

SUBMISSION TO QUEENSLAND PRODUCTIVITY COMMISSION (QPC) DRAFT REPORT INTO ELECTRICITY PRICES IN QUEENSLAND.

INTRODUCTION

The Community Power Agency¹ and Energetic Communities² welcome the opportunity to make this submission into the QPCs Draft Report into Electricity Pricing in Queensland. The broad Terms of Reference allow the Commission to recommend a range of equitable cost reduction options. In particular we support the acknowledgement of the role of Community Energy Business models, the need to address low-income households and vulnerable communities and the opportunity presented by supporting the AER rule change for local generation network credits, which would in turn help enable local energy trading. Specifically, we recommend that the Queensland government develop programs and support innovation in new social enterprise business models that increase access to clean energy for low-income households, renters, apartment dwellers and homeowners without solar access and members of the broader community. It is the lowest income households that miss out on opportunities to access the renewable energy technologies that we need.

To that end, we submit with this submission several business models, research reports and briefings. Many of these opportunities come from the Renewables for All³ (R4A) project, led by the Community Power Agency.

COMMUNITY ENERGY

Section 11 of the Draft Report refers to third parties that may be able to play a role in local electricity supply. We support Draft Recommendation 41 that *the Queensland Government should identify, and where appropriate remove, state-based barriers to local options for third party supply of electricity, to support cost effective energy supply.*

An example of this is Community Energy, which refers to renewable energy projects that involve significant levels of community participation and/or ownership, and who initiate, develop, operate, own and benefit from the project. Collectively community energy can include energy generation, efficiency, conservation and management projects and includes Community-Owned Renewable Energy (CORE) projects. Community energy projects can range from small, embedded generators to whole isolated grids. They are generally of the size of 10's of kW to 10's of MW, thus filling in a current gap of renewable generation size. It is an approach that requires relatively small investment but delivers impressive outcomes through the mobilisation of volunteer effort, local economic development and community investment.

There are several business models that fall under the banner of Community Energy, including both donor models and community investment models that have successfully been commissioned in

¹ <http://cpagency.org.au>

² <http://energeticcommunities.org.au>

³ <http://cpagency.org.au/renewables-for-all-resources/>

Australia. We refer you to the National Community Energy Strategy⁴, and in particular to both Appendices D and E⁵.

Community energy projects offer a range of benefits including:

- Engaging and educating the community about renewable energy and energy efficiency;
- Enabling renters and apartment dwellers to invest in and benefit from renewable energy; and
- Providing strong regional, economic, environmental and social development benefits, including reducing greenhouse gas emissions and increasing community resilience.

We recommend the State Government follow other states and support the development of community energy sector by providing funding to

- develop the sector support systems needed to fast track existing community energy projects; and
- establish a Queensland Community Energy Grant Funding Programme, similar to those in NSW and Victoria.

These initiatives and supporting policy mechanisms as detailed in the attached Policy Briefings would provide an effective and cost-efficient pathway to support low-income and vulnerable community to access renewable energy and stimulate community energy.

We have included our CORE Briefing with this submission.

SOCIAL HOUSING, RENTAL AND LOW INCOME HOUSEHOLDS

Social housing tenants, some renters and others on low incomes pay a larger proportion of their incomes on energy, many paying fixed charges for both Gas and Electricity if serviced by both energy supplies. The Queensland Department of Housing and Public Works currently sees itself as supplying housing and not energy, even though with stronger sustainability policy they could potentially supply cheaper energy for their tenants, reducing their costs of living through genuine reductions in the fixed costs of supply networks.

There are several Financing models to support Social Housing tenants and landlords. These target the market failure of upfront capital for low-income households and credit ratings.

Rent Based Financing

Repayment through rent refers to a model that specifically applies to community/social housing providers that would allow them to collect repayment for renewable energy or energy efficiency upgrades through their tenants' rent. A key is to ensure the rental increase is less than the reduction in electricity. To enable rent-based financing for clean energy the following policy measures are needed:

- Facilitating and supporting the development of pilot projects with community housing providers (CHPs)
- Co-funding capital costs of renewable energy or energy efficiency technologies

⁴ <http://c4ce.net.au/nces/>

⁵ <http://c4ce.net.au/nces/the-nce-strategy/10-appendices-and-additional-information/>

- Help broker relationships between community energy groups (Community Broker) and other key stakeholders working in the field and CHPs. Renters only deal with the Community Broker, ensuring they don't have to deal with several organisations simultaneously.

An example of this last point regarding brokers is organisations such as the Moreland Energy Foundation⁶ (MEFL) in Melbourne, who brokered the Solar Savers⁷ program on behalf of Darebin City Council. These may be NGO's such as QCOSS or Energetic Communities that operate in the community and energy space, rather than state or local government owned organisations. Using such organisations increases trust and social license for participants. While Solar Savers is a rate-based mechanism, the community broker idea remains.

We have included our Rent Based Financing Briefing with this submission.

On-bill Financing

On-bill financing refers to where energy upgrades and installations are paid for through customer billing. It is acknowledged that these mechanisms add an extra layer of complexity and potentially puts more risk on the already vulnerable customer. Nonetheless, it allows a resident to invest in a clean energy upgrade for their home for no money upfront, as finance is provided via the utility (energy or water) company who collects repayments via the utility bill. Currently, however, on-bill financing in Queensland may only be made possible through changes to electricity tariff categories, approval from QCA and/or clarity around the National Electricity Retail Law. Repayment is tied to the electricity meter identification number, and therefore the finance could be easily passed on to the following household if the occupants move out (and easier to manage in Ergon areas). While behaviours might change, all future occupants will benefit from efficiency or clean energy upgrades.

The attached Queensland Discussion Paper discusses on-bill financing in Section 3.4.

LOCAL GENERATION

Rule Change – Local Generation Network Credits and Solar Gardens

The proposed AEMC rule change for Local Generation Network Credits (LGNCs), would allow local embedded generators and Solar Gardens to operate and reduce the opex and capex costs of the future network under some circumstances (e.g. voltage regulation, smoothing peaks and reducing load). Such changes will also support removing state based barriers to third party supply of electricity as discussed above. While the AEMC is limited in its scope (e.g. it cannot consider local energy trading or environmental and social benefits the rule change may have), it is strongly recommended that the Queensland government support the proposal in it's own submission to AEMC, supporting the intention of the original rule change proposal. This is an important rule change allowing alternative business models, potentially increasing the role of local governments and significantly increasing opportunities for local generation helping achieve the state governments 50% renewable energy target.

⁶ <http://mefl.com.au/>

⁷ <http://www.embark.com.au/display/public/content/Darebin+Solar+Savers+model+description;jsessionid=A495BCCF2F076BAE6A461DE885C3FA09>

While acknowledging this is a national issue, the National Electricity Objective (NEO) currently excludes environmental considerations, leading to inefficient outcomes as different policies are pulling the energy system in different directions. As such, a change to the NEO to include social and environment outcomes will assure a strong alignment between climate and energy policy, and further ensure rule makers consider the most optimal outcomes for system reliability and safety, environment and a low cost energy system.

Energy Trading

Network benefits are not the only consideration in supporting local generation. We also recommend that local energy trading is supported through developing policy for Virtual Net Metering, in which the non-network component is traded, leading to a more competitive market, better environmental outcomes and increased fairness and equity in supply. This will broaden opportunities beyond behind-the-meter projects. Energy trading can occur using one-to-many or many-to-one business models.

There is currently research being completed, including running trials of exactly how this will work, through Institute of Sustainable Futures (ISF)⁸. While building private wires is one option, this may be duplication of existing grid, and thereby also reducing the impact of customers potentially leaving the grid, as well as potentially reducing the more resource intensive option of using battery storage. Byron Bay is also trialling Energy Trading between two neighbouring facilities⁹.

We have included the ISF study, *“LNCVNM Renewable power options enabled by LET FINAL”*.

Reverse Auctions

We also recommend that the Queensland State Government set aside 5MW of Reverse Auctions for community energy groups. The Australian Capital Territory is currently running a program of Reverse Auctions and has set aside 1 MW for community energy projects. It is recommended that the Queensland government undertake a similar program of reverse auctions that are only available to community energy groups. Reverse auctions support several of the terms of reference of this inquiry and increase social licence and support of the community:

- a competitive electricity market (by allowing more players entry into the industry);
- productivity growth in the energy industry and among energy users by choosing the lowest cost energy opportunities;
- efficient investment and operation of electricity infrastructure (facilitating community investment through community owned energy business models);
- environmental outcomes;
- fairness and equity (through offering opportunities to a wider section of the community and keeping the economic returns in those communities); and
- minimising impacts on vulnerable customers (through allowing community members access to investment they couldn't previously access);

⁸ <https://www.uts.edu.au/research-and-teaching/our-research/institute-sustainable-futures/news/building-level-playing-field-0>

⁹ <http://reneweconomy.com.au/2015/nsw-government-confirms-byron-solar-energy-trading-trial-89650>

Fixed and Demand tariffs

The use of community owned generators to defer upgrades or allow expansion of loads without placing additional loads on the network infrastructure is now possible. Many air conditioners have load control capability under AS4755. By using low cost and reliable control systems, load automation combined with local generation and storage, the utilisation of the network can be increased dramatically and the risks of supply interruptions mitigated. Currently there is no tariff that adequately recognises and rewards these attributes.

COMMUNITY SERVICE OBLIGATION (CSO)

While we support the intention of the CSO, it can be done differently to enable the new business models that can be more cost effective and allow greater participation from the community. In it's current form the CSO inhibits community energy and local generation.

We support the notion of making the CSO available to all retailers to improve competition. As such, we recommend that the headroom component only remain if competition is opened up. However, there may be options where it's cheaper to isolate grids around smaller regional towns¹⁰. In fact, the Institute of Sustainable Futures (ISF) is currently looking at where network constraints make not network solutions more viable¹¹. Perhaps investigating if the economics of alternatives to the CSO makes more sense in these areas.

ATTACHMENTS

- Renewables For All - Policy Briefings
 - Renewables For All - Policy Briefing - CORE.pdf
 - Renewables for All - Policy Briefing - Rates Financing.pdf
 - Renewables For All - Policy Briefing - Solar Gardens.pdf
 - Renewables For All – Policy Briefing - Mini-Grids.pdf
 - Renewables for All – Policy Briefing - Rent-based Financing.pdf
- Renewables for All Queensland Discussion Paper
- Renewables for All Policy Briefing_A Priority Energy Policy Agenda for Queensland_final.pdf
- LNCVNM Renewable power options enabled by LET FINAL

MORE INFORMATION

For more information please contact:

Luke Reade, President, Energetic Communities. M: 0413 114 860
E: luke.reade@energeticcommunities.org.au

Nicky Ison, Founding Director, Community Power Agency M: 0402 034 580,
E: nicky@cpagency.org.au

¹⁰ <http://reneweconomy.com.au/2016/the-40-australian-towns-that-could-and-should-quit-the-grid-93813>

¹¹ <http://www.uts.edu.au/research-and-teaching/our-research/institute-sustainable-futures/our-research/energy-and-climate-1>