

Regional Energy Hubs

Policy Brief

Why Regional Energy Hubs?

The Energy Transition

The transition to clean energy can achieve both social and environmental goals. While millions of Australians are able to access the benefits of solar and energy efficiency to help reduce carbon emissions and their electricity bills, currently renters, apartment dwellers and the lowest-income households are locked out of the renewables transition. To ensure a just transition, this needs to change.

Indeed there are a range of actors looking to participate and benefit from the transition to clean energy from farmers to local councils, community groups to small business. Unlocking the resources – land/roof-space, finance, staff time of these organisations will not only support them to manage their power bills, it will also build social and political support for the transition to clean energy in NSW.

The Regional Energy Hubs idea will provide the coordination, expertise and funding needed to implement clean energy initiatives that empower and benefit, locked out energy consumers, regional communities, farmers and a range of other local energy actors.

Market failures

The market alone is not delivering clean energy solutions to locked out energy users. These users face substantial market barriers, including:

- Split incentives faced by renters - whereby neither landlord nor tenant accrues sufficient benefit from installing solar or energy efficiency measures to warrant doing so, leaving renters with ever higher energy bills.
- High upfront costs - low-income households typically cannot afford the outlay for many clean energy measures, although they would save money. Available finance products are typically not appropriate as either the interest rates are too high or the low-income household is not eligible due to credit-rating issues.
- Complexity, confusion and imperfect information – the clean energy industry is relatively new and as such there is understanding of what constitutes a good product or service. In addition, Australia's energy retailers are trusted less than the big banks (The Guardian, 2015). Households, businesses and other actors wanting to participate in the clean energy revolution are therefore unsure of who to turn to for good advice.
- High transaction costs – the models that have been developed to address these previous market barriers such as Darebin Solar Savers or the Pingala Remote Aboriginal Communities project, are more complex business models with multiple partners organisations. Multiple partner organizations add transaction costs, which in turn means these models are more expensive for end users. In addition these models require a duty of care to vulnerable households and require significant face-to-face time to build trust.

Regional Energy Hubs will help deliver initiatives to overcome these exact barriers by bringing together and coordinating community engagement specialists, technology providers, ethical finance providers and social entrepreneurs.

Social licence

With the renewable energy boom underway in NSW, there is huge potential to increase the social impact of renewable energy projects. To do this requires a more sophisticated approach to

community engagement and benefit sharing, brokering partnerships between renewable energy developers and the local community.

Regional energy hubs could play the role of broker between communities and developers, establishing projects that the community supports, is appropriate and the community can invest in and benefit from financially.

This is the type of sophisticated approach that is needed to grow social licence in the renewable energy sector in NSW.

What is a regional energy hub?

Regional Energy Hubs are regional organisations, that leverage the efforts of existing community energy volunteers, willing contributions from the private sector, community enthusiasm for renewables and government funding, to support all Australians to access innovative and emerging energy technologies such as solar and battery storage.

To start off, these Hubs would have funded staff with technical, legal, community engagement and finance expertise working to develop partnerships with councils, funders, technology providers and other stakeholders to deliver a range of new renewable energy business models that would deliver a just and speedy transition to clean energy. They would also provide support and advice to local actors such as farmers, community energy groups, small business and more.

These Hubs would be connected to regional institutions such as councils and regional development organisations and would deliver programs that were relevant to their region. The Hubs would also be connected through a state-wide and ultimately national network, to ensure that the lessons learnt in one region do not have to be re-learnt elsewhere.

Landcare for Clean Energy

The Regional Energy Hubs can be thought of as Landcare for Clean Energy. The National Landcare program that the NSW Government has supported for more than 25 years, consists of 56 NRM organisations, supporting thousands of volunteer Landcare and Coastcare Groups, connected by a National Landcare Network.

The opportunity that a similar program in the local clean energy space presents, is greater opportunities for co-funding and financing. That is for the Regional Clean Energy Hubs to become more financially self-sufficient over time.

How could a Regional Energy Hubs program be delivered?

We envisage a Regional Energy Hubs program being set-up in two phases:

- Phase 1 – piloting three Regional Energy Hubs for 2-years
- Phase 2 – scaling up operations at these three pilot hubs and establishing seven additional Hubs across NSW

We see the Regional Energy Hubs program being complimented by an ongoing community energy grants program.

Phase 1 – 2017-2019

We propose that as part of the next phase of the NSW Climate Change Fund, \$3.5million be allocated in the next two years to pilot three Regional Energy Hubs.

We propose that these three pilot Hubs be located in the Northern Rivers, the New England and the Shoalhaven/Monaro region. These are hotspots of community energy and broader renewable energy activity and are also politically relevant.

The proposed outcome of these two year pilots would be:

- Three functioning regional energy hubs, with a well established governance structure
- At least one successful new clean energy initiative/project in each of the three regions

- A solid business plan, for how the Regional Energy Hub will secure matching funding in the 2-3 following years.

Suggested budget

Item	Amount
Regional Energy Hub staff and core costs	\$500k/hub
Energy project funding	\$200k/hub/year for 2 years
State-wide network funding for capacity building, resource development and info sharing	\$400k/year for 2 years
Total	\$3.5million

We also suggest that this could be something that the Federal Government or ARENA might be interested in partnering on.

Phase 2 – 2019 onwards

In Phase 2 of the Regional Energy Hubs program, we envisage three streams of work:

1. Providing matching funding to the established three Regional Energy Hubs, if they have successfully achieved the stated outcomes of the program outlined above.
2. Establishing seven new pilot Hubs across the state, including at least one in Sydney. These should similarly receive \$500k for two years set-up plus energy project budget and then be eligible for matching funding after 2-years.
3. Continue to resource and participate in a state-wide network to support the 10 Regional Energy Hubs and grow the capacity of hopefully hundreds of local energy initiatives, projects and groups (see the grants program outlined below).

This approach to developing a Regional Energy Hubs program builds on the excellent work of the Regional Clean Energy program and grows the sophistication of support for community and local energy in NSW. We hope that the Regional Energy Hubs program can be even more successful and long-lasting than Landcare has proven to be.

Community Energy Grant Program

Building on the Growing Community Energy Grant Funding Program, Community Power Agency proposes that the NSW Government establish an ongoing grant program with more regular funding rounds to support innovative local and community energy projects across the state, not only in the pilot Regional Energy Hub locations. We suggest that the grant program should be structured into three areas:

1. Funding for **community energy pre-feasibility/feasibility studies**. This would be for community energy groups and potentially other local energy actors such as farmers to access funding to determine whether their project ideas are feasible, technically, socially and financially. These grants should be capped at \$30-50k per project and may be as small as \$10k per project.
2. Funding should be made available to **develop new models of community energy**. This would be for groups or organisations that have a proven track record in delivering successful community or socially beneficial energy initiatives, who have an idea for a model that is not currently operating in NSW. Funding should be capped at \$150k per new model.
3. Finally funding should be made available to consortiums of organisations to develop and implement **Zero Net Energy community plans**. Building on the success of the Zero-Net Energy Town Blueprint for Uralla, there are communities across NSW that are looking to become more energy self-sufficient and carbon neutral. We suggest that NSW make grant funding available to support these communities to develop and implement plans to move their community to zero-net energy/emissions. Funding should be capped at \$400,000, with work likely to be needed over at least 3-4years.

Grant funding in categories 2&3 should be milestone based, with funding only released when milestones are achieved.

Program Costs

In total we envisage the Regional Energy Hubs and community energy grant programs costing \$16.6million over four years and \$49.6million over 10 years. Community Power Agency will be advocating for the set-up of the Regional Energy Hubs program both in NSW and nationally. As such we could envisage in the future some of this funding commitment coming from the Federal Government.

Further, modelling conducted by [Marsden Jacobs and Associates](#) suggests that the project funding provided would leverage between \$10-\$17 of community investment in clean energy for every \$1 of government spending. Matching funding requirements in the operation phase of the Regional Energy Hubs would require *at least* \$1 of matching fund for every \$1 of government funding and this does not include the thousands of volunteer hours that will be leveraged through the program.

In addition the Network would be tasked with developing an impact assessment online tool that would show real-time the financial, emissions, energy and social impact of this program.

Suggested budget

Item	Amount 4-years	Amount 10-years
Regional Energy Hub Set-Up	\$7,000,000	\$7,000,000
Regional Energy Hubs Matching Operational Funds	\$2,100,000	\$23,100,000
Grant funding program*	\$5,900,000	\$15,500,000
Regional Energy Hubs state-wide network	\$1,600,000	\$4,000,000
Total	\$16.6million	\$49.6million

*This is based on an assumption of funding approximately 100 feasibility studies, 30 new models and 15 community Z-NET plans over 10years.

For more information:

Contact Nicky Ison – nicky@cpagency.org.au, 0402 0345 80.