



Securing Australia's Cleaner Fuels Industry:

Response to the consultation paper on a demand mechanism

15 September 2026

Introduction

Rewiring Australia welcomes the opportunity to contribute to the discussion of how to secure clean fuels for Australia. This consultation arrives at a crucial moment in Australia's energy transition: the conflict in the Middle East has highlighted the extreme vulnerability of our dependence on foreign fuels for transport. This has sparked a dramatic shift in the vehicle market as households race to switch from petrol and diesel to electric vehicles (EVs), something that could shift just as quickly in other vehicle segments.

As proposed, this mechanism remains unduly focused on liquid fuels as the primary lever to address fuel security and emissions reduction. As acknowledged in the consultation paper, electrification offers the lowest life-cycle costs, highest energy security, lowest emissions, and wider economic benefits. Importantly, it has the potential to deliver these benefits for large portions of the sectors identified as 'hard-to-abate' or 'not feasible' in the coming years.

Recommendations

With regard to the structure of the demand mechanism, Rewiring Australia makes four recommendations:

- 1. Apply the Phase 2 design from the beginning: Implement a carbon-intensity based approach.**
- 2. Include electrification as an activity across all fuel segments from the beginning.**
- 3. Add installing EV charging as an eligible activity with the value calibrated to incentivise efficient infrastructure roll-out.**
- 4. Keep a separate target for aviation to ensure that investment is not diverted to other more easily-abated sectors.**

Removing the switch in metrics between Phase 1 and Phase 2 delivers a consistent approach for industry to comprehend and apply to business planning. Including electrification from the beginning ensures a technology-neutral approach to allow for lowest-cost solutions to emerge. Adding EV charging as an activity will help to catalyse the rollout of charging infrastructure in advance of EV uptake. A separate aviation target ensures that investment is directed to this most hard-to-abate transport sector.

The remainder of this response focuses on the benefits and potential of electrification to provide low-cost fuel security across transport sectors.

Electrification benefits

Technology neutrality is essential to reduce emissions for the lowest cost. Electrification currently offers the lowest-cost decarbonisation for ground transport due to its significant energy efficiency advantage. Electric motors have zero operational carbon emissions. For aviation, electrification offers three times the emissions reduction potential of liquid fuels: liquid fuels can reduce the direct carbon emissions but not the non-carbon emissions (NOx and contrails) which drive two thirds of aviation's global heating effect¹.

Furthermore, first and second generation liquid fuels bring a host of well-established risks associated with agriculture which electrification avoids. These include the likelihood of inflating food prices, indirect land-use change, water stress, vulnerability to natural disaster, biodiversity opportunity loss, and the administrative burden of assurance. Certification should capture and attempt to manage these risks, but electrification avoids them all together.

The electric revolution

The Government's cost benefit analysis clearly shows that electrification offers the most cost-effective emissions abatement and fuel security; the sensitivity assessment demonstrates the strong impact of this lever on outcomes. However, the Government is unduly cautious with regards to electrification in its proposed framework: electrification is the optimal solution for affordable, secure, low carbon transport. Australia should develop low carbon liquid fuels only to the extent that they are economically optimal; there is no value in incentivising an economically unsustainable industry.

The identification of hard-to-abate sectors is inaccurate: with technological developments many of the sectors listed are likely to be increasingly appropriate for electrification, meaning that the consultation paper's diesel forecasts may be high. The proposal appears to recognise "aviation, maritime, heavy vehicle and rail transport" as sectors where electrification is "not feasible", based on stakeholder feedback. We question the categorisation given growing evidence of partial electrification in these transport sectors in Australia and around the world:

- **Electric heavy vehicle transport** is being deployed commercially in Australia by Janus and New Energy Transport among others, driven by favourable economics. In China 26% of new truck sales were electric in 2025².

¹ Lee et al. (2021). The contribution of global aviation to anthropogenic climate forcing for 2000 to 2018. *Atmospheric Environment*: 244, 117834.

² Ember (2026). China Energy Transition Review 2026,

- **Electric rail transport** is operational in every major city in Australia. India has electrified 99.2% of its vast 70,000km rail network³.
- **Electric maritime transport** is likely to dominate on short, busy routes, such as Sydney's ferry network⁴, but a wider role for electrification is supplying auxiliary energy in hybrid ships. Buquebus in Tasmania is a world-leading producer of electric catamarans. In Europe, a range of maritime organisations called on the European Union to adopt more ambitious goals for maritime electrification⁵.
- **Electric aviation** remains challenging but is being tested in Australia on a small number of very short-haul island routes. With advances in battery technology, electric flight is expected to be feasible for routes under 1,000 km, which would include the country's busiest flightpath between Melbourne and Sydney.

We note that the battery industry continues to experience dramatic improvements in energy density as the commercialisation of novel anode chemistries and electrolyte developments reach mass production⁶. These and future developments will continue to broaden the applications and market segments where electrification is feasible and economically lowest-cost.

We encourage the government to permit electrification as an eligible activity across all transport segments as part of a broadly technology-neutral mechanism. A separate aviation target will ensure that this sector receives investment.

Finally, given that one of the major limitations on faster uptake of EVs is the availability of charging infrastructure. **Including the installation of charging infrastructure as an eligible activity would provide income to bolster the business case for charger operators to invest ahead of EV uptake.**

About Rewiring Australia

Rewiring Australia is a non-profit research and advocacy organisation dedicated to representing the people, households and communities in the energy system. We deliver practical climate progress by working with government, industry, and communities to electrify everything. Co-founded in 2021 by Dr Saul Griffith and Dan Cass, Rewiring Australia highlights the positive climate and economic outcomes possible for Australia, and the world, with electrification of fossil fuel machines. www.rewiringaustralia.org

³ Government of India ([2026](#)). Mission 100% Electrification: Powering the Future of Indian Railways

⁴ Parkinson ([2024](#)). Sydney ferry fleet to go fully electric, with first on the harbour in 2026.

⁵ T&E ([2026](#)). Maritime organisations call to include shipping in Electrification Action Plan.

⁶ For example, CATL ([2023](#)) and [Group14](#).