Transport and Infrastructure Net Zero Consultation Roadmap

Take the survey

Department of Climate Change, Energy, Environment and Water

Response received at:
July 27, 2024 at 12:24 AM GMT+10

Response ID:
sbm2f85862976a5087d4f82e

1 Confirm that you have read and understand this privacy notice.
Yes

2 Please indicate how and if you want your submission published.
Public

3 Published name
Fortescue

4 Confirm that you have read and understand this declaration.
Yes

5 First name
Tom

6 Last name
Parkinson

7 Email
[redacted]

8 Phone

[redacted]

9 Who are you answering on behalf of?

Organisation

10 Organisation name

Fortescue

11 What best describes you or your organisation?

Industry

12 What sector do you represent?

Maritime
Rail
Heavy road vehicles (trucks, buses etc.)
Energy
Infrastructure
Climate change/net zero

13 What state or territory do you live in?

Western Australia

14 Postcode

6003

15 What area best describes where you live?

City

16 1. Do you support the proposed guiding principles?

Yes

17 1.1 Please add details to your response.

Not answered

18 2. Do you support the use of the avoid-shift-improve framework as a tool to identify opportunities for abatement?

Not answered

19 2.1 Please add details to your response.

Not answered

20 3. Do you agree the development of a national policy framework for active and public transport will support emissions reduction?

Not answered

21 3.1 Please add details to your response.

Not answered

22 4. What should be included in a national policy framework for active and public transport and how should it be developed?

Not answered

23 5. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to ensure the movement of people contributes to transport emissions reduction?

Not answered

24 6.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to ensure that the movement of goods contributes to transport emissions reduction?

Not answered

25 6.2. How would these actions address the identified challenges and opportunities for emissions reduction in the movement of goods?

Not answered

26 7. Do you agree with the proposed net zero pathway for light road vehicles?

Not answered

27 7.1 Please add details to your response.

Not answered

28 8. The Australian Government is currently developing an Australian New Vehicle Efficiency Standard and has already begun to implement actions in the National Electric Vehicle Strategy.8.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce light vehicle emissions?

Not answered

29 8.2 How would these actions address the identified challenges and opportunities to reduce light vehicle emissions?

Not answered

30 9. Do you agree with the proposed net zero pathway for heavy road vehicles?

Not answered

31 9.1 Please add details to your response

Not answered

32 10. The proposed pathway for heavy road vehicles relies on a mix of battery electric, hydrogen fuel-cell and low carbon liquid fuels.Rank from 1 to 3, the order in which these should be prioritised for emissions reduction.

Not answered

33 10.1 Please add details to your response. Why did you rank them in that

order?

Not answered

34 11. What role should low carbon liquid fuels play in the heavy vehicle decarbonisation?

Not answered

35 12. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce heavy vehicle emissions?

Not answered

36 13. Do you agree with the proposed net zero pathway for rail?

Not answered

37 13.1 Please add details to your response.

Not answered

38 14. The proposed pathway for rail relies on a mix of battery electric, hydrogen fuel-cell and low carbon liquid fuels.Rank from 1 to 3, the order in which these should be prioritised for emissions reduction.

Not answered

39 14.1 Please add details to your response. Why did you rank them in that order?

Not answered

40 15. What role should low carbon liquid fuels play in rail decarbonisation?

Not answered

41 16. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to

reduce rail emissions?

Not answered

42 16.1 How would these actions address the identified challenges and opportunities to reduce rail emissions?

Not answered

43 17. Do you agree with the proposed net zero pathway for maritime?

Not answered

44 17.1 Please add details to your response.

Not answered

45 18. The Australian Government is engaging in consultation as part of the development of the Maritime Emissions Reduction National Action Plan and those consultations will also inform the final Roadmap and Action Plan. 18.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce maritime emissions?

Not answered

46 18.2 How would these actions address the identified challenges and opportunities to reduce maritime emissions?

Not answered

47 19. Do you agree with the proposed net zero pathway for aviation?

Not answered

48 19.1 Please add details to your response.

Not answered

49 20. The Australian Government has already engaged in consultation on aviation decarbonisation through the development of the Aviation

White Paper and those consultations will also inform final Roadmap and Action Plan.

Not answered

50 20.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce aviation emissions?

As the decarbonisation efforts of the aviation industry scale up through industry ambitions and regulated
action through policies such as the Safeguard Mechanism, the bioSAF sector may experience difficulties
finding sufficient feedstocks to meet increased demand beyond a certain point. The CSIRO predicts this will
occur between the years of 2030 and 2035 and when it does, it is essential that there are established
solutions to begin to supply sustainable fuels to continue the decarbonisation trajectory3. For this to occur,
investment and developments in alternative sustainable liquid fuels, such as green hydrogen based
synthetic SAF (eSAF) or green hydrogen power to liquid (PtL) technologies and projects, needs to occur in
Australia well ahead of these pinch points.
The eSAF production pathway will be a critical industry to build on the early decarbonisation achieved by
the bioSAF industry. Noting Australia's geographic location in the world – at the end of long-haul passenger
and air freight routes – and its domestic geography - eSAF must be considered a priority for Government
so that it achieves scaled production and reliable supply for the aviation sector, by the time feedstocks for bioSAF reach peak demand and high-costs, production and demand is overstretched and an over reliance
on foreign, geostrategic or seasonally impacted supply chains.

51 21. Do you agree with the proposed net zero pathway for transport infrastructure?

Not answered

52 21.1 Please add details to your response.

Not answered

53 22. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce transport infrastructure emissions and ensure that transport infrastructure is ready for and enables low-emission transport modes?

Not answered

54 22.1 How would these actions address the identified challenges and opportunities to reduce transport infrastructure emissions?

Not answered

55 23. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to ensure the energy mix is ready to support transport emissions reduction?

Fuel tax credits for diesel (DFTC) use in the heavy vehicle rail, maritime and mining industries is creating a
disincentive for investment in the decarbonisation of heavy industry and – relevant to Fortescue –
especially in iron ore mining. This is because the rebate of the DFTC to diesel users reduces the business
case for companies assessing their returns on decarbonisation projects.
The DFTC is currently A49.6c per litre, and this is creating an investment disincentive that outweighs the
investment incentive intended to be created by the Safeguard Mechanism. The rate of the DFTC increases
with twice yearly CPI indexation, with the next due in August 2024. If it is not possible to change the DFTC
at this time, a solution needs to be found to remove the disincentive by levelling the playing field between
diesel and green energy to encourage early movers in decarbonisation.
One solution that would not affect others in industry, who are not ready to decarbonise, would be to
introduce a payment equivalent to the DFTC for each litre of diesel displaced by an

approved
decarbonisation project. This approach would remove the disincentive created by the DFTC and allow early
movers in decarbonisation to develop a business case to support the large investment required.
If the DFTC disincentive is not addressed, there is a risk that early movers will not be able to reach final
investment decisions on decarbonisation projects of scale.

56 24. How should the use of low carbon liquid fuels (LCLFs) be prioritised across different transport modes over time to achieve maximum abatement?

Not answered

57 25. What are the best ways for the Australian Government to work collaboratively with industry, business, governments and communities to implement the proposed pathways?

Not answered

58 25.1 What are good domestic or international examples of partnership and collaboration on transport and transport infrastructure emissions reduction that could inform the final Roadmap and Action Plan?

Not answered

59 25.2 What opportunities can Government leverage to show leadership in Australia and internationally?

Not answered

60 26. What measures and metrics should be used to evaluate the final Transport and Infrastructure Net Zero Roadmap and Action Plan?

Not answered

61 26.1 What other data and evidence could governments use and how could this offer further insights on the pace, scale and location of

transport emissions reduction pathways?

Not answered

62 27. Do you have any feedback on the proposed review process?

Not answered

63 28. Do you have any further feedback on the Consultation Roadmap and proposed pathways?

Not answered

64 28.1 Is there anything missing? Are the sections appropriately integrated? Is the Roadmap appropriately ambitious?

Not answered

65 29. Is there any further information or documentation that you wish to be considered with your submission?

Not answered

66 Would you like to upload a document?

Yes

67 Have you removed any identifying information from your submission?

Yes

68 Upload a submission

Transport_Consultation_Roadmap_Fortescue_Submission_26072024.e71fcb77_Redacted.pdf

69 Upload a submission

Not answered

70 Upload supporting file

Not answered

71 Upload supporting file

Not answered

26 July 2024

Mr Jim Betts
Secretary
Department of Infrastructure, Transport, Regional Development, Communications and the Arts

Dear Mr Betts

Transport and Infrastructure Net Zero Consultation Roadmap

A proudly Australian company with a strong balance sheet, Fortescue is a global leader in large-scale, ultra-efficient and highly complex developments with a proven track record in developing and operating assets in remote and isolated locations. Fortescue has a strong focus on decarbonisation, evidenced by its industry leading target to achieve real-zero carbon emissions across our terrestrial mining operations by 2030. Fortescue is establishing a global portfolio of renewable energy, green hydrogen and derivatives, battery system and green technology projects and operations that are at the forefront of the global energy transition.

Fortescue is pleased to provide comment on the *Transport and Infrastructure Net Zero Consultation Roadmap* (the Roadmap). We commend the Department on the thoughtful development of the Roadmap and its projections for all sectors contributing significant emissions to the transport sector in Australia. Fortescue broadly supports the proposed pathways for each sector or mode within the transport industry but encourages the Department to raise its level of ambition and bring forward timelines for "easier to abate" sectors such as light vehicles, with the support of appropriate policy settings.

Transport emissions are growing in Australia, and must be reversed, as we work towards our near-term emissions reduction targets by 2030 and our long-term commitment to net-zero as a nation by 2050. Australia has a significant leverage opportunity to reduce transport emissions through direct electrification and the production of low carbon fuels from renewable power.

Flexible pathways that consider different technology options will be required to make informed decisions regarding infrastructure developments and industry policy in the coming decade. Fortescue is pleased to share details of its progress on "hard to abate" technologies including green ammonia-fuelled shipping and battery electric haul trucks, in this document.

2035 emissions reduction target

To frame our submission on the Roadmap, Fortescue considers it important to set out our broader position on Australia's 2035 emissions reduction target. The Paris Agreement provides a strong foundation for countries to meet and exceed successively more ambitious emissions reduction targets. Australia should engage ambitiously and regularly in all processes under the Paris Agreement.

The Climate Change Authority (CCA) is considering point-targets for Australia in the context of its review of advice on a potential 2035 emissions reduction target, with a focus of 65 to 75% by 2035 on 2005 levels[1]. Fortescue supports Australia adopting a target of reducing emissions at least 75% below 2005 levels by 2035, in line with a 1.5°C-aligned trajectory. Fortescue has submitted a separate submission to the CCA covering the economic benefits that could accrue to Australia under this scenario. By the CCA's present estimates, achieving a target in the order of 65-75% below 2005 levels by 2035, would require annual reductions to accelerate significantly into the range of 27-39 Mt CO2-e/year rate of reduction, up from the average yearly reduction of 16 Mt CO2-e currently required to meet Australia's 2030 target[2]. As acknowledged by the CCA, achieving this would require a significant uplift in Australia's emissions reduction policies and levers.

In our submissions to the CCA and to each department developing the sectoral plans for inclusion in Australia's broader net-zero 2050 plan, Fortescue puts forward several key, underlying recommendations:

- **Australia's 2035 target should be a science-based target. Australia should adopt a 2035 target of at least 75 per cent reduction below 2005 levels by 2035, implemented as a single-year point target and achieved without carbon offsets or carbon capture and storage (CCS).**

  An ambitious, but achievable science-based target must underpin all climate policy to avoid warming of more than 1.5-2°C. For decades the Australian economy has relied heavily on fossil fuels, leaving Australians exposed to external market fluctuations and geopolitical conflict. Global climate discussions have too frequently avoided increasing fossil fuel usage as the root cause of the climate crisis. An ambitious target for 2035 will position Australia as a climate rule-maker and not a rule-taker, ensuring we are proactively responding to signals in global markets that are pivoting to address climate change and benefiting from climate policy, rather than subject to the whims of more progressive climate policies abroad.

[1] Climate Change Authority, *2035 Emissions Reductions Targets*, April 2024, page 15, available at https://www.climatechangeauthority.gov.au/2035-emissions-reduction-targets
[2] Ibid, page 4

- **Australia should adopt a transparent multiyear emissions budget from 2021 to 2035 that clearly outlines the emissions capacity for major new projects between now and 2035, enabling budget-compatible projects to proceed and the acceptability of incompatible projects to be assessed.**

  Fortescue believes that it is not sufficient to set a 'point' target alone for Australia's 2035 emissions reduction target. Global emissions need to reduce substantially, and point-target approaches incentivise the deferral of action. To that end, we support Australia's 2035 trajectory including a multi-year emissions budget to be measured from 2021 to 2035. This budget would clearly outline the role for major projects, informed by the sectoral plans, between now and 2035, granting certainty to projects that will net reduce Australia's emissions or have clear, accelerated timelines for fossil fuel phase out – while preventing projects that are incompatible with limiting warming to 1.5°C from proceeding.

- **Rapid fossil fuel phase out matched to the phase in of firmed green energy. Australia should set explicit dates for the phase-out of fossil fuels, commencing with a coal phase out by 2035. A target of 50% reduction in the cost of firmed green energy by 2035 will help to ensure that a matching volume of low-cost, abundant green energy is available.**

  Explicit dates for the phase out of fossil fuel energy, paired with green energy policies to ensure reliability of energy systems, like the Capacity Investment Scheme (CIS), will improve Australia's ability to meet its climate targets and increase the supply of renewable energy.

Fortescue supports the Australian Government's energy and climate policy reforms to enable Australia to decarbonise the economy and meet Australia's international climate obligations. Fortescue also supports the Government's vision to become a renewable energy superpower. We are an industry leader working across the green energy ecosystem, driving hard to decarbonise our Pilbara mining operations, develop and deploy innovative battery electric drive train and storage applications and electrolyser technologies, and develop commercial scale green hydrogen production projects – all by 2030. We have learnt many lessons while working to build the green energy value chain this decade. Noting the vast comparative advantages Australia has in renewables and critical minerals, we share the Government's ambition.

Policy ambition for transport sector decarbonisation

The Consultation Roadmap presents a robust pathway for transitioning key sectors or modes of the transport industry relevant to Fortescue such as freight, road, aviation, rail and maritime. The proposed pathways largely represent the opportunities available to Australia with current and projected technology developments in the race to net-zero by 2050. However, the projected timeframes associated with each of these sectors appear to represent natural adoption of technology driven by voluntary uptake across the private and industrial sectors. This may risk Australia's near-term and long-term emissions reductions goals

noting that the pathway to net-zero will not be linear, or we risk exceeding Australia's emissions reduction budget to track well below 2 degrees of global warming.

Fortescue suggests that the final transport sector plan take a more ambitious approach to the timing associated with technology development and adoption and deeply consider policy options to incentivise demand of these technologies to bring forward earlier decarbonisation of transport sectors and modes. For example, the net-zero pathway for light vehicles notes that fossil fuel usage is expected to decrease in the 2040s and trend towards use in only specific circumstances.

With the right policy settings to encourage widespread consumer and industry adoption, this trend should be occurring in the late 2020s into the 2030s, for us to achieve our climate targets. Light consumer transport is one mode that, without step change cost reductions in hydrogen, will likely see electrification as the widely adopted power source. With the right Government policies in place at the Commonwealth, State and Territory levels, electrification of this mode could deliver strong early decarbonisation and ensure that we remain within our carbon budget as we approach 2030 and net-zero in 2050.

Transport modes and sectors

Fortescue has adopted an ambitious target of real zero by 2030 to phase out the use of fossil fuels across our terrestrial mining operations. Fortescue is investing heavily in decarbonisation technologies in several of the modes and sectors covered in the Consultation Roadmap, such as rail, aviation, road – both light and heavy vehicles - and maritime, to achieve our own targets and demonstrate that both the technology and commercial pathways exist for big industrial companies, like Fortescue, to decarbonise and that it will deliver strong economic growth for business and the economy.

Currently, the main significant policy incentive for Fortescue to pursue this decarbonisation trajectory is the Safeguard Mechanism. Our decision to rapidly decarbonise was made ahead of the introduction of the reformed Safeguard Mechanism and thus it did not play a significant role in this decision. In the short term, we do not expect the Safeguard Mechanism to play a significant role in driving action to decarbonise heavy industry as it will take several years before the mechanism's 'baseline declines' translate into material financial incentives to decarbonise. Once this does occur, our operations will have reached real zero. Further, the huge incentive provided by fuel tax credits for diesel use and mining disincentivises the investment to decarbonise diesel fuelled transport modes and more broadly mining decarbonisation, while overshadowing completely the penalties and incentive provided by the Safeguard Mechanism (more detail later in this submission).

Rail

Image 1: Fortescue ammonia train

In March 2022, Fortescue acquired UK based Williams Advanced Engineering (WAE), now Fortescue Zero. As part of the acquisition, Fortescue Zero announced the development of a world first, zero emission "INFINITY TRAIN™" which will operate out of Fortescue's iron ore mine sites. The regenerating battery electric iron ore train project will use gravitational energy to fully recharge its battery electric systems without any additional charging requirements for the return trip reload. This accelerates Fortescue's race to reach real zero emissions by 2030. Further to this we are investigating and investing in testing ammonia and battery electric locomotives in our operations to ensure we pursue the most technically efficient technology choice.

This investment to decarbonise rail is costly, risky and yet to be commercial. Noting the widespread use of diesel fuel powered locomotives in heavy haul rail, freight and resources sectors, and that most to all heavy haul and freight rail companies and mining companies are classified as 'Safeguard Mechanism facilities', government reforms to fuel tax credits for diesel and/or incentives for heavy haul freight rail sector decarbonisation or alternatives to diesel, should be considered.

Maritime

Image 2: Fortescue Green Pioneer

Fortescue, with the support of the Maritime and Port Authority of Singapore (MPA), government agencies, research institutes, and industry partners, has successfully conducted the world's first use of ammonia, in combination with diesel in the combustion process, as a marine fuel onboard the Singapore-flagged ammonia-powered vessel, the Fortescue Green Pioneer, in the Port of Singapore. The Fortescue Green Pioneer was loaded with liquid ammonia from the existing ammonia facility at Vopak Banyan Terminal on Jurong Island for the fuel trial. In completing the fuel trial, the Fortescue Green Pioneer has also received flag approval from the Singapore Registry of Ships (SRS) and the “Gas Fuelled Ammonia” notation by classification society DNV to use ammonia, in combination with diesel, as a marine fuel.

Globally, ammonia is used in agriculture and industry. It is manufactured as a chemical by combining nitrogen from the air with hydrogen. As a carrier for hydrogen, ammonia can be transported to demand centres for power generation and as a marine fuel in support of the energy transition. Several dual-fuelled ammonia vessels have been ordered by shipowners.

The Fortescue Green Pioneer started its journey towards becoming the world’s first ocean-going ammonia-powered vessel in 2022 when Fortescue successfully converted a four-stroke engine to run on ammonia, in combination with diesel, at its land-based testing facility in Perth, Western Australia. Following the success

of the land-based testing, conversion work commenced on the vessel at Seatrium's Benoi yard from July 2023. This included the installation of the gas fuel delivery system, safety systems and infrastructure, and the successful conversion of two of the vessel's four engines to enable the use of ammonia, combined with diesel in the combustion process, to power the vessel. The two remaining engines onboard the Fortescue Green Pioneer will operate on conventional fuels when required.

In December 2023, the vessel sailed from Singapore to the Middle East and was showcased at the UN Framework Convention on Climate Change and associated meetings in Dubai, United Arab Emirates. World leaders, industry captains and members of international organisations were among the guests hosted on the vessel.

Fortescue commends the work of the Australian Government on the *Singapore and Australia Green and Digital Shipping Corridor* and looks forward to engagement and clarity on progress on the action areas, along with exploring green shipping corridors with other nations.

Road – heavy vehicles - hydrogen fuel cell electric vehicle coaches

Image 3: Fortescue hydrogen fuel cell electric coaches

Fortescue has built Australia's largest gaseous and liquid green hydrogen refuelling station. Located at Fortescue's Green Energy Hub at its Christmas Creek mine site, the A$33.8 million plant is designed to produce around 530 kilograms of hydrogen gas per day, or around 195 tonnes annually.

The project comprises a gaseous hydrogen refuelling station (HRS) to refuel a fleet of 10 hydrogen fuel cell electric vehicle (FCEV) coaches. The Green Energy Hub contains a hydrogen liquefaction facility, liquid hydrogen storage, and a liquid-hydrogen refuelling station.

Road – heavy vehicles - hydrogen fuel cell and battery electric trucks

Fortescue and Liebherr Mining have announced a partnership to jointly develop and validate a fully integrated Autonomous Haulage Solution (AHS), which aims to be the first AHS operating zero emissions vehicles globally. The solution brings us closer to delivering zero emissions autonomous haul trucks to our iron ore operations in the Pilbara.

In May 2024, we announced our hydrogen fuel cell electric vehicle mining haul truck prototype, dubbed "Europa", reached the significant milestone of operating on hydrogen for the first time. This development marks a major step in Fortescue's mission to decarbonise heavy industry and its fleet of heavy mobile equipment, as well as the company's partnership with Liebherr. Delivered in collaboration with Liebherr, Europa is a T 264 Liebherr haul truck and contains a 1.6MWh battery (developed in-house by Fortescue Zero) and 500 kilowatts of fuel cells. The prototype can store over 380 kilograms of liquid hydrogen. Europa will soon commence testing at our dedicated test pit in the Pilbara.

Image 4: Fortescue's Europa

Fortescue Zero has also developed a 1.4MWh battery pack capable of powering our 240t haul trucks to be installed in a prototype zero-emission battery electric mining haul truck that Fortescue is also developing with Liebherr. This system will have the ability to fast-charge in 30 minutes and has the capacity to regenerate power as it drives downhill. The battery arrived in Perth in 2023 and was then installed and into the truck dubbed 'Roadrunner' and transported to the Pilbara where it is currently undertaking detailed onsite testing.

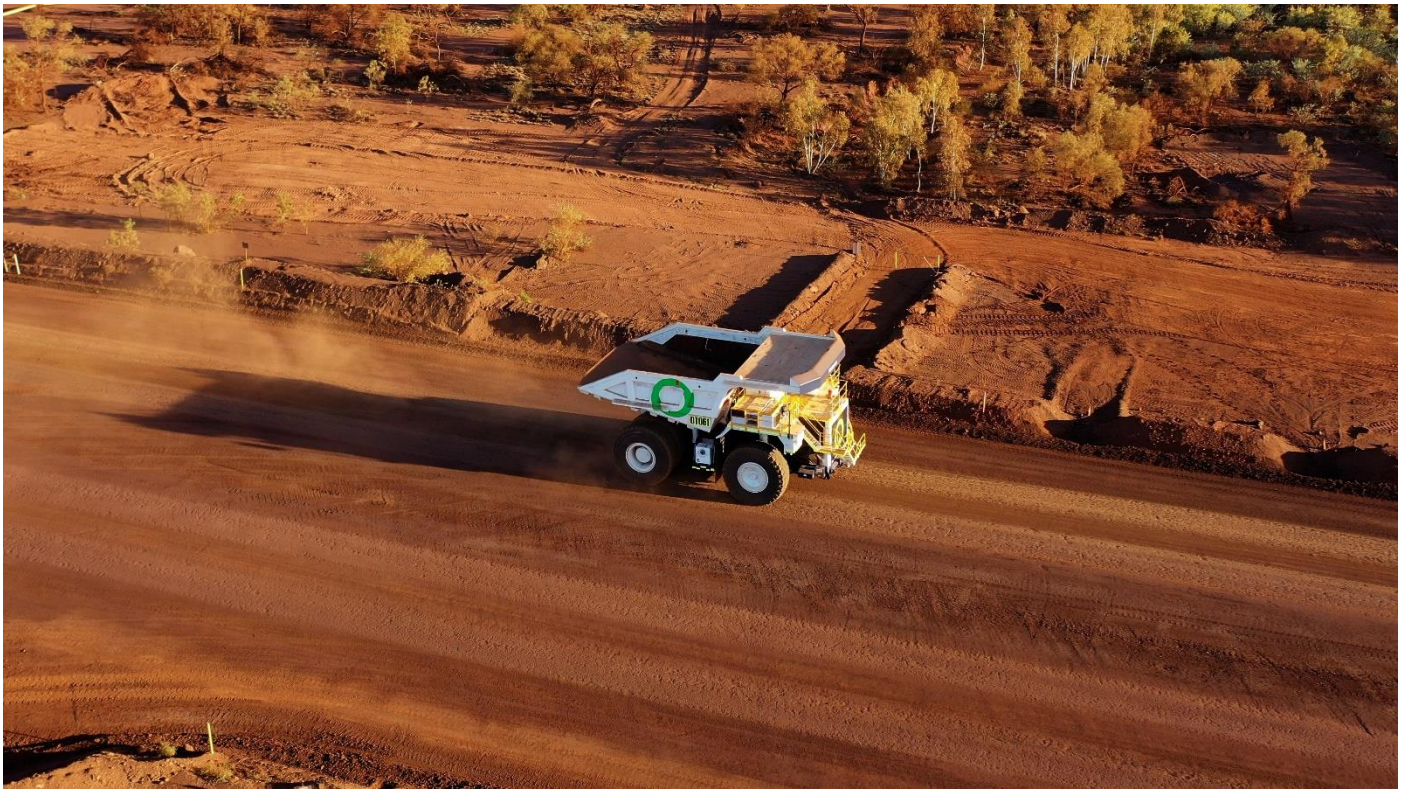

Image 5: Fortescue Roadrunner

Aviation – sustainable aviation fuel (SAF)

As the decarbonisation efforts of the aviation industry scale up through industry ambitions and regulated action through policies such as the Safeguard Mechanism, the bioSAF sector may experience difficulties finding sufficient feedstocks to meet increased demand beyond a certain point. The CSIRO predicts this will occur between the years of 2030 and 2035 and when it does, it is essential that there are established solutions to begin to supply sustainable fuels to continue the decarbonisation trajectory[3]. For this to occur, investment and developments in alternative sustainable liquid fuels, such as green hydrogen based synthetic SAF (eSAF) or green hydrogen power to liquid (PtL) technologies and projects, needs to occur in Australia well ahead of these pinch points.

The eSAF production pathway will be a critical industry to build on the early decarbonisation achieved by the bioSAF industry. Noting Australia's geographic location in the world – at the end of long-haul passenger and air freight routes – and its domestic geography - eSAF must be considered a priority for Government so that it achieves scaled production and reliable supply for the aviation sector, by the time feedstocks for

[3] CSIRO, Sustainable aviation fuel opportunities for Australia, August 2023, available at https://www.csiro.au/safroadmap

bioSAF reach peak demand and high-costs, production and demand is overstretched and an over reliance on foreign, geostrategic or seasonally impacted supply chains.

An integral input to the production of eSAF will be low-cost green hydrogen production, available at scale, of which low-cost renewable electricity is a key input. The Commonwealth has announced significant support for the green hydrogen sector in the *Hydrogen Headstart Program* commencing soon and the *Hydrogen Production Tax Incentive* (HPTI) scheme, due to commence in 2027, and which Fortescue believes will help eSAF. Both schemes will provide early commercial support to projects as the industry scales in Australia, however, challenges may continue if power prices remain high. Australia must continue to transition away from fossil fuel usage in our electricity systems at pace to lower green power prices for the development of critical sustainable liquid fuels for the aviation sector.

Sustainable fuels such as PtL require a sustainable source of carbon dioxide (CO2) as an input to the sustainable fuel production process. There are various means of sourcing CO2 for this process that vary in sustainability quality, from waste CO2 from fossil fuel usage to direct air capture (DAC) which draws CO2 from the atmosphere. The Commonwealth should consider developing guidance for industry associated with access to public funds to restrict or limit the use of CO2 from sources that aren't sustainable. For example, CO2 sourcing should not proliferate or sustain the use or production of fossil fuels.

Removing fossil fuel disincentives

Fuel tax credits for diesel (DFTC) use in the heavy vehicle rail, maritime and mining industries is creating a disincentive for investment in the decarbonisation of heavy industry and – relevant to Fortescue – especially in iron ore mining. This is because the rebate of the DFTC to diesel users reduces the business case for companies assessing their returns on decarbonisation projects.

The DFTC is currently A49.6c per litre, and this is creating an investment disincentive that outweighs the investment incentive intended to be created by the Safeguard Mechanism. The rate of the DFTC increases with twice yearly CPI indexation, with the next due in August 2024. If it is not possible to change the DFTC at this time, a solution needs to be found to remove the disincentive by levelling the playing field between diesel and green energy to encourage early movers in decarbonisation.

One solution that would not affect others in industry, who are not ready to decarbonise, would be to introduce a payment equivalent to the DFTC for each litre of diesel displaced by an approved decarbonisation project. This approach would remove the disincentive created by the DFTC and allow early movers in decarbonisation to develop a business case to support the large investment required.

If the DFTC disincentive is not addressed, there is a risk that early movers will not be able to reach final investment decisions on decarbonisation projects of scale.

Thank you for the opportunity to comment on this consultation. If you would like to discuss any of the issues raised in this submission or to arrange a briefing, please contact [redacted]

Yours sincerely

[redacted]

Director Global Sustainability and External Affairs

FORTESCUE