, community investors are also at risk of losing some or all of their capital.
- Liquidity risk. An investor cannot withdraw from the sub-fund until the sub-fund is terminated. DomaCom does offer a facility through which investors can seek to sell their units to another party and will promote available units to existing shareholders and via the Sapphire Wind Farm e-newsletter list. However, there is no guarantee of another investor purchasing the units being offered for sale.
- Financial risk and inability to service the loan and pay out the loan on maturity. There is a risk that the Grassroots Trust and its partners may find themselves in financial difficulty and not be able to meet their commitments with regard to the terms of the unsecured loan. This was deemed to be a very small risk given that a significant amount of the Sapphire Wind Farm's output has been sold under long-term contracts to the ACT Government, Sydney Airport, the Commonwealth Bank and others.
- Damage or loss to the wind farm.

Each of these risks and the associated mitigation strategies were clearly outlined in the Supplementary Product Disclosure Statement.

HOW IT WORKS

For CWP Renewables, the preferred approach was using a subordinated debt instrument. Investors in the Sapphire Wind Farm Community Co-Investment Fund were not directly exposed to the operational performance of the wind farm. The underlying asset is a loan agreement between Grassroots Renewable Energy Finance Pty Ltd and the trustee and custodian of the DomaCom Fund.

COMMUNITY CO-INVESTMENT IN A WIND FARM (CONT.)

Figure 1: Structure of the community co-investment and how the money flows through to investors and identifies senior bank debt (\$330 million) that has contributed to the funding (approximately \$580 million) of the Sapphire Wind Farm.

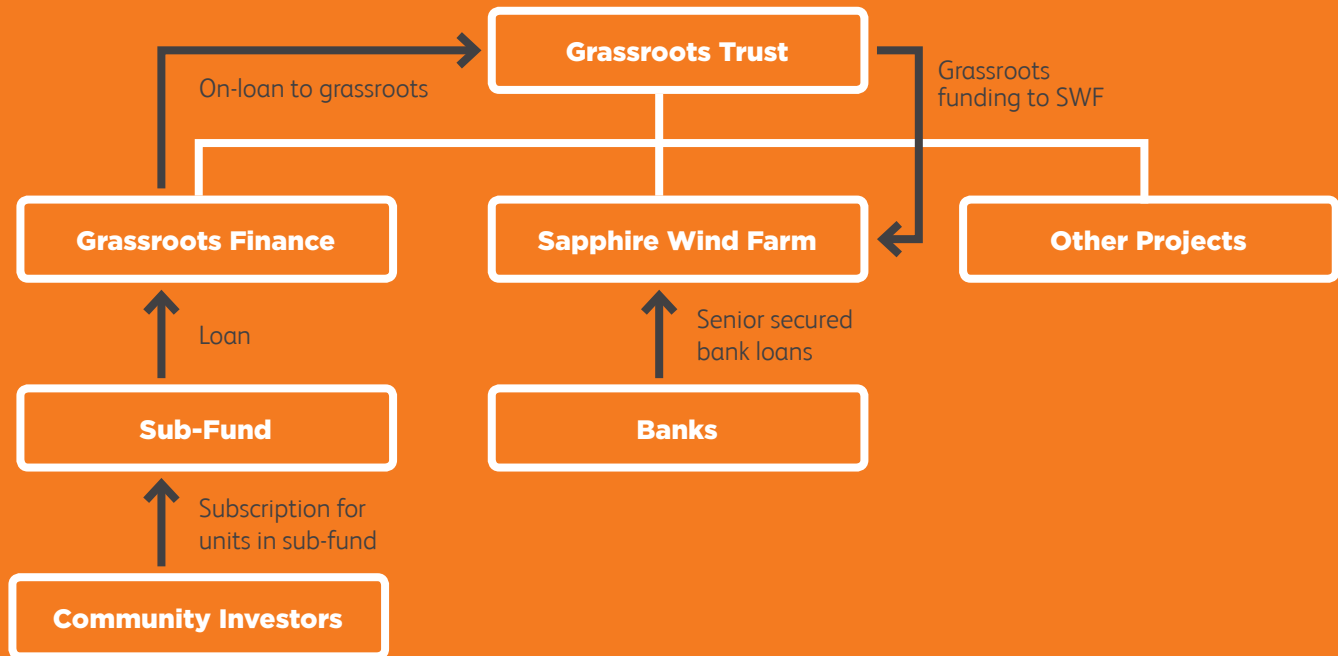
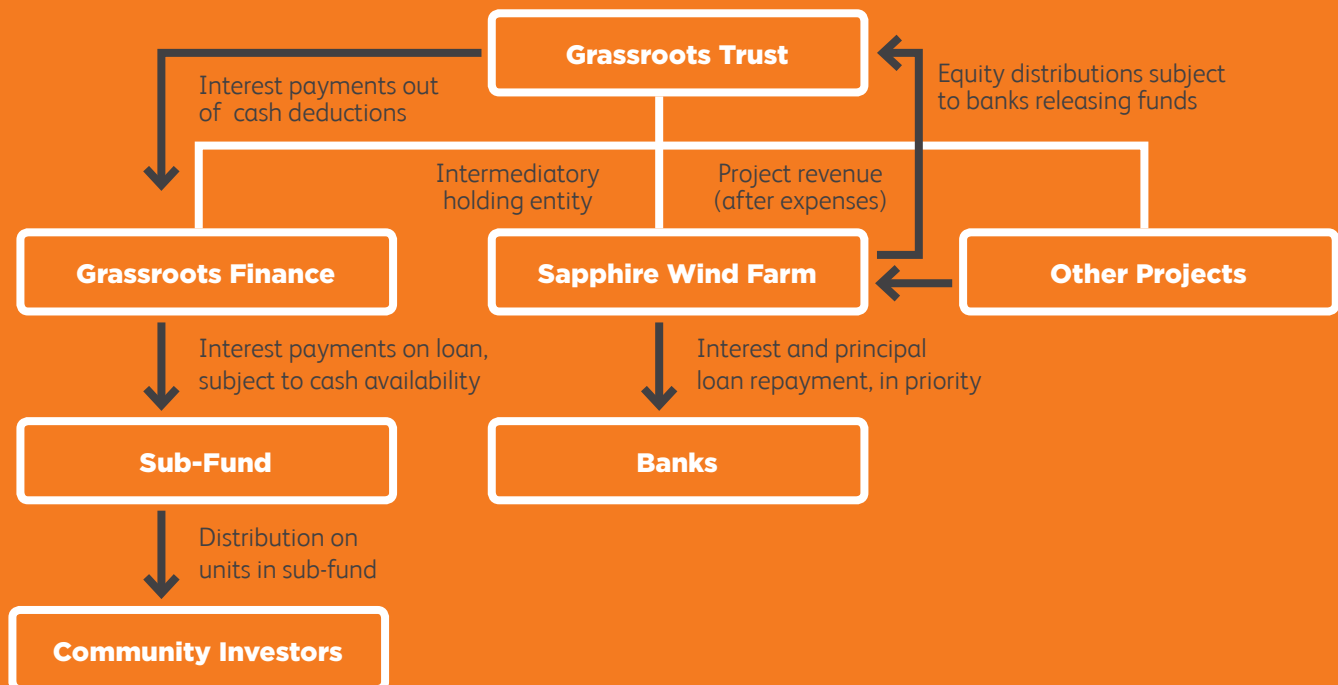


Figure 2: Project cash flow.



SAPPHIRE WIND FARM

KEY AGREEMENTS AND DOCUMENTATION

- Community Investment Testing Report
- Sapphire Wind Farm Community Co-Investment Fund Supplementary Product Disclosure Statement
- Product Disclosure Statement of DomaCom Fund
- Loan Agreement
- Limited Scope Due Diligence report.

KEY LEARNINGS

Timing

- The pioneering nature of the model meant that there were delays and multiple stages to the process. As a result, the level of community interest lost some momentum as the proposal progressed. With the benefit of experience, the process will be more efficient in future projects.
- Timing of the investment offer. Offering the community co-investment after construction completion reduces risks to community investors, but there is also a need to align with local community engagement resourcing, which can often stop following construction.

Determining the community of benefit

- Due to the strong feedback from participants in the survey, the opportunity was first made available to the community surrounding the Sapphire Wind Farm, with priority given to investors in the following order:
 1. landowners hosting Sapphire Wind Farm wind turbines and neighbours located within approximately 5 km of the wind farm
 2. residents of the Inverell Shire and Glen Innes Severn Council areas, on a first-come first-served basis
 3. all other residents of the Federal Division of New England, which includes the local government areas of Armidale Regional Council, Glen Innes Severn, Inverell Shire, Tenterfield Shire and Walcha Shire. Although outside of the Federal Division of New England, the Gwydir Shire Council local government area was also included as residents may identify as local to the wind farm region.
- Since the initial investment offer was undersubscribed, the Grassroots Trust made the decision to open up the investment offer to all residents of NSW and the ACT.

Consider the conversion rates

- Determine the minimum community investment level required for the co-investment to be viable. Conversion rates (shares sold) are always less than the pledge amounts.
- Consider other external factors. For example, the drought in the New England significantly impacted conversion rates due to economic uncertainties and personal cash flow constraints

SUCCESS OF THE APPROACH

The community co-investment initiative outcomes included:

- the first Australian public community investment into a commercial large-scale wind farm – delivering high engagement and a sense of ownership for the local community
- tested the local desire to invest and had strong local partnerships with community energy and sustainability groups to deliver it
- received \$7.4 million of pledges from 500 people, 74 per cent of whom lived locally to the Sapphire Wind Farm
- pioneered a new and highly replicable model with the DomaCom fractional investment platform, which reduces risk for community investors and developers
- received approximately \$1.8 million of community investment from almost 100 investors into the Sapphire Wind Farm
- created a community co-investment structure and approach that can be easily replicated to other projects and scaled in size.



BEYOND COMPLIANCE-LEVEL ACTIVITIES

The compliance requirements of a project include conditions that must be met for the project to receive and maintain development consent. Proponents will be required to comply with a range of planning, environmental and (sometimes) community engagement standards to receive development approval. Compliance activities often include things such as road upgrades, visual screening of the generator on site and at nearby residences, noise mitigation on the project site or at nearby residences and addressing television and radio reception issues. Compliance requirements vary in each state.

While all approaches to benefit sharing are likely to be in excess to what is strictly required for development compliance, some activities might be an extension of what is required for compliance. Compliance activities can contribute added benefits to the local community if the developer undertakes compliance-related work in a way that goes beyond and is substantially better or more involved than would be required by basic compliance standards. In essence, it is doing the same activities required to comply with planning permits and regulatory requirements but going well above and beyond the minimum obligations.

An approach to compliance activities that goes beyond the basic compliance level and contributes to benefit sharing might include:

- > installing additional or better communications towers and enabling access to mobile companies so as to improve local phone reception
- > planting extra vegetation screening and choosing plants that align with local ecology and feed into local conservation efforts
- > offering double glazing to more residences than required.

Local government rates and fire service levies charged on renewable energy generators provide another substantial local benefit. In Victoria, projects are required to make a payment in lieu of rates (PiLoR) to the Local Government Area (LGA) based on a specified formula or by negotiation.

The generator and the LGA agree on a PiLoR and may vary the amount, taking relevant project factors into account. Where the generator offers more than is the basic requirement, this could be considered a form of benefit sharing. In some jurisdictions, including Victoria, renewable energy proponents are also required to pay significant fire service levies.

Long-term commercial agreements, such as for hosts and neighbours, can enhance property values. However, developers have sometimes been required to purchase houses from neighbouring properties. Research has shown that wind farms do not generally have an impact on property prices¹⁰, although the market can be suppressed during the construction phase. However, the uncertainty that goes with large-scale developments (e.g. long and changeable timeframes for development and not knowing what the lived experience of the change and the impacts will be like) can cause close neighbours significant levels of anxiety. In response, several beyond compliance approaches to mitigating housing market anxiety are emerging, especially for very large-scale developments. For example, developers might buy adjacent properties and then resell them once the project is built and no uncertainties remain. Others have offered a bond in order to guarantee the property value or entered into contracts to buy the house at an agreed price if the owner decides they want to sell in the future as a result of the impacts of the development.

Tourism-related activities can also be part of this approach, such as installing viewing platforms, live generation signs, walking tracks or other beautification activities to make the development more engaging or aesthetically pleasing.

Developers seeking to undertake activities beyond compliance as part of their benefit sharing strategy should clearly document all activities required for compliance and the ways that these are being extended to constitute a 'beyond compliance' approach.

¹⁰ Urbis, (2016). *Review of the impact of wind farms on property values*, NSW Government Office of Environment and Heritage, Sydney.



CASE STUDIES

BIODIVERSITY PLANTINGS FOR THE REGENT HONEYEATER

WINTON SOLAR FARM, VICTORIA, FRV

FRV's 85 MW Winton Solar Farm, located 13 km north-east of Benalla in Victoria, was a successful project under the Victorian Renewable Energy Auction Scheme. Following early engagement with neighbours and the community, FRV identified a strong local legacy of protecting the Regent Honeyeater, a bird species that has been impacted by growth in farmland in the area. In response to this issue, local volunteers have partnered with the Regent Honeyeater Project for 15 years, a not-for-profit community organisation, to restore biodiversity and create wildlife corridors.

FRV recognised that there was a strength in supporting this group to continue and extend their work, rather than the development of the Winton Solar Farm being seen as a threat to local species or to the removal of protected habitat. As a pillar of its benefit sharing model, FRV will support the Regent Honeyeater Project to deliver significant new screening and biodiversity plantings in collaboration with local volunteers. Where possible, both partners will work to identify how vegetation shelterbelts – planted predominantly to provide visual screening – can be used to also provide critical wildlife habitats.

FRV invested time to engage locally and understand how to best target key local issues so that it could have a meaningful and lasting impact. In addition, a five-year Community Benefit Fund will be deployed to support local groups with a focus on sustainability.

A WILDLIFE SANCTUARY FOR THE PYGMY BLUE TONGUE LIZARD

HORNSDALE WIND FARM, SOUTH AUSTRALIA, NEOEN

After iterative and ongoing environmental surveys identified the presence of pygmy blue tongue lizards on the proposed site on the Hornsdale Wind Farm, Neoen developed a plan to ensure their protection. Rather than taking an offsetting approach, Neoen appointed an independent expert to develop a plan for a 75 hectare sanctuary for the lizard within the project site. This process of working with an ecologist led to a number of other project modifications to reduce the impact on the species, such as moving access and cable locations and the micro-siting of turbines.

A commercial agreement has been negotiated between Neoen and the landholder for the ongoing maintenance of the sanctuary to allow for the continued preservation of the species.

The development of the sanctuary has been a voluntary initiative of the project rather than a requirement of planning consent and represents more than the minimum required for environmental approval. Neoen felt the sanctuary was an important way in which the Hornsdale Wind Farm could contribute to positive and lasting local environmental benefits.

DEVELOPING A BENEFIT SHARING STRATEGY

Although benefit sharing strategies will vary from project to project, there are a few common steps that will aid their development.

The following phases outline a framework for engaging the community in the process of developing a benefit sharing strategy. Some elements of the first three phases may be interchangeable, depending on how the strategy is defined.

STEP 1: ESTABLISH BENEFIT SHARING OBJECTIVES

Develop objectives for what the benefit sharing strategy seeks to achieve. What value will it create for whom? Why is this important? Becoming clear on the desired outcomes for the community and the project (and other stakeholders) that benefit sharing seeks to deliver will inform which techniques to choose.

For example, a benefit sharing objective might be to:

- create a positive and lasting legacy from the solar farm within the local community
- build positive relationships between nearby residents and the wind farm
- address social and environmental issues that are important to local people.

It is important to also identify what the marketing and promotional needs of the developer are. Is it of prime importance to have strong branding? Will the project be built and operated by the developer, or will it be sold after construction? Will there be an existing staff resource that could manage the administration component over the long term or a local partnership organisation, such as a local council or community foundation, that could host it? This may impact decisions as to who will administer the fund and perform promotional and engagement activities, and the costs associated with that.

STEP 2: RESEARCH COMMUNITY NEED

Undertake a social feasibility assessment by doing desktop research and having some initial scoping conversations with the local government and other key stakeholders in the region in order to understand what local priorities are. This research will deepen the understanding of the social and geographic context of the development and will be used to inform initial ideas on the definition of the community of benefit and the benefit sharing budget.

STEP 3: DEFINE COMMUNITY OF BENEFIT AND CALCULATE THE BUDGET

It is essential to clarify the financial scope of the benefit sharing package (set a dollar value) and ensure that this is calculated on a sound basis. Be willing to share the rationale behind the benefit sharing budget, define the geographic scope – noting that it may adjust over time as you get feedback and input from the community – and do this with reference to local context and the project footprint.

At this stage, the developer is typically setting its desired geographic and financial scope for the benefit sharing strategy. However, this needs to be open to change as community feedback and input is sought in later stages.

STEP 4: PLAN YOUR ENGAGEMENT AND DECIDE WHAT IS NEGOTIABLE

This is the phase where the developer plans how it will engage with the local community around the benefit sharing strategy and establishes a desired role for the community in this process. How will people be involved? What power will they have to influence decisions? Are they being consulted, engaged or empowered?

At this point, it is necessary for the developer to decide what benefit sharing options and techniques it is open to. Are there any preferred models? Are some off the table? Decide what elements of the benefit sharing strategy are open for negotiation and will be responsive to community input.

Benefit sharing is one aspect of a project where it is possible to give the community high levels of influence and control. Ideally, developers will go into community engagement around the benefit sharing strategy with as much flexibility and ability to be responsive as possible.

STEP 5: BEGIN ENGAGEMENT AND BUILD LOCAL NETWORKS

This is the phase where local and other key stakeholders and partners are identified and briefed about the opportunities for the benefit sharing strategy and the planning process to develop it. Where possible, it is good to establish local community partners for the next (discovery) phase so that you can show it is legitimate and authentic. Local partners will help spread the word.

STEP 6: DISCOVER COMMUNITY IDEAS

A fundamental aspect of developing a benefit sharing strategy is to involve the community in the process of design and refinement through a social feasibility process. This is the phase of engaging the community on the ideas of benefit sharing to discover their thoughts, ideas and feedback. Introduce the concept of the benefit sharing strategy locally (e.g. through stakeholder meetings, public forums or media releases).

Use engagement as an opportunity to get community input and ideas into as many aspects of the benefit sharing strategy as possible. This can be done by developing an online survey (and asking the local partners to review it) or running a series of workshops or focus groups. You might also run public information sessions. Through this phase, continue to build a network and database of interested stakeholders.

This phase may go for several weeks, if not several months. At this point, it will be useful to have local community engagement staff on the ground. Ideally, this phase will occur concurrently with project feasibility processes, and certainly before project planning approval.

STEP 7: ASSESS, REFINE AND DECIDE

The findings from the community engagement phase should be reviewed and assessed and the benefit sharing strategy refined to incorporate community feedback. This phase could be completed by the developer or, ideally, by a reference group (or community consultative committee) comprised of local community representatives.

Developing a theory of change will outline the ways that the inputs and activities of the benefit sharing strategy seeks to generate certain outputs, leading to the desired outcomes and impacts. This will help to clarify the logic behind the benefit sharing strategy and will provide a foundation for evaluation processes.

Once the benefit sharing strategy is refined, it needs to go for final decision and approval. This can include a community decision-making process or at least a report back process. It will necessarily involve a formal decision from the developer.

STEP 8: ESTABLISH AND IMPLEMENT

This is the stage where the benefit sharing strategy is implemented in the community. Ideally, this will involve local staff and will be integrated with a holistic community engagement and communications plan. The benefit sharing strategy may involve a range of different techniques and may change over time as the project moves through different stages.

This phase will involve establishing the governance processes and structures required to oversee the benefit sharing strategy. It will also set in place the plans and processes required for monitoring and evaluation. Ideally, it will involve community participation in both the establishment and operation processes. For example, you might set the guidelines for the community benefit fund, including the objectives, eligibility requirements, application processes and selection criteria. This might also involve establishing a community committee to assess applications.

This phase will start ahead of or during construction to ensure that the benefits from the project are being shared ahead of or concurrent with the highest levels of local change and disturbance (which occur during construction).

STEP 9: GOVERNANCE AND ADMINISTRATION

It is recommended that funds be independently governed by or receive input from the local community. This can be facilitated through a purpose-made organisation, an existing trusted community charity or foundation, a community board (with or without local council representation) or a Community Consultative Committee (if well-governed) working in partnership with the developer.

The governance and administration of the benefit sharing strategy will take place throughout the lifecycle of the project. This will involve ongoing communications and engagement (e.g. to advertise grant opportunities). Ideally, it will include the community in governance and decision-making roles (e.g. through the establishment of a committee or even a new organisation). The involvement of community members and project representatives in the governance and administration of the benefit sharing strategy will help to build relationships and connections over time. Administration tasks and costs should be covered by the project developer/owner.

The ongoing role of the project owner will need to be assessed when considering the administration of a community benefit fund. Will the project change ownership over the short term? Is there a natural long-term in-house staff role that could manage the fund administration? Or is there a small contract role that could be deployed each year

COMMUNITY BENEFIT FUND GOVERNANCE

There are many ways to set up and govern a community benefit fund. The Australian Wind Alliance¹¹ reviewed several ways that wind farms are implementing and administering community benefit funds:

“Some community enhancement funds (CEFs) are managed by the wind farm company, with input from community representatives. An example of this is the Sustainable Communities Fund at Pacific Hydro’s wind farms in South Western Victoria, one of the earliest wind farm CEFs. The fund has put over \$1.4 million towards over 300 projects since its establishment in 2005. Some CEFs are managed wholly by community representatives with input from the wind farm company, such as the Waubra Wind Farm Community Fund which is run by a community committee. Others again are Council managed, Section 355 committees comprised of a range of stakeholders to ensure distribution of representation. The Boco Rock Wind Farm CEF is an example of this model, which is common across NSW. Some wind farm CEFs, such as the Snowtown Wind Farm Lend a Hand Foundation, are entirely managed by community representatives.”

Where a community benefit fund is implemented, it is strongly encouraged that the local community has a role in governance and decision making. This can be through a reference group made up of local citizens, local organisations and local government. There may also be existing local philanthropic or development groups that could play a role in ensuring there is a point of difference or a collaboration opportunity between the distinct funds.

In Victoria, it is more common for community benefit funds to be deployed by the renewable energy project owner or in partnership with a community organisation due to Councils receiving Payments in Lieu of Rates.

In New South Wales, where there is not a mechanism for rates, it is more common for Councils to host the grant funds. This is due in part to the preference put forward by the NSW Wind Energy Guidelines for local council/s to administer community enhancement funds under a voluntary planning agreement as per section 355 of the Local Government Act 1993¹².

for this purpose? Typically, administration of a fund will take up only 5-10 per cent of the fund budget. In some cases, there may be a natural local partner, such as a community foundation, that could act as the backbone for the fund and be co-branded as a collaboration. In other cases, local governments may be a suitable host of the fund, provided that they have a good local reputation and that appropriate community and renewable energy project owner governance systems and branding aspects are built in. It is key to look to the local context to design a fit-for-purpose administration approach.

In the ongoing management of a benefit sharing strategy, it is important to share the outcomes and achievements from the strategy with the local community. This could include news stories and community celebrations such as gala dinners or award nights.

STEP 10: MONITOR, EVALUATE AND IMPROVE

As renewable energy projects have long project lifecycles, it is likely that the benefit sharing model will occur for several years at a minimum or, ideally, through to the end of the project life. Therefore, monitoring the impact and alignment with both the owner of the asset and the needs of the community are important. The case study of Windlab’s Coonooer Bridge Wind Farm (in the ‘Types of benefit sharing’ section) project provides some good examples of key performance indicators for evaluating benefit sharing.

The community should also be involved in the evaluation process, such as through a local reference group or survey.

It is important for evaluation to occur throughout the project lifecycle, and particularly in the first years of its operation to ensure that it is meeting the desired objectives. Where necessary, it may be useful to evolve the benefit sharing strategy over time.

For ideas on how to deliver community engagement and evaluation associated with benefit sharing, see the *Community Engagement and Benefit Sharing in Renewable Energy Development Guide* (Lane and Hicks, 2017).

It is important to consider how these stages and activities of developing a benefit sharing strategy can be integrated with the project development timeline and broader community engagement activities.

¹¹ Australian Wind Alliance, (2018). *Building Stronger Communities: Wind’s growing role in regional Australia*. Melbourne. p. 8.

¹² *Wind Energy Guidelines* (2016). Office of Environment and Heritage, NSW Government.

Community event at the Hepburn Community Wind Farm.
Photo credit - Studio Aton for Hepburn Wind



SETTING AND CALCULATING A BUDGET FOR BENEFIT SHARING

CREATING A BENEFIT SHARING STRATEGY DOCUMENT

A benefit sharing strategy will include several types of benefit sharing that are designed to complement each other. The strategy will document the objectives of benefit sharing, the rationale for the benefit sharing budget and approach, the definition of the community of benefit and details of how the strategy will be (or was) delivered, the timeline for benefit sharing in relation to project development, how the strategy is performing and how the strategy will be evaluated over time.

The key sections in a benefit sharing strategy document should include:

- > the goal and overall objectives of the program
- > the value of the program in dollars per year
- > the design and development of the program, including how the community is engaged in this process
- > a theory of change
- > specific elements and benefit sharing techniques and a rationale into how they complement each other and will meet local needs
- > the community or communities it will benefit
- > how benefit sharing will dovetail with the project development stages and with other community engagement and communications activities
- > timeline and implementation for how the program will be delivered and managed throughout all stages of development
- > monitoring and evaluation plans.

If the strategy has already been running for several years, the document should include what has been achieved through the benefit sharing program and how it has changed over time and why.

Calculating an amount to contribute to a benefit sharing strategy will depend on what is appropriate, but should consider the following elements:

- > the nature of the project (e.g. scale, placement)
- > the economics of the project
- > local topography and the influence this has on project visibility and sound impacts
- > the social context, including the population density of the nearby neighbourhood/area and how receptive they are to the project.

There will be two different budget versions:

1. an internal development budget
2. the budgeted value communicated to the public.

Regarding internal costs, there may be specialist legal or tax/accounting advice that needs to be sought, such as for a community investment initiative. Or there could be community engagement work that needs to be funded to establish what the local community needs are. If delivered in-house, fund administration should not be included in the value of the benefit sharing provided to the community.

Setting the financial scope of the benefit sharing program will only be possible once some basic assumptions are known (or modelled). It is essential to consider what is viable for the project, as well as what is proportionate and fair.

Generally, the budget for benefit sharing can be calculated via two main methods:

1. A dollar amount per MW of installed capacity.

For wind farm developments, this is a more transparent methodology than a per turbine measure due to the increasing scale and rapidly decreasing cost of the technology. For solar farm developments, it is recommended that the dollar amount be calculated against the AC MW ratio due to the large range of difference in the nameplate installed capacity and DC-AC ratios across different technologies.

2. A percentage of project revenue or surplus.

This approach has been adopted by the Bodangora Wind Farm in central NSW, which has committed 2 per cent of the income from a single wind turbine to a community benefit fund each year in addition to a per turbine commitment¹³. The Denmark Community Wind Farm directs 10 per cent of the dividends from the wind farm each year into its Community Sustainable Living Fund. In Scotland, a community investment cooperative owns a 2.8 per cent stake in one of Falck Renewables' projects. They cooperative is guaranteed a return of 6 per cent, but this has been as high as 12 per cent in favourable production years.

¹³Australian Wind Alliance (2018). *Building Stronger Communities: Wind's growing role in regional Australia*. Melbourne. p. 8.

It is also important to consider and be clear about the timeframe of the benefit sharing strategy. At what stage of project development will benefit sharing start? Will it run for 10 years? 25 years? Ideally, benefit sharing will start before the construction phase, with some funds starting at a lower amount before construction and then ramping up as the project is constructed and becomes operational. When considering these options, it is important to note that the construction period causes the most local disturbance and change, which makes it a key time when benefit sharing can contribute to building a positive narrative and impact around the project.

When calculating the value of benefit sharing, the following aspects should be considered:

- > any in-kind stream such as staff or contractor time/contribution to community initiatives
- > any cash contribution stream, including:
 - grant funds, scholarships and legacy initiatives
 - neighbourhood (but not host) payments
 - the cost of providing neighbourhood programs, such as solar or energy efficiency programs
 - the cost of developing innovative products
 - the cost of undertaking beyond-compliance activities, such as for flora and fauna protection
 - the cost of creating opportunities for local jobs and contractors (e.g. training)
 - the cost of establishing a co-investment or co-ownership opportunity.

However, the following aspects should not be included:

- > Payments to hosts.
- > Council rates (or Payment in Lieu of Rates in Victoria).
- > Fire service levy charges.
- > Permit requirements (e.g. to minimise noise or visual impacts).
- > The value of expected future returns on investment.
- > The value of the local spend on jobs and contracting as this is considered part of the commercial costs of the project. However, the costs of creating the opportunity for local jobs and contractors to take up contracts can be included in the benefit sharing spend.
- > The value of savings generated from innovative products or neighbourhood programs.
- > Other commercial costs.

Although these cannot be included in the direct value of the benefit sharing strategy, they can (and should) be included in the calculation of local economic impacts, which is the broader story of how a project benefits the local community.

In renewable energy development, sharing the benefits with the community typically requires paying close attention to hosts and neighbours of the project as well as the broader community in the local area. No community is homogenous, so benefit sharing will need to take multiple forms and be flexible to the local context. However, the community of benefit can have diverse boundaries. How wide this geographic area extends will depend on local people's identification, relative population densities and the project attributes, including the aims of the benefit sharing strategy.

There are several ways to define the community or communities that should be included within a benefit sharing strategy. It is likely that different aspects of the strategy will target different community stakeholders. For example, it is common for a benefit sharing strategy to target both neighbours and the general local community.

- > **Neighbour benefits.** Neighbour benefits are offered according to proximity to renewable energy infrastructure. They might include a blanket offer to anyone within a certain radius or offer a graduated benefit that decreases with the distance from project infrastructure. In the latter model, benefit sharing is based on concentric circles around project infrastructure.
- > **General community benefits.** The boundaries of the general community that is eligible under a benefit sharing strategy (i.e. beyond neighbours) might be based on Local Government Area boundaries, postcodes or geographic radius from the project.

It is essential to consult with local people on the definition of the community of benefit to ensure this aligns with local people's sense of community and what they perceive to be fair. The influence of local topography on visual and sound impacts will be a key consideration to factor in when defining the community of benefit. Proportionality is a key principle to keep in mind. Ensuring that community members living closest to the project (who will experience the greatest impact) receive a proportionate benefit is an essential element of any benefit sharing strategy.

THEORY OF CHANGE

A theory of change methodology takes an identified long-term goal (or problem to be solved) and then maps backwards to develop a pathway for change and a process for implementing such an initiative. It may be worthwhile for your organisation to identify what is the shared theory of change as it applies to a distinct project’s benefit sharing model or a portfolio approach.

Articulating a theory of change will help ensure the benefit sharing strategy and the benefit sharing techniques chosen will deliver on the desired outcomes and impacts.

A theory of change identifies the inputs and activities of benefit sharing and relates these to the outputs produced and generated. The impacts are the longer, flow-on changes that occur as a result of the outcomes.

For example, the objectives of a benefit sharing strategy might be to achieve a smooth approvals process; work on a whole of lifecycle social licence; develop equitable, inclusive and integrated renewable energy projects; or contribute to the long-term economic resilience of the local community. The pathway for change for each of these goals would be differently nuanced, and would therefore involve different choices in the development of the benefit sharing strategy.

A theory of change should also be influenced by a local community need. Some communities are particularly active in certain community development areas, and there could be an opportunity to amplify this work. This will then shape the theory of change in regards to the distinct benefit sharing strategy.

Table 3: An example theory of change for a benefit sharing approach

| Inputs | Activities | Outputs | Outcomes | Impacts |
|--|--|---|---|--|
| The direct inputs into the benefit sharing approach (e.g. funding, in-kind contributions and staff time) | The activities (e.g. actions, programs) undertaken to deliver the benefit sharing approach | The outputs generated through the benefit sharing approach | The result of the outcomes – the change created through the benefit sharing approach | The long term and flow-on changes that occur in communities as a result of the outcomes of benefit sharing |
| \$100,000 per year grant fund targeting at-risk youth programs | A grant funds a local service provider to partner with local schools and businesses to provide employment pathways | 20 youths participate in personal development | Youths participating in the program have an increased sense of self-confidence and increased employability. | Decreased rates of youth unemployment and homelessness |
| Staff time to administer the program | | Five youths are trained in hospitality skills | | Decreased rates of youth crime |
| Honorariums for community members on the selection committee | | Five youths are trained in solar installation labouring skills | Four youths secure ongoing work using the skills they developed | |
| | | A partnership with schools identifies at-risk youths in need of support | | |
| | A grant funds personal development and skills training programs for eligible youth | A partnership with businesses contributes to work placement education and employment pathways | | |

WHEN TO ENGAGE AROUND BENEFIT SHARING

Community engagement on benefit sharing should start early in the project timeline. Ideally, this will occur concurrent with project feasibility and certainly before project planning approvals. Initial community engagement will help to scope and design the benefit sharing strategy. Community engagement will then play a role in gathering feedback and input to refine the strategy to ensure it is fit-for-purpose and appropriate in the local context. When establishing the strategy, community engagement could involve local people in the setup of benefit sharing activities. This may include the establishment of a new community reference group, committee or even a new organisation (such as a cooperative, trust or foundation). As the project progresses, community engagement will play a role in ensuring the local community know about benefit sharing opportunities (e.g. grant funding rounds) and reporting back on the achievements and outcomes of the benefit sharing strategy.

Historically, the question on when to engage with local neighbours and key stakeholders in the community was somewhat distorted by the amount of legacy projects in the planning system, particularly in regards to wind farms. The delay in the development of these projects meant that at the time of construction, the projects were frequently amended to allow for changes in the technology. As this was often accompanied by a significant reduction in project costs, it allowed for a more generous benefit sharing model to be deployed. Changes to planning policies or requirements of electricity purchasers have recently resulted in benefit sharing models being retrospectively applied to projects prior to financial close.

Today, the benchmark is that the benefit sharing model is available for community co-development early in the development phase and before planning permit submission. This is occurring both for wind and solar projects.

Social feasibility

It is increasingly common across the sector that the same attention and diligence given to technical and economic feasibility is also given to social feasibility. Best practice renewable energy development requires that social acceptance and social risk analyses are considered on an equal footing with technical and economic analyses.

The social feasibility of benefit sharing options can be built into early project feasibility investigations. Social feasibility analysis for benefit sharing can help developers to understand the social aspects of a local area and identify the local community needs in order to best design the model and then test the feasibility of benefit sharing options.

For guidance on how to approach social feasibility, see *Community Engagement and Benefit Sharing in Renewable Energy Development* (Lane and Hicks, 2017).



Community event for the Sapphire Wind Farm.
Photo credit: CWP Renewables

Bodangora Wind Farm. Photo credit - Infigen

Globally, benefit sharing models have been under development and deployment since the early 1980s, particularly in Europe. New models are emerging as the renewable energy industry matures, technology develops and socio-political contexts change.

Global experience indicates a strong role for policy in encouraging and, in some instances, requiring benefit sharing. In particular, models of community co-ownership and co-investment have been demonstrated to deliver significant benefits for developers, projects, financiers, policymakers and communities. Given that co-investment and co-ownership are new approaches in Australia, there is much to learn about the different ways that they can be delivered and the conditions that foster the roll out of such models. Other developments in overseas benefit sharing that are useful to consider in the Australian context are legacy approaches and agri-solar.

As in Australia, community benefit funds are a common model overseas. In the UK, for example, contributions from wind farms range from \$2000-\$10,000 per installed MW per year. In Scotland, registers of community benefits have been created so that communities can see what is being provided and to aid transparency¹⁴.

Planning and approvals processes

In Denmark and Germany local governments play an important role as planning and approval authorities for large-scale developments. Their ability to influence local renewable energy development is strengthened through national and regional planning laws, where they are required to actively engage and facilitate the siting process of wind and solar farms and ensure that the local community supports any large-scale developments in their area¹⁵. In Germany, planning law requires local governments to undertake a local planning process to nominate renewable energy zones. As a result of this process, many local governments have gone on to work in partnership with renewable energy developers and the local community to develop and co-own renewable energy projects. Such planning processes have eased the approval process for developers and encouraged community co-ownership.

Legacy approaches

Legacy approaches to benefit sharing are occurring globally. For example, the Fisherman Three community wind farm near Cockburnspath in the Scottish Borders was developed by the Berwickshire Housing Association and its partners Community Energy Scotland. By supplying energy to the national grid, the wind farm will create revenue for the housing association of around £20 million over the next 25 years, which is enough to allow it to build 500 new homes. The first year of generation saw a higher yield than anticipated, allowing the housing association to focus on local priorities first, such as the building of a new community hall. The homes and the community hall will leave a lasting and positive legacy in the community from the wind farm and will benefit some of society's most marginalised people through the provision of social housing. A second Scottish housing provider has announced plans to replicate the model.

¹⁴World Wind Energy Association, (2018). *Policy Paper Series: United Kingdom*. https://www.wwindea.org/wp-content/uploads/2018/06/UK_full.pdf

¹⁵Mey, F., Diesendorf, M. and MacGill, I. (2016). Can local government play a greater role for community renewable energy? A case study from Australia. *Energy Research & Social Science*, 21, 33–43. <https://doi.org/10.1016/j.erss.2016.06.019>



Forms of co-ownership and co-investment

A European-wide study of the wind industry found that:

“Internationally and within Europe, there seems to be a growing consensus that the involvement of citizens and communities in the vicinity of projects during their development will make the planning, construction, operation and decommissioning phases easier. WISE Power findings with regard to these new models concluded that partnerships, either private or with at least one cooperative or public private ones, are considered to be the most promising innovative financing measures. They are expected to have the best (positive) impact on social acceptance in the short and long term, to make the projects bankable and transferable. Less is expected from donation based crowd funding.”¹⁶

In Germany and Denmark, it is common for renewable energy developments to provide opportunities for community co-investment or co-ownership, where members of the local community can become shareholder/owners and/or investors in a corporate renewable energy development. Such examples may use a variety of different legal structures, agreements and finance arrangements, but broadly function in a similar manner to the Sapphire Wind Farm example described in this guide.

In Denmark, the Renewable Energy Act (2008) introduced an obligation to offer 20 per cent of the shares of every wind turbine taller than 25 m to local residents. In effect, this means that every wind energy project in Denmark is required to adopt a form of community co-ownership. When a project obtains development approval from the municipality, the project developer is obligated to hold a public meeting to promote the offer for the local community to buy shares. Individuals are further encouraged to own shares through tax exemptions, where the income earned from dividends are tax free for levels of shareholding that offset average electricity bills¹⁷. These initiatives have incentivised more than 150,000 households to own shares in wind farms in Denmark¹⁸.

A highly successful co-investment model from Scotland has been delivered at several wind farms developed and owned by Falck Renewables (Falck). Falck worked with a not-for-profit community energy organisation, Energy4All, to design a model that enabled the local community to invest in its wind farms. With each wind farm, Energy4All assists with the delivery of community engagement associated with the development process and supports local community members to establish a cooperative. Locals can buy shares in the cooperative at a minimum shareholding of \$500. The cooperative owns royalty rights in the wind farm, which guarantees cooperative members an annual return of at least 6 per cent. Energy4All is contracted by Falck to oversee the ongoing administration of the cooperative. The simple co-investment model developed by Falck and Energy4All has proven to be successful, beneficial and easily replicable. As a result, the model has been implemented across seven wind farms¹⁹.

In Germany, it is common for projects to be developed as partnerships between community organisations and developers. In these instances, both parties are involved in decision-making and play a role in project development and ownership. Most operating wind farms in the country are wholly community owned or are partnerships with wind developers²⁰. Community ownership is most commonly facilitated through cooperatives, of which there are over 800 across Germany, or through limited partnerships. It is also common for cooperatives to own bioenergy generation.

The US has also introduced a range of incentives to encourage benefit sharing in the form of co-investment and co-ownership. Minnesota has implemented a unique combination of production tax credits and accelerated depreciation that has encouraged community and developers to partner to deliver renewable energy projects. Their experience has found that such initiatives help to complement fluctuating farming income and make regional areas more viable. Such tax incentives are available in most states in the US.

¹⁶WISE Power, (2016). *WISE Power result-oriented report: WISE Power project – Fostering social acceptance for wind power*, p. 14.

¹⁷World Wind Energy Association, (2018). *Policy Paper Series: Denmark*. https://www.wwindea.org/wp-content/uploads/2018/06/Denmark_full.pdf

¹⁸Ibid

¹⁹Hicks, J. (2018). *Community power: Understanding the outcomes and impacts from community-owned wind energy projects in small regional communities*, PhD thesis, University of New South Wales, Sydney.

²⁰World Wind Energy Association, (2018). *Policy Paper Series: Germany*. https://www.wwindea.org/wp-content/uploads/2018/06/Germany_Full.pdf

Solar gardens and virtual solar models

Solar gardens or virtual solar models are a particular form of community co-ownership or co-investment in which local people purchase shares in a solar farm (or shares in its output) and the output from their shares is credited directly to their electricity bill. This model addresses the common desire for communities to benefit from local renewable energy developments through decreased electricity costs.

Sixteen states in the US have now implemented a variety of policy mechanisms on a state-by-state level, including virtual net metering, community solar feed-in tariffs and subsidies to support community solar initiatives. One of the most successful policies has been the Solar Gardens Act, which was first introduced in Colorado in 2010. Under the Act, solar gardens can be up to 2 MW and must have at least 10 subscribers. Subscribers are credited for their share of the system's output at the retail rate, less an approved charge for the utility's administration costs. Any portion of a community solar garden owned by residential or tax-exempt entities is exempt from property taxation²¹. Another example of a virtual solar project is Florida Power and Light, which is deploying 1490 MW of solar across 20 sites and selling subscriptions under the SolarTogether program for a portion of their output. Solar garden programs have been so popular that shares have sometimes sold out as quickly as 30 minutes after they are announced.

Although a recent study²² found that there are no legal impediments to adopting a solar garden model in Australia, the lack of incentives and the nature of electricity network prices makes the financial model difficult. However, there is scope to develop the solar garden model through enabling community co-ownership in a 1-2 MW portion of larger solar farms. In particular, solar gardens enable unique social benefits by opening up the benefits of solar ownership to renters, apartment owners and others with inappropriate roofs.

²¹ National Renewable Energy Laboratory, (2019). *Midmarket solar policies in the United States: Colorado*. www.nrel.gov/solar/rps/co.html

²² Rutovitz, J., McIntosh, L., Ison, N., Noble, E., Hicks, J. and Mey, F. (2018). *Social access solar gardens for Australia*. Institute for Sustainable Futures, University of Technology Sydney. www.uts.edu.au/sites/default/files/article/downloads/SASG_summary_report.pdf

Agri-solar

Some agricultural communities in Australia are experiencing opposition to the use of land for solar farm developments. Internationally, there is more research and development around 'agrophotovoltaics' (agri-solar) and the opportunities of multiple land uses. Solar farms can offer a good opportunity to rest agricultural land by providing the soil with time to recover nutrients, improve permeability and increase its carbon store. In addition, well planned plantings around and under solar equipment can add biodiversity value to the land. Solar farms can also co-exist with modified farming practices, whereby equipment layout enables grazing or cropping. This dual usage approach can include sheep grazing and lambing paddocks within the fenced solar generation zone, raised solar installations with cropping that benefits from shading or hothouses with multi-MW PV installations on the roof.

Solar farms on agricultural land can implement a range of techniques to reduce soil degradation and retain farming practices by:

- > avoiding disturbances to topsoil from grading or excavation
- > maintaining soil permeability
- > avoiding fertilisers or herbicides where possible
- > avoiding bringing 'alien' soil to the site
- > monitoring activities across the year and checking soil nutrients
- > selecting appropriate pasture and ground cover
- > developing habitat
- > managing vegetation.

Given the potential for agri-solar, it is important to monitor soil, vegetation and animal performance to test and refine the most beneficial methods for the Australian context. This provides opportunities for partnerships with education and research institutes. The following case study from the US indicates how such challenges can be addressed.



Numurkah Solar Farm. Photo credit - Neoen

INNOVATIVE SITE PREPARATION AND IMPACT REDUCTIONS ON THE ENVIRONMENT (INSPIRE)

The US Department of Energy's National Renewable Energy Laboratory has partnered with various universities, research laboratories, local governments, industry partners and environmental groups to run the InSPIRE program (Innovative Site Preparation and Impact Reductions on the Environment). This program seeks to address the absence of systematic research on the outcomes of low-impact agri-solar.

InSPIRE considers the following to be the key principles of low-impact solar:

- existing vegetation is left intact or is replaced with low-growing native vegetation species or crops
- existing topsoil is left in place to allow for the successful growth of native vegetation and to promote soil health post-decommissioning of the solar project
- natural contours of the land are worked into the design and configuration of the solar project with minimal if any land grading required
- soil and vegetation are left intact to facilitate the growth of native vegetation, improve stormwater management through less runoff and erosion and improve soil health
- implementing lower land footprint for foundations of vertical support structures, often driven piles
- vegetation that supports habitat (pollinator species, other native fauna) is encouraged
- minimal O&M activities due to low-growing native vegetation species, could involve livestock grazing

Early research by the InSPIRE program adds weight to existing data that demonstrates how solar can benefit from having healthy vegetation growing underneath panels. This is due to increased evaporation created by fertile ground cover. Similarly, the program has also seen agricultural benefits. For instance, at a site in Arizona that was implementing agri-solar, it was found that cherry tomatoes doubled their yield when under solar cells. The research suggests that while low-impact solar can add additional upfront planning and costs, the benefits over time are robust.

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APPENDIX

EXAMPLE FAQs

It's okay to start talking about benefit sharing before you know what form it will take; in fact, that's the point! Go out there without all the answers. The following is an example of how you can respond to some of the questions you might get.

How is the amount contributed to the community through the benefit sharing strategy calculated?

We have calculated a total amount to distribute based on the installed MW of the final solar farm. We are committed to contributing \$X per installed MW per year for the full X-year life of the project.

How will the community benefit funding be spent?

This will be determined working in cooperation with the community. At this stage, we want to hear what the local community's ideas and priorities are, and that will guide the decisions about how the funding is spent. We want the funding to have a positive, lasting and meaningful impact for the local community.

Are there plans for [x benefit sharing option]?

Many options are being considered. At the moment, we are in the phase of gathering ideas and feedback, and we can add your suggestions into the mix. We'd like the community benefit sharing fund to benefit a broad range of people in the community.

Who will benefit?

The community benefit sharing strategy will seek to reach and benefit a wide range of local people and organisations by developing a range of benefit sharing activities that have been informed by the local community. While this will focus on local residents living in relative proximity to the solar farm, it may also benefit people from the broader area.

What about people who are directly impacted by the development?

We are speaking with people who are concerned that the solar farm might directly impact them. If you are concerned about potential impacts, please contact us so that we can understand your concerns and try to address the issues.

How will the community get to have a say in the approach to benefit sharing?

We have established a pool of funding that will go to community benefit. Beyond that, we are seeking ideas and input from the community as to how these funds can be best spent. We are going through a process of community engagement on this at present, involving workshops, information sessions, one-on-one meetings and a survey. The input we receive through these means will inform the final design of the benefit sharing strategy.



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Parkes Solar Farm. Photo credit - Neoen



ENHANCING POSITIVE SOCIAL OUTCOMES FROM WIND FARM DEVELOPMENT

**Evaluating community
engagement and
benefit-sharing in Australia**

March 2018



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ABOUT THIS REPORT

This research report was supported by the Clean Energy Council and a number of its members to provide a 'snapshot' of current community engagement and benefit-sharing practices in Australian wind farms. It provides an evidence base and recommendations for improving social outcomes from wind development for communities, regulators and developers.



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EXECUTIVE SUMMARY



The wind industry is positioned to contribute significantly to a clean energy future in Australia. However, a lack of strong community support has sometimes led to unviable projects, the introduction of stringent policies for wind development and an uncertain market for renewable generation. Social acceptance is considered crucial to the expansion of renewable energy and the ongoing viability of the wind industry in Australia.

A proportion of this lack of community support can be attributed, among other aspects, to ineffective processes for community engagement (processes used with community members to guide the development of a wind farm project) and a lack of benefit-sharing that is perceived as fair (the distribution of financial and other benefits with the community).

This research report, *Enhancing Positive Social Outcomes from Wind Farm Development*, was supported by the Clean Energy Council and aims to provide a 'snapshot' of current community engagement and benefit-sharing practices in Australian wind farms. It provides an evidence base and recommendations for improving social outcomes from wind development for communities, regulators and developers. Four source documents were created as part of this project:

a literature review of 57 publications; 22 in-depth interviews; an online survey of 26 wind industry representatives and analysis of 32 Community Engagement Plans from the wind industry. This research report collates and summarises the findings of these four reports, from which the recommendations are elicited.

This report is presented within the context of a complex operating environment for wind development in Australia – one that is highly contingent on local and policy context, resourcing and individual and company capacities and attitudes to community engagement. Wind developer staff on-ground in communities are seeking to undertake meaningful engagement, while needing to meet a range of requirements associated with the commercial realities of developing large infrastructure projects. Despite

this complexity, a shift has begun in the Australian wind industry towards valuing and practicing better community engagement and benefit-sharing. Initiatives that have assisted to 'change the game' include the ACT Government's Renewable Energy Reverse Auctions (since 2015), which required community engagement as an assessment criteria. Such initiatives have helped to attune investors to community acceptance issues, and increase the likelihood of power purchase agreements only being signed where there is evidence of positive social outcomes.



An overarching finding from this research is that each community engagement and benefit-sharing initiative should be tailored to a community's needs and expectations, and be built on face-to-face engagement carried out by suitably experienced and/or qualified practitioners able to build strong relationships between local people and the developer. This was found to be more important than using any particular methods, such as community consultative committees, neighbour payments or grant funds. This indicates that there is no single 'silver-bullet' approach that is guaranteed to create positive social outcomes. Rather, better practice requires moving away from one-size-fits-all approaches, and considering each community as its own context – with its own challenges and opportunities.

In terms of community engagement practices, this research found that long-term, local and face-to-face engagement yields the greatest positive outcomes from community engagement. This requires investing in community engagement practices and on-the-ground staff who are able to build relationships and trust. The current status of community engagement in Australian wind farms is

that engagement generally starts early (during site feasibility studies) and uses a range of techniques, demonstrating a commitment to being adaptable and responsive to local context. Wind developers generally rely heavily on one-on-one methods and one-way communications, and relatively little on group-based engagement, opportunities for discussion and deliberation and experiential learning (e.g. at wind farm events and tours). Opportunities are often provided for communities to influence aspects of the wind farm design; however, there remains scope for developers to identify more areas where communities can have meaningful input. There is currently a lack of engagement during the construction phase and periods of project hiatus, and this is identified as a gap in current practice. In addition, there is also a lack of specific community-engagement skills and qualifications among community-engagement staff.

In terms of benefit-sharing in Australia, the wind industry has begun to implement approaches such as community grant funds, neighbour payments and co-ownership or co-investment to increase positive local impacts from the planned wind farm. Neighbourhood benefits and

community funds are becoming increasingly widely adopted, and co-ownership and co-investment by communities is emerging. Benefit-sharing takes many forms, such as the use of local contractors, energy efficiency and education programs, contributions to local infrastructure, re-vegetation and local partnerships. Wind industry representatives have noted that benefit-sharing can shift the dynamics in the community towards active support for the wind farm, and also reduce project costs overall.

Community engagement and benefit-sharing efforts have been supported by the publication of industry guides – notably the Clean Energy Council's Community Engagement Guidelines for the Australian Wind Industry (2013) and the ACT Government's Best Practice Community Engagement in Wind Development (2014). These guides have been referred to as useful tools to inform practice and set a standard. Many wind companies' Community Engagement Plans have derived their information from these guides.

This research report provides specific findings regarding aspects of community engagement and of benefit-sharing practices that emerged from the four source documents

This includes the value of trust, the role of specific wind industry staff, the contribution of face-to-face engagement to relationship-building and the various models of financial and other benefits provided to hosts, wind farm neighbours and the broader community.

The first version of the findings were compiled into a discussion paper and the detailed recommendations were considered by a variety of stakeholders involved in wind development. This second version is published as a research report and features the revised recommendations supported by 16 panellists and one advisor to the project.

GENERAL RECOMMENDATIONS

DEVELOP COMMUNITY ENGAGEMENT THAT IS DIVERSE AND LONG-TERM

Community engagement approaches should include a diversity of practices sustained over time throughout the life of the development, and feature staff who are based in the community (ideally existing locals who are recognised and respected in the communities and upskilled in community engagement). Diversity of practices should include one-way and two-way communications in individual and group settings, as well as formal (e.g. meetings) and informal (e.g. stalls, celebrations) interactions. Invest in face-to-face time and build relationships in the local community as much as possible.

ENSURE INPUT AND OUTPUT COMMUNICATION MECHANISMS

Community engagement should involve ways for community input to influence decision-making and ways for outcomes to be reported back to communities. Community engagement can be considered as involving relationship building, information and education, input and feedback. Consider engagement as a process of responsiveness in which the community provides advice on a range of developer-approved options and topics that contributes to the value of the project by creating a more locally-appropriate and supported project. In turn, development approval is likely to be more achievable and social licence stronger and more sustained. Involve community leaders who can identify the best ways to engage with their community. Maintain one-on-one engagement to establish trusted communication, and ensure regular mail-outs with project updates to ensure accurate information for all.



RECOMMENDATIONS FOR WIND DEVELOPERS

INVEST ADEQUATELY IN COMMUNITY ENGAGEMENT

Recognise the resources it takes to undertake constructive community engagement, including both staff time and community engagement budgets. Consider how the staff undertaking engagement are positioned within the company and ensure these staff have capacity to make (at least some) decisions or, at least have direct access to decision-makers. Implement processes for developing detailed knowledge of the local context, including attention to culture, demographics, history and landscape values. Engage with both potential hosts and neighbours in one-on-one and group settings from the project feasibility stage. Consider implementing this recommendation through activities such as hiring community engagement staff from the community or, if this is not feasible, ensuring that the developers have a visible, accessible and ongoing (rather than intermittent) presence in the community.

PROVIDE COMMUNITY ENGAGEMENT TRAINING TO STAFF

Ensure staff are trained in community engagement theory, techniques and approaches, and follow-up mentoring. This includes skills such as active listening, negotiation, non-violent communication, community development and dispute resolution.

BECOME A LONG-TERM PART OF THE COMMUNITY

Provide ongoing opportunities for exposure, learning and opportunities for people to have contact with the wind technology and staff of the wind farm (e.g. tours, open days, celebrations, school programs, stalls, shopfronts), both pre-construction and during operations. Consider the long-term contribution the development can make in a local area and how this can enhance existing sources of identity and pride for local people (e.g. scholarships, using the community grant fund for both smaller projects and larger, ongoing projects). Be attentive to community engagement during periods of hiatus/delays and construction, as these can cause uncertainty, concern and disturbance for locals.

ENCOURAGE ONGOING ENGAGEMENT

Include community engagement components during construction within EPC (engineering, procurement and construction) contracts.

CLARIFY AND SEEK APPROVAL FOR ASPECTS AVAILABLE FOR COMMUNITY INPUT AND NEGOTIATION

Identify the options and decisions that are available for community input and ensure decision makers (e.g. senior managers) have pre-approved these aspects before seeking the community input. This could include seeking community input into the design and evaluation of the community engagement, and into the options available for benefit-sharing plans.

DIVERSIFY THE OPTIONS TO SHARE BENEFITS

To provide a sense of community ownership and control, provide possible benefit-sharing options to the community, and allow the community (e.g. via a representative body) to select their preferred option/s. Ensure the package of benefit-sharing mechanisms reaches the range of important local stakeholders, including neighbours. Implement evaluation practices for benefit-sharing, and involve the local community in this evaluation process.

SET A CONSISTENT COMPANY APPROACH TO BENEFIT-SHARING

As a company, set a transparent approach to benefit-sharing that can guide locally-appropriate applications. For example, establish a method for consulting on the benefit-sharing package, set a means of calculating a monetary contribution and outline the range of options through which such benefits could be shared (e.g. community funds, neighbour payments etc.). Ensure this is aligned and integrated with the community engagement plan and that the approach is flexible to local context.

BE COGNISANT OF 'FREE-RIDING'

Recognise the role that advocacy organisations and development practitioners play within communities, but do not misuse the social licence that they have established. Do not rely on other developers' contributions to building a strong social licence for wind energy.



RECOMMENDATIONS FOR REGULATORS

SHARE SUCCESS (AND OTHER) EXPERIENCES

Provide support and encouragement for industry to learn from each other regarding what is working effectively – and what is not.

COMMUNICATE CLEARLY

Provide clear, neutral and consistent messaging around wind energy technology – including wording in standards, processes, policy and regulation.

PRIORITISE POSITIVE SOCIAL OUTCOMES

Where local, state and federal governments are implementing renewable energy policies (e.g. reverse auctions) or power purchase agreements, include positive social contributions as assessment criteria. Such contributions could consider the local economy and industry, the future welfare of the community and the contribution of energy generation choices to global processes, particularly climate change. It would also consider local support for the wind farm.

PROVIDE (OR SUPPORT THE DEVELOPMENT OF) STATE AND/OR NATIONAL ONLINE RESOURCES FOR WIND FARM DEVELOPERS AND OPERATORS

Share information such as guidelines, template packs, surveys, questionnaires, educational resources and recommended training courses. This would provide those seeking best practices with practical tools and resources to ensure that community engagement strategies are effective and maximise the social outcomes from the development and operation of a wind farm. This could also include online resources such as virtual tours, educational portals and educational videos that can be utilised for learning opportunities.

BUILD LOCAL GOVERNMENT CAPACITY

Support local government to engage with developers in ways that are positive and productive for local communities, while maintaining their role as potential decision-makers and key stakeholders, in the planning and approvals process.

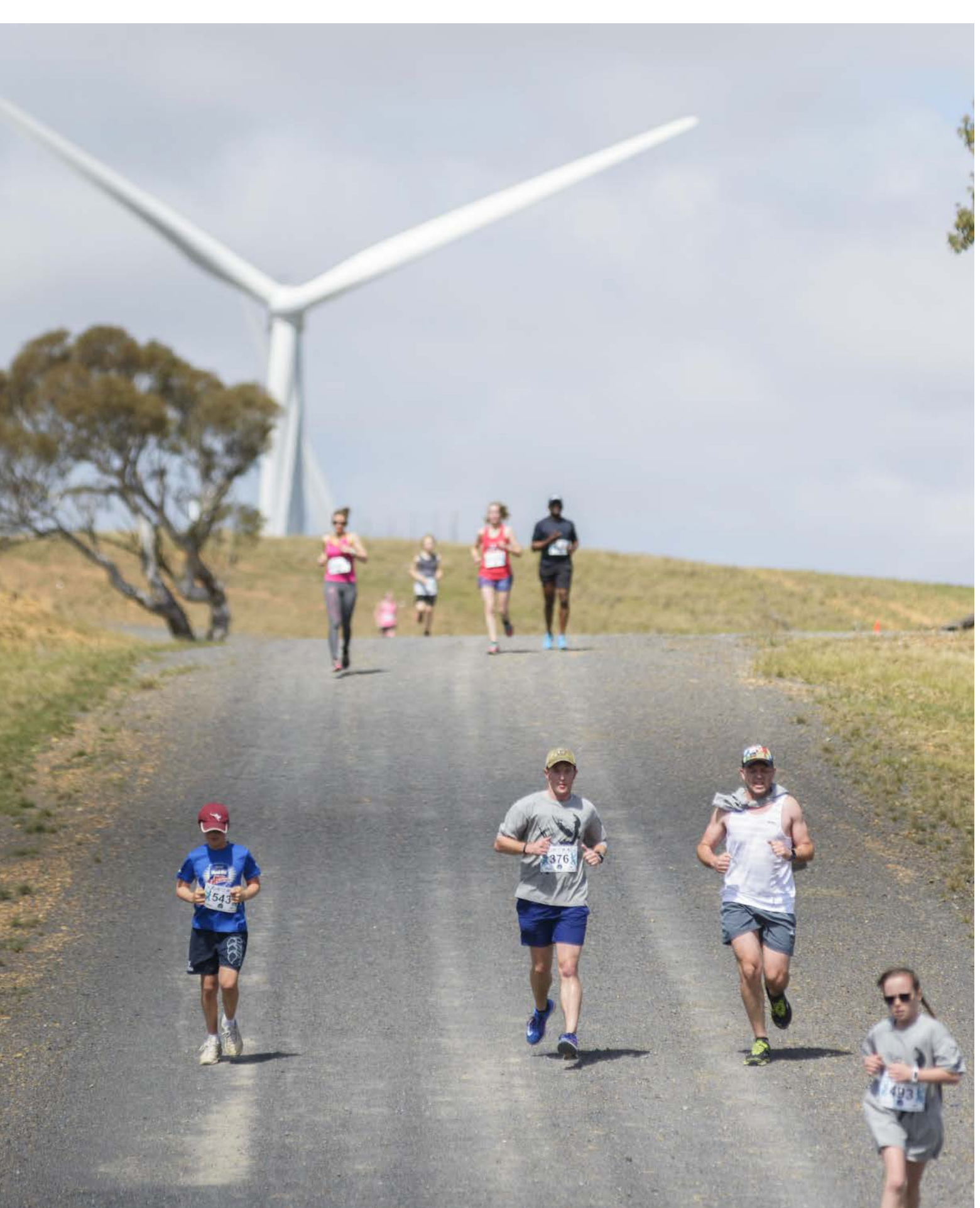
RECOMMENDATIONS FOR INDUSTRY ASSOCIATIONS AND NON-GOVERNMENT ORGANISATIONS (NGOS)

BUILD PARTNERSHIPS AND SHARE EXPERIENCES

Continue to seek partnerships with developers to help create the social conditions for support, including education, awareness raising and advocacy. Assist in wind industry peer-to-peer learning and dialogue, including through wind farm tours for potential hosts and community leaders, and open days. Assist in building opportunities between wind developers and other local industries and training organisations. Share stories of success that are helping to raise the bar of best practice community engagement and benefit-sharing.

SHARE INFORMATION ON INNOVATIVE PRACTICES FOR BENEFIT-SHARING

Establish available information regarding the effective forms and innovative approaches of benefit sharing, and outline the range of options through which such benefits could be shared (e.g. community funds, neighbour payments etc.).



INTRODUCTION



Delivering positive social outcomes from wind development is a value proposition for communities, industry and governments alike, but can be challenging to facilitate.

This research project and resulting report, *Enhancing Positive Social Outcomes from Wind Farm Development*, aims to provide a snapshot of current community engagement practices for wind farm developments in Australia, in order to create a comprehensive understanding of what practices have been implemented, and consider what efforts are effective (or otherwise) for both wind farm developers and their surrounding communities. It also seeks to enhance opportunities and partnerships between developers and communities for shared positive outcomes. Ultimately, this project seeks to contribute an evidence

base for improving outcomes from wind development for communities, regulators and wind developer companies, and advancing policy and development that supports renewable energy generation.

By using a collaborative and iterative research process involving a range of stakeholders including wind developers, experts, NGOs, regulators and community, this research seeks to generate a common understanding of the strengths, weaknesses, opportunities and threats of existing models of engagement and benefit-sharing. In doing so, this research provides a basis to evaluate current community engagement and benefit-

sharing practices in wind development in Australia, and to develop pathways for achieving positive social outcomes. Furthermore, this research also involves establishing an understanding of the value and application of the Clean Energy Council's *Community Engagement Guidelines for the Australian Wind Industry* (2013).

An additional motivation for this project is that it appears there is currently a weak dialogue between policymakers, researchers and industry on issues of wind energy. Notably, there are significant differences between how academics and practitioners frame issues and how they "appreciate evidence, knowledge and the normative



purpose of planning” (Ellis et al., 2009, p.522), which can make it difficult to translate between the two parties. Academic research can offer insight into trends across time and space and is able to bring a depth of understanding from established bodies of knowledge (e.g. sociology, psychology, human geography, politics, science and technology studies). However, academic recommendations can be inaccessible, impractical and/or difficult to translate into action by practitioners. The research team and research design for this project sought to bridge this divide.

DEFINITIONS

COMMUNITY

For wind energy development, the community refers to all the people who live within, and identify with, the geographic area surrounding the proposed site. The physical extent of the geographic area depends on the scale and spread of population and local people’s identification with significant settlements and towns.

COMMUNITY ENGAGEMENT

This definition is drawn from two current Australian sources. The Clean Energy Council’s Community Engagement Guidelines for the Australian Wind Industry (CEC, 2013, p.8) describes community engagement in the wind industry as “the process through which a wind farm developer interacts with a community to inform the decision-making process of a wind farm project”. The ACT Best Practice Community Engagement Guide for Wind Development (Lane & Hicks, 2014) defines community engagement as working “beyond the standard consultation processes typically employed to meet planning approval and compliance requirements”.

BENEFIT-SHARING

Energy infrastructure is recognised to create a range of changes, including visual and amenity impacts. In response, energy operators have sought to share the financial and other benefits with the local and other stakeholders. This is usually directed at community members of closest proximity to the development (Embark, 2017).

This research report collates the project’s research from four source documents – from a literature review, interview analysis, survey results and community engagement plan analysis – as well as feedback from 16 panellists and one advisor, to identify recommendations for practice. The intended audience for this report is developers, regulators, experts, NGOs and community stakeholders involved in, or affected by, wind farm development in Australia. Some of the findings are likely to also be relevant to wind farm development in similar contexts internationally.

BACKGROUND

The wind industry is positioned to contribute significantly to a clean energy future in Australia. It is also well positioned to supply low cost renewable energy investment and jobs, particularly in regional areas.



The development of some wind farms has faced community opposition for multiple reasons. In some cases, the level of opposition has led to unviable projects and the introduction of stringent policies for wind development. Ineffective community engagement and benefit-sharing practices are two factors that have been found to contribute to a lack of community support. What is far less researched, but which emerged from feedback from the panel, is the influence of a number of other factors on community opposition, including:

- organised anti-wind farm campaigns, often led by non-local organisations
- existing community conflicts and divisions
- changing policy and political environments.

Analysing these factors in detail is beyond the scope of this research and it is recommended that these be the subject of future research. In this report, the focus on the ways that community engagement and benefit-sharing practices has been found to increase positive social outcomes.

Community engagement is a general term used to refer to many activities including communications, consultation, participation and co-development. Over the past decade, the community engagement practices employed by the wind industry in Australia have lacked some of the diversity of techniques and benefits seen in other countries and industries. Recent wind energy developments led by developers (such as Windlab's Coonooer Bridge wind farm), communities (such as Hepburn Wind and Denmark Community Wind) and community-developer partnerships (such as that of Infigen and CENREC in the Flyer's Creek project) are shifting the goalposts by improving practices. Further, recent changes in state policies (such as the ACT's Reverse Auction) have increased attention to raise the bar of engagement and benefit-sharing.

Effective community engagement practices have been found in many situations to increase societal acceptance, a win-win for the developer and the local community. As wind-generated electricity is a relatively young industry in Australia, to date there has been little research to evaluate the on-ground effectiveness of different approaches to community engagement and benefit-sharing. This research report seeks to identify the characteristics of both effective and ineffective approaches.

On community engagement, two key previous documents that have sought to understand the influence of different approaches on wind farm approval have been from CSIRO (2012) and Ernst & Young (2015). The "Exploring Community Acceptance of Rural Wind Farms in Australia" report by CSIRO revealed the important role that early and well-designed community engagement can play in community acceptance, concluding that "inadequate consultation and engagement with the community is... a key process contributing to social conflict around wind farm development in Australia" (Hall, Ashworth, & Shaw, 2012, p5). The report recommended that local ownership models of renewable energy can enhance the sense of acceptance and ownership both because the scale of development is more appropriate but also, and "perhaps more importantly", because of the depth of consultation (Hall et al., 2012). However, it gave little detail on outcomes of various commonly used community engagement practices, and how the industry might shift towards a stronger culture of community engagement practice.

On benefit-sharing, the NSW Government's report "Strategic options for delivering ownership and benefit-sharing models for wind farms in NSW" (Ernst & Young, 2015) outlined benefit-sharing mechanisms for wind farm developments based on international precedents to assess their applicability in NSW. It recognised that benefit-sharing mechanisms need to be implemented within a broader context of community engagement. When combined, these can have a direct influence on community acceptance. The NSW report acknowledged one of its limitations as being reliant on desktop-based information and minimal stakeholder engagement. Therefore, that report provided limited shared understandings and culture change toward stronger engagement practices.

From existing research, it appears that a wide range of factors, including highly subjective and emotional aspects, mediate communities' responses to wind farms. These various social factors and their implications are not always well understood or (easily) considered in the wind development process. It is for these reasons that this research focuses on two key means through which wind developments interact with and contribute to local communities: through community engagement and benefit-sharing approaches. It is intended to build on and complement the CSIRO and NSW reports.

METHODS



This project was designed to have several phases and sources of data, in order to gather a range of perspectives and different depths and representative data.

The main method employed to gather this diversity of perspectives was the Delphi Process (Glass, Scott, & Price, 2013). This technique involves iterations of interviews and discussion in which intentionally-selected panel participants remain anonymous and engage through the research team, in order to maintain their anonymity. In this way, an opportunity for frank ‘discussion’ and reflection is created among a diverse range of stakeholders with different vantage points on an issue.

The total number of panel members participating in this research was 19; this sample ensured workability for the activities, as well as a broad enough representation of perspectives. In addition, two advisors participated. To engage with these panel members and advisors, the project secured ethical clearance through The University of Queensland Human Research Ethics Committee (#2016000866). The panel members were interviewed individually by a member/s of the project team between July and August 2016. Of these, 16 panellists and one advisor reviewed a draft discussion paper of emerging findings in June and July 2017, and responded to specific questions that emerged, and contributed to the draft recommendations posed. The panellists’ responses to these questions were integrated into this research report, and the recommendations were revised. The panellists also reviewed the subsequent draft research report in August 2017.

This research created four source documents that were analysed concurrently to inform this report, in order to extract the key themes and findings that emerged from the combined research. A survey of wind industry stakeholders occurred concurrently with in-depth interviews of the selected panel members as well as four additional interviewees. The findings from these informed the research questions for the subsequent literature and information review and the analysis of existing Community Engagement Plans (CEPs). The diversity of the sources allow for triangulation of findings from multiple data sources to identify the strongest points of alignment. This research draws on both primary/empirical research (the survey and interviews) and secondary research (the analysis of CEPs and other academic research findings). The recommendations and conclusions presented in this document are based on the dominant points of alignment across all four data sources. The full reports from each of these source documents are provided in the Appendices.



METHOD 1: LITERATURE REVIEW

A literature review was undertaken to explore publications regarding the relationships between the public and wind turbines in order to combine academic knowledge with practitioner and community knowledge and experience. A majority of the articles were founded on field research, such as case studies or surveys. The literature was examined to focus particularly on the attitudes and responses of people living in close proximity to the development. The literature was reviewed to identify the factors that contribute to positive or negative social outcomes, and the range and effect of community engagement and benefit-sharing practices being deployed. The review also sought details on the concepts and specific practices that could inform policy and practice for the wind energy context in Australia.

The literature review involved a review of 57 academic texts, including peer-reviewed journal papers, edited books and research reports published between 2005 and 2016. An emphasis on research from the Australian context in reference to international experience was enforced to identify any significant points of difference, practices and perspectives that are not yet common in Australia but could inform practices. Articles were sourced through keyword searches in academic search engines and via cross-referencing bibliographies until a point of saturation was reached. Literature covers a wide range of geographic contexts, but largely in the 'Global North': Australia (9), US & Canada (4), United Kingdom (14) and Europe (24). A small number (4) of articles were purely academic and involved no empirical data collection. A number of German language articles were also analysed by a native German speaker. The literature represented a mix of methodologies, including qualitative (16) and quantitative (11) analysis. Specific methods reported in the literature included surveys, case studies and Q methodology.

METHOD 2: REVIEW OF COMMUNITY ENGAGEMENT PLANS

An analysis of Community Engagement Plans (CEP) focused on the plans of developers for community engagement and benefit-sharing in specific wind farm developments. The analysis involved a review of 32 CEPs supplied voluntarily and in confidence by Australian wind developers on the condition of non-disclosure. While not all developers provided CEPs for review (including no CEPs from community-owned wind energy projects), the plans provided were sufficient to create a basis for analysis and to form a view about current practice and the type of variation that is occurring. The CEPs encompass a range of information including principles, objectives, stakeholder identification, methods of communications and engagement, and (in very few cases) evaluation plans. In some cases, CEPs included evidence of evaluation and/or community response to the plans, enabling an element of analysis between what was planned, what occurred and to what effect. The CEPs covered almost all stages of the lifecycle of wind farms and developments across all states and territories. The CEPs reviewed represent a significant range of companies and projects that include larger and small developers; some that are vertically integrated; some with multiple, large projects and some with one small asset (both in number of turbines and size of turbines); some implementing community co-investment; some in isolated communities, and others in populated communities.

The source documents that informed this research can be found at
cleanenergycouncil.org.au/windreport

METHOD 3: ONLINE SURVEY

The Industry Community Engagement and Benefit-sharing Survey (“the survey”) invited industry perspectives and practice on community engagement and benefit-sharing in the process of wind development and operation. The survey was sent via email to individuals in leadership and community engagement roles. It included 50 questions (19 quantitative and 31 qualitative questions), covering aspects such as the resourcing, staffing, timing, purpose, activities and outcomes of engagement and benefit-sharing. The circulation list for the survey was compiled from the Clean Energy Council (CEC) membership database and supplemented to include key developer types (e.g. community wind projects) that were not CEC members. The survey sought the widest possible sample size. Respondents were self-selecting and there were no enticements to respond. It was conducted between May and August 2016.

The survey received 26 responses. The majority of respondents were managing projects in Victoria (16 per cent), NSW (14 per cent), SA (9 per cent) and WA (7 per cent). Staff generally managed two to three wind developments each. Survey respondents held a range of roles within their companies, though most were in community engagement (43 per cent) or leadership roles (e.g. CEO) (25 per cent). A majority had worked in the wind industry for seven years or more and had on-ground experience with community engagement. While 35 per cent had some form of relevant training or qualification, it was more common for people to have specific training in communications rather than community engagement. Half of the wind companies represented were larger companies, with 20 or more full time equivalent (FTE) staff, and most of these had dedicated community engagement staff. Six responses were from community-owned wind developments, and two from community-developer partnerships involving some form of community

co-investment or co-ownership. It is worth noting that of the 79 operating wind farms in Australia, only two are community owned. Thus, the survey received a high proportion of responses from community-owned wind farm proponents. While the survey did not comprehensively cover the entire industry and respondents may not necessarily be a representative sample, the number and diversity of respondents does provide a good range of perspectives and practices present within the wind industry in Australia.

The survey did not require mandatory responses to each question. This approach was offered to ensure that respondents could respond only to questions to which they had experience or opinions, and to avoid forcing a response on a sensitive topic. To manage expectations in the analysis, the sample size is provided for each response or results are provided as a percentage.



METHOD 4: IN-DEPTH INTERVIEWS

In-depth interviews were conducted with the 19 panel members to understand their experiences and perspectives on wind farm development in Australia. The interviewees were selected as they have all had interaction and/or direct involvement in wind energy development/s and represent a diverse group of stakeholders that play an important role across the spectrum of wind energy deployment in Australia. This included two interviewees who represented community-owned projects. An Australian Indigenous person with experience in wind energy was sought for an interview, but was not able to be located in the time available. The project team recognises the omission of this perspective and stakeholder group. Three additional interviews were conducted with non-panel members ('advisors') who were

considered as experts in wind farm and community development. They were sought to increase the breadth of the data. The resulting 22 interviewees represented the categories and sectors of wind developers, community, regulators and government, academics and experts, and non-government organisations. The final representation is featured in Table 1.

Interviews were conducted by the project team members between July and August 2016, were held at a location of the interviewees' choice, and were 60-120 minutes in duration. Interviewees signed a consent form before the interview proceeded. Interview questions were semi-structured and varied slightly by stakeholder type, being tailored to the different roles that they represented. Interview questions are included in the

Appendices. Interviews were partially transcribed and coded according to themes. Developing the coding themes was an iterative process informed by the dominant emerging themes from the multiple sources of data informing the research (e.g. interviews, literature review, community engagement plans, survey of developers).

Table 1: Summary of interviewees by stakeholder type

| Stakeholder type (Code) | Representation | No. interviews |
|----------------------------------|--|----------------|
| Wind developers (D) | Companies with operations in NSW, SA, ACT, WA and VIC. All are corporate developers, developing projects in a range of location types and sizes. | 7 |
| Regulators and government (R) | National, state and local government jurisdictions. | 3 |
| Non-government organisations (N) | Organisations active on wind energy issues and engaged in public debate on renewable energy and climate change issues. | 2 |
| Academics & experts (E) | Included an academic researcher, a health professional and a financial analyst. | 6 |
| Community members (C) | One community member from a very large operating wind farm, one from a community wind project, one from a Community Consultative Committee, one turbine host and one direct neighbour. | 4 |
| Total interviews | | 22 |

OVERARCHING FINDINGS



This section presents the overarching findings that respond to the research questions of the project, namely:

- > **What is the current understanding and attitude to wind farms in Australia?**
- > **What is the current status of community engagement and benefit-sharing practices in Australia for wind farm development?**
- > **What has been the contribution of manuals ('guides') to community engagement on wind farm development in Australia?**

CURRENT UNDERSTANDING OF SOCIETAL ACCEPTANCE AND ATTITUDES TO WIND FARMS IN AUSTRALIA

Social acceptance is considered crucial to the expansion of renewable energy and the ongoing viability of the wind industry in Australia (D'Souza & Yiridoe, 2014; Howard, 2015). Hindmarsh's (2014, p.541) research into community engagement practices around wind development in Australia found that inadequate or poor engagement is a primary issue "underpinning a host of issues that local communities faced with the prospect of hosting wind farms".

Research reveals that many factors influence people's responses to, and relationships with, a wind farm development in their local area. Personal reactions to wind turbines in a landscape are mediated by a mix of historical, psychological, cultural and experiential factors (P. Devine-Wright, 2011a, 2011b). Similarly, Ellis et al. (2007, p.519) found that "public perception of wind farms is a multi-dimensional phenomena constituted through a range of complex cultural, contextual, socio-economic, political and physical factors". Community engagement and participation in decision-making processes can also generate support for wind developments (Bell, Gray, Haggett, & Swaffield, 2013; Fast & Mabee, 2015; Gross, 2007; Hindmarsh, 2010; Walker & Cass, 2011; Wolsink, 2007).



There was a sense expressed in the interviews that a shift had begun in the Australian wind industry towards valuing and practicing improved community engagement and benefit-sharing. As a result, there was a perception that community engagement was more readily discussed and considered. The range of events and activities that were identified throughout the interviews as assisting to ‘change the game’ included:

> **The ACT Government’s Renewable Energy Reverse Auction requiring community engagement**

In the assessment criteria, a 20 per cent weighting was directed to community engagement, as well as use of local contractors and contribution to trades training; the auction documentation included the Best Practice Guide in Community Engagement for Wind (Lane & Hicks, 2014).

> **The Clean Energy Council’s guidance**

The CEC Community Engagement Guidelines (CEC, 2013) and its role in convening developers to share experiences was cited as influencing better practice.

> **Investor expectations**

Several developers commented that investors in wind farms were becoming more attuned to community acceptance and requiring evidence of good community outcomes before they invest.

> **Power purchase agreements**

Organisations, such as local councils, wanting to sign power purchase agreements increasingly want evidence of good engagement and strong social outcomes.

> **The presence of industry leaders**

Examples of innovative and effective community engagement and benefit-sharing being implemented by respected leaders in the industry are helping to raise the bar of what is expected and providing examples to learn from.

> **Shifting culture**

Some wind developers were beginning to value engagement as an integral part of the success of their business, making better practice a fundamental part of corporate culture.

The literature supports these activities and other approaches to increase societal acceptance of wind farms. Table 2 provides a summary of key factors identified through the literature review that were found to positively contribute to these social outcomes, and the role (or purpose) they play in the creation of positive social outcomes.

Table 2: Factors contributing to positive social outcomes from wind development (from the literature review)

| Factor | Purpose |
|--|--|
| Advocates from within the community. | Trusted local voices to be able to speak to others and policy makers; having local people mobilised to publicly support the project. |
| Community as (co)owners of the wind farm (implies that community has both investment and decision-making control). | Increases community participation, influence and support as well as facilitating broader local sharing of benefits; increases likelihood that the development is seen as appropriate and complementary to local identity and sense of place. |
| Community as co-investors or partners in larger development (implies investment opportunities and decision-making influence, but not control). | Increases community participation, influence and support as well as facilitating broader local sharing of benefits. |
| Community participation in decisions around siting of the wind farm and/or individual turbines. | Increases likelihood that siting of the wind farm is seen as appropriate and complementary to local identity and sense of place. |
| Opportunities for public input and discussion leading to co-developed solutions and influence over wind farm design. | Sense of fair processes; local influence over project design (e.g. benefit-sharing package, turbine locations; engagement approach as well as turbine siting). |
| Community engagement that starts early; is sustained over time and is participatory. | Allows for many points of interaction and sources of information over time; facilitates long-term relationship building and trust; allows for feedback loops. |
| Building trust and long-term relationships. | Contributes to the basis for productive (open, honest, constructive) relationships between wind developer and community. |
| Best practice guidelines / guidance (both industry and government). | Establish clear and shared expectations; sets standards and norms; can help to build trust. |
| Benefit-sharing (of various types) within local neighbourhood and local community (beyond turbine hosts). | Spreads economic benefit more widely and fairly; ameliorates 'winners and losers' dichotomies; helps to match scale of impact with scale of benefit; builds wider support. |

Despite these efforts and the apparent shift to increase societal acceptance, opposition to wind farm development continues to be reported and experienced by wind farm developers and communities. The perceived high levels of public opposition are often affected by the ability of certain actors to frame the public acceptance debate, rather than being an accurate reflection of the majority of people's views. Often the public debates (e.g. in the media or submissions to planning processes) are framed by those who express their views strongest, are most motivated to do so and/or who have the best access to resources, knowledge and connections (Bell et al., 2013; Ellis et al., 2009; Hall et al., 2012).

There is a range of Australian and international literature that moves away from the umbrella explanation of 'Not In My Backyard' (NIMBY) as a credible explanation for opposition to wind developments, as it "overlooks the complexity of why people may object to a wind farm proposal, fuels conflict because of its derogatory implications and contributes to poor responses to such disputes" (Ellis et al., 2007), p.536). Indeed, NIMBY explanations can contribute to creating "unhelpful



‘us-them’ opposition groups that act to dismiss what might be legitimate and far more nuanced criticisms of a development” (P. Devine-Wright, 2011b, p.xxiii).

Using NIMBYism as an explanation for opposition assumes that the main cause of people’s objection is selfish motivations of being unwilling to accept a wind farm in their local area, even if they support wind power in general. Rather than being interpreted simply as NIMBYism, it is important to understand why local people express more concern once a specific development is announced. This gives an understanding of the conditions under which they might come to support the development, or the triggers for conditional support. Research has found that people’s perceptions of the equity and fairness of both the development process and its outcomes play an integral role in informing people’s conditional support (Wolsink 2007, p.1188).

Beyond NIMBY, the reasons for opposition can be physical as well as social. The social responses can be based on fear of the unknown. Some researchers have found that “people’s fears about the prospect of windfarm

development have proved to be largely unfounded, and that the reality is less visually intrusive, noisy and despoiling that they had expected” (Warren & McFadyen, 2010, p.210). One of the most commonly-referenced causes of socially-derived negative attitudes to wind farms is a lack of community involvement in decision-making processes, particularly through common use of “decide-announce-defend” approaches to wind farm development (Baxter, Morzaria & Hirsch, 2013; Haggett, 2011; Howard, 2015; Wolsink, 2007; WWEA, 2016). This approach involves taking complete plans to the community, with only very minimal opportunity for feedback. Rather, the approach is to justify the decisions that have been made, with them being open to change. The World Wind Energy Association found that “a lack of meaningful and timely opportunity to have a say in decision-making can contribute to public scepticism, mistrust and opposition” (WWEA, 2016, p.xxiii). From the survey, some interviews and general media, it appears that decide-announce-defend approaches are still common in the Australian wind industry at present.

The placement of turbines and their physical influence on the landscape can also influence opposition, resulting from impacts on both the actual view, and the sense of place. Groth and Vogt (2014, p.7) found that “turbine placement close to residents may heighten their uncertainty and concern of the wind turbines and overshadow any positive inclinations towards the development”. In Australia, researchers found that perceptions of “spoiling a sense of place is a primary cause of enduring social conflict” (Hindmarsh, 2014, p.194).

There remain significant and genuine conditions of public concern and opposition to wind development that call for better understanding of the conditions under which there is likely to be greater local support for wind development. In Australia, this is particularly pertinent given the unstable policy environment for renewable energy and the resulting need to build stronger and more active support for wind farms. In responding to this apparent opposition, the research recommends the value of normalising opposition (rather than neutralising it) to allow debate and deliberation (Ellis et al., 2009).



CURRENT STATUS OF COMMUNITY ENGAGEMENT AND BENEFIT-SHARING PRACTICES IN THE WIND INDUSTRY

The two main identified initiatives for wind developers to negotiate and interact with community and other stakeholders were through community engagement practices, and through offering to share the benefits arising from the wind farm. This section presents the current status of each in separate subsections.

STATUS OF COMMUNITY ENGAGEMENT PRACTICES

Community Engagement Plans

The analysis of 32 Community Engagement Plans (CEPs) for wind developments found that the language and structure used indicates that the industry is interested in engaging meaningfully with communities and that they are seeking to learn and improve practice. The CEPs communicate an intention to respond to and meet, or exceed, community expectations. Overall, the CEPs provide a clear guide as to how, why and who will be engaging with the community in relation to specific wind farm proposals. They outline the developer's intent to develop strong positive links with the community, recognising the value that these relationships bring. Clear trends towards using guides (such as the Spectrum of Public Participation (IAP2, 2004)), and the use of Community Consultative Committees were evident in most CEPs. There was also evidence of new initiatives being trialled that include co-ownership, co-investment and neighbour benefits, particularly in projects located in eastern Australia.

Some plans referenced company values that underpin their engagement activities, along with the role of senior managers in assisting to deliver engagement on-the-ground.

This active involvement of senior managers and the whole-of-company approach serves two purposes: to gain company buy-in for the engagement and its outcomes; and to demonstrate to a community that the company's identity and values are tied to achieving a positive engagement outcome.

Of note, the CEPs written more recently (in the last five years) and located in the eastern states generally demonstrate a more comprehensive set of engagement tools being deployed. These plans are more likely to include benefit-sharing options such as project co-ownership, neighbour payments, sponsorship and/or community grants. They are also more likely to include opportunities for greater community involvement in decision-making. These are the CEPs where the language often includes more references to collaborate, involve and sometimes empower. These trends are likely to reflect industry learning and maturation, as well as the influence of shared norms being collated into guidelines (such as those released by the Clean Energy Council), which were introduced in the past five years.

A noted limitation in the CEPs analysed is the unknown degree of implementation of CEPs. Furthermore, there is a lack of metrics or process to evaluate and or audit the delivery of the community engagement in the majority of CEPs reviewed. Most plans do not have any formal evaluation process outlined in them. Some CEPs do not mention evaluation at all.

Linked to this observation is the apparent separation between the author of the CEP and the staff implementing it in-house, which can affect the implementation and subsequent evaluation of the CEP actions.

In summary, a well-written, detailed CEP does not make the implementation of engagement better or worse. At the very least, the existence of a CEP provides the framework for community engagement activities to be undertaken. The three other source documents provided useful basis for cross-referencing the insights from the CEP analysis.

Purpose of engagement

The survey results indicated that respondents understand the primary purpose of community engagement is to build relationships (26 per cent), followed by a need to inform and educate (17 per cent), build and maintain a social licence to operate (15 per cent), and that it is a "must do for project approval" (13 per cent). Some (9 per cent) say community engagement is part of creating a well-designed development that is well integrated into the local area, adding value to the project as a whole. Only 8 per cent saw community engagement activity as being "at the heart" of wind development; these were responses of people involved in community wind energy projects. It appears that the purpose of engagement is also viewed differently depending on the roles played in the organisation.

Motivations for engagement

The survey sought to understand the risk-based motivations of undertaking community engagement. The results (from 14 respondents) can be categorised into social risk (losing existing social licence with broader community; losing local government support; tense or divided community; non-cooperative landholders; and unable to manage community expectations) and project risks (reactive rather than proactive engagement; site abandonment and associated financial loss; impact to company reputation; and planning development approval rejection and associated costs).

Beyond the risk of not undertaking effective community engagement, the survey also explored the impact of political and market pressures on the organisation's motivation to conduct such engagement. Responses indicate that external pressures cause changes in community engagement. The biggest proportion of respondents (39 per cent) identified that changes to policy environment or market pressures resulted in new requirements that mandated changes in their community engagement approach. For 26 per cent, external pressures have led to more difficult operating environments in which there are fewer available resources for community engagement. In some cases this has led to reducing staff and funding levels for community engagement activities. For 22 per cent, community engagement has always been important and has been maintained as is. Finally, 9 per cent identified that external context changes caused them to realise that a new (improved, more rigorous) approach to community engagement is necessary and required them to change their approach voluntarily.

Values inherent to engagement

In considering the current practices of community engagement, the survey results elicited the key values of effective engagement as experienced by the survey respondents. The values were to bring honesty, transparency (where practical) and integrity; to adapt approaches to the local context; to manage expectations regarding the scope of options open to negotiation and contribution by the community; to maintain regular and face-to-face contact with feedback on community requests; and to share the benefits broadly across the community.

The interviews gathered a range of value-change approaches that had been found to be effective in shifting the culture of wind developer companies towards valuing strong community engagement practices:

> **Initiating culture change and training at company and sector levels**

It is essential to have understanding and support for community engagement from the senior management level. Training in community engagement skills was recommended by interviewees for all staff, not just those in community-facing roles, so that it contributes to a culture change across the organisation where community engagement becomes widely understood and valued. At a sector level, there was evidence that one company's practice can influence others – in both positive and negative ways. Changing the culture of the whole industry was seen as valuable.

> **Embracing a crisis as an opportunity for change**

Interviewees noted that their experience of 'when things do not go to plan' within their company had clarified the value of good, early engagement and increased internal company support for better community engagement practice.

> **Implementing codes of conduct for staff and contractors in community-facing roles**

Interviewees recommended setting protocols and expectations for how staff and contractors behave on site and in the local community, as they are the face of the company.

Key practices applied during engagement

The survey collated responses on engagement activities that are most regularly used across all stages of wind farm development. There is a dominant reliance on one-on-one engagement and one-way information flows, alongside engagement with local and state government stakeholders. Much less used are opportunities for two-way dialogue, such as conversation or workshops, in a public or group setting (e.g. facilitated workshop, public meeting or neighbourhood meeting). Education and experiential opportunities are also rarely used (e.g. wind farm tours, open days or advocate training), in addition to drop-in information sessions during the planning and approvals phase. Table 3 displays the activities in order of usefulness, with the percentage indicating the number of respondents who felt that it was “very useful”. Some activities are more valued than others, while there are no activities that are considered overwhelmingly useful. It appears there is little use of feedback mechanisms (e.g. workshops, polling or voting) despite the literature and interviews indicating these to be very useful.

Table 3: Perceived ‘usefulness’ of community engagement activities (from the survey)

| Rank | Tools | % |
|------|-------------------------------------|----|
| 1 | Website | 14 |
| 2 | Public meetings | 13 |
| 3 | Written materials | 12 |
| 4 | Drop-in style information sessions | 11 |
| 5 | One-on-one meetings | 11 |
| 6 | Community Consultative Committees | 9 |
| 7 | Focus groups, facilitated workshops | 9 |
| 8 | Survey, voting or polling | 8 |
| 9 | Participation in local events | 7 |
| 10 | Wind farm tours | 6 |

Cross analysis between the survey and interview results indicates some points of contention. For example, people identified that wind farms tours, which offer opportunities for first-hand experience, are particularly useful – whereas the survey revealed tours are rarely used. Similarly, the survey revealed that it is common for engagement to be focused on information provision and one-on-one contexts. This emphasis contradicts sharply with interviewees’ reflections that the most effective community engagement practices involve collaboration, a community-wide approach and genuine opportunities for community feedback and suggestions to be considered. Another particular point of difference is the sentiment toward public meetings – while being ranked as the second most useful community engagement tool in Table 3, the interviews and other survey questions indicated they are rarely used and even not recommended, as they can be easily de-railed by vocal interests.

Respondents were asked during the survey to identify community engagement or benefit-sharing techniques they felt had not been effective. Several dominant themes emerged, including public meetings (e.g. town hall meetings), private negotiations, use of one-way methods only, inflexible or one-size-fits-all approaches and tokenistic engagement that does not provide genuine opportunities for influence or participation. Of these, town hall meetings were the most common technique that people identified as not being useful (referenced by 33 per cent of respondents).

Many of the panellists cited negative experiences from public town hall meetings. This was due to the meeting occurring late in the development process, and thus are likely to be attended by local or non-local stakeholders with established oppositional views that can limit constructive and solution-oriented discussions. Regardless of when they occur, conducting public town hall meetings was seen to be problematic as they can be easily dominated by the loudest voices and result in community polarisation. Several panellists offered process and logistical suggestions to improve the usefulness of such public meetings, including holding them early in the development process, involving an independent facilitator who sets ground rules for discussion to enable the ‘middle views’ to be heard, providing a clear outline of topics to be discussed, and communicating with honesty and transparent information. Ensuring outcomes and questions are followed up is also essential.

Further detail was provided on ineffective practices during the interviews. This included the negative impact of prospectors (where the first engagement is done by a company who has no long-term interest in the site or commitment to the community); of late and defensive engagement (known as decide-announce-defend); of not taking people’s issues seriously/ being dismissive; requiring ‘gag clauses’ or other conditions of agreements; negotiating compensation or benefit-sharing privately with specific community members; and offering benefit-sharing initiatives without community consultation.

Budget and timeframe for engagement activities

Given that long-term, local and face-to-face engagement has been identified as yielding the greatest positive outcomes for a wind farm development, budgetary considerations for engagement emerged as crucial from the survey results. Almost all companies, regardless of size, agree that there is a financial benefit for successful community engagement. The findings from this research shows that companies with 11 or more FTE staff consistently direct specific funding to community engagement. Larger companies are also more likely to view the budget for community engagement to be sufficient, whereas the majority of small companies think it is insufficient. Despite their small size, 75 per cent of these small companies have dedicated community engagement budgets and considerations (including voluntary time contributions).

Survey responses indicate that community engagement activities usually start early in the project lifecycle, upon site selection (58 per cent) or during feasibility studies (96 per cent). Only one respondent indicated waiting until the planning and approvals process to start engagement. The predominant reason stated for initiating early engagement was to enable community participation in project design and to 'bring the community along on the journey' to wind farm development. It is unclear, however, if this early engagement extends beyond engagement with project hosts.

In summary, the current status of community engagement in Australian wind farms has been early engagement, being adaptable and enabling the community to have a level of input. However, the choice of language to describe these activities differed across the responses: from seeking authentic partnership with a community to a more top-down, or even 'cowboy' direction from other companies. This indicates that while many developers are more effectively consulting with communities, there remains scope for improving the approaches taken by developers to enable community input into a range of decisions regarding wind farm, community engagement and benefit-sharing design. This would involve identifying certain decisions that are open to community feedback, or even delegating certain decisions to the community (such as the benefit-sharing model). In addition, there is wide variation on what 'early' engagement entails, including both what activities, who is involved and when they start. For example, it was unclear whether early engagement involved more than speaking with potential hosts during the site selection phase.

Status of benefit-sharing practices

The use of multiple and contextually appropriate means of benefit-sharing has been shown by many researchers to have a positive impact on people's support for nearby wind farms (Bidwell, 2013; Fast & Mabee, 2015; Howard, 2015; Walter, 2014). Importantly, community benefits "create legacy projects which affect the long-term daily associations [that] residents have with the wind farm" (Fast & Mabee, 2015, p.34). Being able to focus on the potential positive impacts of a wind development has been found to build support for proposals where benefit-sharing is seen to be genuine and fair (Hall et al., 2012). However, the literature also identified that benefit-sharing methods can only increase support where it is genuinely addressing distributive fairness rather than as a means to quieten opposition (Bell et al., 2013; Haggett, 2011). Several researchers identified the challenge that the positive gains made through greenhouse gas reduction occur on a national and international scale, while the impacts, including noise and aesthetic changes, are obvious at the local level – and that benefit-sharing can help to acknowledge and overcome this 'disjunct' between local impacts and national and international benefit (Haggett, 2011; Hall et al., 2012).

The literature noted an important differentiation between benefit-sharing and bribery or compensation (Aitken, 2010). For benefit-sharing, this was described in the interviews as a means to achieve a fairness of outcomes, and to provide benefits that are seen to be proportionate to the changes taking place and which are distributed equitably. The interviewees raised three aspects of fairness that were of importance to them: that local benefits are proportionate and commensurate to the nature of change, recognising that local people will experience and perceive this change differently from each other and the developer; that benefits are distributed amongst local people in a way that is understood to be fair among hosts, neighbours, council and the broader local community; and that the benefit-sharing is matched with a fair process, to avoid being viewed as tokenism or bribery.

In Australia, the wind industry has recognised that there will be some impacts on near neighbours. The CEP analysis described approaches such as community grant funds, neighbour payments and (less commonly) co-ownership or co-investment being implemented by some companies as a way to increase benefit-sharing. In response, as detailed in the survey results, neighbourhood benefits and community funds are all becoming commonly applied approaches and setting a precedent for industry standards. The effectiveness was noted by respondents as being influenced by how benefit-sharing is used, and how it can change the dynamics in the community. The interviews provided detail on the financial motivation for considering benefit-sharing options. This included the view that benefit-sharing can reduce project costs overall, that it assists to secure finance and power purchase agreements and that it contributes to a better operating environment for wind development (better social

acceptance, less policy and regulatory risk). Hence, it also enhances the likelihood of future projects being successful. Furthermore, the interviewees noted that the full costs of benefit-sharing is unlikely to be significant within the total project budget.

In Australia, there is no current policy requirement regarding benefit-sharing packages, but this is seen by interviewees, panellists and literature as creating a key advantage, which “is the flexibility it enables developers and communities to co-create [benefit-sharing mechanisms] which best meet their needs” (Ernst & Young, 2015, p.36). Without legislated guidance, a range of benefit-sharing mechanisms have emerged:

- > **payments to communities**
(community benefits funds, sponsorship).
- > **payments to landowners**
(landowner lease payments, proximity rent model).
- > **community co-investment or co-ownership**
(community members have a direct financial stake in the project, and, in the case of co-ownership, a role in the decision-making process of the wind development).
- > **non-cash benefits**
local employment and procurement, undertaking landscaping and vegetation screening, running energy efficiency programs, installing solar PV or hot-water, participating in education and training and local infrastructure upgrades and discounted electricity. While these things bring economic benefit to a local community, they do not involve on-going cash payments by the developer.



The survey reveals a low level of benefit-sharing in the 19 project examples provided by respondents. For those that do undertake benefit-sharing, the most common forms are sponsorship (25 per cent) and community grant funds (34 per cent). Seventeen per cent of respondents are also using (or plan to implement) community co-investment or co-ownership. It is noted that the response rate to this question was the lowest of all questions in the survey (15 responses, four of which were community-led projects), potentially reflecting a level of unfamiliarity and inexperience with benefit-sharing among respondents.

The low adoption of benefit-sharing was explained in the interviews, where most developers were interested to try new forms of benefit-sharing, but had not yet implemented any and were wary to do so. This wariness appeared to be derived from a lack of familiarity or experience with the new forms and some influence from changeable national policy environments. There was also minimal sharing of ideas and experience between developers – with many initiatives being dominated by commercial-in-confidence requirements.

The information that developers do hold was not detailed enough to instil confidence to adopt such initiatives. Other aspects that emerged from the source documents that have limited benefit-sharing implementation in the Australian wind industry have been:

> **Place-appropriate**

Engagement and benefit-sharing must be place-appropriate and approaches must allow for flexibility, and must be in-line with each other for perceptions of fairness and genuineness. Otherwise, benefit-sharing can be seen as bribery. Integrate benefit-sharing into CEPs developed for each specific project and community.

> **Lack of comprehension**

Benefit-sharing options are currently poorly understood, and there is evidence of several concerning trends that could undermine the practice: language of compensation, the use of gag clauses and offering benefits late in the piece, in a secretive manner (in a context of poor engagement practice). This risks undermining the contribution that benefit-sharing (particularly with neighbours) can have on perceptions of procedural and distributional justice.

> **Financing structure**

Each company is likely to have different ways of financing projects and different means of benefit-sharing that need to be tailored for specific and local circumstances. Co-investment and co-ownership are new in the Australian landscape, so there is unfamiliarity with how to integrate these alongside traditional ownership and financing arrangements for wind farms.



THE CONTRIBUTION OF GUIDES TO COMMUNITY ENGAGEMENT PRACTICES

Wind developers have increasingly created Community Engagement Plans (CEPs) over the past decade. The CEPs were analysed to gain insight into wind developers' understanding and practice of community engagement. The CEP analysis found that the two main documents on which the CEPs had been based were developed in the last five years: the Clean Energy Council's Community Engagement Guidelines for the Australian Wind Industry (CEC, 2013), and the ACT Government's Best Practice Community Engagement in Wind Development (Lane & Hicks, 2014). For example, three CEPs included a table of guiding principles that had been adapted from Best Practice Community Engagement in Wind Development, such as appropriateness and responsiveness. As evidenced in a large number of CEPs, the use of the guiding principles provided a platform upon which all engagement was built. It also created greater transparency with the community about developer actions and intent.

In general, CEPs reflect a depth of engagement with the concept of degrees of engagement, as presented in the IAP2 Spectrum of Public Participation (IAP2, 2004). This spectrum, commonly referenced in community engagement guides, positions engagement practices on a spectrum from inform, consult, involve, collaborate and empower. There is a trend for CEPs to pick up on language of collaboration and empowerment. It is unclear, however, the degree to which this language has been genuinely understood, integrated and translated into practice. During the interviews and survey for this project, wind developers, experts and regulators communicated that guides were a useful tool that assist to inform practice and set a standard. Some interviewees considered that the guides were a good 'carrot' to encourage better norms without resorting to the more rigid requirements of regulation.

The CEC's Community Engagement Guidelines was the most widely-used community engagement reference tool, with 78 per cent of the respondents having used it. However more than half (56 per cent) also used the IAP2 Spectrum of Public Participation and 44 per cent used the ACT's Best Practice Community Engagement; 13 per cent used other guides or reference tools. It must be noted, however, that the survey response rate dropped by over 40 per cent for this question. This might indicate that respondents do not use guides, are not aware of them or that they felt uncomfortable commenting on this.

SPECIFIC FINDINGS

This section provides specific findings that emerged from the four source documents prepared for this research report. They cover detailed aspects of community engagement and of benefit-sharing practices, including the value of trust, the role of specific wind industry staff, the contribution of face-to-face engagement to relationship-building and the various models of financial and other benefits provided to hosts, wind farm neighbours and the broader community. Each of these specific aspects is set out in subsections below.



BEST PRACTICE COMMUNITY ENGAGEMENT

A range of aspects were recommended that had contributed to effective community engagement. When asked whether a benchmark could be established and evaluated, the panellists offered mixed support. For the majority, they considered that there was a need for a tailored approach for each community from a range of available strategies.

However, there was clear support by panellists for training to raise the standard of engagement, and for public exposure of effective practices and benefits. While panellists acknowledged the important contribution of best practice community engagement to increasing the likelihood of positive social outcomes, they also raised the experience that sometimes even quality engagement cannot shift organised opposition or existing community divisions.

The influence of context

A range of contextual issues were raised in the four source documents. These covered the contexts of the regulatory environment, the scale of the wind farm, the timescale of the development along with the type of surrounding land use and the nature of the local economy. This context was identified through the four source documents as having a strong influence on the way in which community engagement needed to be planned and implemented. This is because, as emerged from the interviews, local contexts vary significantly by a number of cultural, historical, demographic and geographic factors. This makes different community dynamics very complex and context specific. The community's relationships with landscapes are often deeply connected – and thus emotionally loaded. In response, successful approaches to community engagement were found to be best when integrated within detailed understandings of the local community and founded on local knowledge.

In response to this context, panellists advised that each proposed wind farm development's local context be well-understood as a precursor to developing a community engagement strategy. Many considered that this was already occurring, and that relevant contextual categories include an understanding of local economic activities, topography and other local developments, and profiling those who may feel negatively impacted by the wind farm. Panellists noted that flexibility for specific contextual characteristics of a community should be ensured.



Regulatory context

The changeable policy and market environment for renewable energy and wind energy has caused significant uncertainty and financial hardship for developers. This policy uncertainty and change has caused delays in projects. The panellists emphasised that such delays should be explained as such. This has the dual benefit of explaining the political context that can support or hinder wind farm development, but also may trigger local communities to advocate for progress and policy certainty. Beyond this, panellists advised that community engagement funding should be planned to cover 'quiet times' during delays, so that engagement is not suspended during that time.

In the interviews, some interviewees were highly critical of regulation, claiming that it had limited wind development through activities such as the reviews of the Renewable Energy Target, the VC82 regulations in Victoria and the draft NSW Planning Guidelines. For example, the VC82 requirement for all residents within 2 km of a proposed turbine to give their consent to the planning application has led to a widespread mistrust of wind and a "perception that 2 km is a danger zone". One developer described the law as trying to "force developers to cut deals with neighbours", indicating that the law led some developers to attempt to buy support from neighbours, often with 'gag' clauses included in the agreements. Respondents expressed significant concern that an overly prescriptive approach to community engagement and benefit-sharing in the planning approvals process would remove developers' ability to be flexible and adaptable to the specific context of each development and local community.

There is some discussion regarding the introduction of an accreditation process for community engagement ahead of future reverse auction processes. However, the panellists expanded on the criticism of increasingly 'prescriptive' guidelines for community engagement and benefit-sharing. This was explained as inappropriate as the scope, activities and budget for effective engagement are all affected by the history and process of the community and wind farm development. Instead, panellists suggested either a very flexible process for engagement, or alternative measures used, based on transparency and promotion (and associated increased expectations) of positive engagement case studies. Training was supported by the panellists; there was also an identified need to create a training or accreditation process for prospectors.

At a local government level, the interview analysis and survey responses identified that local government (councils) can play an informal yet critical role in wind farm development. Survey responses indicated that local government support was an indication of successful community engagement and benefit-sharing, and that losing this support jeopardised such efforts. However, the interview responses also indicated that local government are not always aware of best practice and are timid in their dealings with wind developers, partly as a result of concerns regarding conflicts of interest. They may also be less equipped and less experienced in dealing with large developments and may have concerns about the politics surrounding large energy projects such as wind farms. Interviewees suggested that local governments could benefit from support (e.g. training, resources, advice) to help ensure they are able to negotiate best practice community engagement and reasonable local benefits from developments.

Scale of wind farm

The size of the wind farm can be a strong influencer on community engagement, as the physical impact differs with scale. Local perceptions of impact vary by context, though generally large turbines and many of them will be more likely to be seen as having a greater impact and disturbance in a local area. The greater the change, the more management will be required to integrate it into the local community in a positive way. In general, this indicates that larger turbines and larger wind farms will involve more attentive, intensive and resourced community engagement practices. This is also closely related to local context and population – new large wind farms are currently being integrated into low population areas which may not need high levels of engagement and benefit-sharing. However, as Australia changes its existing generation portfolio to include greater levels of renewables, more populated areas will also be host sites which will add complexity to the developments.

However, none of this is to say that communities will not support large turbines or large wind farms. Interestingly, the CEP analysis did not show a correlation between a large, more visible wind farm and community anxiety or objection. In fact, one wind farm CEP reviewed had no objections although it was very large and situated on top of an extremely visible ridgeline. This indicates that it is possible for a wind farm to be both highly visible and highly supported, given the right conditions, which includes having undertaken locally-appropriate and quality community engagement.

Timeline

Many interviewees recognised the difficulties associated with long timelines and unpredictable planning processes associated with wind farm development. Often, the development process can span years and projects may sit dormant for a number of years, waiting for finance, power purchase agreements or the right policy environment. This causes a number of challenges for community engagement and benefit-sharing. Ideally engagement will begin during feasibility and continue throughout all stages of a project. This requires investment of staff time as well as funding for community engagement activities. Interviewees also expressed the importance for benefit-sharing to start before construction (when the most disturbance and change occurs in the community), although challenges exist at this point as the project has no income, and definitely before operations. This has monetary and pragmatic impacts on developers, which can be challenging.

Early engagement was strongly recommended by all panellists, who cited the benefits they had experienced or observed. Some defined 'early' as starting immediately after feasibility studies have proved the site to be viable and run concurrently with the detailed planning studies required. This stage enables discussion and input ahead of the planning application, but is not too early that uncertainty unsettles stakeholders, or 'champions' become fatigued in their support. The panellists also provided advice regarding engagement during the wind farm construction stage. This included describing effective, accessible (non-technical) information around timelines of development, truck movements and times, contact details and mechanisms receiving regular updates and lodging complaints and questions. Such information can be delivered through SMS mobile phone alerts, regular website updates and mail-outs, newsletters and/or media stories – ideally in liaison with local government, as well as ongoing face-to-face contact.

The people factor

The CEP analysis reflected that community engagement is no longer seen as 'nice to have', but rather an extension of the company's values and a valuable part of the development process. This was demonstrated by actions to embed community engagement staff in a range of teams within the company.

In the survey, more than half of the respondents indicated that their company has dedicated community engagement staff. However, this is usually less than 1 FTE – a surprising result given more than half of respondent are companies with more than 20 FTEs in total. In half of the survey respondents' companies, staff responsible for community engagement look after three to four projects each, while 37 per cent of respondents indicated that they have one community engagement staff per project. The majority of respondents (58 per cent) indicated that staff involved in community engagement roles live in the wind farm development area.



ESTABLISHING TRUST WITH THE COMMUNITY

Trust is emphasised in the literature as well as throughout the four source documents as a keystone for achieving positive community engagement and associated social outcomes. From the interviews, specific factors that were seen to influence trust included:

There is a notable lack of specific community engagement training among community engagement staff. Of the community engagement staff who responded to the survey, the majority have on-ground experience, and 25 per cent have received specific training or qualifications related to community engagement. However, it was more common for respondents to have formal qualifications in communications than community engagement, indicating the common overlap, or confluence, of the two areas of work. Some respondents have completed short courses (e.g. industry seminars) in media, community engagement, negotiation, complaints management or conflict resolution. Consultants have the highest rate of training and specific qualifications in community engagement, but still this is low, at 44 per cent.

Beyond the formal training (or lack thereof), the source documents identified a range of personality styles and traits that were found to be very effective in enhancing community engagement. Having appropriate people in community-facing roles came up as a recurrent theme in interviews. The right person was identified as crucial to helping build lasting relationships and trust, which are an asset for the project in building support, negotiating acceptable solutions and discussing concerns. The importance of being able to listen and ensure people feel heard is fundamental to community perceptions that a development process has been fair. This appropriateness of community-facing staff and consistency of staff over time, as well as their willingness to engage with local people face-to-face and in one-on-one as well as a group setting was identified as being of fundamental importance.

Many interviewees cited that an ideal community engagement representative of the wind developer would be a local person with a rural background, specific training and certain personality characteristics. The desirable characteristics included being a good listener (empathetic, patient), being humble and honest, and being dependable and trustworthy. There was a recognition that many of these traits come down to personality, but that they can also be developed over time through mentoring and training. Another approach was to pair staff during community engagement, so a range of skill-sets and knowledge are present.

Be available to the community

Providing regular and consistent contact with the local community, particularly hosts and neighbours. Having staff available to the community and able to commit time to developing relationships and being responsive to community interest and concern. The appropriateness of community-facing staff and consistency of staff over time were key to success.

Offer access to decision-makers in the company

Ensuring community-facing staff have some delegation of authority to be able to address people's questions or concerns, rather than always having to defer to someone with more seniority. People want to know they are talking to someone with a degree of power who will take them seriously.

Engage early, in many settings and both informally and formally

Initiating early engagement with local people (beyond hosts) during the feasibility stage. Conducting engagement and consultation via individual and group settings. This includes convening meetings involving hosts and neighbours from early in the project design process. Providing formal (e.g. meetings, information sessions) and informal (e.g. casual encounters in the street, BBQs) opportunities for interaction. This relates to having staff based locally and making an effort to integrate into the local community.

Tell the truth

Being honest about potential negative and positive impacts, and what to expect during all phases of project development including the difficulties of uncertain or changing timelines and project scope.



The panellists responded to the above findings regarding staffing and organisational 'culture' with comments that indicated that a 'cultural change' has already occurred. They identified that this change had been driven by reverse auction requirements (e.g. in the ACT), previous experiences of community opposition, planning instruments (such as in NSW) and other mechanisms and events. The panellists also outlined four initiatives to continue this process of culture change:

> **Promote positive examples**

Publicise wind farms with strong community engagement processes at industry events. This could act to raise expectations of best practice community engagement.

> **Expose cost-benefits of engagement**

Financially quantify the benefits that come from positive community engagement practices, as well as the cost and reputational risk of not doing so.

> **Change organisational structure**

Develop an integrated organisational model to secure and maintain a social licence to operate, and that is clearly driven and supported by senior management.

> **Provide training in community engagement**

Such training could include skills in community engagement and community development, public speaking, active listening, negotiation, models for participation and evaluation, and conflict resolution, and could be provided to a range of levels of staff within wind development and prospector companies.

One CEP uniquely included a risk analysis of the cost of negative outcomes from community engagement. The impact of poor engagement was estimated at around \$3.5m and carried the potential to delay the project by at least 36 months. This resulted in the company adopting a new approach to their engagement process, by investing in significant staff time for face-to-face engagement with a very clear plan and strategy for both engagement and benefit-sharing.

The value of face-to-face engagement

The activities or tools of engagement are varied across Australia, according to the CEP analysis. However, where engagement has resulted in few or no objections to a proposed development there seems to have been a focus on personal engagement that is largely face-to-face – either one-on-one with wind farm hosts and neighbours and/or with a small group of community members. This was a common theme, no matter how big or small the project was, or how visible.

In CEPs that focus on face-to-face engagement (that included one-on-one, group meetings, neighbourhood meetings, a local representative and/or regular visits by a company representative) and that clearly define the avenues for the members of the community to make decisions or to have input into decisions, there appears to be evidence of less anxiety in communities and less objections/more support. The results are that these projects included very high community support which was shown through letters of support, no opposition and no negative press. This result has been demonstrated not only in new projects where early engagement has taken place, but also in one example where this was the approach taken more than ten years after a permit had been granted. The result of this engagement approach, as reported in the CEP, was 100 per cent satisfaction from the community members determined through an independent evaluation process.

Face-to-face community engagement can occur at both an individual level as well as a group level. The interviews revealed that, in general, face-to-face techniques included door knocking, drop-in information sessions, having locally based staff, (short-term) shopfronts, tours, open days, group meetings and events. The survey results indicated some divergent views on

whether face-to-face in an individual context is enough, or if group settings (allowing for discussion, deliberation, negotiation and transparency) also need to be present for face-to-face to be most effective. These included group contexts and opportunistic interactions (e.g. through participating in local events, having local staff or holding drop-in information sessions during the planning and approvals phases). Hosting wind farm tours and events have education and relationship-building benefits.

When managing complaints, the surveys identified that the majority of wind developers seek to respond to new complainants with a face-to-face meeting or visit. Few respondents preferred using email as the only means to respond to new complainants. CEP analysis revealed that technology (e.g. websites, social media) is being used widely to provide information. However, in the plans with the best outcomes in community engagement, it is the face-to-face focus of the engagement and lower reliance on technology which is creating strong relationships and delivering positive outcomes.

The interview outcomes indicated that engaging at a group level provided a sense of transparency and openness, rather than secrecy and suspicion. As many interviewees noted, people in a community will talk to each other anyway, so transparency up front is more effective for positive outcomes. Community, expert and some developer interviewees identified that it is particularly important for hosts and neighbours to be engaged as a group. This was seen as being different from public meetings through being a smaller, defined group of people with clear logics for who should attend and how they can participate (e.g. providing input on specific things).

Community influence on wind farm decisions and designs

The survey respondents commented that to be successful, engagement needs to go beyond information provision to include opportunities for community influence in project design and/or a role in decision-making. However, they also warned that token efforts at engagement, where community input is sought but decisions are not genuinely open to change, can be very damaging. In response, the extent to which companies have been able to provide communities with decision-making opportunities varies. The CEP analysis found that enabling some level of decision-making regarding the wind farm layout and turbine numbers is likely to be determined by a number of physical, economic and social factors. The survey and interviews recognised that including the community in design and decision-making is sometimes impractical or is limited by commercial/technical viability and that these boundaries need to be clearly defined and managed.

Despite the challenges, most companies were able to identify areas for the community to make decisions regarding projects. The CEP analysis suggested activities for community involvement and influence could include traffic routes for construction; some influence on turbine numbers and location; the benefit-sharing program (the design and type of program, how funds are shared and who benefits); and how engagement is conducted, with whom and how often. The survey found that it was most common for developers to have changed the siting of individual turbines (39 per cent) or to have removed turbines from the project (22 per cent).

Community input had informed the design and/or distribution of benefits from the development in three cases (16 per cent). Other aspects mentioned by respondents as having changed in response to community feedback include: location of access road and transmission lines; landscaping and vegetation screening; informing flora and fauna studies, or doing more studies; and agreement to turn off turbines during aerial spraying, if required.

A very specific forum for community decision-making that was often mentioned in the CEP analysis is the use of a Community Consultative Committee (CCC) (or similar titles). This is the result of NSW legislation passed some years ago requiring them to be implemented, however similar committees are used for wind farms in other states. CCCs aim to represent a cross section of the community and are being utilised to share information, increase contact with the wider community and make decisions about aspects of a project such as a community grant program.

The CEP analysis collated the features of best practice CCCs from the developers who had conducted them. Features included:

> Representation

Having broad community representation of local stakeholders and demographics.

> Processes

Having a trained facilitator; clear terms of reference that include deliberation and input/ advice on aspects of project design and benefit; and meeting from the early stages of project planning through the entire life of the project, with the regularity of meetings adjusted to the project stage.

> Transparency

Having publicly accessible and comprehensive minutes of meetings and decisions; clear processes of regular reporting back to this group, and the broader community; and clear means for how positions on the committee are appointed and how people can apply, preferably through a democratic process.

The panellists shared their views on how to avoid CCCs becoming a platform for general debates regarding wind farms, and become an unproductive forum. This advice confirmed the above features. In addition, the panellists recommended all costs being covered, including a good meal following the meetings, and ensuring involvement by a wind developer representative who is constructive, robust and not defensive and a representative from the relevant government department to enable a three-way conversation between the community, developer and regulator.

There was no evidence provided in the CEPs that there is a correlation between the implementation of a CCC (or similar) and a consistently successful community engagement outcome. Although, one project cited in the CEP analysis that achieved very positive community engagement outcomes had implemented a variation on a CCC which was more inclusive but also more informal to influence the design. They invited all people within the neighbourhood of the wind farm to participate in regular meetings with the developer and project hosts. Through these meetings, the developer received input on key decisions and reported back the outcomes of this input, as well as building relationships and trust.

Four survey respondents raised negative experiences with CCCs, as legislated in NSW, having found them to be counterproductive to good engagement. Their concerns included the difficulties of forming a CCC that was genuinely representative of the community and not dominated by personal or political agendas; was effective as a conduit of information between the community and the developer and vice versa; and that had a clear role within the project development process. The combined analysis suggested that the success of CCCs depends on when it is implemented, how membership is appointed, what its remit is and how it can change the dynamics in the community.

The scope for which community stakeholders can influence wind farm designs received mixed comments from the panellists, with some developers concerned that a lack of renewable energy project development knowledge would result in unfeasible decisions. However, others saw opportunities for opening decision-making on non-technical aspects that were community-oriented – predominantly the access to site and construction transport routes; the structure of shared benefit schemes and the use of community investments; off-site landscaping plans such as the design of screening for substations; and viewing platform locations. Where possible, some offered that the community could also provide early input into area mapping to identify any sensitive micro-siting areas in the development. There is also scope for community involvement to inform the CEP and evaluation of engagement and benefit-sharing activities.





BEST PRACTICE BENEFIT-SHARING

When considering whether benefit-sharing should be offered, the panellists proposed several aspects that should be assessed, such as the motivations or concerns of the community regarding the proposed wind farm, the number of neighbouring landholders and the proximity of their homes to the wind turbines.

When the panellists were asked whether a ‘best practice benchmark’ for benefit-sharing was possible to identify, their responses were mixed as the wind farm sizes, governance and approaches to benefit-sharing can be so diverse. They also held a concern that setting an explicit benchmark (or legislation) could limit future improvement and diversity, and also appear to recommend one scheme structure as the ‘silver bullet’.

Instead, they proposed several features that they considered were crucial to a best practice benchmark. These included:

- > **Be willing to negotiate**
Neighbour and community benefit schemes are one of the few parts of a project that can be up for influence and negotiation with the local community.
- > **Be fair**
As community members living closest to projects can experience the greater impacts, they should receive the greatest benefits. Strike a balance that is seen to be a fair split between how much the host benefits versus how much neighbours and the broader local community benefit.
- > **Be ongoing**
Benefits should be provided during the operational phase. One-off payments or payments only during the shorter construction period do not provide ongoing sustainability or support.
- > **Be a true benefit**
Don't be provided with conditions of silence.
- > **Be part of a broader strategy**
This involves community participation and local community development.



Furthermore, the panellists noted that the particulars of the project, especially the capacity factor, financing and legal structure, will limit or influence the appropriate model for each community. The above criteria could also be adapted to evaluate the impact of the benefit-sharing initiatives. Panellists also suggested additional evaluation criteria regarding the long-term sustainability of the benefits in the local community, and the increased positive profile or reputation of the company or project. It is also important to note that benefit-sharing does not necessarily need to involve yearly cash payments; it can also involve local in-kind and partnership benefits, as detailed below.

The subsections below on benefit-sharing detail several types of sharing schemes that were considered and discussed in the four source documents.

Grant programs and broader benefit-sharing

Community grants, also called community funds and benefits funds, are common in many communities hosting wind farms within and outside of Australia. The literature revealed

that these vary in focus, scale and governance. The CEP analysis identified that, in Australia, these grants and funds often exist to provide some form of financial support to local community groups. There have been a variety of structures implemented – including sponsorship of clubs, community grant funds and scholarships. Of the few CEPs that detailed the amount of funding available, this ranged between AUD\$500 – \$1,500/MW per year for large-scale commercial wind farms, and between AUD\$6,000 – \$8,000/MW per year for community-owned wind farms. One panellist described the financial contribution to two NSW communities of AUD\$500,000 per year for the life of the wind farms as being well-received by many community members as a long-term opportunity.

A key aspect of successful community grant funds was that the community determines the role it plays in the delivery of the fund (Ernst and Young, 2015). The Australian experience, revealed in the CEP analysis, identified the variety of ways that the decision of how to disseminate the money is determined: partial community decision

making, full community decision making or involving a trusted third party organisation (e.g. local charity, local government). The CEP analysis did not identify any correlation between having a community fund and a satisfied or accepting community (there was a general lack of evaluation in the CEPs), but the presence of such funds does seem to be responding to a community expectation of some broad benefits to the area hosting the project – similar to the expectation that the wind farm will bring local job creation. Across the four source documents, there was overall support for community grant funds, however, some criticisms in their distinct application in terms of amount, who controls the funds, who make decisions about their allocation and who benefits. It was also noted that in some communities, a community fund may not be an appropriate approach, perhaps due to the low local population or existing (or lack of) local foundations. Each community context is variable and the desire for participation will therefore also be variable.

If a grant or fund program is implemented, the four source documents identified key aspects for best practice:

> **Align with broader, longer-term local and sustainable development initiatives**

For community funding, long-term strategic benefit programs are an increasing trend. These may be targeted to in-need or at-risk populations, or have a particular focus such as more local energy production (WISEPower Consortium, 2015). These can tie in with locally-identified development agendas for the future sustainability and vitality of the community. Applying a meaningful longer-term strategy that is community led and collaboratively designed will lead to better outcomes.

> **Be generous, clear and transparent and base the funding amount on MW capacity (not per turbine)**

It is recommended that companies think creatively about how community benefits are designed and delivered. Financial contributions should be considered in line with project capacity (i.e. \$ per MW), rather than turbine numbers (due to the differences in power of installed turbines), and be developed collaboratively and cooperatively with communities. In the same way that there is no one size fits all approach to community engagement, benefit-sharing should also be developed to respond to the specific community. There are a range of activities that could be considered under this, which may not be a grant program. Financial contributions vary markedly from project to project, and ranged from AUD\$500 to \$8,000 per MW of installed capacity across the 30+ projects reviewed in this project.

> **Separate from sponsorship program**

Community benefits should not be instead of a sponsorship program. But again, financial benefits of any kind should be designed collaboratively with the community.

> **Be independently governed by the local community**

This can be facilitated through a purpose-made organisation, an existing trusted community charity or foundation, a community board (with local council representation), the Community Consultative Committee (if well-governed) or by residents living within a specified radius of the turbines. Such a local committee would oversee the grant guidelines and process for application to ensure suitability for local priorities and circumstances, even if they do not formally hold and distribute the funds.

Neighbour payments

A recent initiative in Australia's wind industry has been a form of benefit-sharing that provides a direct financial benefit to neighbours of a project. This was introduced in reflection of the high incomes (anywhere up to AUD\$15,000/turbine/year) paid to Australian turbine hosts. Providing a financial gain to nearby neighbours can act as recognition that (apart from hosts) they are most impacted by the visual and potential audio (sound) impacts. It can also assist to resolve the conflict that can occur between landowners and neighbours regarding the distribution of benefits. Neighbour benefits can reduce community conflict between the 'haves' and 'have-nots' of wind development by sharing benefits more broadly and fairly.

The CEP analysis justified neighbour benefits as a means to share the benefits of a wind development more evenly amongst those geographically nearest to it, in an attempt to increase the perception of fairness in terms of how the financial benefits from the development are distributed. Distribution to neighbours can be implemented per acre within a set distance from a turbine, or simply per landholder within a certain distance.

Both the CEP analysis and the survey revealed a number of risks with providing financial benefits to neighbours: if this was perceived by others (non-recipients) to be unfair; if it occurs through private negotiations (in secrecy); or if it emphasises a compensation rationale (rather than a benefit-sharing rationale). To counter these risks, it was recommended that the wind developer's decision regarding payment amounts and recipients are informed by deep local consultation, ideally involving group meetings between neighbours, hosts and the developer or a community organisation.

The panellists were undecided regarding whether neighbour payments were a useful precedent – considering that larger industrial, residential and mining developments do not provide such payments. Instead, some panellists proposed offering neighbours the opportunity to host wind farm-related infrastructure such as turbines, roads, sub stations and powerlines. However, this option obviously has its limits as the project boundary will always be drawn somewhere. They advised that, whichever neighbour payment or activity is established, they must be provided early in the development and in a transparent manner that does not risk being perceived as 'bribery', but rather to reinforce other community engagement initiatives.

Other neighbour benefits

Benefit-sharing, particularly with wind farm neighbours, can extend beyond (or in addition to) annual financial payments. In Australia, these have included free home insulation, energy audits and subsidised solar hot water (Ernst and Young, 2015). Other energy-related benefits suggested in the source documents included energy bill contributions; installing solar panels and/or batteries; and ensuring the neighbourhood with closest proximity to the turbines are a priority area for a community grant fund (if implemented).

Co-investment and co-ownership

Working with the community to create co-ownership or co-investment opportunities is an initiative that several Australian wind developers are considering but few have yet been actioned. This includes:

- > **Offering an opportunity for local people to invest in the wind farm**
by purchasing shares or bonds, and setting a low enough minimum entry (e.g. AUD\$1,000) to allow people to participate, while also being administratively practical.
- > **Providing a gift of equity**
in the project to near neighbours (e.g. offering AUD\$1,000 worth of equity to each household within 2.5 km).
- > **Partnering with a local group** (e.g. a cooperative)
to facilitate co-ownership of a portion of the wind farm.

Regardless of whether this equates to a significant level of community ownership or control over the wind farm, it does create a strong local connection with the wind farm and a sense of emotional ownership ('psychological attachment'). There is extensive research indicating that local co-ownership or co-investment is a successful way to increase local support for a wind development, through increasing people's connection with, knowledge of, participation in and benefit from the development (Warren and McFyden, 2010; Hindmarsh, 2010; WWEA, 2016; WISEPower, 2016; Devine-Wright, 2011; Bell et. al, 2013; Bridge et. al, 2013; Walter, 2014; Haggett, 2011; Munday, Bristow and Cowell, 2011; Ernst and Young, 2015). Some survey participants considered that opening the wind farm to local ownership or investment should be mandatory.

The data did not reveal the reasons for the low take-up co-investment by companies, despite their stated interest. The reasons may be numerous, including unfamiliarity and the changes required to legal, financing and security structures of the project. However, it was beyond the scope of this study to research barriers or challenges to co-investment approaches in Australia.

Partnerships and local contractors

The construction stage of a wind development offers a means by which local contractors can receive significant work contracts and a developer can support locally-based employment. The literature review identified that, with regard to local content during the construction phase and if the Engineering, Procurement and Construction contract allowed for it, that the local industry is informed of the development, and that larger contracts are potentially broken up to enable participation by smaller, local contractors. The interviews raised construction as a phase of particular importance in community engagement, as this is when local people will experience the highest levels of change and disturbance (e.g. traffic, noise). Opportunities associated with construction include partnerships with local trades and schools to deliver education programs, as well as open days to help de-mystify the construction process and the technology. Despite being identified as a sensitive period in project development, however, the surveys indicated that developers, in general, plan the least level of community engagement during this stage. This is a current weakness in wind development practices.

The four source documents indicated that local construction industries are already gaining benefits from Australian wind farm development. The CEP analysis revealed that many wind developers are explicitly targeting local contractors through specific actions such as creating an online database of local contractors. Some developers convene business roundtables to brief local contractors on their future needs and provide them with sufficient lead-time to respond to tender opportunities. Some developers have worked with local businesses to increase the skills and capacity of local staff to perform required services. Additionally, some developers have sought to purchase Australian-made wind infrastructure, such as towers, transformers and cabling.

Beyond current practice, the source documents included suggestions to create partnerships with training organisations to provide opportunities for apprentices or for upskilling of the workforce. The panellists responded to these findings by noting that the use of local business during the construction phase can make the economic contribution of the wind farm development explicit to the region and communities.

OTHER BENEFIT-SHARING OPTIONS

Additional benefit-sharing initiatives from outside Australia emerged from the literature review and from interviews:

> **Housing market certainty**

An emergent issue in the literature on wind farm development is the mitigation of housing market anxiety, often from neighbours to wind farm projects. Internationally, some developers have bought the homes and then resell them or offer a bond in order to guarantee the property value for when the owner wants to sell. If it is sold for less than market value, the bond will subsidise the transaction (Fast & Mabee, 2015). Research has shown wind farms do not have any long-term impact on property prices, although the market can be suppressed during the construction phase.

> **Landscaping as visual screens**

The compliance requirements of landscaping at a wind farm often involves screening and planting trees. Beyond compliance, a shared benefit can be ecological offsetting or enhancement.

> **Tourism**

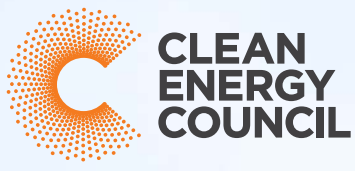
Developing tourism or visitor facilities for the renewable energy projects, such as viewing platforms and educational programs and tours, are increasingly occurring (Munday, Bristow, & Cowell, 2011). Panellists mentioned that the tours could provide a business opportunity for local bus or tour operators, while reducing the resources required from the wind farm.

> **Local infrastructure upgrades**

Using opportunities associated with the wind farm to improve local roads and telecommunications, for example.

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