



### Billions in the bush:

Renewable energy for regional prosperity.





### Contents

Overview	3
Direct payments to host landholders	4
Contributions to regional communities and councils	9
Methodology	13



### **Overview**

From Gladstone to Gippsland, regional Australia has a tradition of powering our cities and towns. This proud tradition continues today, with farmers partnering with the renewables industry to harness clean energy from the sun and the wind and make farms more productive.

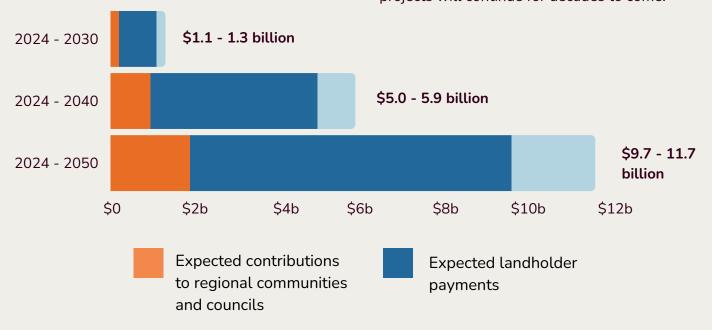
Renewable energy is already powering Australian industry and manufacturing both in the regions and in the cities. The share of renewable energy across the National Electricity Market (NEM) is now more than 40%.

Australian farmers are skilled business owners, experienced at harnessing new opportunities, and thousands of them are already embracing the shift to renewable energy. The deployment of renewable energy is a once in a generation economic opportunity for regional Australia.

Analysis by the Clean Energy Council and Farmers for Climate Action shows that large-scale wind and solar projects across the NEM are expected to deliver between \$9.7 - 11.7 billion in landholder payments and contributions to regional communities and councils over the coming decades.

This includes \$7.7 billion - 9.7 billion in direct payments to landholders, and \$1.9 billion in contributions to regional communities and councils, between 2024 and 2050.

These payments are part of a broader pattern of regional communities receiving the economic benefits of renewable energy projects. Modelling by the Regional Australia Institute finds that large scale wind and solar projects (not including pumped hydro or standalone battery storage) could generate up to \$68 billion in economic activity across Australia by 2030. The economic benefits of hosting these projects will continue for decades to come.



# Expected landholder payments and contributions to regional communities and councils across the five NEM states



# Direct payments to host landholders

Every landholder who chooses to host a wind or solar project, or allows developers to explore opportunities for a project, is paid for the use of their land. If a project proceeds, host landholders, who typically own farming businesses, are paid an annual fee over a multi-decade timeframe (typically 25-30 years).

These payments are made regardless of how much electricity is generated, providing a reliable revenue stream even during drought, poor harvests or downturns in commodity markets.

#### For wind farms



Payments to landholders are most commonly calculated on a per megawatt (MW) basis, though some renewable energy companies may calculate the payments on a per turbine basis. Annual payments to landholders typically range from \$5500-6500 per MW and modern turbines typically have seven MW of capacity.



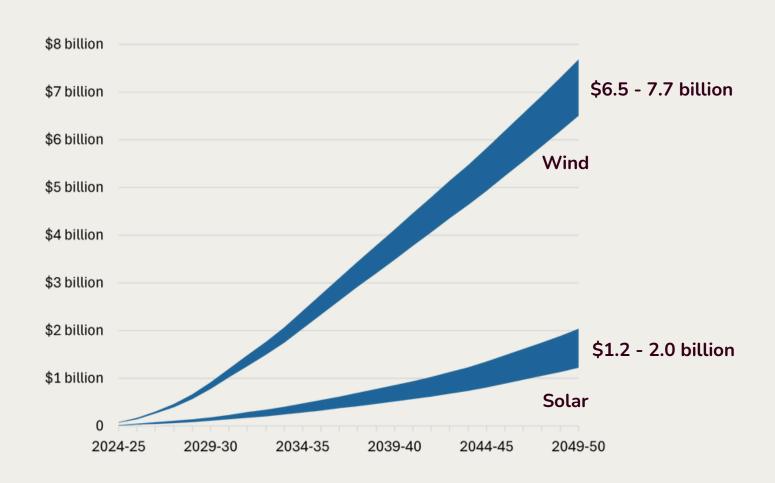
#### For solar farms

Annual payments to landholders are commonly calculated on a per hectare basis, at a rate of \$750-1250 per hectare. One MW of solar panels will typically occupy two hectares of land resulting in a rate of \$1500-2500 per MW. For comparison, a beef farm in high rainfall country might produce \$1500 per hectare in an excellent year.

Based on the 'Optimal Development Pathway' for the Australian Energy Market Operator's Step Change scenario, it is anticipated that direct landholder payments from 2024 will reach up to \$0.9 - 1.1 billion by 2030, \$4.0 - 5.0 billion by 2040, and \$7.7 - 9.7 billion by 2050. (See more about our methodology on page 11.)



## Expected payments to landholders who host wind and solar projects, 2024-2050



#### **SOLAR SHEEP**

Tony Inder, a sixth generation farmer from Wellington, NSW, jumped at the opportunity to graze sheep on a neighbouring solar farm. He was astonished by the increase in yield and wool quality from his 'solar sheep'.

"When this solar farm went in next door to us, I thought 'that land's wasted now'. Turns out... there's actually more sheep grazing there (than before the solar farm was installed)."



### WHAT FACTORS DETERMINE LANDHOLDER PAYMENTS?

Agreements between developers and landholders are voluntary agreements. Landholders have the right to reject an offer or negotiate for a better deal.

Several factors contribute to the amount a renewable energy company can offer to a landholder for hosting wind or solar assets. These include the quality of the wind or solar resource, distance to a transmission connection point, value of the land and its productive potential, electricity market conditions (for example, does the wind or solar resource match up with times of high electricity demand?), 'offtake' market conditions, ease of transporting materials, access to labour and housing, and the conditions placed on the project through the planning assessment process.

Each of these factors influence the commercial viability of the project, and the developer must be able to produce electricity at competitive market rates in order to find buyers for the electricity generated. If a potential project meets all the conditions favourably, then it's likely the landholder will be offered the higher end of the range.

Where a project has a sub-optimum wind or solar resource, is located further away from a grid connection point or has costly permit conditions imposed, the rate offered by the renewable energy company is likely to be at the beginning of the range.

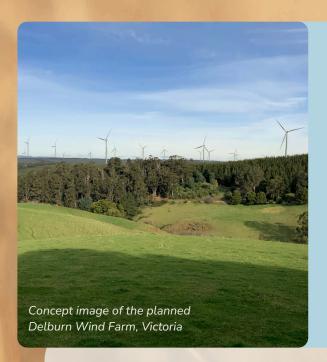
For example, a 300MW wind farm at the upper end of the landholder payment range could see the host landholder(s) paid \$1.95 million annually, or \$58.5 million over a 30-year contract. At the beginning of the range, the landholder(s) would receive \$1.65 million annually, or \$49.5 million over 30 years.

### FARMING WITH WIND AND POWER LINES

Susan Findlay-Tickner joined up with other farmers to create the Murra Warra Wind Farm in northern Victoria. For Susan, farming with transmission lines and wind turbines is now "business as usual".

"We've farmed under transmission lines for about 50 years and now we're farming around the wind turbines too."





## DELBURN WIND FARM: PROFIT SHARING WITH NEAR NEIGHBOURS

The <u>Delburn Wind Farm</u>, a joint venture between OSMI Australia and Cubico Sustainable Investments, will share \$500,000 directly with near neighbours of the project every year. The neighbour profit sharing will be indexed to inflation for the life of the project.

### PAYMENTS TO LANDHOLDERS OVER THE PROJECT LIFECYCLE

While not every proposed project will become an actual wind or solar farm, landholders receive payment for the early stages of feasibility assessment regardless of the project progressing. The figures in this report relate only to constructed projects and do not include payments during the prospecting and development stages (stages 1 and 2 below). Payments during these phases are additional to the figures quoted in this report.



A renewable energy company and landholder will agree to a 'license to access', including an annual payment. Landholders may also receive a one-off bonus payment for entering into an access agreement. An access agreement allows a developer to assess whether the project will be viable, which usually involves erecting a meteorological mast to measure wind speeds, or a pyranometer to measure irradiation (the amount of solar energy received at the site). The developer will also conduct a range of surveys including assessments of biodiversity and cultural heritage.



The renewable energy company and landholder will execute an 'option to lease', again including annual payments to the landholder. The landholder may also receive a bonus payment for entering this phase. At this stage the developer will lodge a development application with state and/or federal government agencies for assessment.



If planning permits are granted and the project reaches final investment decision, the renewable energy company and landholder will enter a contract of up to 30 years that sets out annual landholder payments.

These are the landholder payments included in this report.

## Contributions to regional communities and councils

Renewable energy projects deliver various economic benefits to regional communities. They contribute to the economic vitality of regions by stimulating local economic activity, employment and value-added contributions to gross regional product. They also make direct contributions to host communities through community benefit funds, First Nations benefit funds, neighbour benefit schemes, and payments and/or voluntary contributions to local councils. Our analysis shows that these contributions will be worth \$213 million by 2030, \$958 million by 2040, and \$1.9 billion by 2050. (See methodology on page 11).



**Community benefit funds.** These involve a portion of the financial proceeds of a project being directed towards initiatives that support positive outcomes for the local community, e.g. facility and infrastructure upgrades, support for local events and community groups, or training and scholarship opportunities. Funding allocation is typically informed by a community reference group.



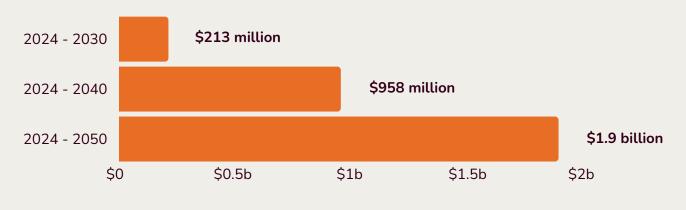
First Nations benefit funds. Similar to community benefit funds, these funds involve social investment tailored to the needs and priorities of local First Nations people.



**Neighbour benefit schemes.** These may include direct payments to neighbours, reduced electricity bills for nearby homes (e.g. via rooftop solar installations, bill subsidies or energy efficiency upgrades), or direct investment/equity sharing schemes.

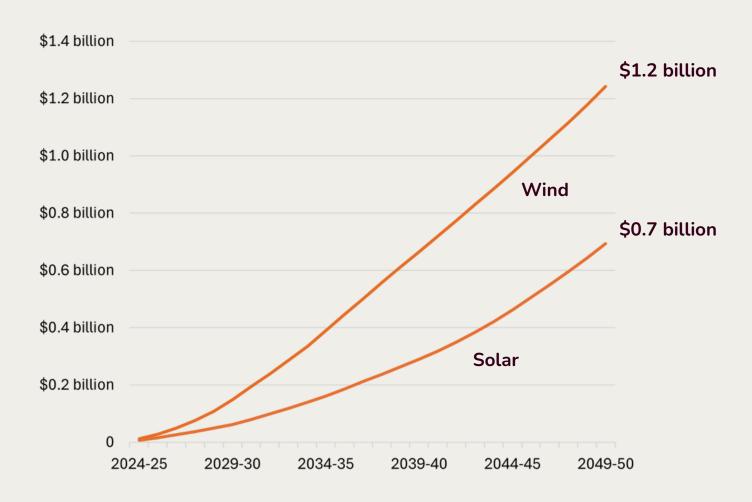


Payments and/or voluntary contributions to local councils. These payments contribute to the financial health and resilience of local governments and support the delivery of local public services, infrastructure upgrades and community projects. These payments are voluntary in some states, and in the case of large wind farms may exceed \$1m p/a.



Expected contributions to regional communities and councils

## Expected contributions to regional communities and councils, 2024-2050



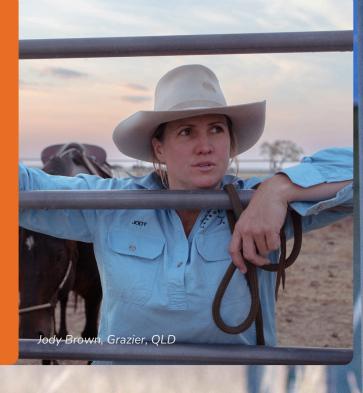
## SAPPHIRE WIND FARM: PIONEERING COMMUNITY CO-INVESTMENT

The <u>Sapphire Wind Farm</u> near Glen Innes, NSW, now owned by Squadron Energy, pioneered Australia's first community investment scheme for a commercial wind farm. Those living close to the wind farm were invited to invest in the project for as little as \$1250. The community jumped on board, collectively investing \$1.8 million. Investors earn returns of 6 per cent per annum, paid quarterly.

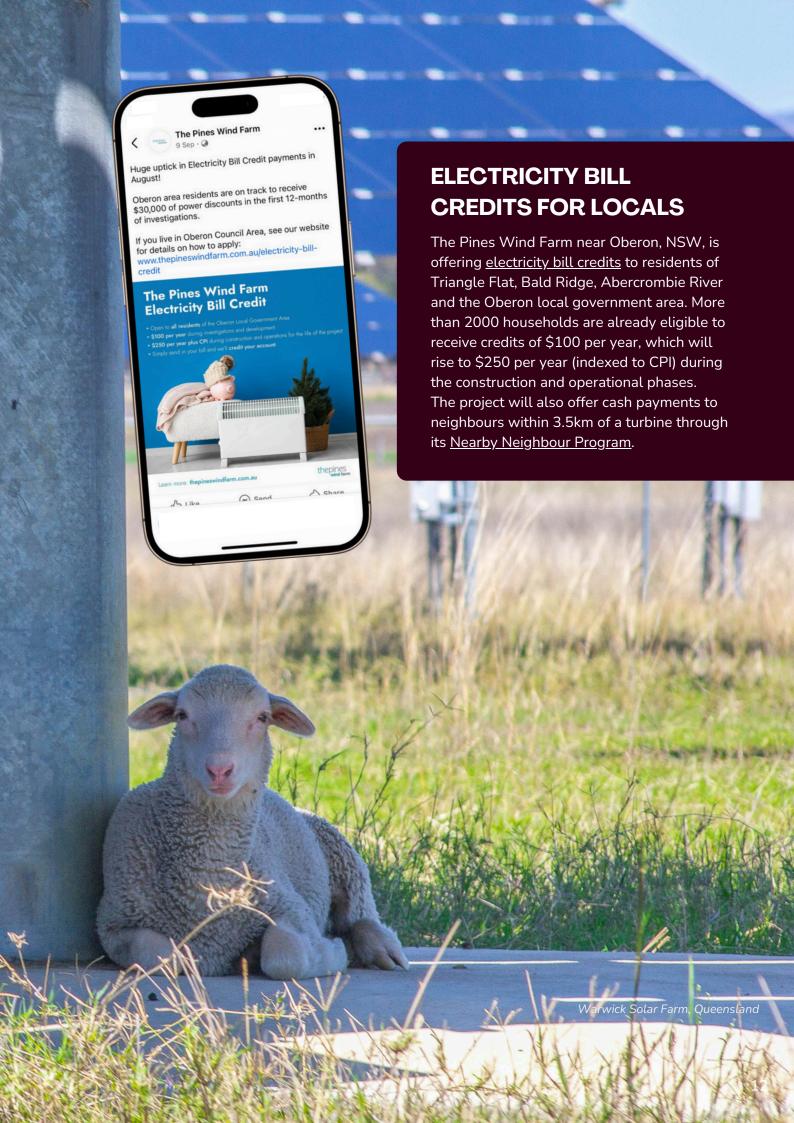




Modelling by the <u>Regional Australia Institute</u> shows that the increase in large-scale solar and wind projects across the National Electricity Market could result in a value-added contribution to gross domestic product (GDP) of more than \$25 billion by 2030. When including flow-on supply chain and consumption effects, the Regional Australia Institute calculated that the total national economic output from this renewable energy investment would be over \$68 billion.







### Methodology

#### ESTIMATING FUTURE WIND AND SOLAR CAPACITY ACROSS THE NEM

The Clean Energy Council and Farmers for Climate Action have estimated direct financial payments to host landholders by multiplying average per MW project payment rates by the forecast installed capacity of renewable electricity generation projects across the National Electricity Market (NEM).

The Australian Energy Market Operator's <u>2024 Integrated System Plan (ISP)</u> provides projections for large-scale wind and solar capacity across the NEM each year from now until 2050. The NEM stretches from Queensland down to Tasmania, and across to South Australia. It does not include Western Australia and the Northern Territory, some isolated grids in the eastern states, or off-grid projects.

For the purposes of this analysis we have taken expected capacity figures from the Optimal Development Path (CDP 14) of the ISP's Step Change scenario - considered by AEMO to be the most likely scenario. Under this path, the NEM is projected to grow from 13 GW of onshore wind capacity in 2024-25 to 59.5 GW in 2049-50, and from 9.5 GW of utility-scale solar capacity in 2024-25 to 58.3 GW in 2049-50.

Predictions of payments to landholders, regional communities and councils would be higher if non-NEM projects, and/or payments to landholders during the prospecting and development stages, were included. Therefore this report presents a likely underestimate of total landholder payments and contributions to regional communities and councils across Australia.

#### **ESTIMATING LANDHOLDER PAYMENTS**

The Clean Energy Council and Farmers for Climate Action have estimated payment rates per MW of capacity by consulting Clean Energy Council members and verifying these figures with other stakeholders and publicly available information. For wind farms we assume a range of \$5500-6500 per MW. For solar we assume a rate of \$750-1250 per hectare, and an installation density of two hectares per MW, providing a range of \$1500-2500 per MW.

#### ESTIMATING CONTRIBUTIONS TO REGIONAL COMMUNITIES AND COUNCILS

Average rates of \$1050 per MW for wind, and \$850 per MW for solar, are based on figures provided by Clean Energy Council members and verified using publicly available information. These figures also align with the figures specified in the <a href="New South Wales Benefit Sharing Guidelines">New South Wales Benefit Sharing Guidelines</a> published in November 2024.

These figures do not include contributions to local infrastructure and services through state government schemes or fees such as the access fees charged to renewable energy companies for projects in NSW Renewable Energy Zones. These schemes provide an additional mechanism through which renewable energy companies contribute to local infrastructure and services, on top of the contributions included in this report.

### Summary of figures included in this report

	Capacity (GW)		<b>Landholder payments</b> Cumulative from 2024			Contributions to regional communities and councils Cumulative from 2024			Grand Total		
	Wind	Solar	Wind	Solar	Total	Wind	Solar	Total			
Queensland											
2030	10.6	5.0	\$191- 225m	\$29-49m	\$220- 274m	\$36m	\$17m	\$53m	\$273-327m		
2040	18.1	12.1	\$1.1-1.3b	\$171- 284m	\$1.2-1.6b	\$206m	\$97m	\$302m	\$1.5-1.9b		
2050	21.3	24.1	\$2.2-2.6b	\$450- 750m	\$2.6-3.3b	\$413m	\$255m	\$668m	\$3.3-4.0b		
New South Wales											
2030	13.4	12.6	\$229- 271m	\$60- 100m	\$290- 371m	\$44m	\$34m	\$78m	\$367-449m		
2040	18.1	14.3	\$1.2-1.4b	\$260- 433m	\$1.4-1.8b	\$221m	\$147m	\$368m	\$1.8-2.2b		
2050	19.8	21.2	\$2.1-2.5b	\$540- 900m	\$2.7-3.4b	\$409m	\$306m	\$715m	\$3.4-4.1b		
Victoria											
2030	9.1	2.1	\$223- 264m	\$15-24m	\$238- 288m	\$43m	\$8m	\$51m	\$289-339m		
2040	9.2	3.1	\$742- 877m	\$55-91m	\$797- 968m	\$142m	\$31m	\$173m	\$969m-1.1b		
2050	9.3	7.7	\$1.2-1.5b	\$143- 238m	\$1.4-1.7b	\$235m	\$81m	\$316m	\$1.7-2.0b		
South Aus	South Australia										
2030	4.1	1.4	\$101- 120m	\$7-12m	\$109- 132m	\$19m	\$4m	\$23m	\$132-155m		
2040	3.7	1.6	\$333- 394m	\$29-49m	\$362- 443m	\$64m	\$17m	\$80m	\$443-523m		
2050	5.5	5.2	\$600- 709m	\$93- 154m	\$692- 863m	\$115m	\$53m	\$167m	\$859m-1.0b		
Tasmania	Tasmania										
2030	2.1		\$41-\$48m		\$41-48m	\$8m		\$8m	\$48-56m		
2040	2.7		\$183- 216m		\$183- 216m	\$35m		\$35m	\$218-251m		
2050	3.6		\$370- 438m		\$370- 438m	\$71m		\$71m	\$441-508m		
NEM total											
2030	39.3	21.0	\$785- 928m	\$111- 185m	\$896m- 1.1b	\$150m	\$63m	\$213m	\$1.1-1.3b		
2040	51.9	31.2	\$3.5-4.1b	\$515- 858m	\$4.0-5.0b	\$667m	\$292m	\$958m	\$5.0-5.9b		
2050	59.5	58.3	\$6.5-7.7b	\$1.2-2.0b	\$7.7-9.7b	\$1.2b	\$694m	\$1.9b	\$9.7-11.7b		

Dollar figures rounded to the nearest million or 0.1 billion. Minor discrepancies may appear due to rounding.



Farmers for Climate Action, founded in 2015, is a not-for-profit movement of farmers, agricultural leaders and regional Australians working towards strong, opportunity-rich climate policies for farming communities.



The Clean Energy Council is the peak body for the clean energy industry in Australia. The CEC works to accelerate Australia's transition to a clean energy future, laying the foundations for Australia to become a clean energy superpower.

#### Contact:

info@farmersforclimateaction.org.au









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info@cleanenergycouncil.org.au









