

Department of Infrastructure,
Transport, Regional Development,
Communications and the Arts
Transport and Infrastructure Net
Zero Consultation Roadmap

submission

July 2024





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The Carbon Market Institute (**CMI**) welcomes this opportunity to respond to the Department of Infrastructure, Transport, Regional Development and the Arts' (**the Department**) Transport and Infrastructure Net Zero Consultation Roadmap (**Discussion Paper**), which opened for consultation on 22 May 2024.

CMI is an independent, member-based institute that promotes the use of market-based solutions and supports best practice in decarbonisation to limit warming to 1.5°C. Our membership includes 150 primary producers, carbon service providers, First Nations organisations, legal and financial institutions, technology firms and emissions-intensive companies in Australia and Asia Pacific. The CMI Board updates CMI's Policy Positions annually, which draw on practical insights from—but are ultimately independent of—members.¹

CMI also administers the Australian Carbon Industry Code of Conduct (**ACI Code**), which was established in 2018 to steward consumer protection and market integrity.²

CMI has consulted our membership to gain practical insights to inform our positions. However, the recommendations put forward in this submission are ultimately CMI's view, independent of members, and do not represent any CMI individual, member company or industry sector.

Strategic outlook

After more than a decade of uncertainty, Australian climate policy is at a critical juncture. The bipartisan Net Zero 2050 Target, broadly supported by the 47th Australian Parliament and enshrined in the *Climate Change Act 2022*, presents a timely opportunity to establish durable policy frameworks and incentives that will channel long-term investment into decarbonisation.

CMI supports the Australian Government's foundational commitment to develop an economy-wide Net Zero Plan, underpinned by six sectoral decarbonisation plans—including the Transport and Net Zero Roadmap and Action Plan (hereafter, **Transport Sector Plan**).

As noted in CMI's submission on the New Vehicle Efficiency Standard (**NVES**), Australia's emissions from transport are rising and will continue to rise without intervention.³

We therefore welcome Government actions to address transport emissions so far, including the National Electric Vehicle Strategy (**EV Strategy**) and NVES, and 2024-25 Budget announcement of the Future Made in Australia (**FMIA**) package, including funding to kickstart a domestic low carbon liquid fuels (**LCLF**) industry.

Renewable electricity is a critical enabler of zero emissions transport and CMI similarly recognises efforts underway to decarbonise the electricity and energy sector. Government actions include expanding the

¹ CMI 2023, 'CMI Policy Positions', https://carbonmarketinstitute.org/app/uploads/2023/11/CMI-Policy-Advocacy-Positions_FINAL-2023.pdf.

² CMI 2024, 'Australian Carbon Industry Code of Conduct', <https://carbonmarketinstitute.org/code/>.

³ CMI 2024, 'DITRDCA Australian New Vehicle Efficiency Standard (NVES) Consultation Impact Analysis submission', https://carbonmarketinstitute.org/app/uploads/2024/03/2024.03_CMI-submission_NVES-Consultation-Impact-Analysis-consultation.pdf.



Capacity Investment Scheme to support the 82 percent Renewable Energy Target (**RET**) and the development of the Electricity and Energy Sector Plan.

CMI Recommendations

CMI highlights opportunities for the Transport Sector Plan to leverage market-based frameworks and build on existing initiatives with complementary policies and incentives to accelerate the decarbonisation of the transport and infrastructure sector. Our recommendations are as follows:

1. To create medium- and long-term investment signals to support net zero 2050, the Government should legislate ambitious economy-wide interim emissions reduction targets, supported by indicative sectoral targets and carbon budgets—including in the Transport Sector Plan.
2. Informed by a strategic approach that accelerates decarbonisation and avoids perverse or unintended outcomes, the Transport Sector Plan should leverage market-based frameworks to channel private investment into decarbonising challenging segments of the transport sector:
 - a. a Heavy Vehicle FES and/or LCLF ETS to reduce heavy road transport emissions and prevent rail freight emissions from ‘leaking’ out of the Safeguard Mechanism and into road freight;
 - b. a SAF Mandate (to be introduced at a point in time where there is sufficient domestic SAF supply) to drive investment into at-point emissions reduction for aviation; and
 - c. a used-car FES for imported second-hand cars to complement the NVES and accelerate light vehicle decarbonisation.
3. Given the dependence of transport decarbonisation on renewable electrification, the Transport Sector Plan—in conjunction with the Electricity and Energy Sector Plan—should consider market-based drivers for renewable electrification in the electricity sector beyond 2030 including:
 - a. a mandatory target under the REGO Scheme that requires time-matching to drive demand for firmed renewable capacity beyond the 2030 conclusion of the RET; and
 - b. at an appropriate time after 2030, bringing high-emitting electricity generators into the reformed Safeguard Mechanism to provide an additional backstop for the retirement of legacy fossil generating assets.
4. The Transport Sector Plan should take a long-term, systemic approach to policy planning that encourages avoidance (avoid) and reduction (shift) behaviours to improve transport emissions- and energy efficiency.
5. The Transport Sector Plan should articulate how the Australian Government will coordinate with states and territories to introduce nationally harmonised distance-based road user pricing to replace road and infrastructure maintenance revenue from the Commonwealth fuel excise.

We elaborate on our recommendations with detailed commentary in the **Attachment**. Should you wish to discuss this submission in more detail, please contact Gabriella Warden (gabriella.warden@carbonmarketinstitute.org).

Yours sincerely

John Connor

CEO



ATTACHMENT

CMI Recommendations

- 1. To create medium- and long-term investment signals to support net zero 2050, the Government should legislate ambitious economy-wide interim emissions reduction targets, supported by indicative sectoral targets and carbon budgets—including in the Transport Sector Plan.**

Legislating strong interim economy-wide emissions reductions targets will provide a medium-term signal for private investment in decarbonisation solutions, directing finance into emissions reductions for 2035, 2040 and out to the Net Zero 2050 Target. As a starting point, CMI recommends that the Government legislate and lodge a 2035 Nationally Determined Contribution (NDC) of well above 70 percent.⁴

While the Government has indicated sectoral plans will not include binding sector-specific targets,⁵ we recommend that Sector Plans—including the Transport Sector Plan—apportion indicative targets and carbon budgets to provide sector-specific direction to private investors.⁶ These should be informed by the Climate Change Authority's forthcoming sectoral pathways advice.⁷

Please see CMI's response to the Electricity and Energy Sector Plan discussion paper for further commentary on the value of targets.⁸

- 2. Informed by a strategic approach that accelerates decarbonisation and avoids perverse or unintended outcomes, the Transport Sector Plan should leverage market-based frameworks to channel private investment into decarbonising challenging segments of the transport sector.**

The Government should leverage market-based frameworks to scale private investment into the critical enablers of transport decarbonisation outlined in the Discussion Paper, including the following options.

- a. A Heavy Vehicle FES and/or LCLF ETS to reduce heavy road transport emissions and prevent rail freight emissions from 'leaking' out of the Safeguard Mechanism and into road freight**

The Discussion Paper recognises rail as a low-emissions transport mode and identifies shifting the share of freight moved from road to rail as a 'shift' action for reducing emissions.⁹

Currently, about 65 percent of rail freight emissions are captured under the Safeguard Mechanism, compared to just 2 percent of emissions from road freight.¹⁰

⁴ See, '1. Strengthen national climate ambition' in: CMI 2023, 'CMI Policy Positions', https://carbonmarketinstitute.org/app/uploads/2023/11/CMI-Policy-Advocacy-Positions_FINAL-2023.pdf.

⁵ See: DCCEEW 2023, 'The Hon. Chris Bowen MP Address to Clean Energy Council', <https://minister.dcceew.gov.au/bowen/speeches/address-clean-energy-council>.

⁶ See, '1. Strengthen national climate ambition' in: CMI 2023, 'CMI Policy Positions', https://carbonmarketinstitute.org/app/uploads/2023/11/CMI-Policy-Advocacy-Positions_FINAL-2023.pdf; CMI 2023, 'Climate Change Authority: Setting, tracking and achieving Australia's emissions reduction targets submission' (CMI submission), https://carbonmarketinstitute.org/app/uploads/2023/07/FINAL_CMI-submission_CCA-2023-consultation.pdf, p. 9.

⁷ Climate Change Authority 2024, 'Sectoral Pathways', <https://www.climatechangeauthority.gov.au/sectoral-pathways>.

⁸ Available at: CMI 2024, Department of Climate Change, Energy, the Environment and Water: Electricity and Energy Sector Plan discussion paper submission', https://carbonmarketinstitute.org/app/uploads/2024/04/2024.04_CMI-Submission_Electricity-and-Energy-Sector-Plan_FINAL.pdf.

⁹ DITRDCA 2024, 'Transport and Infrastructure Net Zero Consultation Roadmap', <https://www.infrastructure.gov.au/sites/default/files/documents/transport-and-infrastructure-net-zero-consultation-roadmap.pdf>, pp. 3, 48-52.

¹⁰ See: FORG 2022, 'Submission in response to the Safeguard Mechanism Consultation Paper', (available at: <https://consult.dcceew.gov.au/safeguard-mechanism-reform-consultation-paper/submission/list>).



To level the playing field in readiness for policies that encourage a shift from road freight to rail freight and prevent rail freight emissions from ‘leaking’ out of the Safeguard Mechanism and into more emissions-intensive road freight, the Transport Sector Plan should introduce a consistent decarbonisation investment signal for heavy road transport. CMI suggests the Department explore a heavy vehicle fuel efficiency standard (Heavy Vehicle FES), an LCLF emissions trading system (LCLF ETS) or combination of the two.

Moreover, in considering adjacent policy actions for the Transport Sector Plan that will encourage a ‘shift’ from road to rail freight, the Department should ensure that rail network and infrastructure projects are being built for the future. For example, new in-land rail networks should be built in a way that supports emerging locomotive design such as hybrid or fully battery-electric locomotives that rely on hills for regenerative braking. The resilience of the rail network to increasing extreme and unpredictable weather events should also be prioritised.

A Heavy Vehicle FES would support the decarbonisation of the incoming heavy road transport fleet by requiring importers of new trucks and buses sold in Australia to meet increasingly stringent emissions standards over time, encouraging the uptake of more efficient internal combustion engine (ICE) heavy vehicles and electric models.

An LCLF ETS could be introduced in parallel to a Heavy Vehicle FES or as an alternative approach. This could help to reduce emissions from Australia’s existing heavy road transport fleet while a new low- and zero-emissions heavy vehicle fleet is coming online.

The Government recently identified domestic LCLFs as a priority for funding under the Future Made in Australia (FMIA) package, focusing on renewable diesel and SAF.¹¹ This is a welcome announcement that will kickstart LCLF supply; an LCLF ETS would provide a complementary demand-side driver for LCLF use.

CMI notes that drop-in LCLFs like renewable diesel could be used to reduce emissions from heavy road vehicles as well as rail freight while electric locomotives are in development. LCLFs such as SAF will also be a longer-term solution for reducing emissions in the hard-to-electrify aviation segment (see recommendation 2(b), below), where the Discussion Paper notes electric and hydrogen aircraft are long-term horizon investments with specific use cases.¹²

A well-designed LCLF ETS should guide LCLF use in a way that optimises emissions reductions across the transport sector, while incentivising at-point decarbonisation for segments where electric alternatives are available or near-available.

CMI further notes that public investment in a local LCLF industry must carefully manage perceived or real land-use trade-offs carefully, such as competition with space for food and fibre production, emissions reduction and removal projects, and renewable energy projects.

¹¹ Australian Treasury 2024, ‘A Future Made in Australia’ (fact sheet), <https://budget.gov.au/content/factsheets/download/factsheet-fmia.pdf>.

¹²DITRDCA 2024, ‘Transport and Infrastructure Net Zero Consultation Roadmap’, <https://www.infrastructure.gov.au/sites/default/files/documents/transport-and-infrastructure-net-zero-consultation-roadmap.pdf>, p. 62.



b. A SAF Mandate (to be introduced at a point in time where there is sufficient domestic SAF supply) to drive investment into at-point emissions reduction for aviation

The Safeguard Mechanism covers two domestic air carriers—Qantas Group and Virgin Australia—and is a driver for emissions reductions. However, given the relatively steep abatement cost curve in the hard-to-electrify aviation segment, Safeguard coverage alone could drive airlines to purchase Australian Carbon Credit Units (ACCUs) or Safeguard Mechanism Credits (SMCs) to offset emissions and meet their compliance obligations rather than investing in SAF to reduce emissions on-site.

To address this and introduce a consistent decarbonisation driver across the aviation segment, the Transport Sector Plan should contemplate a SAF mandate that would set a minimum percentage at which air carriers would be required to blend SAF in with traditional aviation fuels. This percentage would increase predictably over time.

To avoid perverse outcomes and help foster a level playing field for all domestic carriers,¹³ CMI stresses that a SAF mandate should only be introduced at a point in time when Australia's LCLF industry is maturing and there is sufficient domestic SAF supply.

A Jet Fuel ETS is an alternative demand-side driver for SAF uptake that CMI has previously explored and could be introduced through fuel emissions standards, as in California's Low Carbon Fuel Standard.¹⁴ This model could potentially be connected in with an LCLF ETS (as in recommendation 2(a), above).

c. A used-car FES for imported second-hand cars to complement the NVES and accelerate light vehicle decarbonisation

CMI has welcomed the Government's efforts to introduce a FES, the New Vehicle Efficiency Standard (NVES), to bend down the emissions curve for new light vehicles in Australia.¹⁵ However, the NVES will only reduce emissions from new cars.

CMI encourages the Transport Sector Plan to contemplate a FES for imported second-hand cars to accelerate light vehicle emission reductions and support more equitable policy outcomes by kickstarting the second-hand low- and zero-emissions vehicle (LZEV) market.¹⁶

¹³ Noting that most domestic carriers in Australia fly domestic only and do not have access to overseas SAF markets to help fulfill obligations.

¹⁴ See: CMI 2024, 'DCCEEW Electricity and Energy Sector Plan discussion paper submission', https://carbonmarketinstitute.org/app/uploads/2024/04/2024.04_CMI-Submission_Electricity-and-Energy-Sector-Plan_FINAL.pdf, p. 8; CMI 2024, 'DITRDCA Australian New Vehicle Efficiency Standard (NVES) Consultation Impact Analysis submission', https://carbonmarketinstitute.org/app/uploads/2024/03/2024.03_CMI-submission_NVES-Consultation-Impact-Analysis-consultation.pdf, p. 4.

¹⁵ See: CMI 2024, 'DITRDCA Australian New Vehicle Efficiency Standard (NVES) Consultation Impact Analysis submission', https://carbonmarketinstitute.org/app/uploads/2024/03/2024.03_CMI-submission_NVES-Consultation-Impact-Analysis-consultation.pdf; CMI 2023, 'Department of Infrastructure, Transport, Regional Development, Communications and the Arts The Fuel Efficiency Standard – Cleaner, Cheaper to Run Cars for Australia submission', https://carbonmarketinstitute.org/app/uploads/2023/06/2022.05.31_Carbon-Market-Institute-submission_Fuel-efficiency-standard-consultation.pdf.

¹⁶ More detail in: CMI 2024, 'DITRDCA Australian New Vehicle Efficiency Standard (NVES) Consultation Impact Analysis submission', https://carbonmarketinstitute.org/app/uploads/2024/03/2024.03_CMI-submission_NVES-Consultation-Impact-Analysis-consultation.pdf, p. 4.



The Transport Sector Plan should take a strategic approach in contemplating the above market-based mechanisms, as informed by the national carbon market strategy, or strategic approach to carbon markets, that the Government is drafting as part of the economy-wide Net Zero Plan.¹⁷

3. Given the dependence of transport decarbonisation on renewable electrification, the Transport Sector Plan—in conjunction with the Electricity and Energy Sector Plan—should consider market-based drivers for renewable electrification in the electricity sector beyond 2030.

The success of the Transport Sector Plan will depend on the interrelated Electricity and Energy Sector Plan, which should not only drive continued renewable electrification of the grid to enable EVs to be a zero-emissions transport solution, but also ensure there is sufficient LCLF supply to reduce emissions as ageing internal combustion engine vehicles (ICEVs) are phased out and longer-term in hard-to-electrify segments (see above).

We recommend the Department note the following market-based approaches for driving the ongoing, post-2030 renewable electrification of the grid that [CMI recommended to DCCEEW's Electricity and Energy Sector Plan consultation](#),¹⁸ and which would underpin transport and infrastructure decarbonisation:

a. A mandatory target under the REGO Scheme that requires time-matching to drive demand for firming renewable capacity beyond the 2030 conclusion of the RET.

Setting a mandatory Renewable Energy Guarantee of Origin (REGO) target would ensure an ongoing, overt driver for the renewable electrification of the grid beyond the Renewable Energy Target's (RET) 2030 conclusion.

Incorporating a time-matching dimension into this REGO target would leverage the timestamping attribute of REGO certificates to drive additional investment into project types that support variable renewable generation in the grid, such as firming renewables and long-duration energy storage.¹⁹

b. At an appropriate time after 2030, bringing high-emitting electricity generators into the reformed Safeguard Mechanism to provide an additional backstop for the retirement of legacy fossil generating assets.²⁰

¹⁷ For more information on what a strategic approach to markets, or national carbon market strategy, should entail, see: CMI 2024, 'A National Carbon Market Strategy for Australia', https://carbonmarketinstitute.org/app/uploads/2024/06/2024.06_FINAL_National-carbon-market-strategy_CMI-policy-brief.pdf.

¹⁸ CMI 2024, Department of Climate Change, Energy, the Environment and Water: Electricity and Energy Sector Plan discussion paper submission', https://carbonmarketinstitute.org/app/uploads/2024/04/2024.04_CMI-Submission_Electricity-and-Energy-Sector-Plan_FINAL.pdf, p. 8.

¹⁹ See 'Policy position proposal 12' in: DCCEEW 2022, 'Renewable Electricity Certification discussion paper', https://storage.googleapis.com/files-au-climate/climate-au/p/prj232e2205fdfa8b85770e8/public_assets/Policy%20position%20paper%20%20-%20%20Renewable%20Electricity%20Certification.pdf, p. 16.

²⁰ As suggested in: CMI 2023, 'DCCEEW Safeguard Mechanism Rules: Consultation on proposed design' (CMI submission), https://carbonmarketinstitute.org/app/uploads/2023/02/FINAL_Carbon-Market-Institute-submission_Draft-Safeguard-Rules-1.pdf, p. 8.



4. The Transport Sector Plan should take a long-term, systemic approach to transport policy planning that encourages avoidance (avoid) and reduction (shift) behaviours to improve transport emissions- and energy efficiency.

Alongside interventions to support low and zero emissions transport solutions, policies to foster avoidance-based behavioural change can be a powerful tool for reducing emissions while supporting additional public good outcomes including reduced congestion, improved air quality, and reduced road and transport infrastructure maintenance needs.

CMI therefore welcomes the Department's 'avoid-shift-improve' framework for identifying abatement opportunities for the Transport Sector Plan.

We further recognise initial Government initiatives geared at avoiding transport emissions, such as the \$100 million Active Transport Fund to support active transport options that reduce car use, such as new and upgraded bicycle and walking paths.²¹

In coordination with the states and territories, the Australian Government should build on the initial \$100 million Active Transport Fund and provide targeted funding support for the following initiatives to reduce cars on the road:

- targeted investment to improve public transport infrastructure and connections within and between cities—including for high-speed rail to reduce Australians' dependence on the emissions-intensive, hard-to-electrify aviation segment;
- congestion levies to disincentivise private vehicles from entering city centres—for example, in Victoria there is a congestion levy applied to car parks in Melbourne's CBD, the Grattan Institute recommends a congestion tax be levied by states and territories on vehicles crossing CBD boundaries;²²
- public awareness campaigns promoting the health benefits of active transport, where these offer an appropriate alternative to driving (i.e., in cities and regional centres where active transport infrastructure is present); and
- targeted incentives for ridesharing networks.

Concurrently, CMI recommends the Government exercise caution in promoting the fuel-savings benefits of the incoming NVES to avoid encouraging new vehicle purchases. This could otherwise contradict the Active Transport Fund and other avoidance policies, as well as complicate the future introduction of a distance-based road user pricing framework that will be needed to replace the Commonwealth fuel excise and fund transport infrastructure maintenance (see Recommendation 5, below).

5. The Transport Sector Plan should articulate how the Australian Government will coordinate with states and territories to introduce nationally harmonised distance-based road user pricing to replace road and infrastructure maintenance revenue from the Commonwealth fuel excise.

As the NVES is introduced and stimulates the uptake of more efficient ICEVs and LZEVs, revenue from the Commonwealth fuel excise will decline. To raise funding for ongoing road and transport infrastructure maintenance, a distance-based road user pricing will be needed.

²¹ The Hon. Catherine King MP 2024, 'National Active Transport fund', <https://minister.infrastructure.gov.au/c-king/media-release/national-active-transport-fund>.

²² See: state Revenue Office of Victoria, 'Car Parks', <https://www.sro.vic.gov.au/car-parks>; Grattan Institute 2022, 'The Grattan car plan: Practical policies for cleaner transport and better cities', <https://grattan.edu.au/wp-content/uploads/2021/10/Grattan-Car-Plan.pdf>.



CMI recommends that the Australian Government coordinate a nationally harmonised approach to the introduction of distance-based road user charges with the states and territories to prevent premature jurisdictional introduction of road use taxes that may discourage EV adoption (e.g., Victoria's attempted EV tax, which was ruled unlawful by the High Court in late 2023).²³

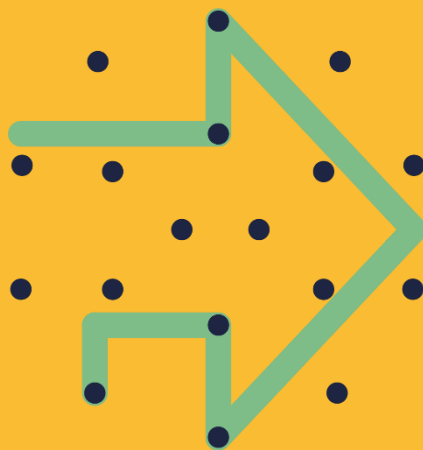
The introduction of new pricing regulations should be carefully sequenced to ensure short- to medium-term LZEV uptake. CMI recommends the charge is applied to ICEVs first to test its parameters while the LZEV market is growing. EVs could then be transitioned into the road user pricing framework over the medium- to longer-term.²⁴

CMI encourages the Department to consult with the Net Zero Authority to ensure policy impacts of an eventual road user pricing framework are equitable and promote a just transition.

For example, in applying a distance-based road user pricing framework to ICEVs ahead of EVs, concessions or exemptions may be appropriate for ICEV drivers in rural and remote areas of Australia where reliance on cars to travel longer distances is higher, and less reliable access to charging infrastructure may render EVs less viable.

²³ See discussion of this in: J Quiggin 2023, 'It's good the High Court overturned Victoria's questionable EV tax. But there's a sting in the tail' (19 October), <https://theconversation.com/its-good-the-high-court-overturned-victorias-questionable-ev-tax-but-theres-a-sting-in-the-tail-215985>.

²⁴ See more detail in: CMI 2023, 'DITRDCA The Fuel Efficiency Standard – Cleaner, Cheaper to Run Cars for Australia', https://carbonmarketinstitute.org/app/uploads/2023/06/2022.05.31_Carbon-Market-Institute-submission_Fuel-efficiency-standard-consultation.pdf.



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The Carbon Market Institute is at the centre of climate change policy and business in Australia. Independent and non-partisan, we bring business, policy makers and thought leaders together to drive the evolution of carbon markets towards a significant and positive impact on climate change.

Engaging leaders, shaping policy and driving action, we're helping business to seize opportunities in the transition to a negative emission, nature positive economy.



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