

QUEENSLAND RENEWABLE ENERGY & SMART ENERGY EFFICIENCY RECOVERY STRATEGY

Submission to Premier and Treasurer of Queensland & Portfolio Ministers

MAY 28, 2020



28 May 2020

Dear Premier and Ministers,

Firstly, please accept our congratulations on your leadership during these challenging times which has resulted in keeping as many of our fellow Queenslanders as safe and healthy as possible.

As attention turns to the economic consequences of the fight against the COVID-19 pandemic and how your Government responds over the longer term to the significant challenges that are before all of us, we present to you the following submission for consideration.

The participating companies in this initiative are representative of a discreet, but important segment of the energy sector in Queensland. We are Queensland companies that – often in partnership with universities - have either invested in the research and development of new, transformative technologies in renewable energy and energy efficiency or have a parallel interest in seeing these technologies integrated into energy networks and markets to drive Queensland's transition to a clean energy future and assist in the delivery of your Government's net zero target by 2050.

Many of the companies listed have in the past also benefited from your Government's support for the development of new, innovative technologies that will be critical to generating the economic and employment growth needed as Queensland's energy sector pivots away from utilising carbon intensive fossil fuels to meet the state's energy needs. Initiatives such as the range of Advance Queensland programs have been of particular and significant assistance over a number of years, in supporting the R&D programs of a number of participating companies.

As we have already seen, both federal and state governments have to date prioritised the dispersing of significant financial support to the community to maintain, as much as possible, employment and spending to support ongoing economic and business activity. All of these initiatives are important and very welcome. Attention is now turning to the next recovery phase where it is expected that more targeted initiatives will be needed to increase the amount of business activity across the economy.

To this end, it is noted that various renewable energy industry groups such as the Clean Energy, Energy Efficiency and Smart Energy Councils have made submissions to federal and state governments on what they consider are priorities for investment in the renewable energy and energy efficiency sectors in the current environment. We are supportive of these submissions but also believe a more bespoke suite of initiatives, relevant to Queensland's unique circumstances and geography, is also required.

As witnessed during the GFC, governments typically embrace initiatives that stimulate as much economic activity as possible from the allocation of funding across individual sectors. This is perfectly understandable. However, on occasions there are also unintended consequences from the way such initiatives are structured and delivered.

For example, should a renewable energy initiative be considered to boost economic activity and, if the past is any guide, it would be tempting to simply stimulate demand by providing subsidies to encourage the uptake of conventional residential rooftop solar and battery installations. Whilst this would be welcomed by rooftop solar companies, their contractors and employees that concentrate on comparatively small, residential-focused installations, the bulk of this stimulus would be captured by those businesses at the low-cost, high-turnover segment of the rooftop solar sector. This would leave those renewable energy technology companies, driving innovation and investing in research and development with typically higher overheads, to be uncompetitive under such a scheme.

Similarly, if stimulating the large-scale renewable energy sector is to be considered, it is important to appreciate, as the Reserve Bank of Australia recently observed, that large scale renewable energy projects

often have long lead times as “it can take several years for new projects to obtain development approvals and arrange finance”.¹

We believe there are alternatives that can meet the needs of not just the conventional residential rooftop solar and battery sectors but also that part of the industry that is driving innovation through the bringing to market of new technology solutions that will be the key for private and public sectors to meet declared net-zero emissions targets. We believe it is this sector where opportunities for long term job creation and export industry development across the residential, commercial and public sectors can be found.

Whilst components such as solar panels and wind turbines for renewable energy projects are typically sourced from overseas, the RBA also noted “there are spill-overs to domestic firms with some contacts suggesting that local content accounts for 25-40% of total costs – mainly in engineering, construction and installation services”. Local content will only be increased if more strategic attention is paid to the capabilities of and engagement with Queensland’s renewable energy and smart energy efficiency technology sector.

Further, as your Government already appreciates, the global automotive industry is going electric, and Australia needs to prepare the necessary infrastructure to support a growing EV fleet and encourage a faster transition. The accelerated roll out of public EV charging infrastructure can boost Queensland jobs and local economic activity. While Queensland leads the way with its EV Superhighway, addressing regulatory barriers can leverage large amounts of private sector investment into charging infrastructure.

The signatories to this submission acknowledge the suite of Queensland Government renewable energy and energy efficiency programs and initiatives already in place such as the ‘*Powering Queensland Plan*’ and ‘*The Future is Electric: Queensland’s Electric Vehicle Strategy 2017*’ among others. This submission also complements and builds on the Queensland Government’s ‘*Buy Local Procurement Strategy and Policy*’.

We also note that it is nearly 4 years since the release of Government’s ‘*Credible pathways to a 50% renewable energy target for Queensland*’. Given the extraordinary economic challenges we face and the opportunities that we currently seek, a refresh of this report - including an analysis of the role of new and emerging renewable energy and smart energy efficiency technologies - is both timely and, we believe, would provide additional job creating initiatives to support our economy and our community.

We look forward to your Government’s consideration of our Strategy. For further information, please contact the our Submission Co-ordinator, Mr Stephen Robertson – Director - Stakeholder Engagement & Strategy at Planet Ark Power. Stephen can be contacted at (e) stephen.r@planetarkpower.com – (m)0447 068 569.

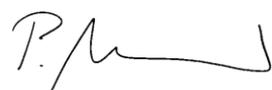
Yours sincerely



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¹ <https://www.rba.gov.au/publications/bulletin/2020/mar/renewable-energy-investment-in-australia.html>



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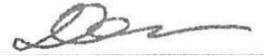
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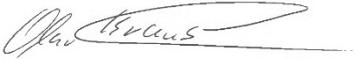
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A Queensland Renewable Energy and Smart Energy Efficiency Recovery Strategy

- **Renewable Energy and Smart Energy Efficiency Recovery Roadmap:**

The Queensland Government to lead by example and develop a RESEER Roadmap and include:

- conducting an audit of all government owned buildings and properties (including Government Owned Corporations) to assess the capacity for rooftops and underutilised land to host integrated solar/battery installations and opportunities for increased smart energy efficiency outcomes.
- developing a program to enable public building rooftops and unused crown land to be leased (typically 20-25 years) by 3rd parties to install integrated solar PV/battery systems and create a community of urban rooftop solar farms across Queensland.

- **Renewable Energy & Smart Energy Efficiency Recovery Program:**

Establish a RESEER Program and allocate at least 25% of funding for projects that showcase Queensland developed, renewable energy and smart energy efficiency technologies and solutions including EV charging solutions. The RESEER Program would provide financial incentives/grants for projects that include, but are not limited to: -

- supporting the financing of private schools and TAFE colleges to fund integrated rooftop solar/battery installations;
- supporting Energy Queensland, the Department of Housing and Public Works and local Councils to install medium to large scale integrated rooftop solar and batteries on public housing.
- sports clubs/to install medium to large scale rooftop solar/battery installations on medium sized sports stadiums and indoor sports centres where appropriate;
- support local governments to install medium to large scale integrated rooftop solar and batteries on council owned cultural, sports and recreation centres and Council halls, designated community safety and evacuation centres and other infrastructure;
- support Rural Fire and SES units to install DER on buildings/stations and provide an appropriate feed-in tariff from export of surplus energy for reinvestment back into equipment and natural disaster recovery resiliency.

- **Turbocharge the EV Roadmap:**

Increase targets for electric/hybrid passenger and commercial vehicles across state government and GOC fleets and provide funding to increase the penetration of EV stations across the state, enabling and integrating new and emerging innovative EV recharging technologies.

- **Accelerate the EV Superhighway:**

Drive reforms to address regulatory barriers including supporting the development and implementation of an EV fast charging tariff, standardised planning and connection agreements.

- **Strategic Procurement and Tendering:**

The Departments of Innovation and Public Works to:

- Jointly conduct education and training webinars for government and GOC procurement officers on new and emerging technologies, their benefits and how they might provide improved energy efficiency/ energy cost reductions and renewable energy uptake.

- Include provision of assessment of available new technologies/solutions in state government tender documentation to allow consideration of how new and emerging technologies might be integrated into renewable energy/smart energy efficiency projects.
- **State of the Queensland Renewable Industry Report:**
The Chief Scientist and Chief Entrepreneur to jointly report annually to Government on new and emerging technologies in energy efficiency, renewable energy and EV charging to inform both public and private sectors, with the first report to prioritise showcasing Queensland developed technologies, to be delivered to Government and released publicly by end of 2020.
- **Shining the Smart, Efficient Clean Energy Light on Queensland:**
Undertake a range of cost-efficient activities across Government to educate and promote the strengths and opportunities of Queensland's renewable energy and energy efficiency companies and research institutions: -
 - Encourage collaboration between Queensland renewable energy and smart energy efficiency technology companies and university partners to develop signature projects that can be showcased nationally and internationally.
 - Yurika to be given responsibility for immediately establishing a Renewable Energy Industry Advisory Committee and embrace a coordination role for combined new and emerging platforms that include renewable energy/smart energy efficiency/EV charging technologies and solutions. (NB: The recent Yurika/QIC announcement regarding the installation of rooftop solar on QIC owned shopping centres is an example where opportunities for innovative, integrated solutions appear not to have been considered.)
 - Yurika to be responsible for hosting (within 3 months) a series of webinars for state, national and, (with the support of Trade & Investment Queensland), international engineering and economic consultancies on the range of renewable energy and energy efficiency technologies emerging from the Queensland renewable energy sector and their university/research partners.
 - CleanCo to be responsible for hosting (within 3 months) a virtual conference and/or workshops to consider opportunities for aggregating renewable energy generation capacity across multiple DER sites in Queensland.
 - Queensland Treasury Corporation to host a virtual conference and/or workshops to consider existing and emerging financing arrangements/products and how they might be promoted across public and private sectors and to report to Government on opportunities by end of 2020.
- **Interdepartmental Regulatory Reform Committee:**
To be established by Queensland Treasury and the Department of Natural Resources, Mines and Energy with renewable and smart energy efficiency sector participation:
 - to identify regulatory/policy roadblocks and opportunities to the uptake of renewable energy and energy efficiency technologies and solutions in Queensland within the national regulatory framework overseen by the AER and other bodies.
 - This interdepartmental committee to develop an action plan within 12 months on a program of regulatory and policy reform.
- **Renewable Energy & Energy Efficiency inter-Departmental Taskforce:**
To commission and fund detailed economic and engineering assessments of opportunities to establish stand alone and grid-connected microgrids across: -

- DSDMIP’s portfolio of industrial and commercial estates;
- remote and island indigenous communities to increase knowledge, experience and build capacity in these communities and across Queensland’s renewable energy and smart energy efficiency sector.
- rural and remote industry to improve energy supply quality and reliability to encourage sustainability and enterprise growth and expansion

- **Renewable Energy & Smart Energy Efficiency Skills Transformation Initiative:**

Like other industries, digital transformation is changing the energy industry and presenting new, efficient ways to operate more effectively and at the same time achieving new, sustainable outcomes. Whilst this digital transformation is often viewed as reducing labour requirements in traditional trades etc, it also presents a major opportunity to reskill workers to enable them to secure new job opportunities.

In energy and other utilities, opportunities to reskill employees can often be found in the areas of operational technology - often referred to as the internet of things (IoT) – e.g. a traditional line engineer or water pipe inspector can be reskilled into a digital technician or cyber-technician. The engineer/inspector’s core understanding of how the operational asset works is critical and it is just the new digital management medium skill that needs to be acquired.

The Queensland renewable energy and smart energy efficiency sector and the energy industry more generally, has a unique opportunity to collaborate with the ICT industry to create new jobs through recognising the range of skills needed to transition the energy sector to a clean energy future and constructing pathways for existing employees to upgrade their skills and achieve vocational recognition that will provide employment security and new opportunities into the future characterised both by the IoT and Energy of Things (EoT).

- **Regional Test Beds:**

Investigate the opportunity to create Regional Test Beds for emerging renewable technologies and technical concepts. Build on the synergistic factors offered by regional communities including:-

- The higher cost of providing energy in regional areas, resulting in inflated community service obligations (CSOs) and higher energy costs for businesses.
- Sensitivity to energy costs.
- Presence of world class renewable resources.
- Stronger connection to, and dependency on the land and natural cycles.
- Lack of adaptive capacity in regional areas.
- Tighter knit communities with stronger community identities and more intergenerational capabilities.

- **Showcase Queensland’s Renewable Energy and Smart Energy Efficiency Capabilities to the World:**

Queensland’s geographic and climatic diversity provides myriad opportunities to develop renewable energy solutions for remote and natural disaster-prone communities.

- With this in mind, Queensland is ideally placed to harness the knowledge, skills and range of innovative technology platforms and deliver integrated renewable energy solutions to many of our most vulnerable neighbours.
- To this end, by promoting innovative, renewable energy and smart energy efficiency initiatives across the diverse range of government departments and service delivery

agencies, Queensland can develop a diverse skill set that can be deployed to generate new employment and international market opportunities.

- Queensland's renewable energy and smart energy efficiency sector in collaboration with Queensland universities can develop and provide resilient clean energy solutions for remote indigenous communities and applying those learnings and experience to work with our Pacific Island and South East Asian neighbours.

- ***Trade & Investment Queensland:***

To engage with DFAT to explore opportunities in overseas markets targeting Pacific Island and South East Asian markets to showcase technology capabilities and solutions providing cost effective, natural disaster resilient, sustainable, clean energy solutions.