

A man in a dark jacket and jeans stands on a grassy hill, looking towards the camera. In the background, several large white wind turbines are visible against a blue sky with light clouds. The scene is set on a rolling green landscape.

BUILDING STRONGER COMMUNITIES

Wind's growing role
in regional Australia

Second Edition



Note to Second Edition – November 2019

Since the first edition of this guide was released in April 2018, a large number of new wind farms have been built or commenced construction. This edition brings up to date the total benefits flowing to regional Australia and updates the text to include the many changes since the first edition. New case studies report on the first wind farm community fund in Queensland and the first public investment offer for an Australian wind farm.

This report has been compiled from research and interviews in respect of select wind farm projects in Australia. Opinions expressed are those of the author. Estimates where given are based on evidence available procured through research and interviews. To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however, we do not assume any liability whatsoever for the accuracy and completeness of the above information.

This report does not purport to give nor contain any advice, including legal or financial advice and is not a substitute for advice, and no person may rely on this report without the express consent of the author.

PHOTO (COVER):

© Pacific Hydro.

PHOTO (ABOVE):

Local farmers discuss wind farm projects in NSW Southern Tablelands. © AWA.

CONTENTS

Executive Summary	2
Wind Delivers New Benefits for Regional Australia	4
Sharing Community Benefits	6
≈ Community Enhancement Funds	8
≈ Addressing Community Needs Through Community Enhancement Funds	11
≈ Additional Benefits Beyond Community Enhancement Funds	15
≈ Community Initiated Wind Farms	16
≈ Community Co-ownership and Co-investment Models	19
≈ Payments to Host Landholders	20
≈ Payments to Neighbours	23
Doing Business	24
≈ Local Jobs and Investment	25
≈ Contributions to Councils	26
Appendix A – Community Enhancement Funds	30
Appendix B – Methodology	33
Appendix C – References	34
Footnotes	35
Case Studies	
≈ Over a hundred projects and counting: Snowtown's Lend a Hand Foundation	9
≈ Embracing the unique needs of communities: Mt Emerald Wind Farm's community fund	10
≈ Investing in local energy sustainability: The Gullen Range Clean Energy Program	13
≈ A short history of Community Enhancement Funds in New South Wales	14
≈ Helping good ideas become reality: Hepburn Wind	17
≈ Extending the benefits to ownership: Coonooer Bridge Wind Farm	18
≈ Spending Locally	21
≈ Waubra Wind Farm Community Fund: Ten years on, it's time to think bigger	22
≈ Getting things done locally: Boco Rock Wind Farm	27
≈ Community wind investment takes the next step: Sapphire Wind Farm Community Co-investment	28

EXECUTIVE SUMMARY

**“ SHARING FINANCIAL
BENEFITS EQUITABLY
AND EFFECTIVELY WILL
ENSURE THAT CLEAN
ENERGY GENERATION ALSO
MAKES A LONG-LASTING,
POSITIVE CONTRIBUTION
TO RURAL AUSTRALIA'S
SOCIAL FABRIC.**



PHOTO: Cape Bridgewater
Wind Farm in Victoria.
© Pacific Hydro.

Australia's 87 operational wind farms deliver significant financial and social benefits to their host communities. Sharing these benefits equitably with local host communities ensures these projects generate not just much-needed clean energy, but also strengthen the social and economic fabric of regional Australia.

Wind farm construction has delivered an economic boost of almost \$5.1 billion to regional Australia—over half of this in the last five years with current wind farm construction projects injecting a further \$4.8 billion in economic activity into the regional economy.

The number of jobs in wind energy has almost tripled in the past two years. The six gigawatts of new wind farm capacity currently under construction have created an estimated 5,700 direct local jobs and a further 13,300 indirect jobs in local businesses that supply to the projects.

Across the 25-year life span of Australia's existing wind farms and wind farms under construction, an estimated \$18.3 billion could be delivered to host communities.

Meanwhile, \$24.9 and \$29.4 million goes directly into regional communities every year through payments to host landholders and wind farm Community Enhancement Funds (CEFs). With 26 more wind farms under construction, that annual figure will increase to between \$56.5 and \$61 million.

From 2021, Community Enhancement Funds will make available \$5 million annually for community projects. A diverse range of other benefit sharing mechanisms will see additional payments go to neighbouring landholders, local councils and community shareholders. If the 74-plus wind farms in the development pipeline are constructed, more than \$8.35 million could flow each year into regional communities through CEFs alone.

This report investigates Community Enhancement Funds and other benefit sharing mechanisms to better understand how wind energy is contributing to the resilience of regional Australia. A range of case studies show how these funds deliver tangible outcomes in towns across rural Australia.

The report also presents the first catalogue of wind farm Community Enhancement Funds across the nation and illustrates the direct and indirect financial and social benefits to Australia's regional communities from wind power.

Benefit sharing mechanisms are examined against the background of the substantial economic boost that wind farms give to their host communities through construction and ongoing employment.

As Australia moves towards a grid powered predominantly by renewable energy, wind districts will continue to benefit as new wind farms are built and clean power generation becomes a mainstay of regional Australia.

Sharing financial benefits equitably and effectively will ensure that clean energy generation also makes a long-lasting, positive contribution to rural Australia's social fabric.

WIND DELIVERS NEW BENEFITS FOR REGIONAL AUSTRALIA

“THE WAY ECONOMIC
BENEFITS ARE SHARED
WITHIN A REGION IS IMPORTANT
AND CAN DETERMINE THE
EXTENT TO WHICH A WIND FARM
IS SEEN TO CONTRIBUTE TO THE
‘WHOLE COMMUNITY.’



Right now, wind energy is booming in Australia. Nowhere is this boom being felt more than in the farming communities which host them. This report looks at how this historic shift is bolstering regional economies and the importance of sharing financial benefits within local communities.

The global movement away from fossil fuels to clean energy has gained momentum in recent years **and will continue to drive Australia's wind energy sector for decades to come.**

Near the end of 2019, Australia's 87 wind farms accounted for 8.1 per cent of the electricity generated nationally.¹ By the end of 2020, an additional four gigawatts of wind capacity will have been added to the grid, putting wind farms on track to supply over 10 per cent of Australia's electricity.²

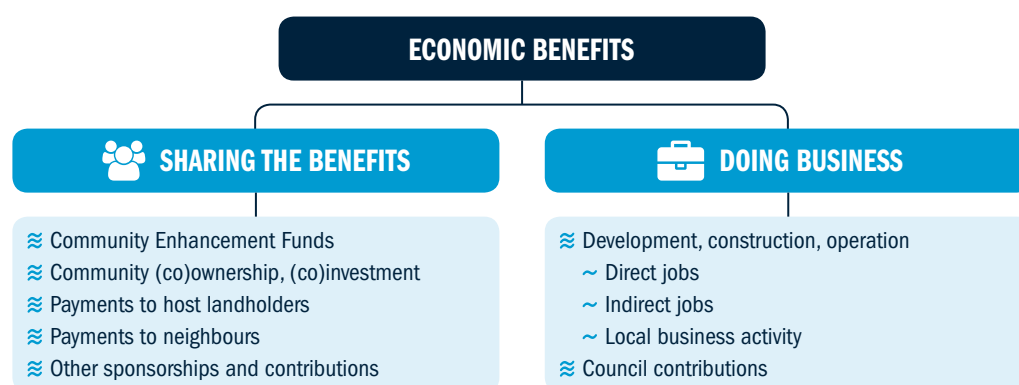
Australian wind farms range in size from a two-turbine community wind farm, Hepburn Wind, to the 140 turbine Macarthur Wind Farm. They are located exclusively in rural and regional parts of the country where the wind is strongest and have a wide geographic dispersal. Most are found in the south east corner of Australia—in South Australia, Western Victoria, Northern Tasmania and

Southern NSW. Wind farms are also found in the south western corner of Western Australia. Queensland's first large scale wind farm was completed in 2018 with another three currently under construction.

Together with large-scale solar farms, wind farms are shifting the country's power generation to a much wider expanse of the country than the ageing coal basins of the Hunter Valley, Latrobe Valley, Central Queensland and Collie. This decentralisation is also delivering the economic benefits of hosting power generation to places that have never experienced them before.

These benefits accrue in a range of different ways that improve the resilience of towns like Jamestown in South Australia, or Ararat in Victoria, which, like many rural towns, rely heavily on agriculture for their local economy.

Figure 1 How wind farms contribute to regional economic and social growth.



The way economic benefits are shared within a region is important and can determine the extent to which a wind farm is seen to contribute to the 'whole community'. Many wind farms are taking a proactive approach to benefit sharing and through deep community engagement, are working to understand community needs and find meaningful ways to contribute to meeting those needs.

This report explores how Australian wind farms share financial benefits with the communities that host them—and the social benefits that brings. This is presented against the backdrop of the substantial economic boost wind farm construction and operation provides for regional economies.



SHARING COMMUNITY BENEFITS

**“ BETWEEN \$24.9 AND \$29.4
MILLION GOES DIRECTLY INTO
REGIONAL COMMUNITIES EVERY
YEAR THROUGH PAYMENTS TO HOST
LANDHOLDERS AND COMMUNITY
ENHANCEMENT FUNDS.**

**WITH 26 MORE WIND FARMS
UNDER CONSTRUCTION, THAT
ANNUAL FIGURE WILL DOUBLE TO
BETWEEN \$56.5 AND \$61 MILLION.**

PHOTO: Community event at Hepburn Wind.
© Studio Aton for Hepburn Wind 2017
at the Pioneering Communities Event.

Benefit sharing by large-scale infrastructure projects means a project can contribute to the social and economic wellbeing of the local community, achieve higher levels of support and help community cohesion and collaboration.³

The ways in which benefits are shared are typically referred to as benefit sharing mechanisms (BSMs). International research suggests that BSMs are effective tools to build better relationships and community-wide support for wind farms.⁴ While BSMs are referred to in some planning regulations, there is little to no legislative requirement for BSMs in Australia. While this may have resulted in delayed implementation, it has also allowed for more creativity in projects where they are implemented. As such, the BSMs implemented in Australia are diverse; including community enhancement funds, payments to host and neighbouring landowners, subsidies for power and energy efficiency measures, (co)ownership or (co) investment into a project, gifting of shares and one-off sponsorships to name some common examples.⁵

EY divide BSMs into three broad categories;

- ≈ payments to communities;
- ≈ payments to landowners; and
- ≈ community (co)ownership.⁶

Payments to communities take a number of forms, however, the most common form is through Community Enhancement Funds, where grants are made available for community groups to use for specific projects.

Payments to landholders are generally made as lease payments to landholders hosting wind farm infrastructure such as wind turbines, substations and power lines or, increasingly, to neighbouring landholders under neighbour agreements or through gifting an equity stake in the wind farm.

Community (co)ownership or (co)investment allows community members to own all or invest in part of a wind farm project. Ownership or investment may be open to the neighbourhood area, the local community or made available to a wider cross-section of the community such as a state or nationwide.

As the Australian wind industry has matured over the last 30-odd years, benefit sharing has become central to the development and

operation of wind farms. This year, between \$24.9 and \$29.4 million will go directly into regional communities through payments to host landholders and Community Enhancement Funds. With 26 more wind farms under construction, that annual figure will double to between \$56.5 and \$61 million (See Appendix B).

As BSMs have developed with the wind industry, it has become clear that a one-size-fits-all approach to benefit sharing isn't appropriate. Geographical appropriateness, scale, community demographics and delivery of BSMs are as important as the contributions themselves.⁷ No two communities are the same, so effective and ongoing community engagement is critical to ensure that BSMs fit the local community context. Indeed, the very discussion with community leaders and representatives to match BSMs to community needs can strengthen the relationship between the community and the proponent. It is, however, a two-way discussion that must take into account other project parameters, such as financial viability. As EY note, it is important that the value of BSMs is balanced against risks to project viability and that community expectations in regard to BSMs are realistic: "BSMs may not result in larger financial benefits, but rather the broader distribution of benefits amongst the community members."⁸

The Clean Energy Council's recently released *A Guide to Benefit Sharing Options for Renewable Energy Projects* is a comprehensive guide to how BSMs are being deployed within the industry.

From Merredin, WA to Jamestown, SA and from Portland, Victoria to Inverell, NSW dozens of small regional towns are reaping the benefits of distributed wind energy projects. As the cost of renewables plummets and communities continue the shift to 100 per cent renewable energy, we believe BSMs will become even more common and varied than they are now.

Community Enhancement Funds

Many wind farms in Australia have Community Enhancement Funds (CEFs), voluntary payments made by a wind farm for distribution to community groups, programs and projects.

As wind farm construction has picked up momentum over the last decade with support from government mechanisms such as the Renewable Energy Target (RET) and state- and territory-based schemes, wind farm CEFs have become increasingly common, with a steady increase in the amount of money flowing from CEFs into communities. Sixteen years after the first CEF, more than 51 CEFs across five states have delivered more than \$9.6 million into projects, events, equipment and organisations around Australia. The number and size of CEFs is growing sharply, and by 2021, \$5 million will be flowing into communities each year through CEFs (see Appendix A).

There are currently no legislated requirements for CEFs in Australia, which has led to enormous diversity in the form, function and size of funds from region to region and project to project. There is also considerable freedom for wind farm representatives, Councils and communities to jointly determine a fund that best suits the region and the people involved. The shape and workings of the CEFs in Australia therefore typically reflect the community hosting the wind farm.

For instance, some CEFs are managed by the wind farm company, with input from community representatives. An example of this is Pacific Hydro's Sustainable Communities Fund. One of the earliest wind farm CEFs, it has since expanded to cover extra wind farms and now a solar farm in Queensland. It has contributed more than \$3.7 million towards over 800 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 run by 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.

Commonly, a set amount of funding per year is made available to local communities during the operational life of the project. The funding amount is typically based on installed megawatts or number of wind turbines in a project, and is typically CPI linked. In many cases, funding grants are made through an application process and in accordance with guidelines or terms of reference determined by the management committee to achieve fairness and transparency. A number of projects, however, have devised unique ways to share funds with the broader community. For example, Bodangora Wind Farm in central NSW has committed two per cent of the income from a single wind turbine to a CEF each year in addition to a per wind turbine commitment. This means the community effectively takes a stake in the wind farm's performance, enjoying its success in the good years but also exposing a portion of its income to downturns. In Western Australia, the Denmark Community Wind Farm directs ten per cent of the dividends from the wind farm each year into its Community Sustainable Living Fund, while in Victoria, Hepburn Wind, the first community wind farm in Australia, has partnered with energy retailer Power Shop to enhance the Energy Fund component of their CEF.

With more than 113 wind farms operating or under construction and another 70 in the pipeline at the end of 2019, wind farm projects around Australia have the potential to support regional townships and community networks with an estimated \$8.7 million in CEF funding every year. While urbanisation and a changing climate continues to threaten the livelihood of regional and rural townships, geographically diverse wind projects present an enormous opportunity to invest in regional economic sustainability and growth. CEFs create strong ties between projects and communities, and within communities, and have proven to be a valuable contribution to many areas around Australia.

“ BY 2021, \$5 MILLION WILL FLOW INTO REGIONAL COMMUNITIES EACH YEAR THROUGH CEFs ALONE.



CASE STUDY

PHOTO (ABOVE):

Snowtown town entrance sign.
© Weekendnotes.com.

PHOTO (INSET):

The Barunga Gap school bus, supported by the Lend a Hand Foundation.
© Tilt Renewables.

Over a hundred projects and counting: Snowtown's Lend a Hand Foundation

"It's helping the community, and not just Snowtown, but all the towns in sight of the wind farm."

The Snowtown Wind Farm Lend a Hand Foundation has been operating for as long as the wind farm—almost ten years. Alan Large, a Snowtown resident, has sat on the foundation committee since it was formed and has a lot of stories to tell about what the foundation means for his community.

"In the last two years we've provided funds for a weather station for the Snowtown Country Fire Service, supported the Bute Men's shed, and contributed to the Brinkworth history group for their museum and a reprint of their centenary book through grant funding.

"In the past, we've helped the Brinkworth bowling club paint their building; the Bute Lions club and primary school plant trees and paint telegraph (stobey) poles and the Snowtown football club upgrade their changing rooms.

In 2017 the Lend a Hand committee contributed \$15,000 to get the Snowtown primary school Barunga Gap school bus route up and running again. The government-run bus route had been cut

because of dwindling student numbers and the school was looking for money to continue the school run with a new bus. For families of out-of-town preschool and primary school students, the bus was a critical service.

The school was able to leverage Lend a Hand funds to raise additional funding from other avenues, and now has the school bus route running again.

Snowtown also has a community bus which the foundation supported a few years back—which any community group can hire.

"At the end of the day, almost ten years on, we still manage to spend all the money each year—we still get plenty of application forms," said Alan.

"The foundation is good for the community."



“ IF ALL THE WIND FARMS IN THE DEVELOPMENT PIPELINE TODAY ARE BUILT, PROPOSED COMMUNITY ENHANCEMENT FUNDS COULD SEE MORE THAN AN ESTIMATED \$8.7 MILLION FLOW INTO COMMUNITY PROJECTS THROUGH COMMUNITY ENHANCEMENT FUNDS.



CASE STUDY

Embracing the unique needs of communities: Mt Emerald Wind Farm's community fund

"No two communities are the same."

Wind farms are increasingly engaging with the diversity, both between communities as well as within them. No two communities are the same, so the developer of Mt Emerald, Ratch-Australia, kept criteria for funding for their Community Benefit Fund as broad as possible to enable different aspirations and demands to be met.

The fund gives \$200,000 a year to communities, local groups, projects and initiatives within a 50km radius. A panel made up of local representatives assesses applications and recommends projects to support.

The fund was seven times oversubscribed in its first year, receiving over 81 applications, which ensured the committee had their hands very full! An incredibly wide range of applications were received, from a boxing gym to a hospital for bats.

Several schools received grants from the community fund, including Kairi State School, which won funding for its sustainable garden project.

Principal Matthew Andrews explained how the project helps students apply their classroom learnings: "The Kairi Kitchen Garden has provided our students with an opportunity to create their own business.

"Our students have created a business model that centres around using the plants and vegetables grown within the garden to use in a variety of ways within their kitchen.

"The most recent night of operation saw the students use ingredients from the garden to help make pizzas.

"Students ordered extra ingredients, made the pizzas, sold the pizzas and then delved deep into the maths to understand income and expenditure models."

Other grants enabled straightforward but important purchases of equipment, like a defibrillator for the Atherton Bowls Club, or a new freezer for Ravenshoe Meals on Wheels, while others enabled more complex projects, such as an upgrade to a BMX and mountain biking track at Mareeba or the development of a museum to preserve the local history of the Tableland Sleeper Cutters.

The fund also enabled some interesting innovation, with a not-for-profit aged care facility planning to integrate video gaming into physical rehabilitation for its elderly residents.



PHOTO (ABOVE):

Locals at the Mt Emerald wind farm open day.
© RATCH Australia.

PHOTO (INSET):

Students from Kairi State School in Far North Queensland, at their Kairi Kitchen Garden sustainable garden project, funded by Mt Emerald wind farm's community fund.
© RATCH Australia.

Addressing Community Needs Through Community Enhancement Funds

The foundations of rural communities have long been built on self-reliance. Hundreds of kilometres from capital cities, small towns survive by locals coming together and devoting their own time and resources to maintaining and operating the basic public infrastructure of fire brigades, public buildings and facilities.

Often, even the local school and kindergarten need help to get by. Key events in the local calendar like the Agricultural Show only happen because groups of willing volunteers make them happen. This kind of volunteer work is the expression of residents' pride in their town.

Wind farm CEFs have provided a welcome boost of financial assistance to help make this work happen. By engaging with the community, wind farms have been able to identify community needs and assist locals to look after their towns.

The community projects funded by CEFs around Australia are just as diverse as the towns, regions and communities themselves. Projects that have been realised through CEF

funding can be substantial, such as the \$100,000 contribution towards upgrading IT and educational equipment in schools in WA through to the \$1,000 granted for a playground project in NSW. Their purpose also ranges across different aspects of community life from provision of sporting facilities, equipment and sponsorship to support for Landcare, aged care facilities and neighbourhood centres.

A number of CEFs direct funds towards enhancing sustainability, such as the Clean Energy Program at Gullen Range Wind Farm and the Denmark Wind Farm Community Sustainability Fund. Others accept a broad range of requests, with geographical boundaries, grant size limits or other mutually agreed objectives and scope.



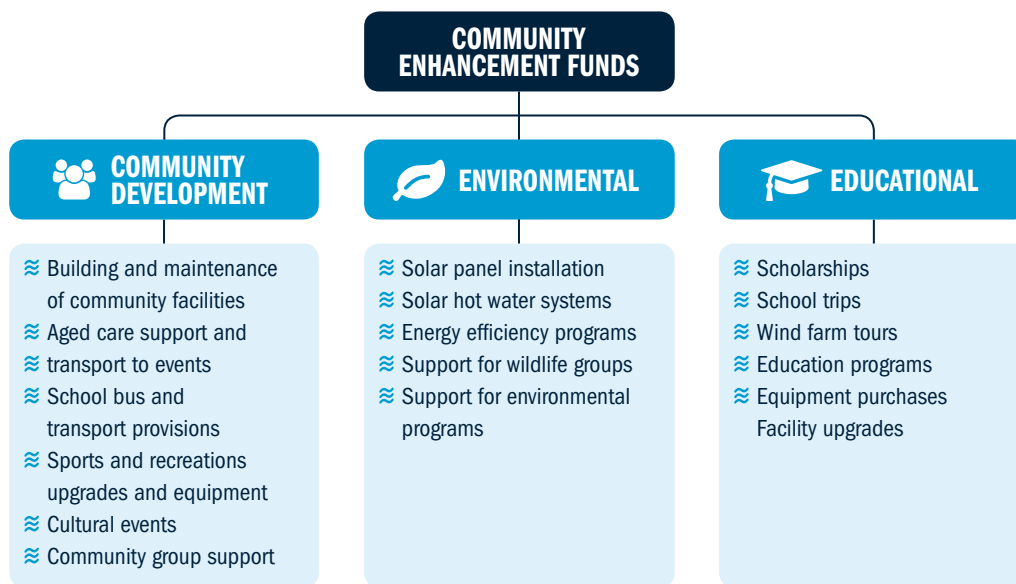
PHOTO: Vocational education teachers from across New England and North West NSW visit Sapphire Wind Farm. © Sapphire Wind Farm.

The strong desire to deliver long term benefits for local communities has driven the development of CEFs. Over the years, hundreds of community applications have been made and granted. Country Fire Services, Country Women's Associations, Landcare groups, golf and bowling clubs, men's sheds and progress associations are just some of the many organisations that have replaced equipment, run projects, built community infrastructure and supported their communities through CEF grants.

Community projects that have been realised as a result of wind farm CEFs range from

Indigenous and community gardens, workshops for resilient living and health initiatives, food coops, local tourism marketing materials and upgrades to community facilities such as maternity and children's rooms, playgrounds and sporting clubs. Equipment has also been purchased for Rural Fire Services, Surf Lifesaving Clubs, native plant groups, theatres, public schools, libraries, kindergartens and community support services. You name it, somewhere, a local community has found a way to fix it, upgrade it or make it happen with the support of wind farm CEF funding.

Figure 2 Sharing the Benefits. Where CEF funding flows in the community.



“THE STRONG DESIRE TO DELIVER LONG TERM BENEFITS FOR LOCAL COMMUNITIES HAS DRIVEN THE DEVELOPMENT OF CEFs.”



CASE STUDY

PHOTO (ABOVE):
Richard Diamond inspecting
the Diamond's solar array.
© Robyn Diamond.

PHOTO (INSET):
Gullen Range Wind Farm.
© Australian Wind Alliance.

Investing in local energy sustainability: The Gullen Range Clean Energy Program

Given wind farms' generation of clean energy, there's logic to Gullen Range Wind Farm's decision to help locals improve their sustainability. Established in 2013, the Clean Energy Program is in addition to a more widely applied community enhancement fund.

Grants of up to \$6,500 are available to residents and businesses within 5km of the wind farm for solar hot water, solar PV installations or other energy efficiency measures. The program is intended to run for the life of the wind farm and has already received 110 applications, with 54 projects completed.

Robyn Diamond and her husband Richard live ten kilometres outside Crookwell in a 140-year-old stone house that was once the teacher's residence for the local school. During their first winter in the house, they realised just how hard it was to keep it warm. They decided to install solar panels on their house through the program.

"It helped us save money by powering our new heater during winter using solar," Robyn said.

"The house already had hydronic wall heaters that we would use by burning wood in a stove to heat the water. We were chopping and burning wood every day just to make the house comfortable. If we were out for a short time, the house would be bone chillingly cold when we got home."

"Gullen Range Wind Farm paid for an energy audit of our house, and we immediately saw the opportunity to switch to electric heating and install solar panels to offset our electricity bills. We installed a 5kW PV system along with a very efficient air sourced heat pump. Last winter we ran the heater through the day, using electricity directly generated from the solar panels. We saved money,

and there was a lot less work chopping wood.

We also expect to be able to export extra electricity to the grid over summer, which will help balance the winter heating costs." Another wind farm neighbour, Dimity Taylor, also installed solar panels through the program after an energy audit of her home.

"Wind farm neighbours get infrastructure that will continue to save them money, the local economy gets a boost from increased demand for local solar installers, and there is an increase in renewable energy installation—a threefold benefit!" Dimity said.

"Most people are using the funds to install solar PV panels or solar hot water systems, but others are looking to use the fund for double glazing, insulation and battery storage."

"The Clean Energy Program is a community initiative that Gullen Range Wind Farm is very proud to be a part of," said Derek Powell, Deputy General Manager Gullen Range Wind Farm.

"What sets it apart from most community benefit schemes is it provides benefits directly to people who live near the wind turbines. Our grants for solar PV, solar hot water or other energy efficiency initiatives result in savings on their power bills as well as decreasing their carbon footprint."





CASE STUDY

A Short History of Community Enhancement Funds in New South Wales

CEFs were first established in NSW in 2007 as a way for farmers and landholders in the immediate precinct of a wind farm to share the financial benefits. The CEF program for the 30 MW Cullerin Range Wind Farm was designed by the proponent in consultation with the Upper Lachlan Shire Council and local community representatives.

PHOTO:

Recipients of Taralga Wind Farm CEF grants for 2018 recognised for their work.
© Adam Chandler, Pacific Hydro.

It required the proponent to contribute \$25,000 (increased by CPI each year) per year for the life of the wind farm. The arrangement was confirmed in the Department of Planning's conditions of consent for the project. That fund has since distributed over \$200,000 in grants for local community groups and projects. A similar condition was adopted by the Gullen Range Wind Farm in June 2009, with fund contributions set at \$1,666 plus CPI per wind turbine per year.

In preparing for new wind farm projects in their area, Yass Valley Council became the first NSW Council to institute CEF requirements in council policy. Adopted in 2016, the Community Enhancement Fund policy applies to all major projects, including mining projects and wind farms.⁹ It stipulates that a CEF be established "for the provision of community facilities, infrastructure and/or environmental conservation." Funds "are to be expended on projects/activities that will benefit the local community with initial priorities being within the immediate vicinity of the site (and) subsequent priorities being elsewhere in the Local Government Area." Yass Valley's policy has also been adopted by neighbouring Hilltops Council.

In recent years, as the capacity in megawatts of wind turbines has grown, a number of projects have increased fund contributions to \$2,500 plus CPI per wind turbine per annum, including the recently completed Sapphire and White Rock Wind Farms in Northern NSW. Some future projects, such as the Collector Wind Farm, are going further, with a \$240,000 per annum contribution for their 54 wind turbine project. This equates to nearly \$4,500 per wind turbine.

The rapid growth in capacity and efficiency of wind turbines suggests that per turbine amounts may no longer be the most appropriate way to determine CEF contributions. Linking future CEF contributions to the plated capacity of wind turbines—that is, an amount per megawatt rather than per wind turbine—will allow CEF contributions to keep pace with the amount of energy, and therefore income, that a wind farm produces.

Community Initiated Wind Farms

While community owned wind farms are a common sight in Europe, only two community initiated and owned wind farm projects currently exist in Australia.

Hepburn Wind, near Daylesford in Victoria, was the first of its kind when it began operating in 2011.¹⁵ The project is owned by a democratic cooperative of almost 2,000 members, all of whom hold a single vote regardless of the number of shares they own. Denmark Community Wind Farm, near Albany in Western Australia is a community company. Local businesses were employed at every stage of the project, making it “a true community effort.”¹⁶

While Hepburn Wind grew out of a desire to build community owned wind energy, and the Denmark project grew out of a desire to tackle climate change at a local level, both projects are now integral parts of their respective communities. By their very nature, such projects deliver substantial benefits to their local communities, through ownership and decision-making roles.¹⁷

Financial benefit sharing is a key part of the vision for both projects but is approached somewhat differently to commercial projects. At Hepburn Wind, a commitment was made to create a baseline fund each year of operation for community projects, energy projects, neighbourhood programs and sponsorship. Members and the broader community decide how that money is spent each year through surveys and feedback. At Denmark Community Wind Farm, a not-for-profit owns ten per cent of the project, and offers the dividends from that ownership stake as a fund for community sustainability projects.

A community-based committee evaluates applications for grants funding. Despite having very different benefit sharing structures, these two projects more than pull their weight when compared to other wind farms around Australia. On a per megawatt basis community owned wind farms make available six times more funding for community projects than the average Australian wind farm (see Appendix A).

With such extraordinary benefits and support for full community wind farm ownership, why don't we see more of it? There are significant barriers to community ownership of large-scale renewable energy in Australia that hamper progress; long development timelines, significant capital requirements and policy uncertainty to name a few. Nevertheless, at least three community-owned wind farm projects are in the development phase in Western Australia, Victoria and NSW and some state governments are exploring ways to make it easier for projects to be approved and built. The environmental, economic, social and technological benefits of community owned clean energy, and growing support for projects should encourage us to continue to tackle these barriers.¹⁸

Australia has many opportunities to remove barriers to and encourage implementation of community renewable energy, and the evidence of support for these projects shows we should be getting on with the job.

“COMMUNITY OWNED WIND FARMS ARE DEVELOPED, FUNDED, OWNED AND OPERATED BY THE COMMUNITY.”



CASE STUDY

PHOTO:

Danish Community Energy Expert, Søren Hermansen, visits Hepburn Wind.
© Studio Aton for Hepburn Wind 2017 at the Pioneering Communities Event.

Helping good ideas become reality: Hepburn Wind

The two turbines at Hepburn Wind, named Gale and Gusto, have been generating clean energy since 2011, and pumping benefits into the community at the same time.

The community fund is split into four distinct streams. These streams have been created to ensure funding is well distributed locally, and in order to realise projects that are important to the local community. Project selection is by a community fund committee made up of local members of the co-operative.

They include:

- ≈ A sponsorship program providing sponsorship for local events such as making the annual Words in Winter festival carbon neutral and supporting New Year's Eve Parades;
- ≈ An energy fund that is used to support local renewable energy and energy efficiency projects such as installation of an electric vehicle charging station in Daylesford and solar for community buildings;
- ≈ A community grants program that provides grants for local organisations that "are working to build a vibrant and sustainable community, with a view to strengthening and building local

resilience." This program has funded dozens of projects with a focus on assisting local co-operatives to establish such as the Daylesford Wholefoods Co-op, as well as the Daylesford Community Radio and Daylesford Community Cinema; and

- ≈ A neighbourhood benefits program that seeks to ensure that neighbours to the wind farm realise benefits, including electricity bill contributions, share offers, local infrastructure support for the CFA, local hall and recreation reserve.

Decisions regarding this unique suite of community funding streams is member led, through surveys. The surveys are used to gauge member opinions about how much funding is going into the five grant areas, the success of the funding and whether or not changes are made to the suite of streams over the medium term so it is constantly tailored to the genuine need in the community.

“ ON A PER MEGAWATT BASIS, AUSTRALIA'S COMMUNITY-OWNED WIND FARMS MAKE AVAILABLE SIX TIMES MORE FUNDING FOR COMMUNITY PROJECTS THAN THE AVERAGE AUSTRALIAN WIND FARM.



CASE STUDY

Extending the benefits to ownership: Coonooer Bridge Wind Farm

With the notable exception of Hepburn Wind and the Denmark Community Wind Farm, ownership of operating wind farms has been the preserve of large financial institutions. The first commercially-owned wind farm to change that is Windlab's Coonooer Bridge Wind Farm, co-owned with Eurus Energy, which commenced operation in central Victoria in 2016.

In an industry-leading move, Windlab offered free shares in the Coonooer Bridge Wind Farm company to host and neighbouring landholders with an option to buy more if they chose. As well as delivering these families a regular return on their shares, it gave them a seat at the table in decisions during the development process and a say in how the wind farm turned out. Altogether, a total of 33 local landholders own around 4% of the total project, which is worth over \$20 million.

"I think it's a really good way to do it," says June Williams, resident of nearby St Arnaud and owner of a neighbouring farm at Coonooer Bridge.

"We're happy to see the money split up. There's country towns that could use a bit of help."

This extra boost comes at a critical time for the surrounding community who have struggled through dry weather for many years.



PHOTO (ABOVE):

Coonooer Bridge Wind Farm.
© Windlab Asset Management.

PHOTO (LEFT):

June and David Williams.
© Rod Male.

"We've virtually had a 15-year drought. Cropping was very poor. The number of kids at the school in St Arnaud has fallen.

"If the farmers are battling, the whole town battles. The money that goes to individuals does definitely go into the town.

Windlab has since replicated this model at the \$75 million Kiata Wind Farm which opened in 2017 where 24 landholders own 2.7% of the project.

For June Williams, it's a simple way to make sure everyone gets a piece of having a wind farm in the area.

"We never worried about the wind farm but it's just nice to know that we're part of it."

Community Co-ownership and Co-investment models

Other approaches to neighbourhood equity, community ownership and community investment in wind farms are also starting to emerge. While the capital required to develop, build and operate large-scale wind farms tends to limit investors to large financiers like banks, corporations and superannuation funds, some developers are looking for ways to open the door to community financial participation.

Models being explored include various forms of co-ownership and co-investment. Lane and Hicks (2018) define co-investment as a model in which a community investment vehicle buys 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 asset. Co-ownership, however, is where a community-owned vehicle owns a portion of the renewable energy development and plays an active role in decision making.¹⁹

Alongside their public offer in 2010, Hepburn Wind offered free shares to its 67 neighbours within 2.5 kilometres of the wind farm with significant take-up and additional investment made into the co-operative. The commercial sector followed suit in 2016 when Coonooer Bridge Wind Farm near Bendigo in Victoria created a structure that included the neighbouring farming community alongside other financiers.²⁰ The developer, Windlab, offered shares free of charge to eligible wind farm neighbours, resulting in 33 landowners owning four per cent of the now operational project.²¹ This model was later replicated at Windlab's next project, the \$75 million Kiata Wind Farm, where 24 local shareholders own 2.7 per cent of the project.

In NSW, the Sapphire Wind Farm has become the first commercial wind farm to make investment available via a public offer. 100 investors across NSW and the ACT have taken up approximately \$1.8m in community shares and are eligible to be part of the project's Community Advisory Panel.²² The owner of Sapphire Wind Farm, CWP Renewables, has indicated they will make a similar offer available to the local community for their current Bango Wind Farm in NSW, as has the Golden Plains Wind Farm in Western Victoria.²³

Flyers Creek Wind Farm, near Orange, entered into discussions in 2013 with a local co-operative about the possibility of community investment in a single wind turbine, and while the initial concept has changed considerably, discussions about community investment continue to progress.²⁴

Overseas, community ownership, community co-ownership and community co-investment is commonplace for wind farms, and these models enjoy high levels of community support.²⁵ For example, in Denmark in 2001, 86 per cent of the wind turbines in the country were cooperative owned, and in 2013, 46 per cent of Germany's 63 GW of renewable energy was locally owned.^{26,27} In the Danish private sector there has been a long-established requirement of all new developments that a minimum of 20 per cent ownership is offered to the local community.²⁸ In general, the European wind industry found its feet through community initiative and investment and provides many examples of how the sector could be opened up in Australia.

The support for and engagement with wind farms that incorporate co-ownership or co-investment opportunities show that the benefits of wind energy go far beyond a cleaner environment, and can be enjoyed by a wide cross-section of stakeholders when an emphasis is placed on inclusion of all stakeholders, and community led development.

Payments to Host Landholders

Agriculture is the lifeblood of regional Australia. The core business of producing food and fibre hasn't skipped a beat as wind energy has joined the list of commodities being produced on Australian farms.

Wind turbines have fitted neatly into farming life, taking up only a small amount of land and allowing farmers to continue their usual activities. In many cases, farmers have been able to accommodate wind turbines on less productive hill country, increasing the overall productivity of their land. Payments to those who host wind turbines are typically made through annual lease payments that are made for the life of the wind farm. Lease payments to farmers represent a substantial flow of money from wind farms to regional host landowners. Across Australia's windiest regions, a new, reliable, long term source of income now helps to support farming communities.

Wind farms operating now will pay an estimated \$22.4 to \$26.9 million to host landowners each year through lease payments. With the addition of wind farms currently under construction, this figure is estimated to more than double to between \$51.5 and \$56 million per annum.

These payments have been critical for many families, delivering year-in, year-out on-farm income and helping them ride out extreme weather and commodity price fluctuations.

As well as getting farms through tough times, these payments also help families with the tricky problem of succession, making the farm business more attractive to the next generation and providing extra breathing space to make the right decision for those involved.

It's a truism that money never stays long in a farmer's pocket. In small rural towns, commodity prices are a big talking point and farmers and their circumstances are the main indicator of the health of the local economy. When farmers hire staff, purchase supplies, repair equipment and invest in new machinery this pumps money into local businesses to the benefit of the whole town. As the case study on page 21 demonstrates, there's never a shortage of things to be done on the farm and plenty of them need money to be spent.

There are several hundred farmers across Australia who now enjoy annual payments over a 25-year life span of a typical wind farm. That's a big boost to the resilience of a lot of rural towns and businesses who have to struggle year to year with the ups and downs of agriculture.



PHOTO: Sapphire Wind Farm Landholders visit construction site. © CWP Renewables.



CASE STUDY

PHOTO:
Charlie Prell, visiting
Will Lloyd at Cooma
Rural. © AWA.

Spending locally

Charlie Prell is a farmer and host landholder at the recently completed Crookwell 2 Wind Farm in Goulburn, NSW.

Wages to local employees	\$16,900
Repairs to cottages on the farm (permanently rented to locals)	\$4,600
Rebuilding the foundations to the shearing shed	\$8,100
Replacing and upgrading fences	\$49,300
Repairing the roads on the farm	\$17,500
Weed control	\$9,200
Repairs to my house	\$31,400
Repairs to my father's house	\$17,100
Donations to charitable causes	\$4,600

Total to the local economy	\$158,700

Even before the wind turbines were installed, Charlie spent a lot of this new income on farm jobs he wouldn't have done otherwise. He tallied up his first two years of spending in 2013 and realised that \$158,000 had already been spent upgrading his farm with the assistance of local employees and businesses.

"I am one farmer of three in this wind farm project. There are well over 30 farmers in this region with access to drought-proof income from hosting wind turbines. That's going to make a big difference to local businesses in Crookwell and Goulburn."

“ WIND FARMS CURRENTLY PAY AN ESTIMATED \$22.4 TO \$26.9 MILLION TO HOST LANDHOLDERS EACH YEAR THROUGH LEASE PAYMENTS.

WITH THE ADDITION OF WIND FARMS CURRENTLY UNDER CONSTRUCTION, THIS FIGURE IS ESTIMATED TO MORE THAN DOUBLE TO BETWEEN \$51.5 AND \$56 MILLION PER ANNUM.



CASE STUDY

Waubra Wind Farm Community Fund: Ten years on, it's time to think bigger

David Clark's family has lived at Glenbrae on the outskirts of Waubra since the early 1900s. When he's not busy managing his family farm, looking after his three children or serving as a Councillor in the local Pyrenees Shire Council, he manages the Waubra Wind Farm's Community Fund as its part-time Executive Officer, assisting the Fund's members to discharge their duties.



PHOTO (ABOVE):

Waubra Wind Farm Viewing Platform on Pyrenees Highway.
© Acciona Energy Australia.

PHOTO (INSET):

David Clark.
© Australian Wind Alliance.

David describes the job as "I do the paperwork and they make the decisions. I can give them the three-year plan, but they've got to make sure it delivers."

The Fund Committee is unusual in that it is made up of over a dozen community groups from around the area, including three Country Fire Authorities, three Landcare groups, the Recreational Reserve, local school and preschool, the Lions Club and a range of sporting groups. Every group, including the wind farm operator, gets one vote each. "These are not natural alliances so working on the Fund Committee brings them together," says David.

"Community people are the ones signing the cheques so it deals them into the game."

In its ten years of operation, the Fund has now covered what David calls "the community facility stuff across the local footprint". In funding around fifteen projects every year, they've sorted out the fire trucks, the fire shed, purchased iPads for the schoolchildren and fixed the playing surface on the footy oval. Over 100,000 trees have been given away to over 100 farming families around the district. Community groups are supported at a minimum level year-in and year-out, with larger sums going to major projects as required. These larger donations are then leveraged to secure further donations from other sources. For example,

the Fund's cornerstone \$100,000 donation

towards a new Waubra Community Hub was part of a \$400,000 community contribution that secured \$1.8 million local facility that will serve them for decades into the future.

"Over the last 12 months we've been doing free energy assessments and advising people what they can do to make their homes more comfortable and cheaper to run. We provide a \$700 incentive which has seen around 25 pensioners or people with health care cards make upgrades."

The challenge now is how to shift the Fund's focus towards larger projects with multi-year timeframes.

"We're at the stage of asking how do we build a plan that's less reactive and builds over time? How do we allocate funds into the future and work with the council to achieve real community building infrastructure. We can start to think about community transport, a skate park, a swimming pool or setting a goal of 5% tree coverage on local farms. To the people on the fund committee, I'm saying, we can be community leaders."

One long-term focus for the Fund that continues is a commitment to putting money away for the future. "We invest 5% of the fund every year so it still carries on after the life of the current wind farm," said David.

Payments to Neighbours

One oft-reported source of discord around wind farms over the years has been that lease payments only accrue to host landholders, and that immediate neighbours, who may also live in close proximity to wind turbines, are not accommodated. In recent years, agreements have been increasingly offered to neighbouring landholders to address this perceived inequity.

As with other BSMs, neighbour agreement structures differ from project to project; and while this diversity can reflect the diversity of regional communities, the methods used to determine a fair and equitable agreement is important. The agreements are typically negotiated on the basis of proximity to a wind farm and/or in relation to impacts associated with a wind farm. Agreements can take the form of direct annual or one-off payments to landowners and can include in-kind contributions to a landowner, such as tree planting to screen the view of wind turbines or include other mechanisms such as neighbourhood investment or a gift of equity. One example of a neighbour agreement model is the Proximity Rent Model. The Proximity Rent Model was developed with the intention to “assist projects to achieve a social licence to operate.”²⁹ This model proposes a payment system based on land owned in proximity to wind turbines, where landowners are paid per hectare within specific areas, rather than based on the number of wind turbines on their land.³⁰ Other models currently being implemented are based on amenity considerations such as noise and visual assessments, while others still consider residences within distance zones from a wind farm.

The Palmer Wind Farm in South Australia was one of the first projects to explore neighbour agreements, announcing its intention to establish agreements with wind farm neighbours in late 2013. This project sought to enter into agreements with neighbours with property within one kilometre or a residence within two kilometres of a wind turbine, with a minimum payment of \$2,000 per annum.³¹

In NSW, the State Government’s 2016 Wind Farm Guidelines encouraged consideration of neighbour (or negotiated) agreements as a form of benefit sharing.³² One proponent active in NSW, Goldwind Australia, has taken up this recommendation at its Coppabella Wind Farm.³³ Neighbour agreements are being offered that include an annual payment based on distance from the closest wind turbine. Agreements are voluntary, do not have a time limit for signing and do not include confidentiality clauses.

The NSW Guidelines are likely to see neighbour agreements become a more common feature of development in NSW. Projects like Golden Plains Wind Farm in Victoria have a neighbour incentive program that pays neighbours \$1000 for each of the first three turbines within 2km of their dwelling, and \$750 for each additional turbine within 2km.

“ NEIGHBOUR AGREEMENTS ARE NEGOTIATED AGREEMENTS BETWEEN A WIND FARM AND A LANDOWNER IN THE VICINITY OF THE PROJECT THAT ARE INTENDED TO SHARE THE FINANCIAL BENEFITS TO LOCAL LANDOWNERS BEYOND WIND TURBINE HOSTS.



DOING BUSINESS

**“ WIND FARM CONSTRUCTION
HAS DELIVERED AN
ECONOMIC BOOST OF ALMOST
\$5.1 BILLION TO AUSTRALIA’S
WIND DISTRICTS, OVER HALF OF
THIS IS IN THE LAST FIVE YEARS.**

Local Jobs and Investment

Any additional business activity in a regional town is welcome. With the wind farm construction boom going on right now, work vehicles and hi-vis workwear are making their presence felt in main streets from Mareeba in North Queensland, through Glen Innes and Crookwell in New South Wales, Mortlake in Victoria and Port Augusta in South Australia.

In 2012, SKM assessed and quantified the economic benefits generated by wind farms in local economies. Their work provided indicative multipliers of jobs and local investment creation through construction and operation of a wind farm. While the industry has evolved somewhat since 2012, these multipliers still allow us to understand the flow of benefits into regional economies now, and the impact is significant.

With six gigawatts of new wind farm capacity currently under construction, an estimated 5,700 direct jobs have been created in regional areas, with a further 13,300 indirect jobs created in local businesses that supply to the projects. It is estimated that the construction phase of these projects could deliver \$4.8 billion in economic activity to towns and regions in Australia's wind districts.

Of course, wind farm construction has been a part of rural Australia for thirty years already, with six gigawatts of wind farm capacity built to date. In that time, Australia's wind districts

have seen an economic boost of almost \$5.1 billion. Over half of this spending has occurred in the last five years as the rate of construction has ramped up significantly.

On an ongoing basis, as wind farms move into their 25-year operational phase, a range of secure, long-term jobs are created in operations and maintenance, keeping skilled employees and their families in rural towns. On completion of the wind farms currently being constructed, around 1,200 ongoing regional jobs could contribute \$733 million every year across the wind industry. Across the full life span of these wind farms, an estimated \$18.31 billion will be delivered to their host communities.

With wind energy one of the cheapest sources of new power in Australia and with prices still coming down,³⁴ a sustainable wind industry can continue to grow beyond 2020, generating good jobs and contributing to diverse and thriving regional communities.



PHOTO: Turbine base construction, Bodangora Wind Farm. © Infigen Energy.

“CURRENT WIND FARM CONSTRUCTION PROJECTS COULD DELIVER AN ESTIMATED \$4.8 BILLION IN ECONOMIC ACTIVITY INTO THE REGIONAL ECONOMY.”

Contributions to Councils

Wind farms also contribute to local economies through new income to local and shire councils. While these payments vary considerably between state jurisdictions, Victoria has the most formalised system.

Since 2000, Victoria has required all electricity generators, including wind farms, to pay an annual payment to the relevant council. The Payment in Lieu of Rates (PiLoR) scheme sets a flagfall of \$40,000 and additional \$900 per megawatt of capacity, adjusted for inflation.³⁵ Actual payments under PiLoR are negotiated between the council and generator based on the suggested schedule.³⁶

These payments can represent a substantial form of income for councils, particularly for those in regions that enjoy a strong wind resource and therefore have more than one wind farm operating within their boundaries. For example, Ararat Rural City Council, in Western Victoria, hosts three wind farms and earns an estimated \$375,000 every year in PiLoR payments from these projects. Around 16 Victorian rural councils receive PiLoR payments from wind farms (see Appendix B).

As wind farms increase in capacity, so does the size of the payments accruing to local

councils. The Golden Plains Wind Farm estimates it will contribute \$800,000 per annum to Golden Plains Shire.

“It’s quite significant for a small shire like us, said Golden Plains Shire Mayor, Owen Sharkey. “We solely rely on rates so to start to see industries like this coming in, hopefully taking a little bit out of rate burden is quite significant and something we definitely need.”³⁷

In NSW, voluntary planning agreements are commonly entered into between wind farms and Councils, as are infrastructure and repairs contracts that consider remediation for any impacts associated with project construction. Similar contracts are common in other States. While it is possible to estimate payments to councils in Victoria, it is much more difficult to estimate payments made to councils in other states, and as such, while these contributions are significant, they have not been quantified here.

“ACROSS THE 25-YEAR LIFE SPAN OF EXISTING WIND FARMS AND WIND FARMS UNDER CONSTRUCTION, 1,200 ONGOING WIND FARM JOBS COULD CONTRIBUTE \$733 MILLION EVERY YEAR TO THE REGIONS AND AN ESTIMATED \$18.31 BILLION COULD BE DELIVERED TO HOST COMMUNITIES.



CASE STUDY

PHOTO (ABOVE):
The Nimmitabel Men's Shed team, Christmas 2016.
© Howard Charles.

PHOTO (INSET):
Works on a new cycle path around Lake Williams.
© Howard Charles.

Getting things done locally: Boco Rock Wind Farm

Nimmitabel, home to about 300 people, is the closest township to the Boco Rock Wind Farm in the Monaro region in NSW.

Since the wind farm began operating in 2014, annual community fund grants have been helping realise important local projects. While grants are open to organisations throughout the Monaro region, Nimmitabel residents have used them to improve their own town.

Local stalwart and wind farm host, Howard Charles, is a member of the Lions Club and President of the Men's Shed. He's seen a significant upgrade of the town's amenities through the fund grants.

"This year, we'll be putting in a cycleway around Lake Williams as well as upgrading the facilities at the men's shed. Thanks to the wind farm, we'll be able to kick start both projects."

The Lake Williams park, originally established by the Lions Club, is where Nimmitabel holds its major town events and celebrations. As part of their ongoing work to look after and beautify the park, the Lions Club decided to build a cycleway around the lake to showcase the park for locals and visitors alike. A wind farm CEF grant is being used to buy the concrete and mesh needed to complete the project, and a number of volunteers will be part of the effort to build the path.

According to Howard, nearly a million vehicles drive through Nimmitabel each year.

"The township wants to make Nimmitabel a great spot to stop for a break.

Soon, drivers will be able to stretch their legs on the new cycleway around Lake Williams."

Established in 2015, the Men's Shed found a home in the town's heritage train station. While the station is historic, it had been left in a state of disuse is sorely in need of some upgrades to make it safe, functional and inviting. The Men's Shed will use a fund grant for railway sleepers to fix and upgrade the station platform. Laying the sleepers and building a daffodil garden bed will involve local volunteers and hopefully encourage more men to join the group.

As well as these projects, other local organisations, such as the Nimmitabel CWA and the Garden Club have also used grant funding to complete much needed projects in the town.

"The Garden Club did some tree planting in the main street of town, which really lifted the entrances into Nimmitabel from both ends."

"It's a nice spot to stop for a coffee or walk around."





CASE STUDY

Community wind investment takes the next step: Sapphire Wind Farm Community Co-investment

The 270 megawatt Sapphire Wind Farm near Inverell in North East NSW is the largest wind farm in Australia and first commercial wind farm to make investment available via a public offer.

When its public offer formally closed in June 2019, almost 100 investors had taken up approximately \$1.8m in community shares. The offer was originally made to residents in the New England area but with drought biting hard on the local economy, the offer was extended to investors throughout NSW and the ACT.

The investment model was co-developed with the local community through an extensive testing process which addressed details such as governance structure, investment length and rate of return. A number of adjustments to the model were made on the basis of community feedback.

The importance of this project is that it creates a community co-investment structure and approach which can be easily replicated in other projects.

One eager investor was Invergowrie local, Adam Blakester. Adam is Executive Director of the not-for-profit Starfish Foundation, which will use the proceeds from its investment to further its mission of supporting sustainability in rural areas.



PHOTO (INSET):
Adam Blakester.
© Supplied.

“To find an opportunity to invest in a rural sustainability project of this size and standard is really very rare,” Adam said. “Half of Starfish’s endowment fund is sitting in term deposits because we can’t find the projects to invest in.”

“To see that kind of money invested locally and know that some of the returns will stay in the region—that’s very significant. So often money invested here leaves the region but this project helps to close the loop from investing to operating and then paying dividends back to the local community.”

“At a time when we are in such severe drought, keeping the money local is extremely important.”

Adam was instrumental in several community renewable energy projects, including local solar bulk-buy programs through Farming the Sun,



PHOTO (ABOVE):
Sapphire Wind Farm.
© CWP Renewables.

and an unsuccessful attempt to develop a community owned wind farm in the region.

“Opening up community investment opportunities in large scale wind farms is something I’ve wanted to see for a long time, so to be able to work with the developer to come up with such a good model is just wonderful!”

“Community investment being offered by a developer in such a large-scale renewable energy project is certainly novel and it’s given the local community a sense of ownership.”

“At this moment the financial return and benefits offered by Sapphire Wind Farm are significantly better than bank and term deposit and other comparable risk.” Adam concluded.

Some key features:

- ≈ Investors can include individuals, businesses, family trusts, self-managed super funds etc.
- ≈ 10 year term with capital return payment at last payment cycle.

- ≈ Low minimum investment of \$1,250, with maximum of \$200,000.
- ≈ 6 per cent fixed unfranked return paid quarterly.
- ≈ 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, the wind farm operator and the fund.
- ≈ Administration and governance is looked after by DomaCom Australia Limited, a fractional investment platform and the community investment fund operator, to relieve community of doing it themselves.
- ≈ Fund administration fees are paid by the wind farm operator and financier, CWP Renewables and Partners Group so there are no extra charges to the investors.

Information in this case study adapted from Clean Energy Council (2019)
A guide to benefit sharing options for renewable energy projects.

APPENDIX A

Community Enhancement Funds

This appendix lists wind farm CEFs included in this report. Annual CEF contribution amounts are listed for the 25-year life of wind farms that are operational or under construction. It does not include programs prior to operations, additional sponsorships, discretionary donations or in-kind support. Proposed CEFs for wind farms in the development pipeline included in the report are also identified.

The wide variety of CEF contributions reflects a range of factors, including project installed capacity, evolving community expectations over time, and needs of specific communities. Many, but not all, CEFs are CPI linked from the point of commencement. Where possible, figures listed are contributions in 2018, which may differ from stipulated contributions at time of CEF inception.

New South Wales

Wind Farm	Wind Farm Commencement	Annual CEF Contribution
Cullerin Range Wind Farm	2009	\$32,000
Capital & Woodlawn Wind Farms	2010–2011	\$42,000
Gunning Wind Farm	2011	\$46,000
Boco Rock Wind Farm	2014	\$167,500
Gullen Range Wind Farm	2014	\$137,931
Taralga Wind Farm	2016	\$127,500
White Rock Wind Farm	2017	\$175,000
Bodangora Wind Farm	2018	\$65,500 ¹
Sapphire Wind Farm	2018	\$187,500
Silverton Wind Farm	2018	\$15,000
Crookwell 2 Wind Farm	2019	\$70,000
Bango Wind Farm	Expected 2021	\$129,950
Biala Wind Farm	Expected 2021	\$90,000
Collector Wind Farm	Expected 2021	\$240,000
Crudine Ridge	Expected 2021	\$160,000

¹ This includes 2% of one wind turbine's revenue, which will vary slightly year on year.

CEFs for wind farms approved or under development: Boco Rock II; Bowmans Creek; Conroy's Gap; Coppabella; Crookwell 3; Flyers Creek; Glen Innes; Hills of Gold; Kyoto Energy Park; Liverpool Range; Rye Park; Ungala; White Rock 2.

Victoria

Wind Farm	Wind Farm Commencement	Annual CEF Contribution
Challicum Hills Wind Farm	2003	\$42,000 ¹
Portland Wind Energy Project	2005–2015	\$81,500 ¹
Codrington Wind Farm/ Yambuk Wind Farm	2005	\$52,000 ¹
Waubra Wind Farm	2009	\$88,000
Hepburn Wind	2011	\$30,000
Mortons Lane Wind Farm	2012	\$10,000
Oaklands Hill Wind Farm	2012	\$53,000
Macarthur Wind Farm	2013	\$64,000

Victoria (continued)

Wind Farm	Wind Farm Commencement	Annual CEF Contribution
Bald Hills Wind Farm	2015	\$25,000
Coonooer Bridge Wind Farm	2016	\$25,000
Ararat Wind Farm	2017	\$65,000
Kiata Wind Farm	2017	\$20,000
Salt Creek Wind Farm	2018	\$40,000
Yaloak South Wind Farm	2018	\$28,000
Crowlands Wind Farm	2019	\$58,000
Mount Gellibrand Wind Farm	2019	\$40,000
Berrybank Wind Farm	Expected 2021	\$50,000
Bulgana Green Power Hub	Expected 2020	\$120,000
Cherry Tree Wind Farm	Expected 2020	\$25,000
Dundonnell Wind Farm	Expected 2021	\$50,000
Lal Lal Wind Farm	Expected 2020	\$100,000
Moorabool Wind Farm	Expected 2021	\$100,000
Mortlake South Wind Farm	Expected 2021	\$193,000 ²
Murra Wurra I Wind Farm	Expected 2020	\$61,000
Stockyard Hill Wind Farm	Expected 2022	\$300,000 ³

1 Average annual contribution across life of fund.

2 Total of Neighbourhood Benefit Program and Small Grants/Sponsorship program.

3 Fund is capped at \$120,000 during construction and will increase to \$300,000 once wind farm is in operation.

CEFs for wind farms approved or under development: Alberton; Golden Plains; Murra Warra II: Ryan Corner; Woolsthorpe; Berrimal.

South Australia

Wind Farm	Wind Farm Commencement	Annual CEF Contribution
Lake Bonney 1, 2 & 3 Wind Farm	2005–2010	\$24,000
Wattle Point Wind Farm	2005	\$15,000
Hallett Wind Farm projects	2008–2012	\$51,000
Snowtown 1 & 2 Wind Farm	2008–2014	\$50,000
Clements Gap Wind Farm	2009	\$55,000 ¹
Waterloo Wind Farm	2010	\$30,000
Hornsedale 1,2 & 3 Wind Farm	2016	\$120,000
Cooper Pedy Renewable Hybrid Project	2017	\$25,000

1 Average annual contribution across life of fund.

CEFs for wind farms approved or under development: Ceres Project; Crystal Brook; Keyneton Wind Farm; Palmer Wind Farm; Twin Creek.

Western Australia

Wind Farm	Wind Farm Commencement	Annual CEF Contribution
Walkaway (Alinta) Wind Farm	2004	\$13,000
Collgar Wind Farm	2011	\$100,000
Denmark Community Wind Farm	2013	Approximately \$10,000 ¹
Yandin Wind Farm	Expected 2020	\$50,000

¹ This figure varies year on year, as it represents a percentage of project income.

CEFs for wind farms approved or under development: Waddi Wind Farm.

Queensland

Wind Farm	Wind Farm Commencement	Annual CEF Contribution
Mt Emerald Wind Farm	2019	\$200,000
Coopers Gap Wind Farm	Expected 2020	\$30,000

CEFs for wind farms approved or under development: Banana Ridge Wind Farm; Clarke Creek Wind Farm; Dulacca Wind Farm; Forsyth Wind Farm; Kaban Green Power Hub; Lakeland Wind Farm.

Tasmania

Wind Farm	Wind Farm Commencement	Annual CEF Contribution
Cattle Hill Wind Farm	Expected 2020	\$120,000
Granville Harbour Wind Farm	Expected 2021	\$10,000

CEFs for wind farms approved or under development: St Patricks Plains Wind Farm; Western Plains Wind Farm.

APPENDIX B

Methodology

Community Enhancement Fund calculations (p9) are based on publicly available data and data shared with us directly by project proponents.

Wind farm jobs and investment calculations are based on multipliers from SKM's 2012 report for the Clean Energy Council.³⁸ In their report, multipliers have been calculated for an example 50 megawatt wind farm project.

The following multipliers from the SKM report are used in this report. A 50 MW wind farm:

- ≈ could employ between 5 and 6 FTE staff for operations and maintenance
- ≈ could generate up to 48 FTE direct jobs from local/regional expenditure during construction
- ≈ could generate up to 160 FTE jobs from local/regional expenditure during construction (ie. Direct and indirect FTE jobs)
- ≈ could add over \$40 million to the regional economy
- ≈ could result in direct expenditure of up to \$3 million per annum in the operations phase

SKM also provide an indication of landholder payments, stating an example 50 MW wind farm “will also provide up to \$250,000 in payments to farmers” (p27). Host landholder lease agreements are invariably commercial in confidence which makes it impossible to accurately calculate their total value. In addition, lease agreements apply to a range of different types of infrastructure, including wind turbines, substations and power lines, all of which attract different rates of payment. Using SKM's estimate as a starting point, we consulted with a range of wind farm developers and stakeholders to generate a robust, indicative range of payments to host landholders. While the estimates are robust, they should in no way be viewed as an indication of current market leasehold value or be seen as applicable to any specific project.

Contributions to councils through schemes such as Payment in Lieu of Rates (PiLoR) and Voluntary Planning Agreements are not consistent across states and have therefore not been included in total estimates of BSM payments or economic impacts of wind farm operations. The estimated contribution to Ararat City Council is based on standard PiLoR payments as outlined on page 26.

APPENDIX C

References

- ≈ Clean Energy Council (2019) *A guide to benefit sharing options for renewable energy projects*.
<https://www.cleanenergycouncil.org.au/advocacy-initiatives/community-engagement/benefit-sharing-for-renewable-energy-projects>
- ≈ Clean Energy Council, (2018) *Community Engagement Guidelines for the Australian Wind Industry*.
<https://assets.cleanenergycouncil.org.au/documents/advocacy-initiatives/community-engagement/windcommunity-engagement-guidelines.pdf>
- ≈ Clean Energy Council (2018) *Enhancing Positive Social Outcomes from Wind Farm Development: Evaluating Community Engagement and Benefit-Sharing in Australia*.
<https://www.cleanenergycouncil.org.au/advocacy-initiatives/community-engagement/enhancing-positive-social-outcomes>
- ≈ Hall, N., Ashworth, P and Shaw, H, (2012). *Exploring Community Acceptance of Rural Wind Farms in Australia: A Snapshot*. CSIRO, Brisbane
- ≈ NSW Farmers (2018) *Wind farm guide for host landholders*.
http://www.nswfarmers.org.au/NSWFA/NSWFA/Content/IndustryPolicy/Resource/wind_farm_guide.aspx
- ≈ O'Neill, L., Thorburn, K. and Hunt, J, (2018) *Ensuring Indigenous Benefit from Large-scale Renewable Energy Projects: Drawing on Experience from Extractive Industry Agreement Making and the Importance of Policy Settings*. Energy Change Institute, Australian National University, Canberra
- ≈ Victorian State Government (2017) *Community Engagement and Benefit Sharing in Renewable Energy Development: A Guide for Renewable Energy Developers*.
https://www.energy.vic.gov.au/_data/assets/pdf_file/0027/91377/Community-Engagement-and-Benefit-Sharing-in-Renewable-Energy-Development.pdf

FOOTNOTES

- 1 <https://opennem.org.au/energy/nem>
- 2 <https://www.cleanenergycouncil.org.au/resources/project-tracker>
- 3 Lane, T. and Hicks, J. (2014) Best Practice Community Engagement in Wind Development. Retrieved from <http://cpagency.org.au/wp-content/uploads/2014/03/Attachment-E-Best-practice-community-engagement-in-wind-development-FINAL-V1.0.pdf>, pp 1,3.
- 4 WISE Power (2016) Report on the real case scenarios —testing measures from the WE Engage Toolkit. Retrieved from http://wisepower-project.eu/wp-content/uploads/121016_Final-Deliverable-4-3-Report-on-the-real-life-project-testing.pdf, p 15.
- 5 Clean Energy Council (2018) Enhancing positive social outcomes from wind development. Evaluating community engagement and benefit-sharing in Australia. Retrieved from <https://www.cleanenergycouncil.org.au/technologies/wind-energy/enhancing-positive-social-outcomes-from-wind-farm-development.html>, p3
- 6 Ernst and Young Australia (2014) Strategic options for delivering ownership and benefit sharing models for wind farms in NSW. Prepared for NSW Office of Environment and Heritage. Retrieved from <http://www.environment.nsw.gov.au/resources/communities/EY-wind-farm-shared-benefits.pdf>, p 6.
- 7 Clean Energy Council (2018) *ibid* p3
- 8 Ernst and Young Australia (2014) *ibid*, p 3.
- 9 Yass Valley Council (2016) Community Enhancement Fund. Retrieved from <https://www.yassvalley.nsw.gov.au/sites/yassvalley/files/public/event/Draft-Community-Enhancement-Policy.pdf> <http://www.yassvalley.nsw.gov.au/sites/yassvalley/files/public/Policies/DA-POL-20%20Community%20Enhancement%20Fund.pdf> pp 2–3.
- 10 Sapphire Wind Farm (2018) Community Legacy Projects. Retrieved from <http://www.sapphirewindfarm.com.au/community/legacy-projects/>.
- 11 Acciona (2017) Waubra Wind Farm Scholarship. Retrieved from <http://media.acciona.com.au/media/4908427/acciona-energy-waubra-wind-farm-scholarship-2017.pdf>
- 12 Geraldton Newspapers (2014) Putting a whoosh into tourism. The West Australian. Retrieved from <https://thewest.com.au/news/gascoyne/putting-a-whoosh-into-tourism-ng-ya-256408>
- 13 Personal Communication (2017) AGL
- 14 Clean Energy Council (2018) *ibid* p18
- 15 Hepburn Wind (2018) Origins. Retrieved from <https://www.hepburnwind.com.au/hepburn-wind-origins/>
- 16 Denmark Community Wind Farm (2018) History. Retrieved from <http://www.dcw.net.au/history.html>
- 17 The State of Victoria, Department of Environment, Land, Water and Planning (2016) Community renewable energy projects, PiLoR and planning issues discussion paper (available on request), p13
- 18 The State of Victoria, Department of Environment, Land, Water and Planning (2016) *ibid*
- 19 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 p 26.
- 20 Lane, T. and Hicks, J. (2017) *ibid*, p 23
- 21 Impact investing Australia (2018) Coonooer Bridge Wind Farm (Windlab). Retrieved from: <https://impactinvestingaustralia.com/case-studies/coonooer-bridge-wind-farm-windlab/>
- 22 <https://domacom.com.au/public-crowdfunding-campaigns/commercial-properties/sapphire-wind-farm/>
- 23 <http://w-wind.com.au/golden-plains-wind-farm/project-specifications/>
- 24 CENREC (2018) Community. Retrieved from <http://www.cenrec.com.au/community/>
- 25 Rueter, G. (2012) The global boom in wind energy. Retrieved from <http://p.dw.com/p/15NVm>
- 26 Hicks, J. and Ison, N. (2018) Community energy in Europe. Embark, retrieved <http://www.embark.com.au/display/public/content/Community+energy+in+Europe;jsessionid=754FA574C6AB8E4584EB808528515E56>
- 27 Farrell, J. (2013) Half of Germany's 63,000 megawatts of renewable energy is locally owned. Institute for Local Self Reliance. Retrieved from <https://ilsr.org/germanys-63000-megawatts-renewable-energy-locally-owned/>.
- 28 Hicks, J. and Ison, N. (2018) Community energy in Europe. *Ibid*
- 29 Pyramus Pty Ltd (2014) A practical shared-benefit model for wind farms—The Proximity Rent model. Pyramus Pty Ltd, p3
- 30 Pyramus Pty Ltd (2014) *Ibid* p7
- 31 Fosdike, J. (2013) Wind farm dishes out neighbour payments. Barossa Herald, retrieved from <https://www.barossa Herald.com.au/story/1986228/wind-farm-dishes-out-neighbour-payments/>
- 32 NSW Department of Planning and Environment (2016) Wind Energy Guideline for State significant wind energy development. Retrieved from <http://www.planning.nsw.gov.au/~media/Files/DPE/Guidelines/wind-energy-guideline-for-state-significant-wind-energy-development-2016-12.ashx>
- 33 Goldwind Australia (2018) Coppabella Wind Farm Modification Application (Mod 1) SSD 6698: Coppabella Wind Farm Pty Ltd Proponent's Response to Submissions. Retrieved from <https://majorprojects.accelo.com/public/2443c9e7ca969a347e715b1558af5db7/Yass%20Valley%20Wind%20Farm%20MOD%201%20-%20Response%20to%20Submissions.pdf>
- 34 Bloomberg (2017) Presentation to the 2017 Clean Energy Summit. Retrieved from <http://www.cleanenergysummit.com.au/dam/clean-energy-summit/agenda/aces-2017-presentations/market-outlook-2017/Kobad-Bhavnagri/Kobad%20Bhavnagri.pdf>
- 35 The State of Victoria, Department of Environment, Land, Water and Planning (2016) *ibid* p26
- 36 The large PiLoR flagfall component places a disproportionate burden on smaller wind farms with only a handful of turbines as it delivers a much higher charge per megawatt than what a larger wind farm pays.
- 37 <https://www.abc.net.au/radio/ballarat/programs/breakfast/rokewood-wind-farm-boost-for-rural-shire/10715882>
- 38 SKM (2012) *Ibid*, pp 21–29

PHOTO:

Open Day at Macarthur
Wind Farm in 2015.
© Angela Chow.





-  AustralianWindAlliance
-  @AusWindAll
-  www.windalliance.org.au