

Queensland Productivity Commission  
PO Box 12112  
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15 April 2016

### **Solar Feed-In Pricing in Queensland Draft Report**

The Australian Energy Council (the Energy Council) welcomes the opportunity to make a submission to the Queensland Productivity Commission's (QPC) Solar Feed-In Pricing in Queensland Draft Report (the Draft Report).

The Energy Council is the industry body representing 22 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia and sell gas and electricity to over 10 million homes and businesses.

As noted in the Draft Report, Queensland has among the highest penetration of small-scale solar PV in the world with solar PV "growing from less than 1,000 residential installations in 2007 to almost 400,000 systems in 2015"<sup>i</sup>. The rapid solar PV expansion has raised opportunities and challenges for the electricity sector, consumers and governments. Many of these challenges relate to the fact that solar PV can impose costs and accrue benefits to parties inside and outside the solar export market, the impact of which has been exacerbated by the significant and arbitrary feed-in-tariff (FiT) rates imposed by state governments.

As a body established by the Queensland Government to provide advice on complex economic and regulatory issues, the QPC has an important role to play in reaffirming the appropriateness of current market-based arrangements for solar PV FiTs in South East Queensland (SEQ). With the Draft Report, the QPC has an opportunity to ensure the government avoids the problems that have plagued premium solar PV FiT schemes across Australia.

#### **A targeted approach is required**

The Australian Energy Council maintains a fair and reasonable value of solar PV exports is best determined and implemented by the market with no regulatory intervention, as is currently the case in SEQ. The Energy Council believes that there is evidence that a market price for solar exports will be fair with solar PV owners receiving an efficient price for the energy they generate with the remaining electricity consumers not paying more (or less) than they should for solar PV generated energy. Competitive markets naturally give rise to the most efficient pricing structure and encourage competition in the development of alternative products and levels of service. This is evidenced by the fact that in "SEQ, nine retailers compete for solar export customers through a feed-in tariff, with offers from 4c/kWh–11c/kWh. The two large retailers are offering 6 and 8c/kWh"<sup>ii</sup>.

Where there is a concern around information asymmetry within the marketplace and the ability of consumers to access more favourable tariff offerings, this could be addressed through improved communications and greater awareness of sites like the Australian Energy Regulator's (AER) price comparator website. As part of the transition to market deregulation in SEQ, there is a role for governments and businesses to communicate the variety of products and services available to all consumers, not just those with solar PV.

#### **No further subsidies required**

The Energy Council agrees that Queensland should not increase feed-in tariffs to pay solar investors for reducing emissions as investors already receive a subsidy from the Small-scale Renewable Energy Scheme (SRES) to reward them for assumed emissions reductions. QPC's modelling in the Draft paper shows that

solar PV capacity in Queensland is projected to grow over the next 20 years without additional Queensland Government intervention.

The Energy Council also considers the most efficient approach to addressing emissions abatement is through an economy wide scheme that is applied nationally. Such a scheme would automatically reflect the value of this externality in solar PV export rates because it would be reflected in wholesale electricity prices, which is a reference point for FiTs. Should such a national emissions abatement scheme be implemented, it would be appropriate to remove any other mechanisms designed to reward abatement. Thus, the Queensland Government should not increase feed-in-tariffs on the basis that it is a 'fair' way to reduce carbon emissions; rather, this policy area ought to be left to the Commonwealth Government.

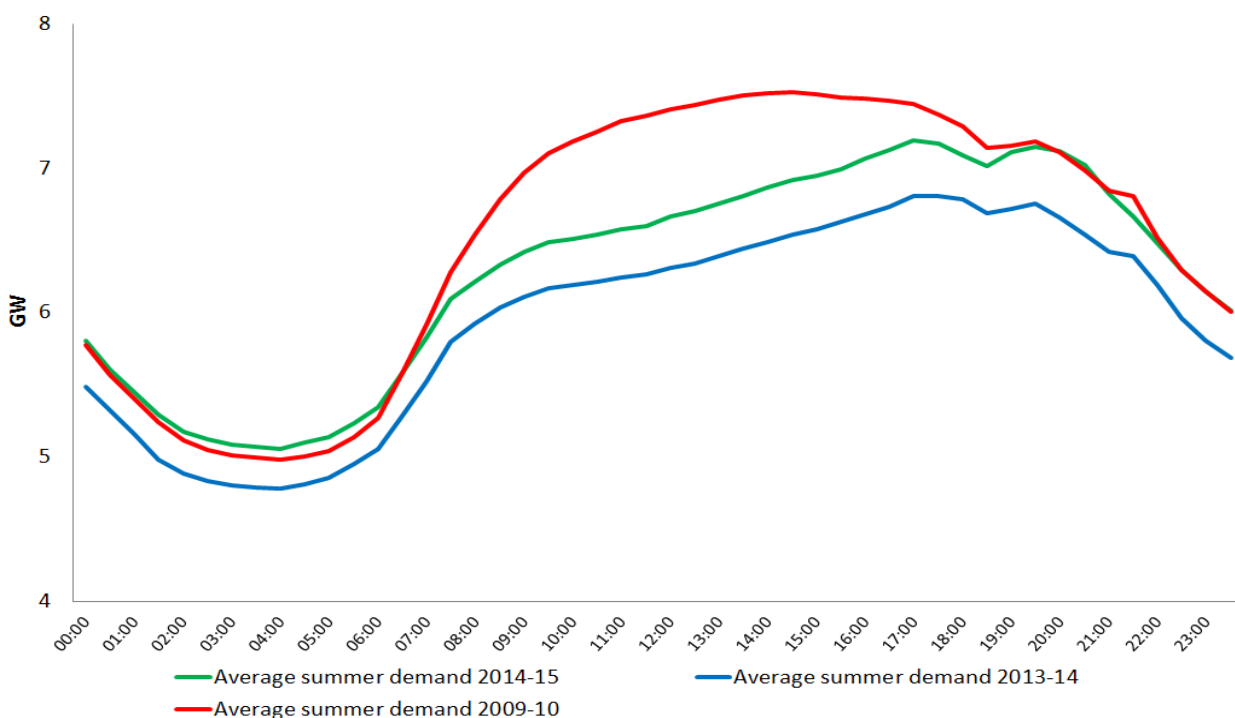
### Valuing network costs/benefits is challenging

An issue that is often raised with respect to solar PV is that the current export rates do not value network benefits. The Energy Council agrees with the QPC that *“where network benefits exist, they are best harnessed through mechanisms that can efficiently and effectively target these benefits, rather than paying all solar PV owners a uniform feed-in tariff unrelated to network impacts”*<sup>iii</sup>.

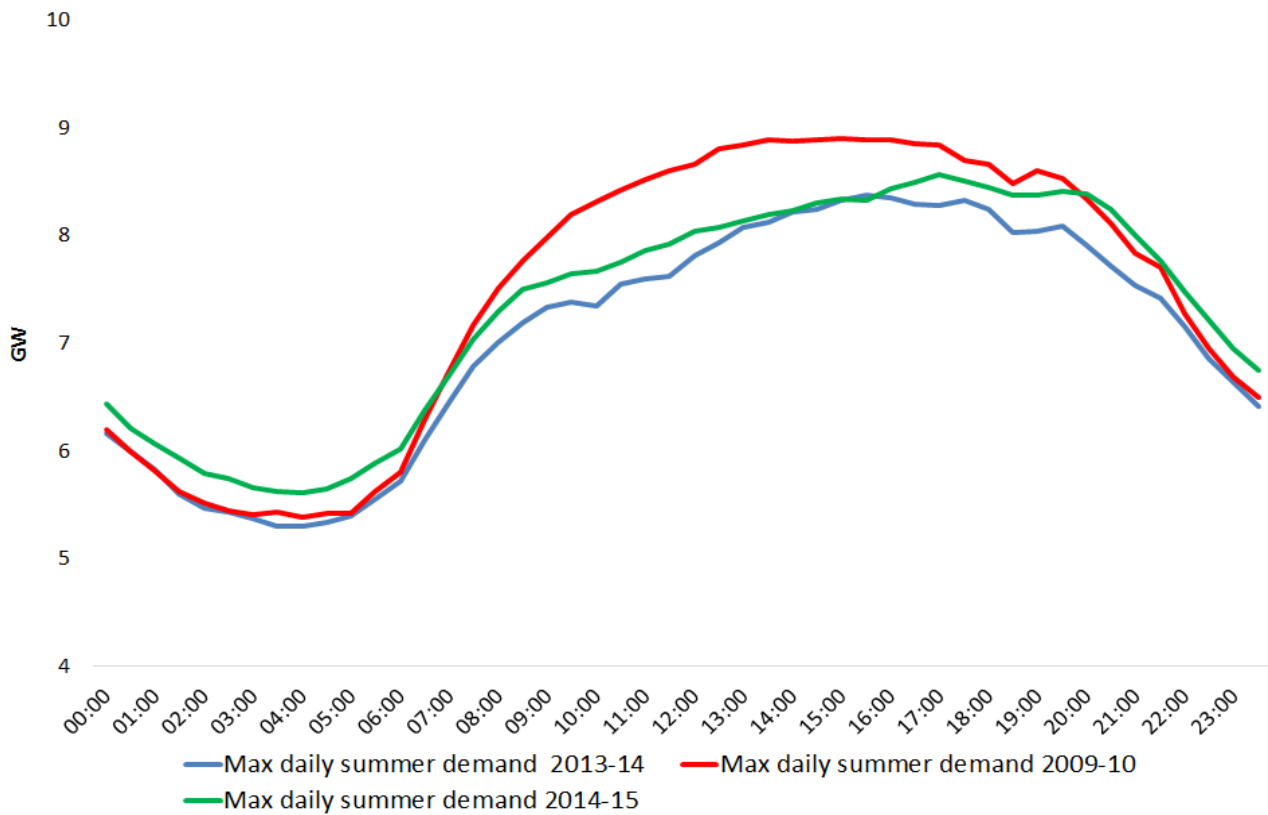
More cost-reflective tariffs for electricity consumption would reveal the value of solar PV to customers far more effectively than government-mandated feed-in-tariffs. For example, if tariffs reflected the value of supplying electricity at peak demand periods, then customers who installed and used solar PV to reduce their peak demand would receive the benefit through lower tariffs.

As shown in Figure 1, there is already a distinct dip in midday demand when solar PV output is operating at its highest capacity. The average midday demand over summer has reduced by over 17 per cent in 2014-15 since 2009-10. By contrast, as shown in Figure 2, peak demand in Queensland has experienced little change over the same period.

**Figure 1: Average summer electricity demand in Queensland<sup>iv</sup>**



**Figure 2: Peak day summer electricity demand in Queensland<sup>v</sup>**




The Energy Council is supportive of separating the calculation of the energy value from the network value, given the entirely different bases for calculating these. Further, the current network regulatory framework both allows and incentivises networks to reward demand-side resources where they do help the network avoid costs. Given this, and absent evidence otherwise, it should be assumed that Energex and Ergon Energy’s network businesses are prepared to do so for solar PV provided it is the right amount in the right location.

The Australian Energy Council notes that the Australian Energy Market Commission (AEMC) is considering whether any additional mechanisms are required. Currently the AEMC is considering this issue through their Local Generation Network Credit rule change process.

Our response to the AEMC’s issues paper noted that there is a lack of evidence that generic small-scale embedded generation systematically assists in reducing network costs. The impact on network costs of small scale PV varies with a range of factors including location, feeder characteristics and local penetration. Analysis by EY for the Clean Energy Council<sup>vi</sup> shows that for sample feeder types, the impact on network costs can change from a benefit at low penetration rates to a cost at high penetration rates. It also shows that the impact can be highly variable between feeders. This will inevitably make the attribution of a single ‘true value’ incorrect, and it is prohibitively complex to calculate for each individual installation.

Any questions about our submission should be addressed to Panos Priftakis, Policy Adviser by email to [panos.priftakis@energycouncil.com.au](mailto:panos.priftakis@energycouncil.com.au) or by telephone on (03) 9205 3115.

Yours sincerely,



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<sup>i</sup> Queensland Productivity Commission, 2016, "Solar Feed-Tariff Pricing in Queensland – Draft Report"

<sup>ii</sup> ibid

<sup>iii</sup> ibid

<sup>iv</sup> Global-Roam (NEM- Review), esaa analysis.

<sup>v</sup> Global-Roam (NEM- Review), esaa analysis.

<sup>vi</sup> EY, 2015, "Evaluation Methodology of the Value of Small Scale Embedded Generation and Storage to Networks"