

Fixing the Electricity Market for Community Energy Projects

Report on the Community Energy Congress – Canberra, June 2014

Introduction

I recently had the pleasure of attending the [Coalition for Community Energy's](#) inaugural event, the [2014 Community Energy Congress](#), held in Canberra in the middle of June 2014. Representing Gippsland's Energy Innovation Co-operative, and funded by [Sustainability Gippsland](#), I went along to the two-day event to gain insight into the current state of play in the community energy sector, as well as to get ideas and develop the necessary skills and networks to help facilitate community energy projects here in Gippsland. In this report I will share some of my learnings from the Congress.

As there were three of us attending the event on behalf of Sustainability Gippsland, as well as others from across Gippsland, who all will hopefully share their insights publicly here and elsewhere, I will focus on the areas of interest to me, and to the sessions I attended at the Congress. Given my background in energy policy and advocacy, this was predominantly around issues associated with the National Electricity Market (NEM). This includes the relationships a community energy project necessarily has with the NEM and the National Electricity Rules – which govern how the Market operates – as well as other NEM participants, such as the distribution businesses who operate the poles and wires which deliver electricity to our homes (IE: SP Ausnet across Gippsland) and the energy retailers who buy and sell energy within the market.

The National Electricity Market and Community Energy

Any electricity-focussed community energy project will have to deal with the National Electricity Market in some way or other. At the moment, the National Electricity Rules (the Rules), are heavily biased towards the incumbent businesses and structures, making it difficult for new and innovative industries or approaches to electricity generation, such as community-owned energy, to break into the market. However a number of rule change proposals are either currently before the [Australian Energy Market Commission](#) (the rule-maker) for consideration or are under development.

Community energy is typically relatively small in size in comparison with the large electricity generators like coal-fired power stations. Such small to medium generators are often located within, and connected to, the distribution network (the local poles and wires delivering electricity to homes and businesses) rather than being connected to the large transmission networks (those that deliver electricity over long distances from remote power stations to areas of demand). Thus they are termed 'embedded generators' (IE: embedded within the distribution network).

Probably the key areas of reform needed are for greater incentives (carrots) as well as greater penalties (sticks) to ensure that the distribution businesses both consider embedded generation as an option when dealing with areas of 'constraints' within the network – rather than the more expensive option of just banging in more poles and wires as they have traditionally done – as well as making it cheaper and easier for embedded generators to connect to the grid.

Simon Holmes a Court from the community-owned [Hepburn Wind](#) project, highlighted this problem when he outlined that their estimates for connecting to the grid in the planning stage of their

project, based on consultants advice as well as advice received from the local distribution business, was to be in the order of \$200,000. However, when the time came to do the work, it ended up costing them \$2 million. This, along with delays by the distributor and the inherent power imbalance between a community energy group and a distribution business, nearly sent the project to the wall.

Given that the cost of delivering electricity (IE: the cost of the networks) makes up nearly 50% of a typical electricity bill, anything that can defer spending money on more poles and wires will ultimately save customers money. Generating electricity near the point of consumption will do exactly that, as well as having the added benefit of typically being a lot cleaner than the larger centralised coal-fired power station that is the alternative. However, under current arrangements, the incentives sit squarely with the distribution businesses continuing down the current path of building more network infrastructure to address constraints in the network, and putting up obstacles to proponents who offer alternatives.

Proposed Changes

One of the most active participants in this space is the [Total Environment Centre](#) (TEC), and they have an excellent summary of both the NEM and the problems with it on their website, as well as a list of Rule changes they are actively involved with or are developing.

A number of Rule change proposals and recently achieved Rule changes along these lines were outlined at the Congress by Mark Byrne from the TEC, Alicia Webb from the Clean Energy Council (CEC) and Craig Memery from the Alternative Technology Association (ATA). These include:

- [Demand Management Incentive Scheme Changes](#), forcing distribution businesses to better consider alternatives to network-building
- [Regulatory Investment Test for Distribution](#), establishing a clear planning pathway for distribution businesses, enabling others to join in
- Changes facilitating the connection of embedded generators, such as [one currently under consideration](#), proposed by CEC, making it simpler for small to medium generators to connect to the grid
- [Network tariff reform](#), affecting how we pay for energy
- [Small Generator Aggregator](#), reducing barriers faced by small generators to operate in the energy market

While clearly these are too numerous and probably too complex to delve into here, it was great to hear of so much activity in this area – one that has traditionally been a huge barrier to community energy in Australia.

A further proposal being developed by TEC involves creating pathway for individuals and businesses purchasing electricity from a local embedded generator to allow them to avoid paying for large parts of the electricity network that they are currently not using. At the moment, if I were to buy electricity from a neighbourhood community-owned solar electricity farm or wind turbine, I would have to pay for use of the network as though my electricity was coming from a remote power station hundreds of kilometres away – even though it would be coming from just around the corner and only using only a fraction of that network. The alternative arrangement being pursued by TEC is called [Virtual Net Metering](#), which would rectify this problem, allowing individuals to effectively only

pay for the network they actually use, further enhancing the economics of embedded generation and community energy.

While many of the above proposals and ideas are focussed on overcoming barriers faced by embedded generation, there was also some coverage at the Congress of some existing opportunities for local energy proponents. Specifically, distribution businesses are already required to publish Distribution [Annual Planning Reports](#), which highlight constraints within their networks, as well as the company's planned approach to addressing these constraints.

Considering these reports, along with the distribution businesses' mandatory [Demand Side Engagement Strategy](#) – which outlines how the company plans to consider and engage with proponents of alternatives to building more poles and wires – can be a useful strategy to propose and negotiate embedded generation alternatives to more expensive poles and wires. In this way, a local community energy proponent could work with their local distribution businesses to develop an idea for a project that addresses an existing need in terms of a constraint within the network.

The Future

If all of the above changes which are currently proposed or under development are adopted, the future for community energy will be significantly improved. While a number of additional barriers still exist, the amazing energy and enthusiasm on display at the Congress, as well as the depth of knowledge and professional understanding of both individuals and organisations active in this space proudly on display across the two days, means that the gathering momentum for community energy can only accelerate. Following the Congress, I believe we will see a number of projects spring up around the country in next few years, and I feel far more confident than I did beforehand that community energy is on the cusp of something big.

Our challenge is to harness local passion, knowledge and enthusiasm to develop projects of our own, and to engage actively with the community to ensure that we have broad community support. In doing this we can be sure that we are up there with the leaders in community energy project proponents in the country.

If you would like more info on the Congress, many of the presentations including some of those mentioned above, as well as some additional information is now available on the [C4CE Congress Harvest website](#). Check it out.

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Energy Innovation Co-operative

<http://eico-op.com.au/>

<http://sustainabilitygippsland.com/group/energy-innovation-co-operative-ltd>