Oceania Small-scale development

Power to the people

Community wind farms have been slow to take off in Australia, but that may be about to change

OLIVER WAGG
BRISBANE

Hepburn Wind Park

LOCAL PRIDE: Adults and children check out the two new arrivals at the 4MW Hepburn Wind Park, about 100km northwest of Melbourne

Community wind farms are no stranger to the US — where the sector is comparable to the size of the entire Australian commercial wind industry.

But Australia has been slow to jump on the community bandwagon. Low-cost electricity generated from the country's vast coal and gas reserves provides real challenges to the economics, while connecting windy but often remote regions to the national grid is difficult and expensive.

Enter the pioneers of the Hepburn Wind Park — Australia's first co-operative wind farm, about 100km northwest of Melbourne, Victoria.

Commissioned this week, nearly four years after the co-operative was registered, Hepburn's two 2MW turbines now supply enough electricity to power 2,300 homes — 300 more than are in the area.

The community-owned project moved from dream to reality in April last year, when Germany's REpower signed a contract to build the wind farm, and a final offer for 1.8 million shares was released. An investment of more than A$7.5m ($7.9m) from 1,000 members of the co-operative, coupled with a A$3.1m loan from the local Bendigo Bank and a A$975,000 grant from the state government provided the finance for the A$12.9m project.

Proponents say wind farms such as Hepburn make sense on two levels. Being embedded in the community means the approval process encounters less local opposition, and the economics of small- to medium-scale distributed generation is cost-effective.

"When citizens see a new wind or solar project, it shouldn't be from the sidelines," the founding chairman of Hepburn Wind Park, Simon Holmes à Court, tells *Recharge*. "They should see it from the front seat, where they have hitched their wagon to environmental and economic progress by investing."

Holmes à Court says Hepburn established a firm mandate from the community. "We never looked at the project purely as an internal-rate-of-return [IRR] hurdle. Our board was given the imperative by the community to build the wind farm. They're not looking for IRR," he says.

"We built for community return, AGL built for 'desal', and everybody else is sitting on their hands waiting for renewable-energy certificates to recover," Holmes à Court says, referring to AGL Energy's contract to supply electricity to a desalination plant in the state's southeast.

A study released in January by REShare, a European Renewable Energy Council project, supports the idea that local ownership goes a long way towards countering resistance. It found that people want to avoid environmental and personal harm; and they also want to share in the economic benefits.

"I don't think many Australians would believe this at the moment, but there's a 'sweet spot' at around 5-20MW for wind projects. Above that, you start incurring all kinds of costs that become diseconomies of scale," Holmes à Court says.

A number of commercial generators have been dismissive of community projects, but Hepburn does not see itself as a competitor. "We're not taking sites that large farms would do and we will only ever provide a small fraction of the total megawatt hours in the market," Holmes à Court says. "But what we do deliver in spades is social licence to operate."

Hepburn has paved the way for other medium-scale embedded generation projects, he believes.

"We have opened up a large part of the country to these types of projects. There are a lot of sites that would be passed over because they are on insufficient grid," Holmes à Court says. "But they tend to be insufficient for large projects — our production is of a scale of the distribution grid we are connected to."

The wind farm is on the distribution network, rather than the transmission grid, thus benefitting from a 10% uplift on spot-energy prices, a premium that rewards generation where it is most needed.

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Surprise as 6MW project gets green light

OLIVER WAGG

A proposal for a small wind farm in Victoria has unexpectedly passed state government scrutiny.

Planning Minister Matthew Guy approved developer Future Energy's plans for a three-turbine, 6MW wind farm in Chepstowe, 150km northwest of Melbourne, amid complaints over the tightening of planning regulations.

The coalition government's new policy will give residents within 2km of a proposed wind farm a right to veto the project, and will declare tourist areas and growth corridors off-limits.

Planned 16MW facility 'would be first step to regional system'

OLIVER WAGG

A six-month study has found there is enough support in New South Wales' New England region for a community wind farm.

The New England Wind Initiative is recommending eight turbines be built near Armidale, about 400km north of Sydney, giving the proposed 16MW project the potential to generate electricity for 25,000 people — almost half the area's residents. First, though, it has to raise A$30m ($31.7m).

"We have got a community here that very much believes in egalitarian values; a sophisticated community that wants to own its own energy source," says project co-ordinator Adam Blakester.

The aim is to establish a hybrid ownership, with a co-operative as the majority owner-operator alongside an unlisted public company.

Blakester says the wind farm would be the first step in creating a regional energy system governed by locals.

"That's quite a substantial first step and will require us to raise about A$30m. It sounds like a lot, and it is a lot of money, but that's about double the amount that people have invested in this part of the country in the past few years on small-scale wind and small-scale solar power," he says.

More than 1,300 people were consulted for the study.