

19th December 2025

Cleaner Fuels Program team

Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts
Australian Government
GPO Box 594, CANBERRA ACT 2601

To the Cleaner Fuels Program team,

Re: Cleaner Fuels Program – Policy Design and Engagement Paper

The Australian Hydrogen Council (AHC) welcomes the opportunity to provide input to the design of the Cleaner Fuels Program.

The AHC is the peak body for the hydrogen industry and our membership includes companies from across the value chain. Our members are at the forefront of Australia's hydrogen industry, developing the technology, skills and partnerships necessary to ensure that hydrogen and its derivatives such as ammonia and methanol play a meaningful role in decarbonising Australian industry.

The \$1.1 billion Cleaner Fuels Program (the Program) was announced in September 2025, just prior to the release of the Australian Government's sectoral and Net Zero Plans, as well as Australia's 2035 emissions reduction target, demonstrating the importance of developing a low carbon liquid fuel (LCLF) industry in order to achieve Australia's net zero ambitions.

This response builds on the AHC's submissions to the 2024 Transport sector plan, 2024 LCLF opportunity,¹ 2025 Future Made in Australia Innovation Fund,² and 2025 Hydrogen Headstart Round 2,³ amongst other consultations.⁴ As stated throughout these submissions and the below responses to the consultation questions, it is paramount that the Australian Government designs and scales incentives that recognise the difficulty of alternative fuels reaching parity pricing with incumbent fossil fuels. This is in an environment where the cost of emissions is not adequately priced and where the continued use of unabated fossil fuels is in fact subsidised, for example via the fuel tax credits. We have been, and remain, supportive of measures that provide financial incentives to LCLFs based on their relative decarbonisation potential when compared to unabated fossil fuels on a whole of lifecycle basis.

The AHC and our members welcome the opportunity to participate in the development of the Cleaner Fuels Program, and we look forward to any additional engagement ahead of the proposed Program launch in mid-2026.

¹ AHC (2024) *AHC submission to transport sector plan and LCLF*, submission, 26 July, <https://h2council.com.au/wp-content/uploads/2024/07/240726-AHC-submission-to-transport-sector-plan-and-LCLF-1.pdf>.

² AHC (2025) *Future Made in Australia Innovation Fund – Program design and consultation*, submission, 6 June, <https://h2council.com.au/wp-content/uploads/2025/06/250606-ARENA-FMIA-Innovation-Fund-AHC-submission.pdf>.

³ AHC (2025) *Consultation on Hydrogen Headstart Round 2*, submission, 7 August, <https://h2council.com.au/wp-content/uploads/2025/08/250807-Headstart-round-2-AHC-submission.pdf>.

⁴ Including: AHC (2024) *Opportunities for a renewable fuel industry in NSW*, submission, 30 August, <https://h2council.com.au/wp-content/uploads/2024/09/240830-NSW-renewable-fuels-AHC-submission.pdf> ; All public AHC submissions can be found here: AHC (2025) *AHC Submissions*, <https://h2council.com.au/ahc-submissions/>.

If you wish to discuss any element of this submission in further detail, please contact me ■

Kind Regards,

Natasha Cerexhe

Policy Manager

Australian Hydrogen Council

1. Eligible fuels

Question 1.1: Which LCLF should be eligible under the program and why?

Question 1.2: Should certain types of LCLF be prioritised over others?

- a) Should LCLF suitable for particular sectors or uses be prioritised? For example, should sustainable aviation fuel be prioritised over renewable diesel?
- b) Should LCLF for certain sectors or uses be de-prioritised due to other viable decarbonisation pathways?
- c) What market impacts are anticipated by influencing prioritisation of particular fuel types?

There are merits in designing the scheme to reward reduction in whole-of-lifecycle carbon abatement rather than in the specification of particular fuel types. For example, the EU's Renewable Energy Directive (RED) III sets binding targets for renewable energy and specific carbon rules focusing on sustainability for biofuels and transport, and tightening criteria to prevent deforestation by phasing out support for forest biomass from primary forests.⁵

Australia already has the policy and finance architecture to support this type of implementation. For example, the Guarantee of Origin Scheme has been launched as a renewable hydrogen certification scheme (Product GO) alongside the Renewable Energy Guarantee of Origin (REGO) to track the electricity inputs.⁶ The scheme is currently being extended to additional production methods (e.g. steam methane reforming and gasification) and commodities (e.g. iron and alumina), offering credible methodologies to verify lifecycle emissions.

The Australian Government could utilise the Sustainable Finance Taxonomies, which provide guidance on the range of LCLFs and methodologies that can be financed in the short and medium term as transition or drop in fuels, to design the Cleaner Fuels Program.

The Australian Government has also released the Net Zero and sectoral plans to provide strategic direction for whole of economy decarbonisation, which included the role of hydrogen and biofuels in the energy transition.⁷ Whilst the AHC and members are supportive of this position, we urge caution in the policy design as not all feedstocks are equally beneficial, both in their emissions reduction potential and in their long-term sustainability. To avoid perverse outcomes, there should be a prioritisation and allocation of feedstocks at the Australian Government level to avoid competition with crop yield and food security as well as to ensure that feedstock and biofuels are utilised in priority use cases. We note that the Minister for Agriculture, Fisheries and Forestry announced a National Food Security Strategy in

⁵ European Commission (2025) *Renewable energy targets*, https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-targets_en.

⁶ Clean Energy Regulator (2025) *Guarantee of Origin Scheme*, Australian Government, <https://cer.gov.au/schemes/guarantee-origin-scheme>.

⁷ Department of Climate Change, Energy, the Environment and Water (2025) *Net Zero*, Australian Government, <https://www.dcccew.gov.au/climate-change/emissions-reduction/net-zero>.

March 2025⁸ and alongside this is developing a National Bioenergy Feedstock Study.⁹ We are pleased to see these both in consultation phases and hope that the insights and strategy from this work is integrated into the Program.

The AHC continues to argue that the Australian Government needs to dually incentivise and invest in both transition (biofuels) and future state fuels (e-fuels). In the short term, biofuels will be closer in price parity and have more secure demand propositions than e-fuels. However, there will be a future inflection point where increased demand for LCLFs will require e-fuels, and we need parallel, sustained development of these production pathways (for green hydrogen and sustainable sources of carbon) to be scaled up and prepared for this alongside biofuel deployment. Within the Program, this could translate to increased incentives for future state LCLFs to allow for dual investment in short and long term solutions. The Australian Government should be strategically planning for this inflection point as key to energy policies and building for this long term transition.

In our submission to the NSW renewable fuels strategy,¹⁰ we argued that each jurisdiction should work with the Australian Government to model capabilities, sector needs and timelines, including master planning for the inflection point where biofuels will be expected to switch to e-fuels, and how this will be managed through relevant policy settings such as regulatory sunset clauses and other mechanisms.

However, given that the Program funding is relatively small and time limited, there is also benefit in designating an industry or use case in order to better direct funding and support. In this instance, renewable diesel (RD), maritime fuels (ammonia, ethanol, methanol) and sustainable aviation fuel (SAF) are the fuels that should garner support under this scheme (listed in order of priority) given that these sectors will require drop in fuels for the foreseeable future.

AHC would also recommend that, where possible, other Australian Government funding available for LCLF production (e.g. Hydrogen Headstart, Powering the Regions, Future Made in Australia technology funding) be aligned with the outcomes of this new proposed scheme in order to ensure that nascent projects with negligible or no margins be as supported as possible to ensure project success.

In addition, we advocate for additional policy measures to provide adequate price signals, for example implementing SAF mandates in line with other jurisdictions and expanding the fuel rebate to cover renewable diesel to avoid perverse incentives to continued fossil diesel usage.

⁸ Collins, J. (2025) *Feeding Australia: Albanese Labor Government's plan to secure our food future*, media release, Department of Agriculture, Fisheries and Forestry, 4 March, <https://minister.agriculture.gov.au/collins/media-releases/feeding-australia>.

⁹ Collins, J. (2025) *Laying the foundations for Australia's bioenergy feedstock industry*, media release, Department of Agriculture, Fisheries and Forestry, 2 October, <https://minister.agriculture.gov.au/collins/media-releases/national-bioenergy-feedstock-strategy>.

¹⁰ AHC (2024) *Opportunities for a renewable fuel industry in NSW*, submission, 30 August, <https://h2council.com.au/wp-content/uploads/2024/09/240830-NSW-renewable-fuels-AHC-submission.pdf>.
AHC (2024) *Opportunities for a renewable fuel industry in NSW*, submission, 30 August, <https://h2council.com.au/wp-content/uploads/2024/09/240830-NSW-renewable-fuels-AHC-submission.pdf>.

2. Type of production support

Question 2.1: Should the production credit be a fixed amount per litre of production, or a variable amount that depends on the market price of LCLF?

- a) Are there any potential benefits, risks or constraints considering the two different production credit options?
- b) What outcomes do you think can be delivered with the available funding?
- c) What type of mechanism provides the greatest investment certainty or level of bankability to projects?
- d) How can this support be structured to prevent substantial upside to producers?
- e) How do you consider pricing for LCLF will be set over the short-medium term and longer term? Will pricing be matched to a premium on equivalent fossil fuel or price of imported LCLF or be on a carbon abatement basis?

Question 2.2: To deliver the policy intent of the Program while maximising the value for taxpayers, do you agree that projects with the lowest cost should be prioritised under the Program, with the cost being measured either as per unit of LCLF produced or as per unit of carbon emissions abated?

Question 2.3: Should the production credit be linked to the quantum of LCLF produced, or the carbon emissions saving potential of the fuel?

Question 2.4: What are your views on the cost to deploy LCLF domestically compared to internationally? Is there a local premium for domestic production?

Question 2.5: Should the total value of production credits be capped for each project? If yes, what should the capped amount be and why?

Question 2.6: Should production be focused on domestic supply only or should export also be permitted? What impact could restriction have for projects or the market?

Question 2.7: Is there a role for combined production support with capital grants for first-of-a-kind facilities?

Question 2.8: What other types of funding or concessional finance could support LCLF projects (e.g. funding from CEFC and NRF)?

Question 2.9: Is any other support required across the supply chain to enable domestic production of LCLF?

Question 2.10: What lessons can Australia learn from other jurisdictions that have already implemented LCLF production support measures?

If the Program hopes to target multiple fuels, it is difficult to nominate which fuel price should be used to peg the price and value of the variable subsidy. To address this issue, the Hydrogen Headstart competitive grants program negotiated bespoke contract for difference production payment with each proponent. Given that the Program will likely only support a small number of projects, this approach may also be applicable.

The AHC and others (e.g. NZEA)¹¹ have consistently advocated for a stronger case management of projects eligible for grant and investment funding by government and Specialist Investment Vehicles (SIVs), ensuring a coordinated approach to investment due diligence, a managed risk allocation and a blended approach to the offer of support (that is, a mix of non-dilutive grant funding alongside debt and equity). This would also underwrite the risk across the supply chain and through multiple funding bodies, making the proposition more attractive to private sector investors. The fact remains that projects developing LCLFs will not be profitable in the short (and possibly medium) term, meaning that if private investment in this sector is to be realised it will require a concerted effort on the part of all government funding bodies.

With regard to the question on capital support grants for first of a kind projects, one of the biggest issues raised by members was the fact that these grants are taxed at company tax rates, making them a far less attractive proposition; that is, whilst it is acknowledged that capital grants can assist, given the very high rate of tax and the administrative burden associated with the grant, it is often not deemed worthwhile. It should be noted that this position is largely held by larger entities. Similarly, there is some difference of opinion within the AHC membership regarding access to concessional financing, with larger companies noting that they are able to secure commercial rates as good or better than those offered by the SIVs. This is not an option available to smaller developers, who will rely on offers of concessional financing from Australian governments.

With regard to the question around whether the production credit should be linked to carbon abatement, the AHC is supportive of a model that incentivises lifecycle emissions abated. This will prioritise the sectors with the most significant challenges and avoid inefficient public spending or misalignment with government strategy.

If the Program were to prioritise the lowest cost instead, this would introduce competition into an uneven playing field. Some LCLFs have existing supply chains, infrastructure, or drop in capabilities, all of which bring down the cost of the fuel. Other LCLFs, especially e-fuels, require additional support to establish but are the longer-term decarbonisation solution.

Finally, the AHC has consistently advocated for the inclusion of export projects in Australian Government funding initiatives.¹² The timely development and scale up of domestic production in Australia (which also benefits domestic offtakers) is significantly aided by the attraction of foreign direct investment and international offtakers. By excluding export, this could risk a chilling effect on international investment and engagement, decreasing the pace, capacity, and flow on efficiencies for domestic industries.

¹¹ Net Zero Economy Authority (2025) *Response letter*, Australian Government, https://www.finance.gov.au/sites/default/files/2025-08/DISR%20-%20Net%20Zero%20Economy%20Authority%20-%20Response%20Letter_Redacted.pdf.

¹² AHC (2023) *Consultation on the design of Hydrogen Headstart program*, submission, August, https://h2council.com.au/wp-content/uploads/2023/08/AHC-submission_Hydrogen-Headstart_03082023.pdf.

3. Fuel production

Question 3.1: Considering this objective, what production pathways should be focused on or prioritised?

- a) Should priority be given to projects that use more-established production pathways (e.g. HEFA and HVO) than nascent production pathways that may present a higher level of technology risk?
- b) How can nascent production pathways compete with more-established production pathways (e.g. HEFA and HVO)?
- c) What minimum stage of project development (and evidence) should be expected by projects under the program?

Question 3.2: Should there be a minimum facility size to be eligible?

Question 3.3: Should LCLF be required to meet a carbon intensity threshold (% carbon intensity reduction compared to fossil equivalent) to be eligible for the program? If yes, what would be a reasonable threshold, and how should that threshold be calculated and verified? If not, why not?

- a) If the production incentive is based on carbon emissions reduced, rather than volume of LCLF produced (see Question 2.3), is a minimum carbon intensity threshold still needed as part of the eligibility criteria?
- b) Should Indirect Land Use Change be included in the method for determining carbon intensity, for the purpose of the Program?
- c) Should any feedstocks be prioritised or otherwise considered out of scope?

Question 3.4: Other than carbon intensity, should any other sustainability criteria be included?

Question 3.5: Which international and domestic sustainability schemes should be allowed to verify sustainability claims?

Regarding production technologies, the AHC position is that de-risked technologies may find it easier to attract capital and therefore any investment or grant from the Commonwealth will have a lower chance of failure and a higher chance of returns. This is compared to lower TRL technologies that may not yet have reached commercial scale and may have execution and technology risk. These technologies may not be able to source capital or investment as easily and the risk for Commonwealth grants and investment bodies has to be priced differently.

Ultimately though, the design of the grant depends on the Australian Government's risk appetite. Given that ARENA has been tasked with administering the Future Made in Australia Innovation Fund which also has a carve out for the trial and demonstration of LCLF technologies, this proposed funding support could be ring fenced to support projects utilising de-risked or more established technologies.

In terms of setting thresholds or requirements for minimum facility sizes, the AHC has consistently argued that the only requirement is production – if a facility has an offtaker and can meet all other emissions and environmental requirements, they should receive grant funding for every unit of product produced. As per our position for the Hydrogen Production Tax Incentive,¹³ a minimum facility size acts to arbitrarily exclude viable projects and reduce public sector administration. If the Department has a

¹³ AHC (2024) *The Hydrogen Production Tax Incentive*, submission, 12 July, https://h2council.com.au/wp-content/uploads/2024/07/240712-AHC-HPTI-submission_final.pdf.

preference for the funding to be allocated to a small number of larger projects, then the grant funding can be negotiated as bespoke contract for difference agreements as was the case for round 1 of the Hydrogen Headstart competitive program.

As for the question of a carbon threshold, the AHC is in favour of a whole of lifecycle emissions abatement threshold. This percentage should be determined to align with the most ambitious of our key trading partners. For example, the EU RED III has a threshold of 70% minimum lifecycle greenhouse gas savings in comparison to fossil comparator¹⁴ and Japan is targeting a minimum 50% emissions reduction for SAF.¹⁵

Overall, we would welcome a threshold minimum, and note that incentives could be scaled based primarily on maximising lifecycle carbon abatement much like the United States' previous Inflation Reduction Act incentives where the quantum of incentive was determined by the level of emissions on a sliding scale – the greater the abatement, the higher the incentive.

We also request that eligible and sustainable sources of carbon dioxide under the Program will need to be clearly defined for the production of low carbon liquid fuels, with particular consideration of post combustion capture.¹⁶ We note the narrow definition of eligible carbon sources in the UK has led to perverse outcomes.¹⁷ As mentioned previously, the Cleaner Fuels Program should comply with the modelling and recommendations that emerge from the National Food Security Strategy¹⁸ and National Bioenergy Feedstock Study¹⁹ as well as the obligations in the newly reformed EPBC Act.

¹⁴ European Union (2024) *Consolidated text: Directive (EU) 2018/2001 of the European Parliament and of the Council*, legislation, July, <https://eur-lex.europa.eu/eli/dir/2018/2001>.

¹⁵ Ministry of Economy, Trade and Industry (2024) *Sustainable Aviation Fuel (SAF) Supply Targets for 2030*, presentation, September, https://www.meti.go.jp/shingikai/enecho/shigen_nenryo/nenryo_seisaku/pdf/016_04_00.pdf.

¹⁶ This is aligned with the Net Zero and sectoral plans, particularly for Resources. Australian Government (2025) *Australia's Net Zero Plan*, September, <https://www.dcccew.gov.au/sites/default/files/documents/net-zero-report.pdf> ; *DISR (2025) Resources Sector Plan*, Australian Government, September, <https://www.industry.gov.au/sites/default/files/2025-09/dsr-resources-sector-plan.pdf>.

¹⁷ Kaminski, I. (2024) 'Anger over 'bonkers' UK plan to reach net zero by importing wood to burn', *The Guardian*, 9 October, <https://www.theguardian.com/environment/2024/oct/09/anger-uk-plan-net-zero-import-biomass-fuelnorth-korea>.

¹⁸ Collins, J. (2025) *Feeding Australia: Albanese Labor Government's plan to secure our food future*, media release, Department of Agriculture, Fisheries and Forestry, 4 March, <https://minister.agriculture.gov.au/collins/media-releases/feeding-australia>.

¹⁹ Collins, J. (2025) *Laying the foundations for Australia's bioenergy feedstock industry*, media release, Department of Agriculture, Fisheries and Forestry, 2 October, <https://minister.agriculture.gov.au/collins/media-releases/national-bioenergy-feedstock-strategy>.

4. *Other policy considerations*

Question 4.1: What are your views on the aforementioned factors affecting the merit of a proposal?

Question 4.2: Recipients under the Program will need to deliver benefits according to the Community Benefit Principles under the Future Made in Australia Act (see Appendix D). How do you consider the Community Benefit Principles in relation to LCLF projects? Are there specific Community Benefit Principles that are more or less relevant?

Question 4.3: How will overseas policy developments interact with domestic policy settings to support projects reaching final investment decisions? For example, LCLF demand-side targets or mandates, and international frameworks such as the International Civil Aviation Organisation long-term global aspirational goal for international aviation (LTAG) of net-zero carbon emissions by 2050.

Question 4.4: In addition to production support, what other measures are considered critical to achieve final investment decisions for projects? What are their key features?

Question 4.5: What are the intersecting policies you expect need to be considered to unlock a domestic LCLF production industry?

Question 4.6: Is there any other feedback you would like to provide that isn't covered by questions above?

The main omission from the Cleaner Fuels Program is the lack of a demand side mechanism. In the absence of whole of economy carbon pricing, there is little to no incentive for industries to increase their offtake of LCLFs priced far higher than fossil fuel incumbent alternatives. Incentives may take the form of direct payments or bespoke contract for difference payments as proposed under this grant, or they could be a redirection of existing fossil fuel subsidies currently supporting the continued purchase and utilisation of diesel for offgrid applications.

In addition, there is merit in considering book and claim models that can incentivise domestic offtake and both domestic and international investment in new projects. For example, a production facility for renewable diesel in Queensland may either supply the LCLF to users in the Pilbara or avoid transportation costs by enabling book and claim. This same approach has been recommended for international shipping as a measure to enable investment in LCLF production whilst recognising that the industry needs time to scale and for vessels that can utilise the LCLF options to join the fleet. An alternative example could apply to SAF.