Response to the proposed updates to State Code 23: Wind Farm Development and the associated Planning Guidance

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#### Prepared for:

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Deputy Premier,
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Infrastructure.

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The united voice of Queensland agriculture

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Hon. Dr Steven Miles

Deputy Premier,

Minister for State Development, Infrastructure, Local Government and Planning and Minister Assisting the Premier on Olympic and Paralympic Games Infrastructure.

**Queensland Government** 

Submitted via email: windfarms@qdsdilgp.qld.gov.au

#### **Our members**

- Canegrowers
- Cotton Australia
- Queensland Fruit & Vegetable Growers
- Nursery & Garden Industry Queensland
- eastAUSmilk
- Australian Cane Farmers Association
- Queensland United Egg Producers
- Turf Queensland
- Queensland Chicken Meat Council
- Pork Queensland

- Bundaberg Regional Irrigators Group
- · Burdekin River Irrigation Area
- Central Downs Irrigators Ltd
- Fairburn Irrigation Network
- Mallawa Irrigation
- Pioneer Valley Water Co-operative Ltd
- Theodore Water Pty Ltd
- Eton Irrigation
- Queensland Oyster Growers Association
- Lockyer Water Users Forum

# **About the Queensland Farmers' Federation**



# The Queensland Farmers' Federation (QFF) is the united voice of agriculture in Queensland.

We are a member-based organisation representing the interests of peak agriculture industry organisations (both state and national). Through our members, QFF represents more than 13,000 primary producers across the cotton, cane, horticulture, dairy, nursery and garden, poultry, pork, and intensive animal industries.

We unite the sector to engage in a broad range of economic, social, environmental, and regional issues through advocacy, policy development, and project activity. We work with the government of the day on behalf of industry, farmers, and the community to provide powerful representation and contribution to the policy direction, sustainability, and future growth of Queensland's agriculture sector.

Our Council of member representatives and policy committees set the strategic priorities for policy development and advocacy, while our Executive Board ensures our corporate governance.

QFF draws on the expertise and industry knowledge of our members, and through our commitment to collaboration and considered policy development, we lead Queensland's agriculture sector towards a strong future, ensuring our members are ahead of the game and have a voice at the table on the issues that matter to their members.

# Response to the proposed updates to State code 23: Wind farm development and the associated Planning Guidance

QFF welcomes the opportunity to provide comment on the proposed updates to State code 23: Wind farm development and the associated planning guidance (updates to State code 23) published on 7 August 2023.

We provide this submission without prejudice to any additional submission from our members or individual farmers.

#### **Overview**

QFF welcomes the opportunity to provide feedback on the proposed updates to State code 23: Wind farm development and the associated planning guidance (updates to State code 23) published on 7 August 2023. The development of wind farms has increasingly come under scrutiny due to the complex challenges they present to both the environment and the local communities they are sited on, particularly in fertile agricultural regions. QFF acknowledges that the proposed State Code 23: Wind farm development and its associated Planning Guidance seeks to provide a robust framework to manage these challenges. This submission delves into the key areas of concern and provides

recommendations to ensure that the wind farm developments are sustainable and are developed in synergy with farmers and local communities.



#### **Summary of key points**

- Rehabilitation: Ensure rehabilitation of any temporary construction areas respects both environmental needs and the requests of landholders directly impacted by the infrastructure.
- Biosecurity: Ensure that proponents conduct any construction or rehabilitation activities in line with biosecurity regulations and allocate funds to safeguard agricultural land from biosecurity threats.
- **Natural drainage patterns and erosion**: Require proponents to provide evidence of nondisruption to drainage patterns and emphasise on managing road deterioration to protect drainage systems and adjacent farmland.
- Bushfire risks: Developers should produce detailed bushfire and emergency management plans, considering the unique risks associated with wind farms adjacent to agricultural lands.
- Sustainable community and shared benefits: Future wind farm developments should prioritise community engagement and local benefits, with strict SIA's ensuring both economic growth for locals and sustainable, socially responsible outcomes.
- Scenic amenity: Highlight the need for accurate visual impact assessments, defining 'high scenic amenity', and involving the local community in identifying areas of aesthetic significance.
- Aviation and aerial spraying: Ensure wind farm structures do not interfere with aerial spraying operations and include local farmer consultations in the Aviation Impact Statement.
- **Transport networks:** Introduce a comprehensive TMP``` that prioritises minimal disruption to agricultural activities and protects regional roads.
- Decommissioning: Mandate clear strategies ensuring financial security for decommissioning
  processes to safeguard rural landholders and the environment particularly in the case of
  business failure or changed circumstances.

#### Rehabilitation

Under Supporting Action PO4, wind farm developers are required to restore and replant areas cleared during construction that are no longer necessary for ongoing wind farm operations. This includes areas designated for temporary purposes such as worker accommodations, concrete batching plants, and construction storage sites. The ultimate aim of any rehabilitation activity related to windfarm sites should be to restore the land to its original state as it was before the construction of the wind farm. Collaborative planning between proponents and landholders is required to ensure that the rehabilitation of any temporary construction areas respects both environmental needs and the requests of landholders directly impacted by the infrastructure.

#### **Biosecurity**

When proponents engage in construction or rehabilitation activities that involve disturbing and relocating soil, they inadvertently risk introducing or spreading biosecurity threats. These threats could manifest in the form of invasive species, pests, or diseases, which can have profound impacts on both local ecosystems and agricultural productivity. Any compromise in a region's biosecurity could have cascading effects – reducing crop yields, affecting local economies, and even altering the

ecological balance of the agricultural area. To mitigate these risks, project proponents need to implement specialised soil disturbance techniques before beginning soil transportation. During the construction or rehabilitation phase, it is essential to strictly adhere to the Soil Movement Guideline set out by the Biosecurity Act 2014 and the Biosecurity Regulation 2016. This proactive approach is in line with best practices set out by established agricultural enterprises and biosecurity zones, which are designed to protect sensitive environments and agricultural regions from external biosecurity threats. As development activities increase in scale and frequency, the associated biosecurity risks rise proportionally. As a result, proponents must allocate funds to ensure that any increased biosecurity risks are appropriately managed and addressed. By contributing funds aimed at lessening these risks, proponents are actively investing in the protection of the regions they operate in.

#### Natural drainage patterns and erosion

Supporting action PO5 mandates that any project developer presents a comprehensive site plan, clearly indicating the proposed vegetation clearance within both mapped and unmapped waterways. Developers must provide evidence ensuring that any proposed disruptions to natural drainage patterns will not adversely affect downstream waterways and catchment areas. However, the proposed requirements for the management plan overlooks the use of heavy haulage equipment on regional roads. The deterioration of highway or gravel-laden roads, especially those running through or between farms, can have unintended consequences on natural drainage patterns. Such degradation might indirectly harm existing catchments and waterways thereby affecting agricultural production in the neighbouring area. It is essential to note that wind farm developers do not merely use regional roads, they also carve out access points from these roads to the development sites. These access points present a dual challenge for agriculture. Firstly, they section-off vast stretches of land, potentially diminishing its agricultural value. Secondly, they can disrupt established drainage systems. Any disturbance to the drainage can result in either waterlogged zones or overly dry patches – both scenarios could indicate adverse outcomes for cropping or livestock production.

The deterioration and degradation of land and surrounding roads also needs to be mitigated in regard to loss of valuable topsoil and increased risk of erosion. If poorly managed, increased erosion can lead to elevated dust levels and runoff that might contaminate local waterways, leading to issues like increased turbidity, heightened biological oxygen demand, and potential eutrophication. It is imperative that wind farm land use planning encompasses detailed frameworks and strategies tailored to control erosion risk and runoff on a site-by-site basis, in consultation with local landholders and environmental planning experts. This becomes even more crucial in regions adjacent to agricultural lands, especially within the catchment areas of the Great Barrier Reef. Any unintended consequences from these developments could jeopardise the objectives outlined in the Reef 2050 Water Quality Improvement Plan, impacting water quality benchmarks related to dissolved inorganic nitrogen, sediment loads, and pesticide levels.

#### **Bushfire risks**

Supporting action PO9 requires wind farm developers to provide detailed bushfire management plans and safety and emergency management plans to ensure that construction and operational workforces are appropriately protected. The consideration stipulated here is that wind farm developments may pose a fire risk in the construction and operation phase. This is because of the risk of lightning strikes, sparks emanating from turbine equipment and the potential for fires being started during construction and management works. Wind farms are located in remote areas and are typically situated on or adjacent to agricultural land. As a result, any increase in bushfire risk

must be deemed unacceptable and appropriate measures or bushfire managements plans must be provided to protect adjoining agricultural land.



Although fire risk associated with wind farm developments are fundamentally no different from the fire risk associated with any other industrial or farming equipment that may operate in similar condition, a contingency for any exacerbation of risk must be addressed under existing schemes and fire risk management principles, namely:

- 1. Consultation with Queensland Fire and Emergency Services (QFES) and the local Fire Warden, and effective identification and management of hazards and risks specific to the landscape, infrastructure, layout, and operations at the facility.
- 2. Siting of infrastructure so as to eliminate or reduce hazards to emergency responders and safe access for QFES emergency responders in and around the facility, including to wind farm and firefighting infrastructure.
- 3. Vegetation sited and managed so as to avoid increased bushfire risk and prevention of fire ignition on-site and spreading to adjoining agricultural land.
- 4. Investing in the acceleration of technology that assists in early fire detection and overall fire preparedness and response.

#### Sustainable community and shared benefits

In 2017, the Queensland Government launched the Strong and Sustainable Resource Communities Act 2017 (SSRC Act) necessitating that residents of communities in the vicinity of large resource projects benefit from the construction and operation of the projects. The primary Object of the Act was to mandate large resource project stakeholders to: (a) draft a Social Impact Assessment (SIA); (b) employ people from nearby regional communities; and (c) not to discriminate against local residents when employing for the projects. The SSRC Act sought to prioritise community involvement, economic growth, and fair practices to ensure lasting benefits for residents of the region. QFF acknowledges that the updated State Code 23 addresses specific crucial aspects of the Queensland Government's 'SIA Guidelines' that align with the provisions in the SSRC Act. These aspects include: (1) Community and Stakeholder Engagement: detailing both proposed and continuous engagement with communities and stakeholders during construction; (2) Workforce Management: delving into the workforce profile during construction phases, with a focus on analysing local and regional labour markets and exploring opportunities for local workers; and (3) Health and Wellbeing: analysing the availability and accessibility of health care and emergency services for the intended construction workforce. However, these SIA guidelines within the updated State Code 23 appear to align primarily with the supporting action PO14, related to workforce accommodation. This could understandably lead to ambiguity for wind farm proponents and the Director General involved with SIA approval.

For future wind farm developments in Queensland, the Objects outlined in the SSRC Act could offer a roadmap to safeguard communities from the fluctuations of the boom-bust cycle and encourage inclusivity, diversity, and active participation in local social and cultural activities. A comprehensive SIA must guarantee that community matters and benefits are properly addressed. Ideally captured in the SIA framework, proponents must be required to clearly outline the balance of benefits and burdens, and the measures to mitigate adverse impacts on them. Proponents must prioritise local recruitment, promoting economic growth for residents of that region. Wind farm developments should consider offering communities consistent, affordable access to the electricity generated, potentially through Distributed Energy Resource offerings or community-based energy cooperatives. Such an approach not only ensures energy reliability but also ensures community-centric, sustainable development. Actively engaging with the community, guided by the SIA framework, is

essential to achieving both procedural fairness and socially just outcomes throughout the SIA process. Future wind farm developments must seek to embody the aspirations of regional agricultural communities — sustainable regional communities with strong local bonds, marked by economic diversity, and a vibrant social and cultural life. Integrating these principles into the updated State Code 23 will guarantee that wind farm developments are not just environmentally sustainable but also socially accountable, contributing positively to the economic fabric of agricultural communities.

#### **Scenic amenity**

If the relevant state or local government planning scheme has identified the site in an area of high scenic amenity, a visual impact assessment report is required to demonstrate compliance with PO15. Firstly, the report must incorporate visual simulations or photomontages, highlighting the expected visual impact of the proposed turbines from critical public viewpoints and viewing corridors. It is widely acknowledged that photomontages or visual simulations cannot entirely capture a scene as authentically as the human eye perceives it. Hence, there is a tendency for such images to underrepresent the actual visual impact attributable to landholders or local community members. Secondly, the detailed assessment component of the report should highlight how the turbines, when observed from specific viewpoints or viewing corridors, do not infringe upon the scenic amenity of the area. However, there exists an ambiguity around the term 'high scenic amenity'. Its meaning remains undefined in both the Code and the Guidance, leading to potential inconsistencies in interpretation.

Regardless of any legislative or desktop interpretations of scenic amenity, community and landholder involvement is paramount to ensure that areas of aesthetic significance are correctly identified, reflecting the true value and perception of the community regarding the scenic amenity of their land. By actively involving the local community and landholders in the assessment process, planners can gain a more holistic understanding of the proposed wind farm development site's significance. Compliance with supporting action PO15 must include the requirements for a comprehensive and inclusive approach to visual impact assessments, prioritising local community and landholder voices and experiences.

#### **Aviation and aerial spraying**

Commercial wind farms are inherently large structures that sprawl across extensive areas, often constructed on or bordering agricultural land. Given their height and prominence, it is essential to ensure that these structures do not interfere with aerial spraying operations or pose any safety risks for these pilots. To meet the requirements of PO21 and PO22, written evidence is required, showing consultations with Airservices Australia, the Department of Defence, and the district aerodrome supervisor. However, consultations must not stop at these aviation entities and must include local farmers and aerial spraying pilots.

Introducing wind turbines into fertile agricultural areas might unintentionally obstruct aerial pest control activities. Aerial spraying is a time-sensitive and efficient method to address pest outbreaks, ensuring crop health and subsequently, the stability of the food supply chain. Should wind farms obstruct these critical aerial operations, the consequences could be extensive. Immediate crop yields are at risk, but there is also the threat of long-lasting ecological disruptions. Furthermore, farmers might face increased expenses due to the necessity of alternative pest control methods or the potential loss of crops. Given these potential repercussions, local community and landholder consultations must be deemed essential to meet compliance with supporting actions PO21 and

PO22. Therefore, such concerns and considerations merit inclusion in the Aviation Impact Statement, ensuring that the voice of the agricultural and aerial spraying businesses are adequately represented, and their safety and concerns addressed.



#### **Transport networks**

Compliance with PO16-20 is essential to ensure the transport and OSOM haulage of windfarm components and construction materials do not adversely impact the transport networks of local agricultural communities. The development of wind farms can significantly strain existing road infrastructure throughout their construction and operation stages. This was evident at the Macarthur Wind Farm in Victoria, where significant road damage amounted to 14 million dollars, yet only a fraction was covered by the proponent. Each wind turbine, made of six sections weighing roughly 80 tonnes each, requires large OSOM trucks for transportation, often escorted by police and Main Roads. Typically, these trucks navigate through low-volume gravel and asphalt roads leading to windfarm development sites, putting immense strain on these regional roads. The sheer weight of these vehicles, often exceeding road capacity, not only erodes the road infrastructure but poses a threat to agricultural supply chains if not adequately addressed. In areas like Queensland's agricultural belts, this can disrupt the timely movement of produce, potentially incurring economic losses borne by farmers. Unique logistical challenges are also posed by the transportation of these components, necessitating road widening and potentially causing damage to adjacent crops and natural drainage systems. The temporary alteration of road signs also introduces potential hazards to farmers transporting their produce.

A comprehensive Traffic Management Plan (TMP) is essential before initiating any site work and should take into consideration the protection of agricultural supply chains and transportation networks. An acceptable TMP must:

- 1. Outline designated pathways, roads, and entry points to ensure minimal disruption to agricultural activities.
- 2. Provide a detailed list of vehicles used and anticipated peak traffic times, ensuring farmers' routines are least affected.
- 3. Incorporate a thorough route risk assessment, evaluating not just road safety but potential threats to farmlands and necessary upgrades to protect them.
- 4. Plan effectively for the construction phase, emphasising minimal disturbance to farmers, especially those needing heavy haulage permits or police escorts.
- 5. Draft a robust maintenance protocol for roads, ensuring farmlands remain accessible and unaffected.
- Establish an agreement with local road authorities, insisting that the wind farm developer not only funds road improvements but also guarantee the protection of road infrastructure adjacent to agricultural lands.

#### **Decommissioning**

Standard contracts for wind farms typically require the dismantling of turbines and the restoration of the site to its original state. While these contractual obligations are in place, there is a legitimate concern regarding their fulfillment, especially in situations where the wind farm owners or developers face financial insolvency or bankruptcy. The recycling process for these blades is not only costly but also offers limited returns in terms of material value. As a result, relying solely on market-driven solutions to address this concern might prove inadequate given the economic dynamics involved. To mitigate such uncertainties, decommissioning bonds must be introduced into

supporting action PO23. These bonds must act as a financial safety net, ensuring that funds are available for the dismantling and restoration processes, even if the responsible entity becomes financially non-viable. Previous work Financial Provisioning Scheme during the development of the gas sector can be pointed to as a way in which the government sought to manage risk in the resource sector.

Therefore, it becomes crucial for the State Code 23 to impose strict decommissioning regulations. It must mandate the relevant proponents in wind farm developments to outline clear strategies for ensuring financial security for decommissioning processes. These regulatory measures should be aligned with the 'polluter pays' principle. This principle, frequently applied to various other resource extraction sectors, demands that those responsible for environmental degradation bear the costs of rectifying any damage. It is vital to ensure the protection of rural landholders who might be directly affected by decommissioning processes. Supporting action PO23 must stipulate that any wind farm development must present a comprehensive decommissioning strategy in the approval process. Such a strategy must be a prerequisite for obtaining approval, ensuring that landholders and the local environment remain safeguarded throughout the lifecycle of the wind farm.

#### Summary

Yours sincerely

The rapid expansion of wind farm developments will come with complex challenges, especially when such developments are built upon or adjacent to agricultural land. The proposed updates to State Code 23: Wind farm development and its associated Planning Guidance represents a concerted effort to streamline this integration, addressing both environmental and socio-economic concerns. It is imperative that its integration respects and protects existing ecosystems, agricultural activities, and community values. By addressing the above concerns in detail, Queensland can facilitate a synergistic cooperation between wind farm developments and the agricultural lands and communities they are built upon and build confidence that unintended consequences can be planned for and avoided.

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