

**SUBMISSION TO QUEENSLAND RENEWABLE ENERGY EXPERT
PANEL – ISSUES PAPER**

10 JUNE 2016

Project Manager
Queensland Renewable Energy Expert Panel
PO Box 15456
City East
QLD 4002

10 June 2016

Dear Sir/Madam

The Queensland Farmers Federation extends its gratitude to the Queensland Renewable Energy Expert Panel for the opportunity to make a submission on the Panels Issue Paper, dated May 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 (including energy and water resources); environment and natural resources; industry development; economics; quarantine and trade.

QFF aims 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.

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 are increasingly utilising diesel and/or renewable energy technologies, particularly solar photovoltaic.

QFF supports the adoption of renewable energy technologies by farmers to manage operational costs associated with their primary farming activity including, but not limited to, ensuring reliable energy supply, managing costs associated with energy charges by shaping peak demand, through to other impacts such as the control of evaporation rates from ponds; and also as a strategy for divesting their portfolio.

Agriculture - A Trade Exposed Industry

In supplying the increasing demand for food in the region, Australia is subject to competition and major institutional impediments. Rather than to relying on global markets, most of the world's most wealthy industrialized countries have sought to protect their farmers from competition through maintaining high import tariffs, import quotas and direct price support-mechanisms but not Australia. The sector also continues to struggle with falling commodity prices to some sectors and declining profitability.

QFF notes that electricity prices in Australia are higher than overseas jurisdictions³, disadvantaging our commodity exports on the global market and leaving farmers heavily trade-exposed. A communique from Australia's Agricultural Industries Electricity Taskforce (February 2015) detailing this issue and impacts to overall productivity is included as an attachment to this submission (see Attachment 1).

More than any other sector of the economy, agricultural productivity in Australia is highly dependent on seasonal variations in rainfall and access to a reliable water supply which in most cases, can only be secured through a sustainable energy (electricity) supply. Changes to weather patterns are influencing both the intensity and duration of rainfall and thus

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.

³ CME. (2012). Electricity Prices in Australia: An International Comparison. A Report to the Energy Users Association of Australia.

redefining the suitability of many areas for farming; and resulting in many irrigators having higher-than-average load factors compared to other energy consumers. For some farmers, changes to rainfall patterns and water shortages will inevitably mean surrendering their farms as production falls and the level of farm indebtedness becomes unsustainable. The government therefore has a role to assist agri-businesses to manage this risk and ensure future food security.

Significant investments in infrastructure and technology, and growing innovation across the sector will provide some opportunity, but as agriculture is and will always remain a high risk industry, the sector often fails to attract the required investment capital. Historically, farmers have responded to their eroding terms of trade by increasing productivity – in many cases this requires access to water which in turn can only be achieved and guaranteed by the corresponding access to power.

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.

As electricity prices continue to increase, more farmers are moving to on-farm energy generation using renewable and non-renewable energy technologies (in terms of substitution of grid power). Many new technologies now permitting for the continuous access to power (for example, solar with battery storage), coupled with decreasing technology costs are allowing farmers to install generating capacity to manage/shape peak demand and manage grid-reliability issues.

A significant issue for farmers and agribusinesses, (particularly for processing and water pumping), is the reliability of the current electricity supply in edge-of-grid areas (often constrained areas). 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 and other renewables can assist with managing unreliability in regional and 'edge of grid' areas.

The opportunity for the supply of excess electrical generation from regional renewable 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 notes to the Queensland Renewable Energy Expert Panel the details of the recent QPC solar feed-in pricing report which determined 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 QPC report 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 articulated its support for the QPCs Draft Recommendations 9.1 and 9.2 that the Queensland Government should retain mandatory solar export pricing in regional Queensland at this time given the lack of competition 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 energy 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.

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 such as renewable energy technologies. 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 renewable energy technologies to the grid.

Thank you for the opportunity to provide comment on the Expert Panels Issues Paper, released in May 2016. QFF welcomes the opportunity to discuss the potential opportunities offered by renewable energy technologies and supporting policies for Queensland's agricultural sector.

Yours sincerely,

G. Davis

Dr Georgina Davis
Policy Advisor, Resources.