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Low Carbon Liquid Fuels Consultation Section
Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts
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Dear Consultation Section

Cleaner Fuels Program: Powering low carbon liquid fuel production in Australia

Thank you for the opportunity to provide a submission on the *Cleaner Fuels Program: Powering low carbon liquid fuel production in Australia* following the announcement from the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCSA) on 13 November 2025.

Queensland Cane Growers Organisation Ltd (CANEGROWERS) is a not-for-profit public company with the sole purpose of promoting and protecting the interests of sugarcane growers since its inception in 1925.

CANEGROWERS is the peak body for the sugarcane industry. Our affiliations at the State, National and International level combined with 13 district offices in Queensland ensures that services and advocacy are provided in local communities as well as at the highest levels of industry and government decision-making.

We welcome the Australian Government's commitment of \$1.1 billion over ten years to catalyse a domestic low carbon liquid fuels (LCLF) industry through the Cleaner Fuels Program, as part of the Future Made in Australia agenda.

Sugarcane is uniquely positioned to underpin large-scale, sustainable low-carbon liquid fuels in Australia for three key reasons. It is a high-yielding C4¹ crop with strong greenhouse abatement potential per hectare as well as high biomass productivity. The sector has existing milling and logistics infrastructure can be leveraged for new fuels (ethanol/AtJ SAF, renewable diesel, advanced biofuels from bagasse and trash). And the industry is concentrated in regional and coastal Queensland communities where new investment, jobs and diversified farm income is highly valued.

Queensland CANEGROWERS:

1. Strongly support the rapid design and implementation of the Cleaner Fuels Program and ask that it moves quickly to provide bankable certainty for these first-of-a-kind projects.
2. Support fuel- and technology-neutral production incentives, with recognition of lifecycle carbon intensity and regional economic benefits, rather than effectively favouring any one pathway or feedstock.
3. Seek a fair share of value for farm businesses through explicit recognition of feedstock sustainability, farm-level emissions performance and long-term offtake arrangements that share the low-carbon premium along the supply chain.

¹ Sugarcane is a high-yielding C4 photosynthesis crop – a plant type that is particularly efficient at converting sunlight and CO₂ into biomass in warm climates. It is a climate resilient crop that is well-suited to areas where most other crops are less adapted.



4. Support robust sustainability safeguards (including food security, water, biodiversity and land-use considerations) that work with – not against – existing best-practice systems such as Smartcane BMP and Queensland’s reef regulations.

Our detailed comments below are framed against the policy objectives and question themes in the Policy Design and Engagement Paper. These principles are based on initial analysis by CANEGROWERS and they may subject to change as a result of further industry consultation in parallel with the further development of the LCLF market and associated commercial offerings..

Eligible fuels and prioritisation (Questions 1.1 – 1.2)

1. Eligible fuels

We support the inclusion Sustainable Aviation Fuel (SAF) via multiple pathways (e.g. HEFA, AtJ from ethanol, gasification/FT, other advanced routes), Renewable diesel (RD) as well as other low carbon liquid fuels that meet robust lifecycle greenhouse criteria and fuel quality standards, where they can be “drop-in” or near drop-in substitutes.

From a sugarcane perspective, key pathways that should clearly be eligible include:

- Ethanol-to-jet (AtJ SAF) from cane juice, molasses or other sugarcane-derived intermediates.
- Advanced biofuels from sugarcane residues (bagasse, trash) via gasification, pyrolysis, hydrothermal liquefaction or other thermochemical pathways.
- Co-processing / upgrading of cane-derived intermediates in existing refineries, where emissions and sustainability can be properly allocated and measured.

We support a fuel-agnostic but sustainability- and carbon-intensity-conscious eligibility framework: fuels and pathways should be eligible if they meet robust lifecycle CI thresholds and sustainability criteria, rather than because of their label alone.

2. Prioritisation between fuels and sectors

CANEGROWERS agrees that some sectors are more dependent on liquid fuels for decarbonisation. Aviation is hard-to-electrify and globally moving strongly towards SAF. Long-haul and heavy-duty road, off-road, marine and rail will also need substantial volumes of renewable diesel / paraffinic fuels in the medium term, even as electrification proceeds where feasible.

We believe that SAF should be a priority use, but RD for heavy vehicles and other hard-to-electrify segments is also important and can help build early volumes and learning, so this should not be excluded. Government should provide a common framework (CI thresholds + sustainability + community benefits) and then allow competitive processes to select the best-performing proposals. This should be supported by demand side mandates/standards (e.g. SAF blending standard, low carbon diesel standard) rather than trying to achieve all prioritisation on the supply-side production incentive alone.

From a sugarcane grower’s viewpoint, it is important that sugarcane-derived fuels (both SAF and RD) are not disadvantaged relative to other feedstocks by methodology choices (e.g. ILUC assumptions, treatment of residues) that do not reflect Australian realities.

Type and structure of production support (Questions 2.1 – 2.10)

CANEGROWERS sees two overarching needs:

1. Bankable, long-term production support for projects, so that mills and project developers can confidently sign long-term feedstock contracts with growers.



2. Clear link between support and carbon / sustainability performance, so that part of the premium can flow back to farm level where the emissions improvements actually occur.

Fixed vs variable production credits (Q2.1 – 2.3)

CANEGROWERS believes there is merit in both fixed per-litre credits and Contract-for-Difference (CfD)-style mechanisms. Our preference for early projects is a fixed volumetric production incentive with CI-based tiers, e.g.: a base credit per litre of eligible LCLF produced; and an uplift for fuels achieving deeper CI reductions (e.g. >70% vs fossil reference), verified through the GO or LCA framework.

This approach is simple and investable for first projects (compared with complex CfD arrangements tied to a volatile and immature international price benchmark), and rewards real emissions performance and incentivises continued on-farm and process improvements. This could be designed to step down over time for new projects as technology costs fall, while retaining long-term certainty (e.g., persistent support up to the 10-year horizon signalled in the paper or as necessary to underpin investment).

For later project waves, a hybrid model could be considered – with a modest fixed CI-tiered credit plus a narrower CfD element against an agreed international LCLF benchmark or carbon price, to reduce over-subsidisation if global prices rise sharply.

We agree that projects with lowest cost per unit of emissions abated should be advantaged, but urge that regional development and community benefit principles are taken into account and not simply used as “tiebreakers”. Methodologies should recognise that the cheapest abatement is not always the most resilient or the most beneficial for regional Australia (e.g. fuels that rely on imported feedstocks vs domestic, sustainably produced sugarcane). Projects should also be considered from a strategic standpoint to ensure that starts are made for a range of broadacre crops across varied production zones (where scale exists) to spread productivity and production risk.

Caps, first-mover disadvantage and combined support (Q2.4 – 2.8)

CANEGROWERS endorses the focus on overcoming the first-mover disadvantage and agree that production incentives should be calibrated to what is required to unlock Final Investment Decision (FID), not to maximise windfall returns.

- *Cap per project:*

We support a project-level cap on total production credits, but it should be negotiated based on transparent financial modelling (e.g. target IRR, evidence of cost gap vs fossil alternative) rather than an arbitrary dollar limit. Caps must not be set so low that first-of-a-kind projects remain unbankable.

- *Domestic vs export:*

We support allowing both domestic use and export, provided the carbon and sustainability credentials are transparent and aligned with GO. Export opportunities can improve plant utilisation and scale economics, ultimately benefiting domestic users as the market matures. Variable grant support could be tied to domestic supply only, or a base level/threshold of domestic supply requirement.

- *Combined support with capital grants / concessional finance:*

We support a hybrid package for first-of-a-kind facilities – capital support (e.g. via ARENA, CEFC, NRF or other mechanisms) plus a long-term production incentive under this Program. Without capex support, many regional sugarcane-linked projects will not reach FID. CEFC / NRF concessional debt and guarantees could help de-risk mills and new project SPVs (e.g., single



company; mill-strategic JV; grower aligned entity such as a co-op; or a regional cluster central facility). Thought should be given to shared risk mechanisms for feedstock price volatility, especially where growers are encouraged to invest in new varieties, irrigation or harvesting systems tailored to LCLF supply.

- **Supporting domestic feedstock**

We believe that grant support should be explicitly tied to domestic production from primary and secondary feedstock (i.e., crops, crop residues and wastes) and not supporting projects which simply convert imported ethanol. A minimum threshold of domestically produced ethanol should be a requirement.

Supply chain support (Q2.9 – 2.10)

CANEGROWERS believes that upstream investments are essential.

The achieved level of CI should be recognised and valued (through CI baselines linked to Smartcane BMP status). On-farm improvements that further reduce CI (e.g. nitrogen efficiency, optimised irrigation, optimisation of trash retention) should be recognised and, where possible, co-funded or linked to the LCLF premium. Investment in collection and logistics for cane trash and residues (balancing soil health requirements) is critical if residues are to be mobilised as LCLF feedstock. The Cleaner Fuels Program and future SAF programs should give priority or higher merit scores to projects that source a minimum percentage of feedstock from Smartcane BMP-accredited farms. Or set Smartcane BMP (or equivalent) as a qualifying sustainability standard for certain higher-tier incentives. Smartcane BMP modules (nutrient, soil, water, biodiversity) would be mapped into sustainability or GO criteria to support this.

For cane-based low-carbon fuels to succeed, growers and mills must be able to understand and actively manage carbon intensity, sustainability certification and new commercial arrangements. CANEGROWERS recommends that structured knowledge sharing and capacity building for growers and mills be explicitly recognised as a merit criterion in program assessment. Projects that invest in training, extension and practical tools for their feedstock suppliers reduce implementation risk, improve lifecycle emissions outcomes, and ensure that regional communities share in the benefits of public investment. The Program should require proponents to present a credible, resourced plan for grower and mill capacity building, co-designed with recognised industry organisations such as CANEGROWERS and Smartcane BMP partners.

We encourage the Government to draw on lessons from international schemes (e.g. US and EU) where stable, per-unit incentives, robust certification schemes and clear mandates have been effective at driving scale – while tailoring them to Australia’s feedstock profile and regional needs.

Fuel production pathways and project maturity (Q3.1 – 3.2)

We support the Program’s focus on mature projects and late-stage technologies able to deliver meaningful volumes in the near term, while still leaving room for promising emerging pathways.

From a sugarcane standpoint, AtJ using sugarcane ethanol (especially where we can leverage existing distillery expertise and infrastructure) is a strong and credible pathway that should be a mainstay for the Program. While Gasification/FT, HTL and other advanced routes using bagasse and cane trash are emerging pathways that should not be excluded and considered on merit/potential. We would suggest a minimum project maturity for eligibility (e.g. FEED completed or underway, site and key permits identified, indicative offtake and feedstock MoUs). We believe it would be better to avoid a rigid minimum facility size that inadvertently excludes modular or multi-train projects in regional



sugarcane regions. Thresholds should be set to ensure material emissions reduction but still allow regional-scale plants typical of sugarcane districts.

Carbon intensity thresholds and Indirect Land Use Change (Q3.3)

We support inclusion of a minimum lifecycle carbon-intensity reduction threshold for eligibility (e.g. $\geq 50\%$ reduction vs fossil, in line with major international schemes), with measurement methodologies aligned with the emerging Guarantee of Origin framework for LCLF. These should be transparent, Australia-appropriate default values for sugarcane production and processing, which reflects our best-practice farming systems (Smartcane BMP accreditation, reef and water quality regulations) and the fact that bagasse is already widely used for renewable electricity and process steam.

Projects slightly below the threshold in early years should have a route to qualify if they demonstrate a credible, time-bound improvement plan (e.g. fertiliser optimisation, transport efficiency, renewable power at mills).

On Indirect Land Use Change (ILUC):

ILUC treatment should be evidence-based and proportionate, recognising that sugarcane is grown on a stable land base in Queensland. There are strong regulatory controls on clearing, water quality and high-value environmental areas. CANEGROWERS cautions against importing generic overseas ILUC factors that do not reflect Australian land-use patterns which would not be fit for purpose and would unfairly penalise cane and other agricultural feedstocks.

Sustainability criteria and schemes (Q3.4 – 3.5)

CANEGROWERS supports sustainability criteria beyond CI, such as land-use and biodiversity safeguards, food and fibre security considerations, water availability and quality, and long-term soil health and residue management (particularly for cane trash removal).

CANEGROWERS expects existing farm and mill schemes including Smartcane BMP for cane farms, VIVE, Proterra and Bonsucro for processors and farms to be recognised as the primary method for accreditation of sustainable sugarcane feedstock. It would be important to allow stacking of domestic (e.g. Smartcane BMP, Australian water quality and reef regulations) and international schemes, so that Australian producers are not forced to “double comply” in a way that creates unnecessary cost without environmental gain.

In this way ensuring use of sustainability frameworks in a way that enables responsible use of residues (bagasse, trash) while preserving soil carbon and agronomic performance.

Merit criteria and regional benefits (Q4.1–4.2)

CANEGROWERS supports the proposed merit factors – emissions reduction, economic benefit, fuel security, sustainability and efficient market development – and welcome the integration of Community Benefit Principles under the Future Made in Australia Act.

From the perspective of Queensland sugarcane communities, we recommend that the Program:

- Makes regional economic development material in scoring:
 - Number and quality of long-term jobs in sugarcane regions;
 - Value-add to existing agricultural industries and the stability of farming communities.
- Explicitly recognise feedstock producers as core beneficiaries:
 - Projects should be asked to demonstrate how the CI premium and public support will be shared upstream, e.g. through:
 - linked sustainability-based pricing for cane or residues;



- co-investment or profit-sharing models; or
- financial support for on-farm practice change that reduces CI.
- Align with Community Benefit Principles by requiring proponents to:
 - Work with local grower groups and regional organisations (including CANEGROWERS districts and mills);
 - Use local suppliers and workforce, with training pathways in regional areas.

Policy coherence and demand-side measures (Q4.3–4.6)

To truly unlock sugarcane-based LCLF investment, the Cleaner Fuels Program should be complemented by clear demand-side settings, such as SAF uptake targets or standards for domestic aviation, Renewable Diesel / LCLF standards or (plans for) targets in key freight and industrial segments, and fuel quality and standards work that keeps pace with international developments, and fuel policy that recognises carbon abatement from LCLF. Without demand side measures there is no foundation on which to build investment.

Unlocking investment into LCLF production depends on a coherent stack of intersecting policies – Future Made in Australia industry support (Cleaner Fuels Program, NRF/CEFC/ARENA), fuel standards and excise settings, climate policy (Safeguard, ACCU, Climate Active), a robust Guarantee of Origin and certification framework, planning and regional infrastructure policy, and feedstock and land-use policies in sectors like sugarcane and grains. Unless these levers are aligned around certified low-carbon fuels – including recognition of existing best practice on farms – Australia will continue to export feedstocks and import value-added fuels.

We would also specifically like to see coordinated planning across Future Made in Australia, agricultural, regional development and bioenergy policies so that feedstock competition is managed sensibly, and that water, land and infrastructure planning supports rather than constrains sustainable cane-based LCLF projects.

Conclusion

Queensland sugarcane farmers are ready to play a central role in building an Australian low carbon liquid fuels industry that delivers large-scale, credible emissions reductions, while strengthening fuel security and regional economies. A successful LCLF sector has the potential to provide new, long-term revenue streams that help maintain the viability and resilience of farm businesses across multiple sectors.

We urge the Government to finalise and launch the Cleaner Fuels Program swiftly, with settings that clearly reward lower carbon and higher sustainability performance and provide long-term, bankable production incentives. The Program should explicitly aim to ensure that the benefits of public investment and private capital flow through to regional communities and farm businesses across Queensland's sugarcane regions.

To ensure Queensland sugarcane farmers can genuinely benefit and help underpin success, CANEGROWERS calls on the Program to:

1. Explicitly recognise sugarcane-based feedstocks and residues (cane juice, molasses, bagasse, trash) in program materials as strategic LCLF feedstocks, alongside canola, tallow and others.
2. Support development of robust CI baselines and tools for sugarcane and fund work to establish regionally specific emission factors and digital tools that growers and mills can use to quantify and improve CI.



3. Encourage project proponents to include growers as partners, not just suppliers and weight proposals more favourably where farmers are part of governance, profit-sharing or equity structures.
4. Co-design sustainability criteria with the sector and ensure that requirements for residue removal, land use and biodiversity are aligned with agronomic best practice and do not inadvertently harm soil health or productivity.
5. Provide information to support extension programs that help growers understand LCLF markets, CI, sustainability requirements and potential farm-level investments.

We would welcome the opportunity to engage further with officials as program design is refined and implementation approaches are developed. Please do not hesitate to contact me if you require any further information in relation to this submission.

Yours Sincerely

Dan Galligan
Chief Executive Officer