



25 June 2015

Queensland's renewable energy policy  
Department of Energy and Water Supply

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Dear Sir/Madam,

### Queensland's renewable energy policy

Origin Energy Limited (Origin) welcomes the opportunity to make a submission to the Queensland Government's issues paper on Queensland's renewable energy policy.

Origin recognises that climate change is a global challenge and unequivocally supports measures to progressively reduce carbon emissions. We support Australia making an equitable contribution to this global effort, that the level of this effort be comparable to our most relevant trading partners and that it take account of the nature of the Australian economy.

With this in mind, we support the Queensland Government encouraging the progressive decarbonisation of the electricity mix, including by removing barriers to the deployment of renewable energy sources such as solar where economic to do so. It is critical that frameworks to promote emissions reductions encourage measures at the lowest cost. Delivering low cost abatement for Australia requires a national approach. Origin therefore encourages the Queensland Government to carefully consider the role its renewable energy initiatives play in the context of global and Australian targets and initiatives and with consideration of the broader impact on what is currently an oversupplied energy market.

Ultimately, the internationally agreed goal is to limit average global temperature rise to two degrees Celsius or less, in order to have a realistic chance of avoiding the most extreme impacts of climate change. It is hoped the Paris agreement will place the world on a pathway to achieving this goal and Origin supports action at the Australian and Queensland level to constructively support this agreement.

#### **Key points**

Origin has the following key points to highlight:

- **Aspirational 50% renewable energy target by 2030** - Origin supports the progressive decarbonisation of the electricity sector in Australia and views the increased deployment of renewable technologies as a key part of this transition. Our philosophy is that this deployment should be underpinned by sustainable policy which encourages the commercial deployment of renewable generation sources, without excessive cost subsidisation. It is important to recognise that overly generous subsidies provided under the Solar Bonus Scheme are still placing a burden on Queenslanders, and that this will continue until the old scheme finally phases out in 2028.
- **Trial 40 MW renewable energy auction** - historically, large scale renewable energy in Australia has been dominated by hydro and wind sources in the southern states. However, with the continued fall in the cost of solar technology, coupled with the expected growing

electricity demand in Queensland, Origin views large-scale solar as providing an exciting opportunity in Queensland.

- **Aspirational target of one million solar rooftops by 2020** - Origin views Queensland as an excellent location for the continued uptake of small-scale solar PV systems and has just launched a new product which allows households and small business to install solar PV systems with no up-front cost. We expect solar PV installations to continue growing strongly, without the need for further subsidies or targets.
- **Fair and reasonable price for solar** - Origin has consistently offered an additional 6c/kWh rate to solar customers and believes that this represents a generous rate. We note that this is in addition to the subsidy provided by the Small-scale Renewable Energy Target and state based feed in tariffs. In competitive retail energy markets feed in tariffs should be determined by competing retailers.

### **About Origin**

Origin is Australia's leading integrated energy company focused on gas exploration, production and export, power generation and energy retailing. A member of the S&P/ASX 20 index, the company has more than 6,000 employees and is a leading producer of gas in eastern Australia. Origin is Australia's largest energy retailer servicing 4.3 million electricity, natural gas and LPG customer accounts and has the country's largest and one of the most flexible generation portfolios with approximately 6,010 MW of capacity, through either owned generation or contracted rights. Origin is a significant investor in low emissions and renewable energy technologies and has diverse global renewable energy interests in geothermal, hydro, wind and solar technologies. Through Australia Pacific LNG, its incorporated joint venture with ConocoPhillips and Sinopec, Origin is developing one of Australia's largest CSG to LNG projects based on Australia's largest 2P CSG reserves base.

### **Aspirational 50% renewable energy target by 2030**

Origin supports the progressive decarbonisation of the electricity sector in Australia and views the increased deployment of renewable technologies as a key part of this transition. Our philosophy is that this deployment should be underpinned by sustainable policy which encourages the commercial deployment of renewable generation sources, without excessive cost subsidisation. We expect solar PV installations to continue growing strongly, without the need for further subsidies or targets.

With its high levels of solar radiation and strong expected growth in electricity demand, Queensland is well placed to facilitate the development of, and host, utility scale solar projects. For these projects to go ahead, project developers need confidence that they are operating within a long term, stable policy environment supportive of renewable projects.

If an aspirational target for the percentage of renewable energy is desired, it should be framed in a way that is achievable, and contributes to the broader transition of the electricity sector. To put this in context, in 2014 renewable energy generated about 13% of Australia's electricity mix, although in Queensland this was about 7%<sup>1</sup>. This proportion should gradually increase to 2020 as the national Renewable Energy Target (RET) increases.

Besides setting a target for the percentage of renewable energy another relevant consideration would be the carbon intensity of the state's electricity supply, measured in tonnes of carbon dioxide equivalent per Megawatt hour (tCO<sub>2</sub>-e/MWh). The Queensland electricity grid is currently dominated by coal generation, although this contains a number of the most modern and efficient coal-fired power stations in Australia.

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<sup>1</sup> Clean Energy Council (2015). *Clean Energy Australia 2014*.

### ***Trial 40 MW renewable energy auction***

Origin has significant experience in developing power stations and in contracting for their output and would welcome the opportunity to further discuss the design of a potential auction mechanism with the Queensland Government.

We would suggest that the Queensland Government also consider how they may help trial projects be implemented, such as through assistance with the development approval process, connection agreements, working with the Clean Energy Finance Corporation and with the Federal Government to ensure long term support for Queensland projects.

### ***Aspirational target of one million solar rooftops by 2020***

Small-scale solar PV is growing strongly in Queensland. Of the 1.4 million small-scale solar PV systems currently installed in Australia, about 440,000 are in Queensland, or about 31%. The state also has a very high rate of penetration in the household sector, with 8 of the top 10 postcodes in Australia being in Queensland. Overall, we do not believe a target or other incentives are necessary as solar PV is continuing to grow strongly and is expected to do so over the longer term.

If an aspirational target is desired, then we suggest there are a number of ways that it could be described. Besides considering the number of systems installed, another aspirational target may involve the total installed capacity at a point in time or the total amount of electricity generated from solar systems in a given year. A capacity based target may better reflect the anticipated growth in larger commercial scale solar systems.

Origin is one of the largest installers of solar systems in Australia, having directly installed about 80,000 systems to date. In total, about 360,000 of our retail customers have solar products. This year, Origin launched a new solar leasing product which involves no up-front cost. We are also exploring new battery technologies which may be offered soon.

As an active participant in the solar market we have experienced some barriers to the greater uptake of solar PV systems in Queensland and suggest that these could be reduced. Some of the main barriers are in the predictability of connecting to the network - both from Energex and Ergon:

- Residential consumers do not appreciate the complexities of why one person can, and their neighbour can't, connect similar systems. Having a clear regulatory framework for connecting residential systems under a certain threshold (e.g. 5kW) would reduce these barriers.
- For commercial systems, it would be beneficial to make the permission to connect process as predictable as possible.
- Generally, requirements for artificial export limits and output reducers (on the inverter) add capital cost and complexity that are an unnecessary barrier to the uptake of solar.

### ***Fair and reasonable price for solar***

Origin has consistently offered a voluntary rate of 6c/kWh to solar customers in a number of jurisdictions including Queensland. A number of jurisdictions now recommend a fair rate for solar systems. For example, the NSW IPART approach, currently recommends that retailers should offer a benchmark rate of 4.9-9.3 c/kWh. It is important to note that this is a recommended rate only and is voluntary, with the market offering many different products that are generally within this range.

Other important issues to take into account when considered a fair and reasonable benchmark rate for solar include:

- Environmental benefits of solar PV are already incorporated through the Small-scale Renewable Energy Scheme (SRES) which pays an up-front amount for the deemed lifetime abatement of the solar system.

- Consumers are primarily driven by energy efficiency and the avoided cost associated with solar PV, rather than earning revenue by selling excess energy into the grid. The majority of consumers understand that previous solar FiT schemes (such as the Solar Bonus Scheme) were too generous and were inequitable.
- FiT policy should not distort the market for other technologies or cause unintended consequences. As noted above, new products are emerging which offer solar PV with no up-front cost, whilst battery technology is evolving and could provide new opportunities in the near future.

It is important to recognise that overly generous subsidies provided under the Solar Bonus Scheme are still placing a burden on consumers, and that this will continue until the old scheme finally phases out in 2028. The scheme:

- has resulted in increases in network costs of \$292 million in the 2010-15 regulatory period;
- is forecast to result in increased network costs of \$1,387 million in the 2015-20 regulatory period; and
- because costs are recovered on a volumetric basis, customers without solar installations pay proportionately more of the cost than those customers who do have a solar installation.

If you have any questions regarding this submission please contact Keith Robertson (Manager Retail & Wholesale Regulatory Policy) on +61 2 9503 5674. We look forward to further consultation as Queensland's renewable energy policy evolves.

Yours sincerely,



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