

Australian Government
Department of Climate Change, Energy, the Environment and Water
Department of Infrastructure, Transport, Regional Development,
Communications, Sport and the Arts

Submission via the online submission portal

15 September 2026

RE: Securing Australia's Cleaner Fuels Industry – Demand mechanism consultation

Rio Tinto welcomes the opportunity to make a submission to the Department of Climate Change, Energy, the Environment and Water, and the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (together, the **Departments**) in relation to the consultation paper on a demand mechanism for low carbon liquid fuels (LCLF) in Australia.

Rio Tinto acknowledges that we have an important role to play in driving forward the energy transition and working collaboratively with governments as they work to build energy security and resilience. Rio Tinto recognises the many potential benefits of developing a domestic bioenergy industry, including lifecycle emissions reductions, potential for regional jobs, economic development for communities and traditional owners, and supporting Australia's fuel security. Rio Tinto has significant experience trialling and deploying bioenergy in our operations in multiple jurisdictions (refer to map in Appendix) and is well positioned to comment on the advantages and disadvantages of different policy levers to promote bioenergy use and industry development.

In 2025, our scope 1 and 2 emissions were 31.5 million tonnes CO₂e¹ and we have committed to reducing our scope 1 and 2 emissions by 50 per cent by 2030 against a 2018 baseline and to net zero by 2050. We are making significant investments towards delivery of our decarbonisation strategy which will also improve energy resilience. Most of Rio Tinto's emissions from global surface mining operations are generated by the consumption of fossil diesel in heavy mining equipment, locomotives and associated industrial engines. Globally, Rio Tinto consumed 1.6 billion litres of diesel at our major managed operations in 2025, accounting for 12 per cent of our scope 1 and 2 emissions. Diesel consumption at our Australian operations was 1.2 billion litres.

In the long term, we expect that electrification of our mobile assets will be the major decarbonisation pathway to support achievement of our net zero by 2050 target, with renewable diesel playing a complementary role in reducing emissions where electrification may not be technically or economically viable. Achieving this transition will require a significant increase in electricity demand across our operations. In some cases, the pace and extent of electrification may be constrained by the cost of supporting infrastructure, as well as land access and permitting requirements. As a result, we do not expect electrification to be technically feasible or financially viable for all our Australian operations or for all diesel applications in the medium term. In this context, energy from biogenic sources is expected to play an important complementary role in our decarbonisation strategy. Renewable diesel, biomethane, hydrogen and biocarbon have the potential to reduce our medium-term reliance on fossil energy and contribute to the achievement of our decarbonisation targets.

¹ Emissions reported on an equity share basis

Renewable diesel for use in heavy mobile equipment is technically proven and delivers approximately 75 per cent lower life cycle emissions than fossil diesel fuel². Rio Tinto has demonstrated that its US mining operations can be run on renewable diesel and has fully transitioned its Boron operation in California. In Australia, we are piloting renewable diesel at our iron ore assets in the Pilbara and establishing a Pongamia seed farm development in Queensland to help stimulate supply of low carbon liquid fuel feedstocks in Australia, subject to confirming its technical and economic viability. The sustainable supply of feedstock and a developed domestic Australian market are critical constraints to accelerated industry-wide use. This is reflected in the higher price of renewable diesel in Australia compared with fossil diesel (renewable diesel currently trades about twice that of fossil diesel in the Asian market) particularly relative to other jurisdictions. This differential in price is largely driven by scarcity margins for feedstocks and biofuel refining capacity, which are best supported by supply side policy measures.

In Rio Tinto's submission to the *Unlocking Australia's low carbon liquid fuel opportunity* consultation in 2024, we described some of the barriers to establishing and scaling LCLF supply chains in Australia, and the important role of supply-side policy to help overcome these. We support supply-side measures announced by the Government since that time, including production-linked incentives under the Cleaner Fuels Fund and R&D support under the Future Made in Australia Innovation Fund, aimed at establishing a policy environment which supports investment in the development of a strong domestic market for LCLF. We emphasise the need for incentives for the development of advanced biofuel feedstock crops in suitable areas, and advocate for recognition under the Australian Carbon Credit Unit (ACCU) Scheme to incentivise feedstock projects that meet defined, verifiable thresholds for carbon sequestration and co-benefits. We also encourage the Government to review resourcing, systems, criteria and expectations of proponents to best support the timely delivery of announced policy measures and allocation of announced funding, so that a diverse feedstock supply can be scaled up to underpin domestic LCLF production].

For industrial users of fossil diesel, the design of the Safeguard Mechanism economically incentivises scope 1 (including diesel-related) emissions reduction via a price signal for scope 1 emissions reduction. Therefore, for Rio Tinto, reducing diesel-related emissions aligns with our roadmap to meet climate targets, but is also required to reduce Safeguard-related costs. Additional demand side measures such as volumetric mandates for LCLF could increase operating costs for industrial diesel users at a time when alternative fuel sources are not competitively available at the scale required. Alternative approaches such as a carbon intensity framework should be explored. Furthermore, we emphasise the importance of implementing announced policy measures and addressing remaining barriers before any demand mechanism takes effect.

Due to geographic constraints, it will be challenging to deliver renewable diesel from refineries in Australia to our operations in the Pilbara. To overcome such constraints to marketing low carbon fuels, and minimise emissions from transporting fuel to site, a robust and transparent model for enabling the renewable energy attributes of lower carbon fuels to be traded and reported under the scope 1 market-based approach that is recognised by NGER is required.

We acknowledge the recent publication of Australia's *National Bioenergy Feedstock Strategy* and are supportive of efforts to progress the five priority areas identified. In our submission to the *National Bioenergy Feedstock Strategy* consultation in 2025, we emphasised the importance of growing sustainable feedstock supplies as a critical foundation to domestic supply chain development and improving the cost competitiveness of bioenergy, including LCLF, relative to fossil alternatives. We also noted the need for clear guidelines defining the sustainability of biofuels in Australia, and prioritisation of development and investment in novel feedstocks and related technologies accordingly, to promote a sustainable, scalable industry in the long term. Lifecycle emissions and other sustainability-related impacts vary significantly depending on feedstock type and land use considerations, processing-related emissions and waste, transportation, and co-benefit opportunities. Establishing sustainability parameters now, including consideration of carbon intensity limits that reduce over time, would provide policy certainty, promote R&D and investment into alternative feedstock projects, promote best practice, and maximise emissions reduction in the long-term. Recognition under the ACCU Scheme should also be progressed, to incentivise feedstock projects that meet defined thresholds for carbon sequestration and co-benefits.

² <https://www.neste.com/products-and-innovation/neste-my-renewable-diesel/what-is-hvo>

Given the magnitude of LCLF that Australia would require to help decarbonise large fuel users (resources, aviation, agriculture and transport industries) ensuring that domestic production is balanced to provide certainty of supply for domestic use versus export markets will support competitive local pricing and incentivise uptake. Similarly, the role of imported feedstocks and LCLF will need to be carefully considered in any policy design and structured to underpin reliable supply and regional supply chains without impacting domestic production objectives and incentives.

We thank the Department for the opportunity to continue to engage in the development of a domestic LCLF industry. We would welcome the opportunity to discuss this submission with you further. Please contact Jaeson Wells (Jaeson.Wells@riotinto.com) with any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read 'MH' followed by a stylized flourish.

Matt Holcz
Chief Executive Iron Ore
Country Head Australia

APPENDIX – Key Rio Tinto bioenergy trials

