

# ELECTRICITY

## POLICY POSITION

Access to affordable and reliable electricity supplies for all users is paramount to maintaining the international competitiveness of Australian agriculture.

The National Electricity Market is not working for Australian farmers and needs serious reform. The NFF recognises that Australia's generation mix needs to change as existing infrastructure assets reach the end of their useful lives and to meet emissions reduction targets.

## ISSUE

The entire Australian community relies on secure, affordable access to electricity and other forms of energy, and the Australian agriculture sector is no different. The current regulatory regime is not serving the interests of users and this is particularly the case for Australian farmers. The regulatory regime needs to be updated to maintain ongoing relevance of the National Electricity Market (NEM) to consumers and to meet future challenges.

Australia's electricity sector is undergoing transformational change as older electricity generation, transmission and distribution assets reach the end of their useful lives over coming decades. The current transition is occurring as a result of compounding policy distortions across all elements of the NEM and the network is no longer serving the needs of end users.

A different generation mix may also be required to achieve internationally agreed emissions reduction goals. Innovation will continue to drive change in the way that electricity is generated and managed to meet consumer requirements. Government policy must not favour specific technologies, but rather enable the technologies to compete on their merits. NFF recognises the need for a smooth transition to a market based system. We must move from a policy environment that is layered in policy distortions and subsidies to one that is market-based.

The 2020 Renewable Energy Target has been legislated by and enjoys the bipartisan support of the Commonwealth Parliament. NFF recognises that the retention of the RET provides certainty to investors in renewable energy as we transition to a market mechanism. But this should not be used as an excuse for not transitioning to a market-based mechanism by 2020.

A coordinated national strategy for emissions reduction and electricity market reform is necessary to ensure access to affordable and reliable sources of electricity. To ensure that Australian agriculture and downstream value adding sectors remain internationally competitive, it is essential that the policy levers of government work cohesively to these objectives to ensure the most efficient plan for change is adopted.

## BACKGROUND

The world's population is forecast to exceed 9 billion people by 2050, and demand for food and fibre to increase by 60 per cent. Meeting this demand in the context of a changing environment while at the same time contributing to global action to reduce emissions will be a challenge. In Australia, electricity generation accounts for around one-third of carbon dioxide equivalent (CO<sub>2</sub>-e) emissions.

In December 2015, 195 countries including Australia, under the banner of the United Nations Framework Convention negotiated the “Paris Agreement”. The Agreement aims to hold the increase in the global average temperature to well below 2 °C above pre-industrial levels and to increase the ability to adapt to climate change. Australia has committed to reduce emissions by 26-28 per cent below 2005 levels by 2030 and to achieve this goal, Australia’s electricity generation mix is changing.

Electricity use is variable across agriculture depending on industry, intensification of operations, location and structure of the business. Farms that require heating, cooling or irrigation have higher levels of electricity use. In some industries electricity consumption is stable year round, in others there can be significant seasonal variability. For some farmers demand is flexible, providing choice as to when electricity is consumed. For others, demand is often driven by factors beyond individual control, such as streamflow, the weather, and regulations that govern access to water, reducing options for an individual to manage their own demand.

Both reliability and affordability are key for agricultural producers – wholesale price spikes and outages can destroy annual returns for some farmers in the space of a few hours. However overinvestment to enhance reliability comes at the expense of affordability. Efficient investment in, combined with efficient operation and use of, electricity services is crucial for farmers, other consumers and the wider economy.

The replacement of ageing electricity generation infrastructure and meeting Australia’s international commitments will require a substantial transformation in that sector and billions of dollars worth of investment. The current suite of Federal, State and Territory policies are distorting and compromising the entire NEM, hampering that transition and driving inefficient investment.

Emissions reduction policies need to be coordinated nationally to ensure that reliability, affordability and international competitiveness are not compromised. Under the current settings, the RET distorts the generation sector through opaque cross-subsidies from consumers and non-renewable generators to renewable generators. The RET was designed as a transition policy, but has by default become the core policy lever to reduce emissions in the electricity sector by favouring particular types of generation technology.

There are underlying structural issues in the NEM that need to be resolved. The National Electricity Rules (NER) produce price outcomes that unreasonably favour distribution network service providers at the expense of users in the revenue determination process, and incentivises them to challenge the decisions of the regulator. Similarly, the risk premiums calculated in the formula for Weighted Average Cost of Capital do not appropriately reflect the natural monopoly enjoyed by Distribution Network Service Providers (DNSPs).

Inefficient network investment, ineffective regulation and a lack of policy consistency is continuing to drive up electricity prices for end users and is accelerating the pace of change. Escalating prices encourage users to leave the centralised network and invest in alternative sources of electricity, further increasing the costs for those unwilling or unable to leave the network.

Electricity prices cannot be cost reflective if the regulated asset base upon which they are built includes assets that are not used or useful. The owners of DNSPs must bear the cost of their past inefficient network investment decisions.

The National Electricity Market is broken and needs to be fixed. A do nothing approach is untenable, and an enduring policy framework is required to provide the electricity sector with certainty for investment. A market-based approach for the electricity generation sector that has the broad scale support from the community, industry and the Parliament would provide a platform for stable and low cost transition.

## WHAT THE INDUSTRY NEEDS

Government electricity policies must:

- recognise that more than 75% of Australian agriculture produce is exported, and that as a trade exposed sector we must remain competitive in international markets
- recognise that access to reliable, affordable and sustainable electricity is a necessary pre-condition to economic development, farm profitability and efficient investment in agriculture
- recognise that the policy distortions and ineffective regulation, not consumer preferences have been the predominant drivers of change throughout the NEM
- ensure that the NEM serves the needs of all end users, including SMEs and farmers and readily facilitates their choices as to how and when they source their electricity needs
- ensure that electricity policy and regulation is coordinated nationally
- ensure that electricity regulators are adequately resourced and empowered to meet the needs of end users and ensure that the owners of generation, transmission and distribution assets are kept accountable

Government policies specific to the electricity generation sector must:

- recognise that innovation and the adoption of new technologies will be key to meeting emissions reduction goals at the lowest cost
- ensure NEM rules are flexible enough to support a greater role for decentralised generation
- not favour specific technologies, but rather enable technologies to compete on their merits
- ensure emissions reduction policies do not distort the market in favour of particular technologies to deliver the full benefits of innovation
- position the generation sector to meet both current and future emissions reduction obligations at the lowest cost
- support research into, development and adoption of new generation technologies, including both centralised and decentralised generation
- support and promote improvements in on-farm energy efficiency, self-sufficiency in generation and storage capacity where appropriate

Government policies specific to the electricity distribution and transmission sector must:

- ensure that appropriate incentives are in place for efficient levels of investment in transmission and distribution assets, regardless of ownership
- reduce the incentives and ability for DNSPs to challenge regulatory decisions
- ensure that reliability standards strike a balance between shared risk across all end users and individual users' risk management choices and strategies

- ensure that assets that are not used or not useful are excluded from regulated asset bases, so that electricity networks operators do not pass risks on to end users
- ensure that the weighted average cost of capital is regularly reviewed to accurately reflect the cost of finance faced by network operators and the position of a natural monopoly that they hold

Government policies specific to the retail electricity sector must:

- ensure adequate competition at the retail level, particularly in regional areas
- recognise that various agricultural industries have different needs and abilities to shift demand in response to tariffs
- ensure that tariffs are set transparently and fairly and are tailored to suit the needs of agricultural businesses.