Australia Post

Cleaner Fuels Program: Powering low carbon liquid fuel production in Australia
Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts
Via website

Australia Post welcomes the Government's initiative to accelerate the development of a domestic low carbon liquid fuel (LCLF) industry through the Cleaner Fuels Program (CFP). The ambition to catalyse domestic production of LCLF, reduce emissions in hard-to-electrify sectors, improve sovereign fuel security, and create jobs, aligns with Australia's net zero commitments.

According to the Transport and Infrastructure Net Zero Roadmap and Action Plan 'in 2023-24, there were an estimated 249.0 billion tonne kilometres of freight moved by road, 447.9 billion tonne kilometres of freight moved by rail, 88.3 billion tonne kilometres of freight moved by coastal shipping and 0.2 billion tonne kilometres moved by air freight'.[1] Australia's liquid fuel demand is significantly reliant on international supply chains. In the 12 months to November 2024, domestic production accounted for approximately 20 percent of total key fuel group consumption, continuing a 14-year trend marked by a reduction in local refining capacity from around 75 percent of national consumption.[2] This decline corresponds with the closure of five major refineries over the past 13 years, with domestic producers attributing this contraction to tightened profit margins, surplus global supply, and the growth of cost-effective capacity in Asia.[3] Collectively, these five refineries provided 31,660 ML of production capacity. Today, over 90 per cent of imported petroleum products are sourced from Asian refineries, leaving Australia's economic and national security vulnerable to global supply interruptions.[4] This risk is most acute for diesel and aviation fuel; in 2024, 65 per cent of diesel imports were sourced from just three countries – South Korea, Malaysia and Singapore.[5]

Australia's diesel consumption has increased by 93 per cent since 2014. If no action is taken, Australia's transport sector is expected to become the country's largest contributor to emissions by 2030. While petrol vehicles have seen growth in hybrid and electric options, most diesel and jet fuel uses still lack cost-effective alternatives. Coupled with insufficient incentives to switch fuels, this could result in continued increases in domestic liquid fuel emissions over the next few years.

Critical sectors like aviation, rail, and road freight use equipment built to last for decades, making quick adoption of electric technologies difficult. Since assets such as aircraft, locomotives, and heavy trucks are expensive and intended to serve for long periods of time,

[1] Transport and Infrastructure Net Zero Roadmap and Action Plan, September 2025 - https://www.infrastructure.gov.au/sites/default/files/documents/transport-and-infrastructure-net-zero-roadmap-and-action-plan.pdf
[2] Refined Ambitions: Exploring Australia's Low Carbon Liquid Fuel Potential, Deloitte, July 2025 - https://www.cefc.com.au/media/jh3gvm14/refined-ambitions-exploring-australia-s-low-carbon-liquid-fuel-potential.pdf
[3] Ibid.
[4] Ibid.
[5] Ibid.

fleets are replaced infrequently. This slow turnover means that even when new electric options emerge, widespread adoption is limited by long investment cycles, delaying the phase-out of established liquid fuel systems.

Australia Post has partnered with Ampol to supply 500,000 litres of Amplify Renewable Diesel R10 to its Redbank Parcel Facility in Brisbane, with deliveries started in November 2025. The renewable diesel will be used in the site's existing truck fleet of 89 vehicles over the next year, reducing lifecycle emissions without requiring engine modifications. The project demonstrates Australia Post's commitment to decarbonising our transport emissions as we work towards Net Zero by 2050. We believe that renewable diesel will play a key role in decarbonising Australia's transport sector.

For the CFP to deliver meaningful, equitable and timely decarbonisation – especially in the transport sector – the design must reflect real-world constraints, technological readiness, and the dynamics of heavy road freight in Australia. This submission sets out recommendations in support of prioritising certain LCLF pathways (particularly renewable diesel) over others and ensuring demand-side measures are given parity with supply-side incentives.

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

Eligibility under the CFP should be limited to LCLFs that demonstrably deliver material emissions reductions, can scale in Australia, and can be deployed efficiently in hard-to-abate sectors. Given finite public funding and constrained feedstocks, eligibility criteria should be selective rather than open-ended.

At a minimum, eligible fuels should meet the following principles:

- Deliver verifiable, lifecycle greenhouse gas emissions reductions relative to conventional fuels.
- Be technically and commercially scalable within Australia in the near-to-medium term.
- Be compatible with existing vehicles and infrastructure.
- Support decarbonisation of sectors with limited alternatives (e.g., heavy road transport).
- Demonstrate clear domestic end-use pathways.
- On this basis, the following LCLFs should be eligible under the CFP:

<u>Renewable diesel (including HVO)</u>

Renewable diesel should be a priority eligible fuel. It is a proven, drop-in fuel compatible with existing diesel engines and fuel distribution infrastructure, enabling immediate emissions reductions without requiring fleet replacement or new refuelling infrastructure. Renewable diesel is particularly well suited to heavy-duty road transport, a sector that is difficult to electrify at scale due to range, payload, cost, availability and infrastructure constraints. Its inclusion maximises near-term emissions abatement while preserving existing vehicle asset lifecycles and freight productivity.

The transport sector accounts for 22 percent of Australia's annual carbon dioxide equivalent emissions. Without intervention, projections indicate that transport emissions could become the leading source of greenhouse gases in Australia by 2030.6 As Australia's population and economy expand, transport activity is also likely to keep rising through 2050. Heavy freight accounts for approximately 40 per cent of transport-related emissions and contributes around 7 per cent to Australia's total greenhouse gas emissions.7 The Federal Government's Emissions Projections 2024 report indicates that freight emissions are projected to rise 16 per cent by 2040.[8] Within the freight sector, road transport is responsible for a dominant share, representing 83 per cent of all freight emissions.[9]

Climateworks' analysis also found that road freight emits five times more than rail and domestic shipping combined, even though it handles only a third of total freight activity.[10] Over the past several decades, increases in economic activity, population, and urbanisation have contributed to overall growth in freight transport and this is only likely to increase. In FY25, Australia Post delivered 2.5 billion articles to more than 12.8 million delivery points.[11]

Sustainable aviation fuel (SAF)

SAF should be eligible under the Program; however, should not be prioritised ahead of LCLFs that serve the road freight sector. While SAF markets are emerging and scaling internationally, providing airlines with viable supply pathways in other jurisdictions, comparable alternatives do not exist for the road freight sector at any meaningful scale. Heavy and long-haul road freight has no feasible substitute in the near-to-medium term beyond LCLFs given current limitations of electrification and other technologies. Prioritising fuels that enable immediate and scalable emissions reductions in road freight transport is therefore critical, while SAF development should continue to be progressed through aviation-specific market mechanisms and international supply opportunities.

The CFP should focus eligibility on LCLFs that deliver the greatest emissions reduction, fasted deployment, and strongest alignment with Australia's transport decarbonisation challenge at the least cost. Prioritising renewable diesel for heavy road transport will maximise the effectiveness of public investment, support existing fleets and infrastructure, and deliver immediate, scalable emissions abatement. Eligibility settings should remain

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[6] Transport and Infrastructure Net Zero Roadmap and Action Plan, September 2025 - https://www.infrastructure.gov.au/sites/default/files/documents/transport-and-infrastructure-net-zero-roadmap-and-action-plan.pdf.

[7] Delivering freight decarbonisation: Strategies for reducing Australia's transport emissions, Summary report, Climateworks Centre, 2023 - https://www.cefc.com.au/media/bxjlcrvu/climateworks-delivering-freight-decarbonisation.pdf.

[8] Australia's emissions projections 2024, Department of Climate Change, Energy, the Environment and Water - https://www.dcceew.gov.au/sites/default/files/documents/australias-emissions-projections-2024.pdf

[9] Delivering freight decarbonisation: Strategies for reducing Australia's transport emissions, Summary report.

[10] Ibid.

[11] Delivering for the future: 2025 Annual Report, Australia Post - https://auspost.com.au/content/dam/auspost_corp/media/documents/2025-australia-post-annual-report.pdf.

adaptable over time as technologies mature and alternative decarbonisation pathways become viable.

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

Yes. While a degree of technology neutrality is important, prioritisation is necessary where fuels differ materially in their emissions-abatement potential, scalability, cost effectiveness, and readiness for deployment in Australia.

In the near-to-medium term, priority should be given to LCLFs that:
- Can be deployed at scale quickly
- Deliver high emissions reductions per unit of public support
- Are compatible with existing vehicles and infrastructure
- Address sectors that lack viable alternatives.

Renewable diesel meets these criteria more strongly than other LCLFs. It is a drop-in fuel compatible with existing diesel engines and distribution networks, enabling immediate emissions reductions without stranding existing vehicle assets or requiring major new infrastructure investment for distribution and off-takers.

LCLFs should be prioritised for hard-to-abate sectors where electrification or other zero-emission alternatives are not currently viable or scalable. Heavy duty freight transport is a clear example. This sector faces structural barriers to electrification including:

- Long operating distances and high payload requirements
- Limited charging infrastructure, particularly in regional and remote areas
- Grid and onsite energy constraints
- Low operating margins making investment in expensive assets challenging
- Higher upfront vehicle costs and operational complexity, include road access limits.

Influencing prioritisation of fuel types and end-use sectors can have several positive market impacts:

- **Investment certainty:** Clear prioritisation signals reduce policy risk and give producers, investors and users confidence to commit capital to production facilities, supply chains and fleet adoption.
- **Efficient allocation of scarce resources:** Feedstocks and capital are limited. Prioritisation helps ensure these resources are directed to uses that deliver the greatest emissions reduction and economic value.
- **Avoidance of free-riding:** Without prioritisation or demand-side measures, early adopters may bear higher costs while others continue using fossil fuels. Targeted prioritisation supports a more level playing field.
- **Acceleration of domestic market development:** Aligning production incentives with priority end use sectors encourages domestic consumption of LCLF rather than export, strengthening sovereign fuel security.
- **Clear price signals:** Prioritisation can support the development of stable, predictable demand, reduce price volatility and improve long-term affordability for end users.

While prioritisation may constrain flexibility in the short term, this is outweighed by the benefits of faster decarbonisation, better value for public investment, and clearer market signals. Over time, as technologies mature and alternatives become viable, prioritisation settings can evolve accordingly.

An additional issue warranting further exploration by the Department is the relative value of prioritising domestic production of renewable diesel compared to SAF, having regard to where equipment/assets are refuelled and the maturity of international markets.

Road transport refuels almost exclusively onshore and relies on fuels supplied within Australia. By contrast, aviation operates in a global fuel market. Airlines refuel across international networks and already have access to SAF in overseas jurisdictions where production capacity, policy support, investment and supply chains are more advanced than in Australia. In this context, domestic SAF production may not be the only – or necessarily the most efficient – pathway for reducing aviation emissions in the near term, particularly if Australian airlines can access SAF through international hubs. This raises a question for further consideration: whether public support under the CFP should prioritise domestic renewable diesel production, given its guaranteed onshore use in road transport, over SAF production where emissions reductions may be achieved through international supply chains. Exploring this distinction would help ensure public investment is directed to fuel pathways that deliver the greatest domestic emissions abatement, energy security and economic value.

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

The introduction of renewable fuel standards in the US has played a key role in boosting the use of low-carbon liquid fuels (LCLFs), which have increased by about 520 percent since 2011.[12] The US Federal Renewable Fuel Standard (RFS) requires that transportation fuels contain a set amount of renewable fuel each year, and it enforces strict regulations to make sure these fuels have a significantly lower lifecycle emissions footprint compared to traditional fossil fuels. Marginal incentives have shaped production choices. US policies have historically favoured renewable diesel over SAF because renewable diesel's flexible, low-cost process produces more fuel from various feedstocks, lowering the cost per ton of CO2 emissions avoided compared to SAF. A recent article by Hall&Wilcox notes 'the US experience offers several important lessons that Australia can use to maximise its investment:

- **Set clear targets:** Mandating blending levels or production goals can give the industry the confidence it needs to invest and expand.
- **Provide practical financial support:** A combination of grants, tax credits, and loan guarantees can lower barriers to entry and benefit both new and existing producers.

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[12] Australia's Cleaner Fuels Program: lessons from the US, December 2025 - https://hallandwilcox.com.au/news/australias-cleaner-fuels-program-lessons-from-the-us/ \

- **Ensure market certainty:** Maintaining stable, long-term policies helps attract private investment and supports large-scale local production.
- **Support early innovation:** Ongoing funding for research, development, and commercialisation keeps Australia competitive and sustainable as technology advances.
- **Collaborate with industry:** Working together, government and businesses can speed up technology transfer and develop a more robust and resilient supply chain.'[13]

Additionally, Australia should publish nationally agreed greenhouse gas emission conversion factors for LCLFs to support consistent and credible emissions reporting. The UK provides a useful example: the Department for Energy Security and Net Zero publishes detailed emissions intensity factors by litre, gigajoule, and kilogram for a wide range of fuels, differentiated by feedstock and production pathway.[14] These include biodiesel derived from used cooking oil or tallow, HVO, and development diesel. In the absence of equivalent Australian factors, Australia Post currently relies on emissions data provided by its LCLF supplier for reporting purposes. Establishing a nationally recognised set of conversion factors would improve consistency across organisations and provide greater confidence and certainty for fleets considering a transition to LCLFs.

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?

Yes. LCLFs should only receive CFP support if they meet a clear, credible carbon intensity threshold. This ensures public funding leads to real emissions reductions and upholds the Program's integrity. A carbon intensity threshold would:

- Ensure that only fuels delivering material lifecycle emissions reductions are supported
- Prevent public funding from flowing to fuels with marginal or uncertain climate benefits
- Provide clarity and certainty to investors, producers and fuel users
- Align the Program with international best practice in LCLF policy design.

To be effective, the carbon intensity threshold should be designed with the following principles in mind:

- **Lifecycle based assessment:** The threshold should be based on full lifecycle greenhouse gas emissions, including feedstock sourcing, production, transport and end use. This ensures comparability across fuel pathways.
- **Ambitious but achievable:** The initial threshold should be sufficiently ambitious to drive meaningful emissions reductions while remaining achievable for early projects to

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[13] Ibid.

[14] UK Greenhouse gas reporting conversion factors – https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2025

support market development. The threshold should tighten over time in line with technology maturity and Australia's emissions targets.

- **Consistency and transparency:** Clear methodologies and verification requirements should be established to minimise uncertainty, reduce administrative burden and prevent inconsistent treatment across fuels.
- **Market driven feedstock supply:** Feedstock eligibility should remain agnostic, subject to meeting sustainability and lifecycle emissions requirements. The Program should avoid prescribing or favouring specific feedstocks, allowing the market to determine the most efficient and lowest cost feedstock to meet the carbon intensity threshold. This approach encourages innovation, supports cost minimisation, and enables producers to respond flexibly to feedstock availability and price signals over time.

While a carbon intensity threshold is necessary, it should not be the sole eligibility criterion. Fuels with similar carbon intensity outcomes can differ significantly in their ability to scale, their cost-effectiveness, and their suitability. Accordingly, the threshold should work alongside sector-based and use-based prioritisation, rather than replace it. For example, drop in fuels such as renewable diesel that meet a strong carbon intensity threshold and can be rapidly deployed in heavy road transport may deliver greater near-term emissions abatement than other fuels with comparable carbon intensity scores but more limited deployment pathways.

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

Unlocking a domestic LCLF production industry requires coordinated policy settings across multiple portfolios. Production incentives alone will be insufficient without alignment across energy, transport, climate, industry, waste, trade and regulatory frameworks. Key intersecting policy areas include:

- **Transport:** Fuel-use mandates, blending requirements or carbon-intensity standards for hard to abate sectors; alignment with fuel quality standards; and clear signals on the role of LCLFs in road transport decarbonisation.
- **Climate and emissions policy:** LCLF policy should align with Australia's broader climate framework, including national emissions reduction targets and sectoral decarbonisation pathways; carbon accounting and reporting frameworks; and interaction with safeguard mechanisms and offsets.
- **Energy and electricity system policy:** Domestic LCLF production intersects with renewable electricity availability and pricing, grid connection processes, network capacity and access in regional areas.
- **Feedstock, waste and circular economy policy:** Waste and resource recovery frameworks governing access to oils, fats, residues and other feedstocks; circular economy strategies that influence feedstock prioritisation and competing uses; export controls or incentives affecting whether feedstocks are retained domestically or exported.
- **Trade, fuel security and export policy:** Trade settings affecting import/export of fuels and feedstocks; fuel security and sovereign capability objectives; interaction between domestic production support and international fuel markets.

- **Aviation and international decarbonisation frameworks:** For SAF, international aviation obligations and frameworks; airline procurement practices and access to overseas SAF markets; alignment between domestic production support and international supply options.

Another critical intersecting issue is the need for clear, aligned and consistent signals from decision-makers at both federal and state and territory levels regarding the role and expected timeline of LCLFs – particularly renewable diesel – in the decarbonisation of the road transport sector.

Currently, there is a risk of policy fragmentation and mixed signals. While some frameworks implicitly assume that road transport will transition rapidly to electrification, others recognise the significant structural, technical and commercial barriers that remain, especially for heavy duty and long-haul freight. Misalignment across jurisdictions creates uncertainty for investors, fuel producers, and fleet operators, undermining confidence in long-lived capital investments.

There is also a misguided perception that aviation is inherently "harder to abate" than road transport and therefore should be prioritised. While aviation does face long-term decarbonisation challenges, this framing can obscure the reality that road transport – particularly heavy road freight – is also a hard to abate sector in practice. The existence of theoretical alternatives does not equate to near-term feasibility or scalable deployment.

In the road transport context:

- Battery-electric and other alternative drivetrain technologies remain uncertain in terms of performance, cost, range, payload impacts and infrastructure readiness.
- While technological improvements may occur, the timing and extent of those improvements is uncertain – they may arrive quickly, or they make take decades.
- Regardless of future technology pathways, internal combustion engine (ICE) vehicles are being purchased today and will remain in service for many years, given the long asset lifecycles typical of heavy-duty vehicles.

Against this backdrop, perceptions that renewable diesel will have a short role, or be phased out by 2040, are misleading and disconnected from commercial reality. Without explicit and aligned recognition from governments that renewable diesel is a necessary and enduring component of road transport decarbonisation, there is a risk that production investment is deferred, demand-side measures are weakened, and emissions reductions are delayed. Greater alignment between federal and state and territory governments on the role, value and realistic timeline of LCLFs in road transport would provide clarity to the market, reduce policy risk and ensure that decarbonisation pathways reflect operational realities rather than assumptions about future technology uptake.

Our recommendations:

- Recognise road freight as a leading priority sector for LCLF support, given its high emissions, limited electrification options, and rapid potential for emissions reductions.

- Prioritise renewable diesel over SAF under the Program – especially in the near-to-medium term.
- Prioritise development of complementary demand-side measures (e.g., sector-wide mandate) to ensure uptake and emissions reductions, creating a level playing field across operators and avoiding free-riding.
- Condition production incentives on credible domestic use plans and binding supply commitments, to avoid domestic production being exported or used outside intended sectors.
- Build monitoring, reporting and verification frameworks into the CFP design to track actual use and abatement – not just production volumes.
- Calibrate supply-side support in close coordination with demand-side measures – not treat them in isolation.

As we continue to serve our customers and communities, we must balance their evolving needs and expectations with the environmental and climate impacts of our operations. In 2024, Australians spent a record $69 billion online, up 12 per cent year on year, with 9.8 million households (84 per cent of all homes) shopping online.[15] For Australia Post, around 91 per cent of our Scope 1 greenhouse gas emissions and 95 per cent of our Scope 3 greenhouse gas emissions were attributed to transport activity in our network. Unless changes are made to how road freight is transported nationwide, increased freight activity will result in higher emissions. This could make it much harder for Australia to meet its climate goals.

We commend the Government for taking important steps to unpack and progress what is an inherently complex and interconnected policy framework. The CFP represents a significant opportunity to deliver practical, near-term emissions reductions while supporting domestic industry, fuel security and productivity in hard-to-abate sectors. We welcome ongoing opportunities to contribute to policy development, to participate in pilots where appropriate, and to share operational insights from the road transport sector to support effective, evidence-based implementation. To discuss this submission further, please contact Kat Burela, Head of Industry, Policy and Regulatory Affairs at [redacted]

[15] Australia Post eCommerce Report 2025 - https://auspost-report.s3.ap-southeast-2.amazonaws.com/AUS+Post+-Ecommerce+Report+2025.pdf