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RE: Energy Security Board National Energy Guarantee Consultation Paper

The National Farmers' Federation (NFF) welcomes the opportunity to make a submission to the *National Energy Guarantee Consultation Paper*. Access to affordable and reliable electricity supplies for all users is paramount to maintaining the international competitiveness of Australian agriculture. NFF welcomes the Government moving to a technology neutral position in the generation sector that addresses reliability concerns and emissions reductions in a rapidly transforming national electricity system, but there remains a degree of scepticism that retail prices for agricultural customers will be lowered as a result.

Vertical integration and high levels of concentration at the retail level mean that without careful design, the NEG risks entrenching big market players and worsening barriers to entry.

Further, NFF is concerned that the NEG Consultation Paper does not address the increased cost pressures arising from overinvestment and misuse of market power in the transmission and distribution sectors, often by state owned companies.

The NFF is the peak national body representing farmers and, more broadly, agriculture across Australia. Operating under a federated structure, individual farmers join their respective state farm organisation and/or national commodity council. The NFF's vision for Australian agriculture is to become a \$100 billion industry by 2030. Agriculture is a source of strength in the Australian economy, providing stable employment and income to rural communities. To achieve our vision, the sector needs regulatory and public policy settings that foster growth and productivity; innovation and ambition.

This submission makes six core recommendations regarding the NEG Consultation Paper:

- **Recommendation 1:** Safeguard competitiveness in Australia's National Electricity Market (NEM) to avoid increasing electricity prices;
- **Recommendation 2:** Seek explicit bipartisan support and endorsement from States and Territories through the Council of Australian Governments Energy Council for the NEG framework and associated climate policies. This is a necessary (but not sufficient) condition to ensure investment certainty and therefore address affordability.

- **Recommendation 3:** The Commonwealth should have sole responsibility for setting national emissions targets.
- **Recommendation 4:** The NEG should explicitly recognise the contribution that renewable bioenergy can make to emissions reduction by rewarding renewable heat generation for industrial processes and biomass cogeneration
- **Recommendation 5:** Establish a credible and high quality emissions offset and credit scheme that includes clear pathways for Australian agriculture to generate and trade emissions credits.
- **Recommendation 6:** Co-investment in Research and Development, combined with incentives, is necessary to facilitate investment in technologies to enable them to become commercially viable.

The NFF's climate, electricity and energy policies

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.

The NFF recognises that climate change poses a significant challenge for Australian farmers. As a nation, we must act to ensure that our economy is well placed to cost efficiently reduce our national greenhouse gas emissions profile.

Emissions reduction policies need to be coordinated nationally to ensure that reliability, affordability and international competitiveness are not compromised. 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

NFF's position on the NEG Consultation Paper

The NFF welcomes Government's move towards technology neutrality in the NEG Consultation Paper. However, the NFF is concerned that electricity affordability might not be improved by the NEG. While NFF is strongly supportive of implementing an electricity framework with policy directives around reliability and emissions reduction to increase confidence in investment decisions in the electricity sector, there is concern about the NEG not providing enough certainty to secure the electricity sector investment needed to lower costs and curb emissions while reliably supplying electricity.

The NEG Consultation Paper assumes that the reliability guarantee, designed to require retailers to either contract or produce dispatchable energy, will automatically provide investment certainty, making electricity more affordable. Nonetheless, the NFF questions whether a reduction of liquidity in the competitive electricity market might put upward pressure on wholesale (and therefore retail) electricity prices. It might also make it harder for new retailers and small retailers to fulfil this guarantee, potentially reducing the number of electricity retailers and thus reducing competition. The NEG reliability guarantee risks sparking a damaging bout of overinvestment in network and generation infrastructure that, without proper regulation, will result in higher retail prices.

Recommendation 1: Safeguard competitiveness in Australia's National Electricity Market (NEM) to avoid further increases in electricity prices.

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 and holds the view that Australia must move from a policy environment layered in policy distortions and subsidies to one that is market-based. Based on current evidence, the NFF believes the lowest cost pathway to a low emissions future is some form of market-based approach for electricity generation.

The National Energy Guarantee (NEG) is an improvement on the Renewable Energy Target. Technology neutrality is critical to ensuring that emissions reduction and reliability goals are met at lowest cost – the NEG delivers on that score. However, NFF believes that all available abatement options that relate to electricity should be integrated into the NEG, not just those that relate to electricity *generation*. This is discussed further below.

NFF strongly supports research into, development and adoption of, new generation and storage technologies, including both centralised and decentralised generation. Innovation will continue to drive change in the way that electricity is generated and managed to meet end-user requirements. Further research is also required to enable the flexibility to support a greater role for decentralised generation and smaller scale or micro-grids.

Reform is needed to maximise the opportunity provided by investments made in small-scale decentralised generation, such as that which occurs on Australian farms. With the emergence of new technologies, generation capacity is becoming increasingly decentralised, which is a significant disruption to the NEM model. Examples of this include solar or biogas facilities on farms, and the co-generation capacity of meat processing facilities and sugar mills.

There are currently barriers to enabling full utilisation of the excess electricity generated by solar, biogas or biofuels. The regulatory settings are such that there is no incentive for large-scale electricity networks to accommodate, let alone encourage, maximising the value from investment in distributed generation. These are not addressed by the NEG.

Recommendation 2: Seek explicit bipartisan support and endorsement from States and Territories through the Council of Australian Governments Energy Council for the NEG framework and associated climate policies. This is a necessary (but not sufficient) condition to ensure investment certainty and therefore address affordability.

For farm businesses and food manufacturers to have the confidence to invest, climate policy settings need to be stable and the price of credits needs to be relatively predictable over the long term.

It is also crucial that the future policy framework for the electricity sector has bipartisan support to safeguard the framework against political uncertainty. To this end, NFF encourages reframing of the NEG to acknowledge that with the right design features and linkages with other climate policies, the NEG can in fact almost work like an emissions intensity scheme through the trading of emissions credits and offsets.

Recommendation 3: The Commonwealth should have sole responsibility for setting national emissions targets.

NFF's view is that emissions reduction policies must be coordinated nationally to ensure that electricity is reliable and affordable so that the international competitiveness of farmers and the agricultural value chain is not undermined.

In that context, the NFF endorses the approach outlined in the consultation paper whereby the Commonwealth sets national targets in advance, although we hold concerns that the proposed five year period may be too long. As the consultation paper notes, one of the critical shortcomings of the RET was the failure of the emissions target to adjust to electricity demand. This must be avoided in the design on the NEG.

Recommendation 4: The NEG should explicitly recognise the contribution that renewable bioenergy can make to emissions reduction by rewarding renewable heat generation for industrial processes and biomass cogeneration

Another area where the industry could play a much larger role in meeting emissions reduction goals is renewable bioenergy, including renewable heat (i.e. process or industrial heating) production and biomass cogeneration.

The lack of incentives for renewable heat in energy generation creates a serious imbalance in the renewable energy market and misses some of the lowest cost opportunities for carbon emissions abatement.

The best way to do this would be to enable renewable heat production to be eligible for Australian Carbon Credit Units (ACCUs) and allow retailers to use these to meet their emissions requirement under the NEG.

Bioenergy generation can contribute to both emissions and reliability requirements and the NEG should accommodate this. Cofiring with sustainable biomass has the potential to significantly reduce the carbon footprint of non-renewable electricity generators while supporting baseload and dispatchable generation, regional employment and communities.

Recommendation 5: Establish a credible and high quality emissions offset and credit scheme that includes clear pathways for Australian agriculture to generate and trade emissions credits.

The NFF favours flexible compliance options as long as they are credible and agriculture is able to contribute effectively by generating domestic credits that can be purchased by retailers to meet NEG emissions requirements. NFF also favours carrying forward, and banking of, emissions overachievement but these should not be unlimited. The limits could be duration-based or applied as a carry-over adjustment factor that decreases with duration of banking.

Most emissions in agriculture occur outside of electricity demand. Consequently, by giving emissions-intensive trade exposed industries further exemptions from meeting electricity emissions targets, other sectors are likely to be faced with larger, potentially more costly emissions reductions.

It is critical that Government ensures that the settings of offset markets facilitate efficient participation by farmers. NFF has long argued that there are fundamental barriers to farmers participating in the carbon market, including:

- There is no easy way for a farmer to bundle up and sell all the different sequestration and emission reduction strategies that suit their farm system and business model. This creates very high administrative costs and reduces efficiency.
- There are a very limited number of methods available that are relevant to the majority of farmers. The reality is that for most Australian farmers cost-effective methods are not yet available.
- Understanding the legal and financial risks to participating in the carbon market is difficult, and sourcing trusted and independent advice is challenging. Emissions reduction projects are long term commitments of at least 7 years or, in the case of sequestration projects, 25 to 100 years.

Despite some adjustments on the establishment of the Emissions Reduction Fund, it is NFF's view that these barriers to an effective and efficient offset market persist. With the ERF now six auctions old, these barriers to participation are increasingly evident.

With the exception of very large industrial businesses, approved methods are single activity methods. For a farmer to apply more than one method, they would be required to implement multiple carbon projects, each with their own partners, monitoring and reporting rules.

Of the 703 registered projects, vegetation projects (reafforestation and avoided clearing) continue to be awarded the vast majority of contracts with 124 million tonnes of abatement contracted across 364 projects nationwide. In contrast, only five methods of the available agriculture methods have been used – these relate to methane utilisation in piggeries and dairies, beef cattle herd management and soil carbon sequestrating in grazing systems. This covers a grand total of 50 projects and a total of 17.8 million tonnes of CO₂ abatement. Similarly, only 13.8 million tonnes of abatement have been achieved by savannah burning methods utilised in northern Australia.

The method by method model also presents an overly cumbersome and expensive process for what may be a relatively straight forward and “adoptable” suite of on-farm management practices. A typical mixed farming enterprise may have opportunities to restore vegetation, agroforestry, increase soil carbon, avoid methane and N₂O emissions and increase energy efficiency, but as yet there is no easy way to bundle up these small parcels and sell them in a way that is efficient.

For small farm businesses, the effort required for a single method offset project is just not worth it as the current approach to participating means that a significant percentage of project value is lost to overheads, and this is a significant barrier to uptake.

Recommendation 6: Co-investment in Research and Development, combined with incentives, is necessary to facilitate investment in technologies to enable them to become commercially viable.

Continued and sustained investment in R&D by industry and government will build on the gains we have made to date and drive further improvements and potential step changes in the carbon efficiency of our farming systems. As farmers adopt less emissions intense practices, the contribution of the land and agriculture sectors in the national greenhouse gas inventory will improve.

The agriculture sector has shown its willingness to invest in climate research using industry funds through the Rural Research and Development Corporation (RDC) model. There are genuine incentives for industry to do this research – both in terms of productivity benefits and the need to build the capability to demonstrate to our markets that we are responsible producers. However, some emissions reduction R&D has long lead times, requiring sustained investment over time. The very nature of the challenge means that some research will be need to be “far-horizon”, making it riskier and less attractive for industry and private investment.

The statutory framework and funding agreements in place in the RDC model means that industry investment must be made in a way that delivers demonstrable value to levy payers. This limits the ability for industry to invest significantly in far horizon or blue sky research. By way of example, analysis conducted by Meat and Livestock Australia has examined the likely cost, mitigation potential and productivity impacts of methane research priorities. This highlights that there are some research areas where mitigation potential is significant (for example >20%) but the productivity gain is limited (<5%) which means industry is unlikely to invest in these areas without adequate incentives to do so.

In NFF's view, Government policy settings should incentivise industry to pursue the research that it is unlikely to fund on its own. A co-investment approach model such as that adopted in the Carbon Farming Futures package or the Rural R&D for Profit Programme has demonstrated success in the past to leverage industry, research providers and private sector investments. Such an approach:

- recognises that carbon research is often too “risky” to fit inside the demonstrable value parameters of industry levy-funded research; and
- enables industry as a whole to capture the value of the carbon benefit realised from its investment and adoption of carbon efficient practices, which in turn is captured through downward trends in the agricultural emissions.

Conclusion

The NFF acknowledges that the NEG, if designed well has the potential to deliver a reliable, low emissions electricity system. Technology neutrality is an essential pre-requisite for both the emissions guarantee and the reliability guarantee to be met at the lowest possible cost to the economy. The NEG, once implemented, will deliver a consistent framework across most of Australia that is able to be scaled to different emissions trajectories and can be linked to existing climate policies. For these reasons, the NFF supports the implementation of the NEG. It is important that the NEG recognises the contribution that renewable heat production and renewable bioenergy can make to Australia's emissions reduction efforts.

These features, however, are not sufficient to ensure that downward pressure will be placed on retail electricity charges. There are real concerns that the vertically integrated and concentrated nature of the retail and generation sectors of the National Electricity Market will negate any downward pressure on wholesale electricity prices that may arise from greater investment certainty. Additionally, there are real risks that the NEG may cause further damaging overinvestment in network infrastructure, placing upward pressure on retail prices.

Participation in carbon markets by Australian farmers to date has been hindered by a cumbersome and expensive process. It is critical that the NEG links seamlessly with the emissions reduction fund and other climate-related policies to ensure the lowest cost abatement is sourced across the economy and that farmers have an incentive to reduce their emissions while being rewarded for doing so. To achieve this, the Australian Government will need to support research and development in the sector and provide a means for farmers to aggregate and trade credits generated by multiple, small bundles of emissions abatement.

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