# **Sugarcane Bioenergy Inquiry 2025**

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# Wilmar Sugar and Renewables

Submission to the Queensland Parliamentary Inquiry into Sugarcane Bioenergy Opportunities

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## 1. Executive summary

Queensland's sugar industry, and Wilmar Sugar and Renewables in particular, is uniquely positioned to contribute to Australia's energy transition and sovereign fuel capability. With the right policy settings, the sector can deliver scalable low carbon liquid fuels (LCLFs), including sustainable aviation fuel (SAF), renewable solid fuels such as black pellets, and dispatchable renewable electricity via cogeneration.

This submission outlines the policy interventions required to unlock these opportunities, drawing on Wilmar's current view of the investment environment and industry experience in sugar and ethanol manufacture and electricity generation. It proposes a framework that supports feasibility work, infrastructure and market development, while aligning with national sustainability and sovereign capability goals and underpinning regional economic resilience.

# 2. Economic environment for Australian sugar industry

The Australian sugar industry currently faces a range of significant economic challenges, mirroring the difficulties experienced by other sectors such as automotive manufacturing and oil refining, both of which have contended with global competition and, in some cases, industry closures. Many of Australia's sugar factories are ageing – most were constructed in the 1870s or 1880s – and a substantial proportion of the capital base of the sugar manufacturing sector is at the end of its service life and must be replaced if operations are to continue. As a result, the stay-in-business capital requirements for the sector - which are already very high, due to the nation's expensive labour and construction costs, are ever increasing. The increased demand for replacement capital is challenging cashflows and threatening the future viability of the sector. Compounding these challenges, operational and maintenance costs within the sugar sector have been rising at a rate that has outpaced inflation.

Approximately 85% of Australia's sugar production is exported, with a strong focus on Asian markets. However, the industry faces strong competition from countries such as Brazil, Thailand, and India, where labour costs are substantially lower. Since 2000, eight Australian sugar factories have closed, and many factories – particularly those that are processing less than two million tonnes of cane annually – are currently cash negative given today's sugar prices. Without a fundamental improvement in industry economics, further mill closures are anticipated in the coming years.

Despite these difficulties, there are promising opportunities on the horizon. One such opportunity is investment in renewable fuels and renewable energy production, which offers a way to diversify revenue streams and replace aging assets. By extracting additional value from existing cane feedstock or by shifting production from sugar to renewable ethanol, which may command a more favourable price, the industry could improve its financial outlook.

# 3. The way forward: Recommendations for the Parliamentary Inquiry

There are a number of government actions that would both encourage industry investment in bioenergy projects and ensure their ongoing viability. They are:

- Co-fund feasibility and final investment decision studies to de-risk project development initiatives
- Restructure the Queensland ethanol mandate to stimulate demand for local ethanol and facilitate appropriate market prices for producers



- Advocate for the removal the ethanol excise in recognition of the environmental and health benefits
  of ethanol compared to fossil fuels.
- Establish a buyer-of-last-resort scheme for biofuels such as black pellets
- Advocate for an Australian Biofuels Mandate with local content provisions or other local producer support
- Advocate for a sovereign fuel supply to the Australian Defence Force for renewable diesel, ethanol
  and sustainable aviation fuel, including other government agencies
- Establish cogeneration power purchase agreements to support bagasse-based electricity generation
- Provide a floor price for electricity export from existing capacity
- Facilitate bi-lateral sale and purchase of electricity between sugar factories and their cane grower suppliers such that the margin between wholesale and retail prices is partly or fully shared between the contracted parties
- Reform electricity market regulations to reduce barriers for sugar industry generators
- Invest in capital grants for sugar industry first-of-kind industrial upgrades and energy transition
- Address the negative impacts and implications of sugar industry regulation on investment in bioenergy and biofuel projects.

# 4. Wilmar Sugar and Renewables operations



Wilmar owns and operates eight sugar factories in North Queensland, located across four main cane growing regions.

The combined operation processes approximately 15 million tonnes of cane per annum supplied from 1,300 growers. Its factories produce more than two million tonnes of raw sugar (60% of Australia's production), and 500,000 tonnes of molasses.

Wilmar is Australia's largest raw sugar producer and sugarcane grower, and one of the largest generators of renewable electricity from biomass. It is one of only two bioethanol producers in Australia and is the leading sustainable liquid fertiliser and stockfeed producer.

The business employs 2,000 people in permanent and seasonal roles and contributes \$1.6 billion in direct and indirect value-add to Queensland communities.

Wilmar, a key player in the sugar industry, has actively pursued the development of renewable fuel and energy options. The company has a dedicated Business Development function specifically to identify



economically viable growth projects that could enhance Wilmar's operations in Australia. Success in this area would attract further investment, provide asset renewal in our factories and help secure the future of Wilmar's factories for generations to come.

Over the past two years, Wilmar has engaged with multiple industry participants and project proponents and has assessed a broad range of renewable fuel and energy technologies at a conceptual level. These have included:

- First generation (from molasses or juice) and second-generation (from bagasse) ethanol (1G and 2G ethanol)
- Alcohol to jet sustainable aviation fuel (SAF)
- Gasification of bagasse for methanol and SAF production
- Hydrothermal liquefaction technology to convert bagasse to biocrude
- Small and large-scale cogeneration
- Cogeneration/solar power generation with battery storage
- White and black pellets
- Hydrogen
- Anaerobic digestion for biogas production.

Having undertaken this comprehensive review of renewable fuel and energy technologies, Wilmar is narrowing its focus to three commercially promising pathways:

- > **Black pellets** produced from bagasse offer a renewable alternative to coal in existing boilers without modification. Wilmar is conducting engineering studies, including a commercial-scale trial in the United States of America, to assess feasibility. If successful, this technology could potentially be extended to tops and trash, increasing its value proposition.
- > **First-generation ethanol** produced from sugar juice presents a low-risk route to SAF production. Wilmar is evaluating the conversion of some factories from sugar to ethanol production, contingent on long-term offtake agreements and supportive policy settings. This would require significant capital investment and policy certainty.
- > **Cogeneration** using bagasse as fuel offers dispatchable renewable electricity. While historically supported by renewable energy certificates, current market structures do not adequately value the baseline nature of sugar manufacturing sector cogeneration. Regulatory reform and targeted offtake agreements are needed to support existing capacity and further unlock latent capacity.

While second-generation (2G) ethanol and gasification technologies represent promising avenues for long-term decarbonisation, they currently involve significant technical and commercial risks that limit their immediate viability as strategic pathways for sugar manufacturers such as Wilmar.

Ongoing research and pilot projects by others continue to advance these approaches, but at this stage, their deployment in the Australian sugar industry remains speculative in our view, with substantial uncertainties around scalability, reliability, and cost-effectiveness. As such, Wilmar's current focus remains on technically ready solutions such as black pellets, first-generation ethanol, and cogeneration that offer more immediate opportunities for investment and impact, while monitoring the evolution of 2G ethanol and gasification as potential future options.



## 5. The factory energy balance

Sugar factories are designed to operate in balance between the energy entering the factory, in the form of cane fibre called bagasse, and the amount of energy required to process the sugar cane to produce final products such as raw sugar, electricity, molasses and ethanol.

To avoid creating a disposal issue from excess bagasse, sugar factories were therefore historically designed with lower energy efficiency than is technically feasible so as to use all the available bagasse. As a result, there is currently no (zero cost) excess bagasse for alternative applications. However, by installing equipment to improve the energy efficiency of factories, it is possible to create surplus bagasse that may be used for other products and opportunities. Indeed, the bioenergy opportunities identified above will require energy efficiency projects. These projects will require significant capital investment to liberate the necessary surplus bagasse feedstock.

The additional benefit of investment in energy efficiency in sugar manufacturing factories is the renewal of aged and end of life process equipment which is removed and replaced to achieve an energy efficient design. This will also provide the factory with improved performance and reliability which provides direct economic benefits to sugar manufacturers and growers that supply cane to the factory.

## 6. Future black pellets opportunity

With the potential for investment in our sugar factories to enhance factory energy efficiency to liberate bagasse, there is an opportunity to process this bagasse into black pellets, a renewable fuel that can replace coal in conventional coal-fired boilers with no modifications. There is emerging domestic and international demand for this product, but the technology has yet to be implemented in the sugar industry, making it a higher-risk investment that would benefit from government-backed feasibility studies and capital support. The technology is modular, allowing for investment one factory at a time, thereby reducing risk.

Through the optimisation of the sugar production process, the Wilmar factories could produce 400,000 tonnes of black pellets per annum from surplus bagasse. This is equivalent to 320,000 tonnes of coal which would emit 768,000 tonnes of CO<sub>2</sub>. Pellet production from bagasse is envisaged to take place only during the crushing season, leaving the maintenance season as an opportunity to produce additional volume from other biomass sources, such as tops and trash and energy cane. The focus is first to optimise the process on bagasse, which will be the lowest cost and most economic feedstock, and then subsequently investigate other opportunities.

Wilmar has engaged a technology vendor to conduct engineering studies to define the scope and capital cost estimates for a Black Pellet project at each of its factories, with support from the Queensland Bioenergy Fund. The study, due to conclude by the end of 2025, includes a commercial-scale trial using bagasse feedstock in the United States of America. This trial will yield real-world data to inform the engineering studies and give Wilmar's engineers practical exposure to the technology, aiding its potential integration into Queensland factories. The outcome will provide Wilmar with a clearer understanding of the technology's feasibility and associated capital and operating costs, enabling informed discussions with prospective long-term customers. If feasible, this approach could benefit all sugar factories in Queensland, not just those operated by Wilmar, and provide a coal substitute for other Queensland based manufacturing businesses.

The black pellets opportunity will require reinvestment in a factory's aged process equipment to improve energy efficiency. This reinvestment in factory assets will ensure a long-term reliable and sustainable sugar industry to the benefit of all value chain participants. Additionally, the utilisation of tops and trash as extra



feedstock for black pellet production represents a logical progression that could further unlock value across the supply chain. By broadening the scope of biomass sources, the industry could enhance resource efficiency and create new income streams for growers, while supporting the broader objective of maximising the sustainability and economic resilience of Queensland's sugar industry.

Furthermore, black pellets are considered a gateway to gasification, as their uniform size, density, and moisture content make them an ideal feedstock for advanced conversion processes. By transforming bagasse into black pellets, sugar factories could facilitate future integration with gasification technologies, which require consistent and readily processable biomass to operate efficiently. This positions black pellets not only as a renewable fuel replacement for coal, but also as a strategic enabler for the next generation of bioenergy solutions, potentially expanding the role of Queensland's sugar industry in the transition to low-carbon energy systems. As the industry explores these emerging pathways, the development and adoption of black pellet technology could lay the essential groundwork for further innovation in biofuel production.





A Wilmar Sugar and Renewables team at the US site of the bagasse-based black pellets trial (left) and black pellets (right).

#### 7. Current ethanol situation

There are only two domestic producers of ethanol in Australia (Manildra and Wilmar). Wilmar is the only sugar industry player, producing 60ML of ethanol from molasses at its plant in Sarina. Notably, Wilmar operates a circular business model, turning the by-product from its ethanol distillery into liquid fertiliser for cane farms and horticulture. Manildra, the major player with a capacity of more than 300ML, produces ethanol from waste starch which is a by-product of its successful export gluten business. The domestic ethanol market is oversupplied and Manildra exports substantial ethanol volumes given this oversupply in Australia.

There is a marked disparity in production costs between the two producers, with Wilmar's costs being significantly higher due to the strong and increasing domestic and export demand for molasses as a feedstock for the stockfeed industry.

State Government ethanol mandates do not create enough demand to absorb local production at prices that support long-term sustainable operations. The E10 retail market structure is also not supportive of creating a viable market for ethanol as it is positioned by retail fuel outlets as a discounted substitute for unleaded petrol (ULP). Although the wholesale ethanol price is currently above ULP parity, ethanol is subject to a substantial excise (16 cents per litre), which impacts the supply chain's cost structure and, consequently, the



price that can be charged. Ethanol prices are also linked to wholesale petrol prices which are subject to significant variability due to volatility in oil prices, refining margins, international shipping costs and exchange rates. Variability in ethanol price is therefore unrelated to its cost of production which is heavily influenced by molasses prices in domestic and export markets which have steadily increased over time. Together, these factors present significant challenges for the long-term sustainability of Wilmar's Sarina facility, Queensland's and the sugar industry's only ethanol producer.

The use of ethanol directly as a fossil fuel replacement provides greater decarbonisation benefit at lower cost compared to further processing the ethanol into SAF and then using SAF as a fossil fuel replacement. This differential in decarbonisation outcomes underscores the importance of fostering strong policy support and commercial frameworks for all ethanol applications, not only advanced biofuels. Prioritising measures that incentivise both direct ethanol fuel use and its conversion to sustainable aviation fuel will broaden market opportunities for Queensland's sugar industry, improve the sector's resilience, and accelerate progress towards Australia's emissions reduction targets.

To address these issues, a comprehensive restructure of the ethanol mandate is necessary to facilitate changes to the ethanol market, stimulate demand and ensure Queensland's ethanol industry remains viable. This could include the following:

- The Queensland Biofuels Mandate (Mandate) should be stringently enforced with retailer exemptions granted only in exceptional circumstances (liable parties with multiple sites must aggregate sales rather than seek exemption for individual sites).
- The Mandate target of 4% should be measured against a liable party's sales of all fuel grades (including premium unleaded petrol (PULP), which the national vehicle fleet is progressively moving towards, and disregarding exemptions) leaving liable parties to decide how they meet that commitment providing encouragement for retailers to develop alternate market positions for ethanol (e.g. an octane enhancing additive) as opposed to the current positioning as a discounted substitute for ULP.
- The Mandate target should rise incrementally from 4% to 10% over three years as the increase in electric and hybrid vehicle use reduces petrol consumption.
- Retailers of petrol in Queensland should be required to place a notice on all petrol pumps that,
   'This fuel may contain up to 10% ethanol' to encourage the use of ethanol as an additive in all petrol grades, not just ULP.
- Fuel sold in Queensland as E10 should have a minimum 9% and a maximum 10% ethanol content (as in NSW).
- The Mandate should be modified to require that ethanol be produced from sugar cane or sugar cane by-products, thereby specifically targeting sugar industry produced ethanol, given that Queensland represents the vast majority of Australia's sugar production.
- Queensland Government Fleet vehicles capable of using biofuel (petrol or diesel) should be required to do so.
- The ethanol excise should be removed in recognition of the environmental and health benefits (improved air quality and lower tail pipe particulate emissions) of ethanol compared to fossil fuels.
- The Government should promote the mandating of ethanol in fuel for its health and environmental benefits particularly carbon abatement.

Additionally, the Queensland Government should advocate for the removal the ethanol excise in recognition of the environmental and health benefits (improved air quality and lower tail pipe particulate emissions) of ethanol compared to fossil fuels.



Such measures would help bridge the gap between production costs and market prices, providing greater certainty for producers and facilitating the scale-up required for future opportunities like sustainable aviation fuel (SAF) production. By modernising policy settings, Queensland can secure the future of local ethanol manufacturing, create a pathway for advanced biofuel developments, and reinforce the economic resilience of the sugar manufacturing sector and in turn, the sugar industry.

**Recommendation:** The Queensland ethanol mandate should be restructured to stimulate demand for local ethanol and facilitate appropriate market prices for producers

**Recommendation:** The Queensland Government advocates for an Australian Biofuels Mandate with local content provisions or other local producer support

**Recommendation:** The Queensland Government should advocate for the removal the ethanol excise in recognition of the environmental and health benefits of ethanol compared to fossil fuels.

# 8. Future ethanol opportunity

Looking forward, ethanol represents a pathway to low carbon liquid fuels (LCLF) production (e.g. SAF and renewable diesel), and the Queensland sugar industry could play a critical role in globally competitive, ethanol-based LCLF production.

Achieving this will require ethanol production on a much larger scale than Wilmar's current distillery, with first generation (1G) ethanol technology viewed as the lowest risk and lowest cost option to increase ethanol production capacity. This would necessitate producing ethanol from sugar juice, not molasses, to achieve the volumes needed for a SAF plant. In such a scenario, some factories would be converted from sugar production to ethanol production, decommissioning the sugar process but maintaining cane supply and crushing operations. This would be a major investment, only justifiable with the certainty of a long-term ethanol offtake contract and changes to existing cane supply agreements and the current sugar industry regulatory framework.

Large-scale ethanol-to-SAF projects are capital intensive. For example, a 250 ML SAF facility requiring 400 ML of ethanol feedstock and a substantial amount of cane would involve an investment of over \$2 billion. It is projected that the price required for SAF would be approximately three to five times the current jet fuel price, so some form of supply or demand-side support, likely through national legislation, would be required.

It is envisaged that investment in ethanol-to-SAF facilities will follow after HEFA (Hydroprocessed Esters and Fatty Acids) feedstock are fully committed, because they are expected to be the next cheapest pathway after the HEFA pathway. HEFA feedstock primarily comprises waste oils and fats, such as used cooking oil and tallow and, once these resources are fully allocated to existing SAF projects, ethanol derived from sugarcane becomes the most attractive feedstock for the next wave of sustainable aviation fuel initiatives.

Wilmar has engaged an engineering consultant with expertise in sugar milling, ethanol, and SAF to conduct studies supported by the Queensland Bioenergy Fund. These studies will evaluate several processing options and, for the preferred option, will estimate the scope of work and capital costs. This will provide an indication of the ethanol and SAF price required for such a project to be economically viable. If successfully



implemented, this project would deliver a major capital injection to renew ageing assets and secure the long-term operation of our sugar factories in the industry.

The "food versus fuel" debate, which questions whether agricultural resources should be directed towards producing food or biofuels, is often raised in discussions about ethanol production. However, in the Australian sugar industry context, this issue is not a significant concern. Australia exports approximately 80% of its sugar production, with these exports accounting for less than 2% of global sugar output. This means domestic demand for sugar is easily met and there is ample surplus available for alternative uses such as ethanol manufacture. As a result, increasing ethanol production from sugarcane would not compromise food security or limit the availability of sugar for local consumption.

# 9. Current cogeneration situation

Cogeneration from bagasse is the process of generating both steam and electricity from bagasse - the fibrous material left over after sugarcane has been crushed to extract its juice. This provides a renewable and efficient energy source for the sugar manufacturing process. Factories generate enough electricity to be self-sufficient and export excess electricity to the grid. Wilmar exports more than 300 gigawatt hours of electricity into the national electricity grid each year, enough to power more than 50,000 Australian homes for a year.

Historically, the renewable electricity credits market has incentivised substantial investment in major cogeneration facilities, yielding considerable benefits in asset renewal and diversification of revenue. However, the current commercial and regulatory climate no longer encourages further investment in cogeneration. The absence of credit for baseload generating capacity, despite all generation being 100% renewable, presents a challenge for sugar cogeneration projects.

In addition, current wholesale electricity prices during the day often fall below zero, resulting in the factory being charged for electricity exported to the grid during that period. As such, the current wholesale pricing model has a significant negative impact on sugar operations.

To address these operational challenges and unlock the full potential of cogeneration, it is essential to reform existing market and regulatory settings to ensure that sugar factories are fairly compensated for the unique characteristics of their renewable power exports (e.g. reliability and network frequency support). Implementing mechanisms such as a guaranteed floor price for exported electricity, especially during periods of negative pricing, would help stabilise revenues and support optimal factory performance. Such reforms would not only encourage further investment in cogeneration capacity but also enhance the sustainability of local sugar operations for cane growers, ultimately strengthening the entire value chain and supporting regional communities.

Recommendation: Provide a floor price for electricity export from existing capacity

# 10. Future cogeneration opportunity

There is significant latent opportunity for expansion of cogeneration capacity, where investment in sugar factory energy efficiency could unlock more than 600 GWh of additional power generation at Wilmar factories alone.



All sugar factories could benefit from supportive policy frameworks that encourage investment in additional cogeneration capacity. Such frameworks might involve a specific sugar industry scheme where government retailers or generators commit to purchasing a specified number of megawatt-hours (MWh) and associated renewable credits or rights at predefined prices. For these projects to proceed, there must be certainty regarding scheme parameters such as the quantity and electricity price prior to costly feasibility studies, providing factories with the confidence to invest. Joint government funding of these studies would further boost confidence and encourage uptake by sugar factories.

Another significant opportunity – currently not available under existing network rules – is for sugar factories and cane growers to engage in bilateral electricity sales and purchases. This would allow them to share all or part of the substantial margin between the wholesale price received by factories for the electricity sold to the grid and the retail price paid by cane growers for irrigation, simultaneously creating benefits for both sugar factories and cane growers. This opportunity would reduce revenue for the distribution/retail sector however could be justified based on a broader economic cost-benefit analysis of industry and community support, given the reliance on many regional and rural communities on the sugar industry.

**Recommendation:** Invest in capital grants for sugar industry first-of-kind industrial upgrades and energy transition

**Recommendation:** Establish cogeneration power purchase agreements to support bagasse-based electricity generation

**Recommendation:** Facilitate bi-lateral sale and purchase of electricity between sugar factories and their cane grower suppliers such that the margin between wholesale and retail prices is partly or fully shared between the contracted parties

Recommendation: Reform electricity market regulations to reduce barriers for sugar industry generators

#### 11. Policy settings required

To realise the sector's bioenergy potential, Queensland must adopt a strategic policy framework that addresses both supply-side and demand-side barriers.

#### 1. Supporting feasibility and capital investment

Early-stage investment in bioenergy project development is limited by uncertain demand and policy. While initial concept studies are inexpensive, costs rise quickly through development. Government coinvestment in feasibility and final investment decision (FID) studies is essential to de-risk projects and build a pipeline of shovel-ready initiatives.

Capital grants are also required to support industrial upgrades such as pelletisation technologies, energy optimisation, and process electrification. These investments will enable sugar factories to transition into bioenergy precincts, aggregating feedstocks and producing renewable fuels at scale.

**Recommendation:** Co-fund feasibility and final investment decision studies to de-risk project development initiatives

**Recommendation:** Invest in capital grants for sugar industry first-of-kind industrial upgrades and energy transition



#### 2. Creating market demand and investment certainty

To justify investment in bioenergy production capacity, Australia must create stable and predictable market signals. A key mechanism is the introduction of a National Biofuels Mandate with local content provisions or local producer support measures. This mandate should require fuel suppliers to include a defined percentage of biofuels such as ethanol or SAF in their blends, with a portion sourced from domestic feedstocks, potentially even with targets specific to feedstock type. Without this provision, demand could be met by imported biofuels, undermining local production and investment.

Government procurement, particularly by the Australian Defence Forces which consumes between 300 – 320 ML per annum (with around 215ML of aviation fuel) – could further support market development and ensure fuel security.

The Queensland Government should advocate for national demand-side policies, including biofuels mandates and procurement targets.

**Recommendation:** The Queensland Government advocate for an Australian Biofuels Mandate with local content provisions or other local producer support

**Recommendation:** The Queensland Government advocate for a sovereign fuel supply to be established with the Australian Defence Force and other government agencies for renewable diesel, ethanol, and SAF

## 3. Cogeneration floor price

For electricity from cogeneration, bilateral contracts with entities such as CleanCo could offer fixed prices over a 10-year period, reducing exposure to volatile electricity markets and rewarding the valuable attributes of bagasse-based electricity generation. Bagasse-based electricity generation benefits the sugar industry (both sugar factories and sugar cane growers), regional and rural communities and Queensland's economy by supplying power during evening peaks and reducing price spikes, but current market structures do not reward these attributes.

For existing cogeneration operations, a guaranteed floor price for exported electricity, especially during periods of negative pricing, would help stabilise revenues and support optimal mill performance. Regulatory reform is also needed. Electricity from sugar milling is a by-product, not the main goal. Current connection and access rules impose unnecessary burdens on existing and new sugar factory generators, and these burdens have significantly increased in recent years. The Queensland Government should collaborate with market participants to eliminate these barriers.

**Recommendation:** Establish cogeneration power purchase agreements to support bagasse-based electricity generation

Recommendation: Provide a floor price for electricity export from existing capacity

#### 4. Buyer-of-last-resort mechanism

While conventional power purchase agreements can support cogeneration, they may not be suitable to de-risk emerging technologies like black pellet production. We propose the introduction of a buyer-of-last-resort mechanism for bioenergy products, particularly black pellets.



Under this model, the Queensland Government would commit to purchasing a defined volume of product at a guaranteed minimum price if commercial buyers do not materialise. This product could be used in government-owned coal-fired powerplants reducing the emission intensity of their generation. This approach provides a safety net for producers, enabling them to proceed with capital-intensive investments in pellet manufacture and logistics infrastructure with confidence that their investments will not be stranded.

This mechanism shares conceptual similarities with the NSW Government's Long-Term Energy Service Agreements (LTESA), which operate like financial options. LTESA provides generators with the right but not the obligation to access a government-backed floor price if market revenues fall below a defined threshold. A Queensland buyer-of-last-resort scheme could adopt a similar optionality-based design, offering producers a guaranteed fallback price while preserving their ability to pursue higher-value commercial contracts.

Recommendation: Establish a buyer-of-last resort scheme for biofuels such as black pellets

#### 5. Address regulatory impacts

There is significant concern within the sugar manufacturing sector about the risks and adverse impacts on existing and new investments as a result of the re-regulation of the sugar industry through the Queensland Government's Grower Choice legislation and the Federal Government's Sugar Code of Conduct.

It is important that governments address the negative impacts and implications of this regulatory environment, particularly in the context of any potential future large scale investment by the sugar manufacturing sector in bioenergy and biofuels.

**Recommendation:** Address negative impacts of sugar industry regulations on investment in bioenergy and biofuel projects

# 12. Strategic benefits

The proposed policy framework would deliver significant economic, environmental, and strategic benefits:

- **Economic**: Extend the life of sugar factories, support over 20,000 regional jobs, and diversify revenue streams.
- **Environmental**: Reduce emissions in transport and energy sectors, create value for agricultural byproducts, and contribute to a circular economy.
- Strategic: Enhance Australia's energy sovereignty and reduce reliance on imported fuels.



#### 13. Conclusion

Queensland's sugarcane industry has the feedstock, infrastructure, and expertise to lead Australia's bioenergy transition. With targeted policy support, we can unlock significant economic, environmental, and strategic benefits.

Wilmar is committed to advancing and investing in bioenergy opportunities including cogeneration, black pellets and ethanol if they are commercially feasible. Government action is required to create the necessary market conditions to encourage and support this investment.

We urge the Committee to consider these proposals and work with the sugar manufacturing sector to build a resilient, low-emissions bioenergy and biofuels capacity in the Queensland sugar industry, which will underpin the long-term sustainability of the sugar industry and the regional communities it supports.

Submission made on behalf of Wilmar Sugar and Renewables by:

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