

Submission to the Enabling supply of renewable diesel in Australia

February 2024

The Australian Logistics Council (**ALC**) is pleased to make a brief submission on the Enabling supply of renewable diesel in Australia - a consultation paper on an Australian paraffinic diesel fuel quality standard.

General Observations

Potential Impacts on Australia's Road Transport Fleet

Essentially, a widespread adoption of renewable or zero-emission liquid fuels holds the potential for the most substantial reduction in transport emissions across the national fleet. With Australia surpassing 20 million vehicles in 2021, heavy transport, consisting of rigid and articulated trucks, reached nearly 700,000 vehicles by 2023. While electrification is vital for new heavy vehicles, decarbonized fuel can significantly impact a larger number of vehicles in the short to mid-term, particularly in heavy transport with older vehicles.

As Australia makes this transition to a decarbonised economy, decision makers must not forget the need to ensure a resilient and efficient end to end supply chain to carry the Australian freight task

This means that care needs to be taken to ensure that decisions made to incentivise the adoption of methods of transport utilising alternative fuels does not distort the efficient operation of the marketplace.

Alignment with International Standards

Considering Australia's remote geography and low population density, adhering to international standards is essential for facilitating the flow of international goods. Deviating from these standards should only occur if absolutely necessary, as any constraints on supply at scale may elevate costs and affect overall fuel security. In the current global context, domestic fuel production is vital for enhancing Australia's fuel security, and aligning with international standards can foster investment in renewable fuel production, potentially opening doors for exports.

Comprehensive Emission Standards Across All Transportation Modes

The ALC emphasizes the need for consistent and comprehensive emission standards applicable to all transportation modes, including sea, road, air, and rail. This approach creates a level playing field and provides regulatory incentives for the adoption of environmentally friendly technologies. It is important to avoid disproportionate impacts on specific sectors, as seen with the current challenges faced by the rail industry under safeguard mechanisms.

Price Sensitivity and Price Parity Importance

In their submission to the NSW Renewable Fuel Scheme Discussion Paper November 2023, the Australian Logistics Council stressed the need for various renewable fuels to achieve net-zero emissions in the transport sector. These include renewable diesel, biodiesel, ethanol, green hydrogen, e-methane, e-methanol, and sustainable aviation fuel. However, their widespread adoption depends on achieving price parity with conventional diesel. Price parity is crucial for incentivizing fuel switching in the highly competitive and price-sensitive transport and logistics sector.

Survey Responses

1. Please provide information about the benefits or impacts from using renewable diesel within the existing vehicle and equipment fleet in Australia.

Diesel powered prime movers play a critical role in freight across Australia, and their use will continue to be essential in delivering freight to remote locations over coming decades. This is particularly acute in regional areas with limited supply of EV charging or hydrogen refuelling infrastructure.

Immediate decarbonisation for heavy vehicles involves local production of renewable diesel (HVO), which is chemically identical to conventional diesel. Derived from renewable sources, it offers a 75-95 percent reduction in emissions, without engine modifications. Current hurdles in Australia include National Diesel Standards limiting HVO adoption due to specified density requirements.

In the US, policies like the Renewable Fuel Standard and California's Low Carbon Fuel Standard incentivise biofuel development. Australian tallow is converted to renewable diesel in Singapore for the Californian market, while canola seed, exported to Europe, contributes to biodiesel.

Although no commercial renewable diesel production exists in Australia, companies are exploring domestic options. Encouraging through funding domestic production and setting competitive pricing frameworks would drive rapid adoption, ensuring grid resilience, mitigating supply chain risks, and eliminating the need for additional infrastructure modifications.

ALC firmly believes in the benefits of renewable diesel in lowering emissions and to this end strongly supports the development of the renewable diesel standard.

2. Please provide any comments on the proposed approach or wording of the paraffinic diesel definition.

Enabling the supply of paraffinic diesel would regulate the quality of renewable diesel as well as other paraffinic diesel alternatives (such as synthetic diesel) produced from non-renewable sources. ALC opposes the use of fuel from non-renewable sources and emphasises the necessity for renewable diesel to be derived from sustainable feedstocks.

When using paraffinic diesel, clear specification of its origin is important to ensure transparency regarding its renewable or non-renewable sourcing, avoiding potential contradictions in carbon emission reduction goals.

In conjunction with these standards, ALC recommends the development of an internationally aligned Guarantee of Origin Scheme (GOScheme). This scheme would establish a framework for quantifying, monitoring, and verifying emissions and other attributes of Australian clean energy products, supporting industry development and safeguarding against the infiltration of non-biogenic products and those from environmentally undesirable supply chains, such as palm oil.

3. What are the advantages and disadvantages of including the paraffinic diesel parameters within the existing diesel standard?

Exploring the incorporation of paraffinic diesel parameters into the existing diesel standard involves an assessment of its pros and cons. Fuel quality standards primarily focus on regulating fuel parameters and their associated testing methods, emphasizing the assurance of the final product's quality. However, it is important to note that these standards do not extend to regulating the origin of fuels, as this aspect lies outside their purview. Despite this, it represents one of the few avenues available to explicitly specify that the fuel originates from renewable sources.

The proposed initiative by the department seeks to establish regulations governing fuel quality for paraffinic diesel in Australia, with the aim of facilitating its supply, regardless of the feedstock or source material. This proposal, however, does not function as a mechanism to guarantee that fuel labelled as renewable diesel is exclusively derived from a biogenic source. ALC expresses its disagreement with this approach, asserting that the labelling should be unambiguous in conveying whether the end product has been derived from biogenic sources.

4. What should the minimum density limit be for paraffinic diesel in Australia and why?

ALC supports Option 2 as provided.

5. What are the advantages and disadvantages of creating a standalone paraffinic diesel standard?

ALC advocates for the establishment of distinct standards for both renewable diesel and, if necessary, paraffinic diesel. The primary objective is to ensure that the benefits associated with utilizing renewable feedstock sources are explicitly and comprehensively addressed within the regulatory framework.

Recognizing the potential for technological advancements that could lead to the production of non-paraffinic renewable diesel, ALC remains mindful of the evolving landscape. However, it underscores the importance of anticipating the future viability of such processes. History has demonstrated that the department may require a considerable amount of time to reassess the fitness for purpose of the paraffinic diesel definition, even if advancements occur. ALC highlights the risk that technology and fuel usage could outpace the department's ability to adapt, emphasising the need for a proactive approach to standards that can accommodate emerging developments in a timely manner.

6. Should a standalone paraffinic diesel standard follow the specifications of the European standard EN 15940 or another standard? Why? (See indicative specifications for comment at Appendix C.)

No comment

7. Are there benefits in having two classes of paraffinic diesel with different densities and cetane ratings per the European standard EN 15940?

No comment

8. If the Government created a paraffinic diesel standard, what would be the best way to regulate paraffinic diesel/mineral diesel blends?

9. What should the minimum flash point be for paraffinic diesel in Australia and why? What would the implications be if the minimum flash point of paraffinic diesel aligned with the European minimum at 55°C?

No comment

10. What should the maximum FAME content of paraffinic diesel be? Would increasing the maximum FAME content to 7% lead to any vehicle operability or storage issues?

ALC supports the increase of FAME content to 7%

11. Should labelling requirements similar to the European standard EN 15940 be used or are there other labelling requirements appropriate for Australia?

Following the European labelling requirements such as 'Paraffinic diesel fuel shall be distinguished from other diesel fuel by a dedicated marking. Indication on dispensing pumps of "Not suitable for all vehicles; consult vehicle manufacturer information or manual before use" is recommended.'

However, given that most OEMS are comfortable with the use of renewable diesel at 100%, then the information may not be required and may also cause substantial unnecessary confusion with consumers.