

**SUBMISSION ON QUEENSLAND PRODUCTIVITY COMMISSION
SOLAR FEED-IN PRICING IN QUEENSLAND
DRAFT REPORT**

13 APRIL 2016

Mr K. Wood
Principal Commissioner
Queensland Productivity Commission
PO Box 12112
George Street
QLD 4003

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Dear Commissioner Wood.

The Queensland Farmers Federation extends its gratitude to the Queensland Productivity Commission for the opportunity to make a submission on the Commission's 'Solar Feed-In Pricing in Queensland Draft Report', dated March 2016.

Queensland Farmers' Federation (QFF) is the peak body representing and uniting 16 of Queensland's rural industry organisations who work on behalf of primary producers across the state. QFF's mission is to secure a sustainable future for Queensland primary producers within a favourable social, economic and political environment by representing the common interests of its member organisations. QFF's core business centres on resource security; water resources; environment and natural resources; industry development; economics; quarantine and trade.

Our goal is to secure a sustainable and profitable future for our members, as a core growth sector of the economy. Our members include:

- CANEGROWERS,
- Cotton Australia,
- Growcom,
- Nursery and Garden Industry Queensland,
- Queensland Aquaculture Industries Federation,
- Queensland Chicken Growers Association,
- Queensland Dairyfarmers Organisation,
- Queensland Chicken Meat Council,
- Queensland United Egg Producers,
- Flower Association of Queensland Inc.,
- Pork Queensland Inc.,
- Australian Organic,
- Pioneer Valley Water Co-operative Limited,
- Central Downs Irrigators Limited,
- Burdekin River Irrigators Area Committee, and
- Fitzroy Basin Food and Fibre.

Over 307,000 people are directly employed in agriculture across Australia, of which over 55,000 are employed in Queensland¹ which is the biggest employer in rural and regional communities. Australia's 135,000 farmers produce enough food to feed 80 million people providing 93% of the domestic food supply, and supports an export market valued at more than AU\$41 billion per annum (over 13% of export revenue), according to the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)². With population growth and rising personal income, the emerging middle class in Asia provides the major market for over 60% of Australian agricultural exports².

QFF represents the interests of all farming sectors across Queensland and acknowledges that the adoption of solar technologies and their arrangements (both technologically and from a service perspective) varies considerably by sector and by farm.

QFF's supports the adoption of solar technologies by farmers to manage operational costs associated with their primary farming activity (including, but not limited to, ensuring supply, managing costs associated with charges, through to other impacts, such as the evaporation of ponds); and also as a strategy for divesting their portfolio. Incorporating solar power on-farm has none of the labour intensive nature and ongoing overheads of other aspects of farming.

QFF believes that the installation of solar is highly beneficial for farmers wishing to shape peak demand, maximizing productivity and creating additional income streams, within a synergistic land-use framework.

QFF reiterates its previous concerns that it is extremely difficult to make holistic comment to what is a single component of a larger and uncertain process. Unfortunately, there is a lack of overall vision and ownership of Queensland's rural and regional agenda (including pertaining to long-term energy sustainability), and also of Queensland's agricultural sector. Within the context of a lack of long-term leadership, critical strategic planning has been deficient. QFF believes that Queensland's agricultural sector and also regional communities warrant specific investigation to identify critical issues impacting electricity demand, supply and pricing, included within the context of solar. A critical component of this is the ability of farmers to feed excess power back to the grid on a transparent basis, and the ability for those wishing to invest into 'solar farming' being provided opportunities with regard to transparent feed in tariffs (where appropriate technology and regional demand exists).

A significant proportion of regional variation in on-farm energy expenditure across Queensland is the difference in types of agricultural commodities grown and the use of energy-intensive farming practices, such as irrigation with groundwater. Whilst some farms have access to public water supplies, many farms pump groundwater from bores and overground water sources. Most pumping is done with electricity, but pumps in remote locations may use diesel and/or renewable energy technologies.

¹ Queensland Treasury and the Department of Education and Training, Jobs Queensland Occupational Data, 2016.

² Australian Bureau of Agricultural and Resource Economics and Sciences. (2014). Agricultural Commodity Statistics.

PV Electrical Generation in Regional Queensland

QFF acknowledges that farm operations adapt to higher energy (and fertilizer) prices by shifting to more energy-efficient production practices and input use. In some cases, farmers respond to higher energy prices by finding other ways of reducing or otherwise offsetting their energy purchases. For example, the installation of off-grid energy generation capacity including solar photovoltaic and use of stand-alone diesel generation on end-user premises.

If electricity prices increase in the future, more farms may find on-farm power generation (in terms of substitution of grid power through to 'renewable energy farming') profitable. Many new technologies now permitting for the continuous access to energy (for example, solar with battery storage), coupled with decreasing technology costs are seeing some farmers installing generating capacity to manage/shape peak demand.

A significant issue for agribusinesses, particularly processing, is the reliability of the current electricity supply. Stakeholder feedback to QFF has highlighted the decreasing electricity-grid reliability experienced by many farmers and ancillary activities (such as processing and pumping of water). Disruption in electrical supply results in processing down-time, and unnecessary wear and tear on machinery, reducing the life-span of critical assets and infrastructure including energy efficiency measures. On farm electrical generation from solar can assist with managing unreliability in regional areas.

The opportunity for the supply of excess electrical generation from regional solar generation to the grid should be permitted and a suitable rebate paid to farmers (and other generators) where new generation capacity is avoided. In the case of regional areas, permission for connection is granted by Ergon Energy Corporation (the network arm), not Ergon Energy Queensland (the retail arm).

QFF supports the feed-in of excess energy generated on-farm where the grid-connection technology and regulation permits; and perceives growing opportunity for farmers to include 'energy farming' into their businesses.

QFF supports the QPCs conclusion that 'some form of regulation for solar pricing is warranted' in regional Queensland where there is no retail competition at present in line with the reports Draft Finding 4.2. For regional Queensland, a price approval regime is likely to achieve the Government's objectives at least cost. A price approval regime for solar exports will afford the same level of customer protection as price setting, but will provide opportunities for different offers and products for regional solar PV owners.

QFF therefore supports Draft Recommendations 9.1 and 9.2 that the Queensland Government should retain mandatory solar export pricing in regional Queensland. Under a price approval regime, regional retailers would be obliged to: purchase solar exports from small customers in regional Queensland; and submit their offers to the regulator for approval on an annual basis.

Barriers to Solar Exports

QFF is aware of farmers who are currently unable (through technology constraints or simply the administrative burden of the process) to provide their excess power generated on-farm back to the local grid. The lack of retail competition in regional Queensland and the inability to secure other service providers for 'grid-services' (including for the installation of new electrical meters through to transformers), prohibits opportunities.

QFF understands that older-technology meters without interval recording capability are an impediment to facilitating the feed-in of excess energy generated from on-farm sources; and that greater competition in metering will promote innovation and lead to investment in advanced meters that deliver services valued by consumers at a price they are willing to pay. The AMEC Rule change (repealing Part 8A of the National Electricity Law) will, in theory, expand competition in metering and related services and create competitive certainty. The SEQ region has seen a variety of electricity retailers develop new energy services and product offerings and a number of utilities outsource their metering services.

Whilst meters are not immediately engaging to customers per se, it is critical for customers to be totally engaged with the energy products and services enabled by them. Retailers, for example, will increasingly demand product and service differentiation as the markets move away from basic metering. Any meters/metering products installed now must take into account future needs, and the quality and functionality of the (smart) meters must be of sufficient standard to permit the feed-in of excess electricity generation from solar to the local grid.

QFF urges the QPC to consider opportunities for the strategic deployment of appropriate metering technology to regional customers with existing or imminent solar PV electricity generation and export capacity.

If regional competition existed in regional Queensland, the deployment of new meters would assist farms to become more mobile in terms of the ability to switch retailers within weeks if dissatisfied and the ability for meters to be serviced by different providers.

Technological change and the falling cost of capital have introduced opportunities for decentralised solar power generation and storage in batteries (as well as diesel generation) on many farms to reduce peak demand and therefore reduce demand for investment in increased network capacity. QFF understands that, whilst peak demand drives investment, aggregate demand is important for recovering costs because you recover over the total demand, and that determines prices. Energex, for example, has previously noted that "deteriorating network utilisation as total energy consumption has moderated is forcing up network prices as the costs of providing, operating and maintaining the network are spread over a lower consumption base whilst maximum demand remains at record levels"³. The current policy-approach attempts to use tariffs to achieve 'actual' change, however, this is a blunt instrument if not coupled with appropriately designed supply-side policy.

³ Mr Darren Busine, Acting Chief Executive Officer, Energex Limited, Select Committee on Electricity Prices. Proof Committee Hansard, 3 October 2012, p. 27

It is essential that distribution networks are aware and understand the nature of off-grid and/or additional solar PV generating capacity. Ergon Retail has advised QFF of 'forecasting fright' where dynamic load events (such as storms) have impacted solar PV generation in particular, leading to unplanned load demand. A comprehensive knowledge of new generation capacity installed by farmers (and others) will also allow distribution networks to better manage local supply and demand. A role for both retailers and distribution networks will be the communication of appropriate technologies for those customers installing generation capacity (for example, as specified under AS4777 to ensure inverters have trading capability) to permit trading opportunities back to grid.

Thank you for the opportunity to provide comment on Draft Report on the Energy Pricing Inquiry released 3 February 2016. If you would like to discuss any aspect of the QFF submission please contact Dr Georgina Davis on 3837 3727.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'R Wade', written in a cursive style.

Ruth Wade
Chief Executive Officer.