

Sugarcane Bioenergy Inquiry 2025

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08 October 2025

Mr Stephen Bennett MP

Chair

Primary Industries and Resources Committee

Member for Burnett Parliament House

BRISBANE QLD 4000

Dear Mr Bennett

RE: Inquiry into Sugarcane Bioenergy Opportunities in Queensland

Townsville Enterprise strongly supports the exploration and expansion of sugarcane-based bioenergy, including cogeneration, bioethanol and biofuels. Queensland's sugarcane industry is positioned to underpin the state's clean energy future while securing new markets for growers and strengthening national fuel security.

Introduction to Townsville Enterprise Limited

Townsville Enterprise Limited (TEL) is the peak economic development and destination management organisation for Townsville North Queensland. For over three decades, TEL has played a central role in shaping the region's future through strategic advocacy, investment attraction, tourism development, and by promoting Townsville North Queensland as a place to visit, invest, and live. Through economic leadership, we connect business and industry with opportunities¹.

Background into the region

The Townsville North Queensland region contributes nearly \$20 billion annually in Gross Regional Product to the national economy and is home to 240,000 people². Agriculture is a key focus sector in our economy, occupying 85% of our region, with sugarcane as the leading commodity. In 2023-24 the Burdekin and Hinchinbrook regions, being the two largest sugarcane producers in Australia, produced a combined 11.154 million tonnes³.

Despite its significance, the sugar industry faces many challenges such as declining yields⁴, labour shortages⁵, falling acreage, mill closures, and increasing global competition⁶. These pressures threaten the long-term viability of the industry and the communities that depend on it⁷. Bioenergy presents an opportunity to diversify income streams, reduce risk and strengthen the resilience of our agricultural sector.

Sugarcane Bioenergy Benefits

Sugarcane bioenergy presents a strong opportunity for regional development and value-adding to primary industries in Queensland. Townsville Enterprise welcomes the State Government's decision to consult the community on *Primary Industries Prosper 2050: a 25-year blueprint for Queensland's primary industries*⁸. Townsville Enterprise believes that developing a sugarcane-based biofuels sector will play a significant role in helping Queensland reach its ambitious goal of \$30 billion in primary industry output by 2030. This will be expanded on later in this submission.

A report from Licella found that the sugarcane biofuel sector alone could create 8,000 new full-time jobs, 1,000 construction jobs, deliver \$10 billion in new investments and add \$5 billion to Queensland's GDP. By 2030, the industry could convert 1,050 kilotons of biomass residue into 360 million litres of sustainable aviation fuel (SAF), with projections indicating rising to 1,080 million litres by 2035. This figure accounts for more than 10% of Australia's aviation fuel needs⁹.

Refining and processing facilities are central to this growth. Each biorefinery typically creates 50-100 permanent positions in operations, laboratory works and technical management¹⁰. For example, the Wilmar Bioethanol distillery directly supports 50-80 jobs¹¹. Developing and building these biorefineries creates follow on jobs such as local contractors benefiting from ongoing construction/ maintenance, transport operators see increased demand and regional universities and training providers creating programs to meet the change in industry.

Recent projects demonstrate this opportunity such as the North Queensland SAF facility¹² and Licella's biorefinery¹³ which have a combined investment of \$22 million in government funding and \$60 million in private funding. Both projects combined plan to deliver 1,300 construction jobs, 100 permanent roles, 100 operational roles and produce 142 million litres of SAF.

Scaling up the production of sugarcane bioenergy is a key driver that supports national policies and builds sovereign capabilities. Sugarcane-based biofuels strengthen Defence's fuel security by providing a sovereign fuel alternative to imported fossil fuels, while cogeneration opportunities support the renewable energy targets. Ash Salardini, CEO of Australian Sugar Manufacturers noted that a biofuels and bioenergy agenda will not only maintain the more than 20,000 jobs already supported by the sugar industry but grow them significantly. With targeted investment and policy support, the sugar industry can provide renewable electricity for half a million homes and biofuels to meet over 30% of Australia's domestic aviation fuel needs¹⁴.

A supported sugarcane bioenergy industry would benefit growers, millers, and sugarcane communities across Queensland, enhancing the long-term viability of the sector. For millers, support through government and other external funding for investment in bioenergy would enable

upgrades to equipment, improving factory reliability and efficiency while creating additional income sources¹⁵. Energy generated from bagasse and trash can be used to power mill operations, reducing reliance on external energy and enhancing operational sustainability. Surplus energy can be sold back into the national grid, further diversifying mill revenue streams¹⁶.

For growers, the development of bioenergy provides opportunities to diversify income beyond raw sugar which is subject to international price volatility outside of their control by supplying feedstock for renewable energy and fuel production. Benefits for growers lies in market diversification, creating opportunities for growers to be able to supply and access different markets¹⁷. The support into sugarcane bioenergy will not affect traditional business which can continue without forgoing land, resources, energy, or capital and without taking on additional risk. Bioenergy development also offers greater financial stability to a sector exposed to global price volatility, weather risks and rising costs¹⁸.

North Queensland is the state's centre of mass for sugarcane production and should be at the heart of future initiatives to grow the industry and to expand its use into bioenergy. Sugarcane is already the region's largest agricultural employer, anchoring local economies from the Hinchinbrook through the Burdekin to Mackay. Townsville has the foundation to support the growing bioenergy industry through available infrastructure, a strong research presence and capable workforce in the region. Building this industry in the North will draw on the research and development capabilities of both James Cook University (JCU) and Central Queensland University (CQU). TAFE Queensland will also support the growing bioenergy industry through local workforce growth and development, expanding trade and technical skills in partnership with industry.

Water Infrastructure and Land Use Planning

One of the most critical factors that impacts the success of the sugarcane bioenergy industry is improved water infrastructure. Without clear support from improved water supply, the current agricultural potential of sugarcane will not be able to support future bioenergy demand. Water is agriculture's lifeblood and plays a critical role in ensuring the future success and growth of agriculture in Queensland and the achievement of Australia's goal of a \$100 billion sector by 2030¹⁹. In many regions, viable agricultural land remains underutilised due to insufficient irrigation capacity. Queensland experiences climate extremes such as floods and droughts which are further exacerbated due to climate change²⁰. This makes securing water supply essential to support industry and agriculture. Future expansion opportunities need to have a focus on improving water security and supply through existing schemes such as the Herbert River and the Burdekin catchments. Equitable access to water will secure future food production and smooth out agriculture's boom-bust cycles²¹. Increased water supply enables the expansion of agricultural goods such as sugarcane production, creating the feedstock base necessary to scale sustainable aviation fuel, renewable diesel, and cogeneration opportunities.

Land use planning and development is critical in supporting the future of sugar manufacturing. With 85% of our region's land dedicated to agriculture, and over 2,600 farms operating locally, there is a clear need to ensure that bioenergy initiatives are integrated into broader economic and

environmental strategies. Land use conflict is intensifying as agriculture competes with mining, green energy, urban development and other competing projects²². Strategic planning and balanced policy are needed to protect valuable agricultural land while accommodating necessary growth.

The Queensland Parliament has an opportunity to deliver long-term regional growth and stability, while co-investing in projects that are economically viable and supported by farmers. A policy backed approach to water infrastructure planning and investment, integrated with sustainable land use planning, will support balanced crop diversification, food security, secure water supply and bioenergy expansion. Queensland will be able to develop new industries, build resilience to droughts and floods, and provide the confidence for ongoing agricultural and bioenergy investment.

Investment in water infrastructure to increase the land available for sugarcane must be a priority for Queensland going forward. This investment will also unlock the opportunity for further value-added production and ensure expanded markets and greater opportunities for bio-energy production through the use of this resource. In particular, the capture, storage and distribution of the abundant water resource in North Queensland should be prioritised to support the growth of the sugarcane industry in the region.

Biofuel Defence Opportunity

Biofuels presents itself as an opportunity to strengthen operational integrity, energy resilience, and strategic capability of Australia's Defence sector. As global fuel markets become increasingly volatile and geopolitical tensions threaten supply chains, the ability to produce and secure fuel domestically is critical²³. Defence is the Australian Government's largest user of fossil fuels²⁴, and with its reliance on imported crude and refined fuels it is vulnerable to supply disruptions²⁵. Sustainable Aviation Fuel (SAF) and Renewable Diesel (RD) are critical to the operational integrity, energy resilience and strategic capability of the Australian Defence Force (ADF). The ADF has identified domestic biofuel production as critical to enhancing national fuel security²⁶. Biofuels derived from renewable sources like Queensland's sugarcane, offers a sovereign alternative to imported fossil fuels, ensuring Defence can maintain readiness and mobility under any circumstances.

Trials of renewable fuels in Victoria have found that all ADF aircraft are certified to operate on SAF and demonstrations have already proven its viability, including the RAAF Roulettes at the 2023 Newcastle-Williamstown Air Show and the first routine base-level adoption at RAAF Base East Sale in 2024²⁷. Biofuels can serve as a drop-in replacement that works with existing aircraft and infrastructure providing an immediate solution²⁸. Defence has also advised Parliament that up to 50% of current fuels could be replaced with renewable fuels, but that this requires a commercialised industry for it to be viable for Defence to switch²⁹.

The continued reliance on imported refined fuels is a major risk. Northern Australia is central to defence and economic prosperity but is served by thin supply chains, single pipelines and just-in-time logistics³⁰. As production and demand of biofuels naturally converge in Queensland,

Parliament should create opportunities for biofuel testing and operations in North Queensland to ensure that critical Defence infrastructure is supplied. Furthermore, by anchoring biofuel production in Queensland's sugarcane industry, Defence can boost regional economic development while securing a reliable, renewable feedstock for its operations.

Defence's Net Zero Strategy³¹ and Future Energy Strategy³² provide a clear framework for this transition, targeting a 43% reduction in emissions by 2030 and net zero by 2050³³. These goals are supported by steps outlined in the Defence Strategies such as increasing use of clean energy at bases, expanding low-carbon liquid fuel adoption and preparing operational capabilities for future fuel types. Sugarcane bioenergy and biofuels align with this transition by offering low emissions, domestically sourced alternatives that supports Defence's future commitment to energy and fuel security.

This Inquiry provides the opportunity for Queensland to lead the nation in the development of a defence biofuel support strategy centred on the sugarcane resource available in North Queensland. This will harness the opportunity from sugarcane bioenergy for the Australian Defence Force (ADF) whilst providing benefits for non-defence use including in the mining and agriculture sectors. Importantly, it will also drive the growth of a sovereign fuel capability in the heart of Australia's defence precinct, providing national security as well as commercial benefits.

Sugarcane Bioenergy Cogeneration in Queensland's electricity generation mix

Sugar manufacturing in Queensland generates renewable electricity through cogeneration using bagasse, the fibrous by-product of sugarcane³⁴. Wilmar Sugar, Australia's largest biomass energy producer, operates eight sugar mills capable of producing around 620,000 megawatt hours annually, with over 300,000 megawatt hours exported to the grid, which powers more than 68,000 homes³⁵. Wilmar's Pioneer Mill near Ayr is the nation's largest biomass-only generator and can operate 24 hours a day and produces half of the company's total export volume³⁶.

Bagasse cogeneration provides a stable and dispatchable source of renewable energy, operating 24 hours a day, seven days a week³⁷. Stockpiling enables year-round energy generation, including outside the crushing season. Queensland Mills such as Wilmar's Pioneer Mill, Victoria mill, Macknade mill and Mackay Sugar's Racecourse Mill, have been used to help address energy deficits during periods of high temperatures and surging electricity demand³⁸. The Australian Sugar Manufacturers group has highlighted that through supported policy, cogeneration plants could become year-round suppliers of clean energy, helping Queensland achieve its 50% renewable energy target by 2030 and providing backup during supply constraints. With targeted investment incentives, the sector could expand installed capacity to approximately one gigawatt, potentially reducing wholesale electricity prices up to 15%. Full utilisation could deliver an additional 2.1 terawatt hours of renewable power annually, enough for around 420,000 homes while creating over 20,000 regional jobs³⁹.

In addition to cogeneration, Wilmar is advancing feasibility studies into producing black pellets from bagasse, supported in part by the Queensland Bioenergy Fund. Black pellets are a renewable

coal replacement fuel that can be used in conventional power stations without modification, with strong customer interest already emerging both domestically and overseas. A pre-feasibility trial is under way at a commercial-scale facility in the United States to test the technology's application in Queensland. If successful, this would provide a new export opportunity for the state and help underpin factory investment⁴⁰.

In a global context, bagasse-based cogeneration has proved to be a reliable source of grid electricity in countries that have modernised their sugar factories to increase energy efficiency. Several countries like Mauritius, India, and Brazil have the sugar industry connected to the public power grid which earns the industry extra revenue in exchange for clean electricity. In Brazil, sugarcane mills are the fourth leading sources of electricity supply to the Brazil's grid electricity mix, even though it is just 15% of the industrial capacity of the sugar industry with estimates showing that sugarcane residues through bioelectricity, can supply 148,000 GWh to the grid⁴¹. This is an indicator of the electricity potential of the sugar cane industry in the global energy transition.

Bio-energy cogeneration must be a part of Queensland's electricity generation mix. An energy generation mix based around renewable resources like bagasse fits perfectly into North Queensland's outstanding renewable resources, including wind and solar. With the requirement to improve water infrastructure to increase land available for sugar cane production, there is the additional opportunity to leverage this infrastructure and provide local pumped hydro for firming power for the renewable energy mix. Together with the baseload power delivered from southern areas, sugar cane and bioenergy can ensure the electricity generation requirements of the industrial future of North Queensland can be met.

Sugarcane Sustainable Aviation Fuel Opportunity

The Australian government has committed \$1.1 billion to accelerate the development of a domestic low carbon liquid fuels industry through its new ten-year Cleaner Fuels Program. This investment aims to stimulate private capital, build onshore refining capability, and create resilient supply chains for renewable diesel and sustainable aviation fuel (SAF). First commercial production of drop-in cleaner fuels which are compatible with existing engines, is expected by 2029. Liquid fuels account for around half of Australia's national energy use, and replacing fossil fuels with renewable alternatives presents both a climate and an economic opportunity⁴². With abundant access to key feedstocks such as sugar, alongside world-class farming practices and renewable energy resources, Australia is well positioned to establish a globally competitive industry.

Building a domestic SAF industry offers transformative economic benefits beyond aviation decarbonisation. Independent economic modelling by ICF International⁴³, commissioned by Qantas and Airbus, projects that comprehensive SAF policy implementation would generate \$12 billion in economic value by 2040 while creating or sustaining 70,000 jobs across the value chain⁴⁴. This figure is further supported with insight from the Clean Energy Finance Corporation which estimates this sector could grow to \$36 billion by 2050, delivering regional jobs, supporting farmers and foresters, and underpinning national fuel security while contributing significant emissions

reductions⁴⁵. ARENA's Bioenergy Roadmap reinforces this opportunity, projecting \$10 billion in additional annual GDP by 2030, with 26,200 new jobs predominately in regional areas where feedstock production and processing occur⁴⁶.

Jet Zero provides a world-leading case study of private sector interest in North Queensland biofuel investment opportunity. Jet Zero Australia's two flagship SAF projects illustrate Australia's capacity to mobilise large-scale SAF investment, with strategic government support. The projects secured \$14 million in public funding from the State, Commonwealth and Singaporean Governments⁴⁷, which in turn catalysed approximately \$60 million in additional private investments from strategic partners Qantas, Airbus, Idemitsu Kosan and other major private equity investors⁴⁸. The project will produce 102 million litres of SAF annually, generate 1,000 construction jobs and 100 permanent roles, and position North Queensland as a strategic SAF hub for both civilian and defence aviation⁴⁹. Jet Zero's success in securing co-investment validates that strategic public funding attracts private sector confidence and positions North Queensland to capture a significant share of the emerging global SAF market. These outcomes highlight the importance of supporting a domestic SAF development in Queensland. Supporting this industry not only decarbonises aviation but offers fuels security, economic benefits and supports regional communities.

Exploring other Complementary Bioenergy Options

While sugarcane is the primary option for bioenergy opportunities in Queensland, there are many complementary bioenergy options such as feedstock and oilseed that should be further explored. The emergence of advanced technologies for converting lignocellulosic materials (fibrous, woody biomass) and extracting oil from plants, such as pongamia and algae, enables the production of sustainable aviation fuels, renewable diesel and higher value platform chemicals such as those used to produce bioplastics. The opportunities presented by non-feedstock options should be further explored as they can be grown on non-arable or marginal land, using brackish water (including coal seam gas water) and CO₂ from the coal fired power industry⁵⁰.

Recently there have been developments that have brought more attention directed towards invasive weeds such as prickly acacia. Prickly acacias poses a significant problem across North Queensland but with advancements these weeds have been recognised as potential feedstock options that could be converted to renewable energy, reducing agricultural and environmental impacts while contributing to energy security⁵¹.

Queensland with its world-leading research expertise in these feedstocks, is well positioned to develop a reputation in the use of feedstocks such as sweet sorghum, forest waste, biogas, invasive weeds and oil crops such as pongamia and algae to develop high-value commodities alongside existing biofuel options⁵².

Sugarcane Bioenergy alignment with Prosper 2050

Sugarcane bioenergy directly aligns with the Queensland Government's *Primary Industries Prosper 2050* blueprint, which sets out a vision for primary industries to be economically, environmentally and socially sustainable. *Prosper 2050* recognises that global demand for sustainable food, fibre

and foliage is increasing rapidly, alongside the growing opportunities in bioeconomy products⁵³. Biofuels, bioplastics and renewable energy from sugarcane aligns with the diversification opportunities that the *Prosper 2050* blueprint prioritises. The sugarcane bioenergy sector can deliver manufacturing outcomes, regional processing hubs and waste utilisation which are key *Prosper 2050* considerations that support Queensland's transition into clean energy but also provide jobs, attract investments and strengthen regional economies⁵⁴. Through supporting sugarcane bioenergy projects, Queensland Parliament can contribute to the *Prosper 2050* goal of increasing the value of Queensland's primary industries to \$30 billion by 2030⁵⁵. This is through sugarcane bioenergy opening new markets, advanced processing and high-value biogas exports.

The submission has already noted the importance of water infrastructure development to ensure the ongoing expansion and production of sugarcane bioenergy opportunities. These investments will have multiple benefits for the State and for the region, ensuring a valuable ROI on infrastructure investments and aligning with the State's priorities for value-add in the primary industry sector.

Successful Policy implementation Case Study - Brazil

The inquiry should consider international examples, such as Brazil where successful policy has been implemented to develop the bioenergy industry. In 2022, 50% of Brazil's total energy supply was made up of renewables, with 60% of the renewable energy supply accounting for biomass. Biofuels in Brazil represent 22% of the transport energy in Brazil, which is significantly higher than global averages⁵⁶. Bioethanol is the most important biofuel, representing almost 40% of combined gasoline and ethanol use in energy. Reports from IEA Bioenergy in 2024 find that biofuels are growing to replace diesel in heavy duty industries and in 2022 alone represented 9.3% by energy of diesel use⁵⁷.

Since the early 2000s, the Brazilian government has introduced public policy to influence the biofuel market. This is seen through policy such as tax differentiation between fossil fuels and renewables, mandatory mixing of anhydrous ethanol in gasoline and biodiesel in fossil fuels, and inclusion of flex fuel vehicles enabling E100⁵⁸. Recently in 2022 the Brazilian National Congress approved an Amendment to the Brazilian Constitution to promote the competitiveness of biofuels through preferential taxation compared with fossil fuels⁵⁹.

Brazil has developed a strong biofuel industry over the past years, driven by its Fuels of the Future law, which established the SAF National program aimed at fostering the research, production, commercialisation and use of SAF in the Brazilian energy matrix. From this process, Brazil introduced a SAF mandate requiring 1% annual GHG reductions from domestic aviation beginning in 2027, 3% by 2030, and 10% by 2037⁶⁰.

This recent commitment to a SAF mandate, coupled with the National Bank for Economic and Social Development's (BNDES) financing of US\$1.1 billion for sustainable fuel projects has unlocked tens of billions in private sector biofuels investment and serves as a blueprint for Australia to ensure short-term government action evolves into policies that enable real long-term progress⁶¹. Brazil's success in their bioenergy initiatives demonstrates the scale of opportunity for

Queensland. With the support of new mandates, incentives and investments from both the public and private sector, Queensland can follow the success of Brazil and secure a competitive advantage while providing regional economic benefits.

Enabling Policy and Market Settings

Implementing sugarcane bioenergy initiatives require strong policy structure and market support. Clear frameworks such as the SAF blending mandates, Renewable Fuel Standards or long-term offtake agreements would provide investor confidence and accelerate private sector co-investment. Targeted public co-investment through grants, concessional finance or tax incentive could reduce the risk of capital-intensive projects in SAF, cogeneration and biomethane, following models from successful countries such as Brazil and other biofuel leaders.

Infrastructure upgrades will be important for the success of future sugarcane bioenergy initiatives. Upgrades to the port, transport, storage, mills and pipeline networks would ensure that bioenergy products could be delivered at scale for both domestic and export markets.

Investments in research and development partnerships between governments, industry and universities can find improvements in cane yields, commercialise new technology and develop higher value bioproducts.

Conclusion

Townsville Enterprise believes that sugarcane bioenergy projects must be commercially viable and regionally grounded. Government support should focus on co-investment, policy reform, and infrastructure that enables these emerging industries to scale. Queensland must act within the next 2-5 years to secure a competitive position in the bioenergy industry, as major international competitors, including India and Brazil, move quickly.

We advocate for a future where sugarcane is not only a food source but a foundation for clean energy, regional employment and economic diversification. We therefore submit that:

- The inquiry notes the potential for the expansion of sugarcane to include bioenergy opportunities throughout multiple markets, ensuring a variety of off-take potential agreements for growers and competition for the resource from buyers, resulting in a more efficient market overall.
- The Inquiry recommends the development of water infrastructure in North Queensland that will enable increased irrigation and the expansion of suitable land for the growing of sugarcane.
- The Inquiry notes the potential for increased water infrastructure to provide other benefits, including pumped hydro, to increase the ROI on these infrastructure investments.
- The Inquiry notes the importance of programs such as the new Sovereign Industry Development Fund (SIDF), and that Government monitors its effectiveness of it encouraging and accelerating development in the biofuels sector.

- The Inquiry recommends the development of a defence biofuels strategy for Queensland, centred on the Defence presence in North Queensland and ensuring sovereign supply chains for defence operations domestically and internationally, whilst also providing opportunities for commercial markets.
- The Inquiry recommends the development of SAF mandates for use within Queensland
- The Inquiry recommends investigation of infrastructure upgrades for the transport, storage, and logistical backbone required for increased production and value add for sugarcane and bioenergy. This should include transmission infrastructure for renewable energy generation associated with bagasse.
- The Inquiry recommends opportunities for public co-investment, including potential grants, concessional finance, or tax incentives to reduce the risk of capital-intensive projects involving sugar cane and bioenergy.

Thank you for the opportunity to contribute to this important inquiry.

Sincerely,

Claudia Brumme

Chief Executive Officer

Townsville Enterprise Limited

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- ¹ [Townsville Enterprise – About us](#)
 - ² [Townsville Enterprise – Focus Sectors](#)
 - ³ [Townsville Enterprise – Focus Sector, Agriculture](#)
 - ⁴ [Sugar Manufacturers – Declining Yields](#)
 - ⁵ [CaneGrowers – Mend Fences in the Sugarcane Industry](#)
 - ⁶ [Issues currently facing the Australian sugar industry](#)
 - ⁷ [Government intervention required to save Mossman’s cane growing community](#)
 - ⁸ [Primary Industries Prosper 2050: a 25-year blueprint for Queensland’s primary industries](#)
 - ⁹ [Licella – SAF and renewable diesel from sugarcane](#)
 - ¹⁰ [Biofuels Boost Australia’s Economy](#)
 - ¹¹ [Wilmar – Distillery](#)
 - ¹² [Virgin and Qatar back NQ SAF facility](#)
 - ¹³ [Licella – Project Swift](#)
 - ¹⁴ [Australian Sugar Manufacturers – Sugarcane Bioenergy & Biofuel](#)
 - ¹⁵ [Key moment for the sugarcane industry – Agforce](#)
 - ¹⁶ [Queensland Government Inquiry into Sugarcane Bioenergy](#)
 - ¹⁷ [Sky Renewables Inquiry into sugarcane bioenergy](#)
 - ¹⁸ [Queensland Government Inquiry into Sugarcane Bioenergy](#)
 - ¹⁹ [The Value of Water](#)
 - ²⁰ [Queensland climate change](#)
 - ²¹ [Navigating the Challenges Facing Queensland Agriculture](#)
 - ²² [Navigating the Challenges Facing Queensland Agriculture](#)
 - ²³ [Liquid Fuel Security Review](#)
 - ²⁴ [Good chemistry keeps Defence moving](#)
 - ²⁵ [Fuel under fire: insights from the 2024 Defence Fuel Symposium](#)
 - ²⁶ [The Australian Defence Force and its future energy requirements](#)
 - ²⁷ [Loading up on sustainable aviation fuel](#)
 - ²⁸ [Sustainable Aviation Fuel Roadmap](#)
 - ²⁹ [Labor backs QLD renewable fuel manufacturing for Defence](#)
 - ³⁰ [Australia’s fuel insecurity is not hypothetical](#)
 - ³¹ [Defence Net Zero Strategy](#)
 - ³² [Defence Future Energy Strategy](#)
 - ³³ [Defence Net Zero Strategy and Future Energy Strategy released](#)
 - ³⁴ [Wilmar Sugar - Bagasse](#)
 - ³⁵ [Wilmar Sugar – Renewable Energy](#)
 - ³⁶ [Wilmar Sugar – Powering the Grid](#)
 - ³⁷ [Wilmar Sugar – Renewable Energy](#)
 - ³⁸ [Sugar power helping to fill Queensland’s heated up electricity demand](#)
 - ³⁹ [Crops to Kilowatts](#)
 - ⁴⁰ [Renewable cane projects to produce SAF and replace coal in power stations](#)
 - ⁴¹ [Bagasse Electricity Potential of Conventional Sugarcane Factories](#)
 - ⁴² [Fueling the future – Infrastructure gov](#)

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- ⁴³ [Developing a SAF industry to decarbonise Australian aviation](#)
- ⁴⁴ [Qantas Group - SAF](#)
- ⁴⁵ [Fueling the future – Infrastructure.gov](#)
- ⁴⁶ [ARENA's Bioenergy Roadmap](#)
- ⁴⁷ [Jet Zero – Public Investment](#)
- ⁴⁸ [Idemitsu, Qantas and Airbus back Jet Zero](#)
- ⁴⁹ [Jet Zero – Project](#)
- ⁵⁰ [Strategic directions for development of the Queensland bio-based industrial products sector](#)
- ⁵¹ [Prickly acacia into renewable fuel](#)
- ⁵² [Strategic directions for development of the Queensland bio-based industrial products sector](#)
- ⁵³ [Vision and purpose for Primary Industries Prosper 2050](#)
- ⁵⁴ [Prosper 2050 – Market growth and Value adding](#)
- ⁵⁵ [Primary Industries – Prosper 2050](#)
- ⁵⁶ [Implementation of bioenergy in Brazil](#)
- ⁵⁷ [Implementation of bioenergy in Brazil](#)
- ⁵⁸ [Implementation of bioenergy in Brazil](#)
- ⁵⁹ [Implementation of bioenergy in Brazil](#)
- ⁶⁰ [Brazil's Action Plan on CO₂ Emissions Reduction from Civil Aviation](#)
- ⁶¹ [Brazil to Invest \\$1.1 Billion to Accelerate SAF Production](#)