# Transport and Infrastructure Net Zero Consultation Roadmap

## Take the survey

Department of Climate Change, Energy, Environment and Water

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ARTC

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Yes

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9 Who are you answering on behalf of?

Organisation

10 Organisation name

ARTC

11 What best describes you or your organisation?

Government

12 What sector do you represent?

Rail

13 What state or territory do you live in?

South Australia

14 Postcode

5035

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?

Yes

**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?

Yes

**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?

Yes

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?

Yes

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?

Yes

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?

Yes

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?

Not answered

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

Yes

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?

Not answered

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

ARTC Submission to Net Zero Road Map - FINAL.pdf

**69** Upload a submission

Not answered

**70** Upload supporting file

Not answered

**71** Upload supporting file

Not answered

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2 August 2024

# Submission in response to the Commonwealth Government's Transport Net Zero Roadmap

## Background

The Australian Rail Track Corporation (ARTC) is proud of the vital role we play in Australia's transport supply chain and in the economic development of the nation. As one of the country's largest Rail Infrastructure Managers, ARTC maintains and operates 8,500km of the national rail network across five states, managing the transit of around 450 trains per day across New South Wales, Victoria, Queensland, South Australia and Western Australia.

We continue to invest in Australia's future prosperity and growth through the delivery of transport infrastructure projects which enhance the safety, reliability and efficiency of our rail network.

Each day our network transports intermodal containers, agricultural products, general freight and passenger services, as well as minerals and other bulk goods. Achieving significantly more freight being transported via rail is one of the single largest Net Zero reductions outside of electricity generation given a estimated 60-70% carbon footprint reduction compared to the road transport, proceeding further advancements in rail transportation forecast to increase this benefit. This significant shift improves our environment, our sustainability and arguably, supply chain competitiveness and increases the safety of motorists and local communities.

We continue to meet the changing needs of our customers and are committed to the health and safety of our people, the environment and the local communities in which we operate.

## Introduction

ARTC welcomes the Federal Government's consultation with industry on the development of a Transport Net Zero Roadmap, seeking feedback on potential pathways for transport and transport infrastructure to support the economy-wide net zero transition as well as the actions or policies the Australian Government will need to take.

Over the past few years, the Australian transport and supply chain sectors have experienced significant impacts due to extreme weather events and flooding. This has, caused great disruption to the movement of people and goods, including essential items such as groceries and food. In turn, this disruption has resulted in significant (and broad) social and economic impacts to the Australian community. ARTC believes that through economies of scale, rail has the capacity to continue playing a significant role in reducing the transport sector's overall emissions, but to do so will require policy and investment consideration in its capability and resilience.

ARTC has reviewed the consultation paper and strongly supports the proposed approach outlined in the document. In particular, ARTC believes that the approach of starting with a holistic review of the transport supply chain aligns with ARTC's previous recommendations that government freight policy should adopt a master planning approach to optimise the necessary infrastructure. Cascading that whole of network approach into assessing the needs of each mode within an optimised freight system, the specific support that assessment triggers and then how all stakeholders can work to deliver the proposed outcomes is the appropriate framework to maximise a successful transition of the transportation sector to net zero. This efficient

rail supply chain network will deliver improved services and reduce emissions in a traditionally hard to abate national supply chain.

The combination of a growing economy, and hence increasing freight needs, as well as the operating and infrastructure requirements of the net zero transition, ensures this roadmap (and its whole of system approach) is a unique opportunity for objective agreement on the facts and issues underpinning the supply chain. In particular, it is essential to understand and agree the impact of electrification on the weights of operating vehicles and rolling stock on existing infrastructure and the costs of adaption for that infrastructure to accommodate the heavier weights both in investment and emission capital.

Addressing the challenges of existing funding mechanisms developed for a fossil fuel economy that are no longer appropriate for a net zero economy, both in respect of managing the heavier maintenance loads that arise from heavier vehicles, but also a funding mechanism based on excise for a fuel, use of which is declining, are a necessary condition of the roadmap. Adapting an access framework and charging mechanism that reflects this net zero reality, and ensuring its consistency across the entire supply chain, should be an essential goal of the roadmap and ARTC strongly supports the outlined approach which ensures the appropriate focus on these issues.

Given this support, ARTC proposes the following considerations.

**Master Freight Network Planning**

As part of the focus on rethinking our transport systems, it is imperative to recognise the role that effective master planning will have in ensuring that the freight system is optimized to deliver Australia's freight needs reliably based on efficient investment that results in the lowest embodied carbon and lowest emission outcomes in the short, medium and long term. Given the length of the distances which freight must travel across Australia, and the need for recharging or refuelling (depending on the future fuel source) facilities, it is essential that this review of transport systems encompass access to the future energy infrastructure to ensure the lack of such access does not constrain transport's transition in the future. This optimisation of infrastructure will limit the construction of excessive infrastructure, and the associated embodied carbon in those excessive facilities, as well as ensuring that the freight is delivered in the lowest emission manner.

Currently, all state Governments are reviewing their freight strategies, and the Commonwealth Government continues to refine and develop the National Freight and Supply Chain Strategy to ensure supply chains are developed efficiently; with their role in the decarbonization of the Australian economy and achievement of net zero a critical measure of all such strategies. In its submissions to all these reviews, ARTC has highlighted the importance of coordinated infrastructure master planning (and data transparency) to ensure rail, and the transport sector as a whole, operate at maximum efficiency. ARTC is therefore encouraged that this coordinated network view is the starting point for the decarbonisation roadmap, as it is only from this position that the sector can maximise its contribution to the net zero journey.

In the alternative, the absence of cohesive strategies that outline the long-term vision for freight infrastructure development leads to investment decisions reflecting shorter-term considerations rather than their potential long-term freight efficiency and benefits for the economy. The lack of cohesion in this approach across road and rail ensures a lack of harmonisation in long term system coordination and investment, as well as interoperability constraints (when multiple layers of infrastructure management are considered) arising from multiple operational interfaces. This lack of harmonization constrains the ability of each mode to maximize its role in meeting the national freight task and drives a much higher level of emissions, and embodied carbon in excessive infrastructure construction, than would otherwise be necessary.

The role of Federal and State specific overarching master plans for freight supply chain investments across all modes and interfaces would send clear signals on, and enable threshold triggers for, investment in defined

areas required for efficiency or expansion. It would also guide action to address a coordinated and harmonised approach to operational needs, future land use and economic regimes that support an increasingly integrated approach to the rail component of that supply chain, leveraging the economies of scale rail offers into the future. A critical first step in this direction would be to ensure that in undertaking cost-benefit analysis of investments that these explicitly consider the cost of both emissions and embodied carbon in their assessments and that the impact of the project on alternative modes (and their emissions) be accounted for.

Finally, the need to develop an efficient and effective road user charging framework that is consistent with a net zero future, and not reliant on diesel excise, is a critical step in allowing this optimised master plan across the freight transport supply chain. This need for a consistent framework is a key conclusion of the recently released July 2024 New South Wales Independent Toll Review.

**Mode Shift - Road to Rail**

A key aspect of assessing the efficient master plan for the transport supply chain and delivering the lowest emission outcome is ensuring that rail's share of the modal freight task is maximised given its emission efficiency. Increasing modal shift from road to rail is therefore a key component in supporting decarbonisation of the transport sector and reducing Australia's overall greenhouse gas emissions. Rail Infrastructure Managers (RIMs), ARTC included, are focused on delivering rail freight networks that are capable of meeting the growing capacity and reliability demands of the freight task and meet the evolving needs of the infrastructure in the current environment.

Rail moves 58% of the national freight task (bulk and non-bulk) yet is responsible for only 11% of transport emissions, making rail the mode of choice for decarbonising freight supply chains (ClimateWorks, 2023).

Freight volumes on Australia's east coast are projected to more than double by 2050 while the Australian Government is aiming to achieve its emission target in the same year. Modal shift from road to rail that arises from investments in the rail network will be key to meeting both these targets - between Melbourne and Brisbane for example, mode shift may reduce truck movements by 200,000 per year and cut carbon emissions by 750,000 tonnes per year from 2050.

Recognising this contribution to reducing emissions is critical to meeting decarbonisation goals - a key part of which is ensuring that transport emission reductions arising from modal shift are rewarded through access to emission reduction credits under the proposed ACCU scheme. This can also be extended to ensuring consistent modal treatment under the Safeguard Mechanism to ensure the transport impact is optimised across the supply chain (which is addressed in more detail at the end of this submission).

These two areas are linked through the potential denial of access to Emission Reduction Fund initiatives for Safeguard Mechanism (SGM) listed companies, which significantly limits the incentive base for rail operators for decarbonization. ARTC is a member of the Freight on Rail Group (FORG) whose submission addresses this issue in some detail, but it is critical to highlight that the ability to maximize the transport emission reductions on a whole of system basis is reliant on consistent treatment of modes. Further, it requires that all rail operators have access to the ACCCU scheme regardless of their SGM status.

This approach also highlights the need to adopt an integrated approach across the entire transport supply chain as the starting point of any analysis. It is only through adopting this entire supply chain approach that the benefits of rail will be achieved given the emission reduction will be realised in the road sector whilst rail emissions will increase (albeit at a lower per unit basis), but the transport system will be lower emissions as a whole. Therefore, capturing the emission benefits of modal shift necessitates a whole of supply chain approach and ARTC is encouraged this whole of system approach is identified as the appropriate starting point.

**Rail Resilience**

It must be noted that greater modal shift is only possible with a reliable and resilient rail network.

The East West corridor is the backbone of the ARTC network carrying 70-80% of freight between the eastern states across the state, onwards to Western Australia forming a vital link in the national supply chain. Like much of Australia's legacy transport infrastructure, it was built to historical engineering standards from, in some circumstances, well over a century ago reflecting the stable and more predictable climatic conditions of the time and is therefore highly susceptible to adverse and increasingly volatile weather conditions.

The ARTC network was severely impacted by extreme weather events between 2021 and 2024, including two 20 plus day shutdowns of the East-West corridor which put brought food security to national attention. These challenges are also compounded by vegetation management across vast sections of the network, with disruptions with instances of falling trees, embankment issues and bushfires impacting on this vital routes.

ARTC is planning significant work, with investment in excess of $1 billion over six years, to improve the resilience of its network through the Network Investment Program (NIP). This is in addition to previous investment on the network related to resiliency. The NIP will consider both new and accelerated capital replacement activities to progressively improve network performance.

While ARTC is responsible for managing the risks to the operation of the critical infrastructure assets it owns and operates, the national rail network has traditionally not been viewed as critical infrastructure in the same manner as defence, energy, and water infrastructure. The case for national support to upgrade the network to ensure continued operation and functionality is clear from its seamless functionality and critical role in ensuring continuity of freight movements during the pandemic while the adverse economic impacts were obvious when there have been extended outages.

Furthermore, the East-West Corridor through to Perth carries the most container traffic of any ARTC corridor and is the most competitive against road freight of all key origin-destination pairs. It is critical to maintain this competitive advantage from a productivity and safety perspective and also from an environmental perspective given the lower emissions per tonne of freight emitted by rail freight compared with road freight.

**Net Zero Pathway for Rail**

Modal shift, and the need to develop a resilient and reliable network to accommodate the freight volumes required for rail to play its role in the net zero journey reflects on the need to adopt an optimisation of the freight transport system. As stated above, ARTC supports the framework approach to move from the supply chain approach to the net zero pathway within the rail mode. In particular, this provides the need to focus on, and support, greater innovation and investment in new rolling stock technologies as an essential factor in driving emission intensity reduction. Developing the rail pathway within the Net Zero Roadmap is therefore a significant opportunity for the Federal Government to consider and implement ways in which to accelerate rail's emission reduction in addition to the reductions that occur as a result of modal shift.

The development of an appropriate heavy vehicle charging framework is identified in the Issues Paper as an element to be addressed within the net zero pathway for each mode. Given the importance of a road user charging framework that charges the appropriate cost to heavy vehicles to delivering the efficient, optimised, transport system, ARTC considers that road user charging should be considered under the whole of transport network approach as it is necessary condition to the optimisation of the transport supply chain. To achieve this, the main barriers lie in the enabling systems and the associated costs of pick-up and delivery. These factors challenge the "right freight, right mode" principle. Currently, low volumes of freight between Sydney and Melbourne, which would traditionally be moved by rail, face significant transit time, cost, and reliability challenges, making rail largely unviable compared to road transport.

**Decarbonised rail infrastructure**

ARTC is one of the largest rail infrastructure managers in Australia, managing over 8,500km of rail track across five states. As an asset manager we can directly contribute to transport decarbonisation through how we design, construct and operate our asset and most significantly through the materials we procure and recover for re-use.

Rail utilises materials such as steel and concrete that are emissions intensive to manufacture and any emissions pathway to decarbonise transport infrastructure will require low carbon input materials. However, as acknowledged in the Consultation Paper, this is a hard to abate sector and progress requires concerted effort from industry and government.

One of ARTC's steel suppliers Whyalla's Liberty Steelworks are seeking to become carbon neutral by 2030 and replace coal burning blast furnaces with low or zero emissions alternatives by 2030 which will then make green steel commercially available in Australia. ARTC's Inland Rail Parkes to Narromine Project installed 22,600 tonnes of carbon neutral concrete culverts, a product supplied by Humes (Holcim). Carbon emissions for the product was reduced by using supplementary cementitious material with the remaining emissions neutralised via certified carbon offsets. These are promising developments, but technologies are not mature or commercially available and require a whole of government approach to rapidly scale.

In addition to embodied emissions, a whole of lifecycle assessment of the infrastructure, identifying emissions across the production, construction, operation, maintenance and decommissioning will identify other opportunities for emissions reduction pathways.

As a transport infrastructure provider, ARTC supports the Federal Government's focus on infrastructure. Low emission fuels and rollingstock technology solutions to achieve Net Zero pathway for rail. We do note however that to date energy and transport infrastructure development and planning has been siloed and welcome the Government's approach outlined in the roadmap of ensuring that Net Zero sectoral plans for electricity and energy will consider energy use more broadly including transport energy use. This alignment is fundamentally important for enabling transport decarbonisation.

**Low Carbon Liquid Fuels and Biofuels**

Whilst the use of low emission fuels is addressed within the specific modal issues, it is important to highlight that this could also be addressed at a whole of economy system level. This would improve on an approach where these issues have been addressed largely in silos and allows a clear transition plan to be developed. This ensures that the roadmap can develop based on the steps to move the entire supply chain forwards to a low emission future allowing based on an approach which leverages existing capital investment in a lower emission way through the use of low emission fuels, whilst the economy moves and invests over the longer term to the full net zero future. Low emission fuels are therefore a critical element of the roadmap.

Given its use of diesel-powered vehicles in maintaining its network, the development of low carbon liquid fuels is an area of direct relevance to ARTC. There is therefore a significant opportunity for incentivising the transport industry by supporting the development and take-up of biofuels or zero/low carbon liquid fuels.

In addition to assisting with decarbonisation, biofuels do not require changes in current vehicle engine technology or the fuel distribution network. According to the WA Department of Primary Industries, there is no commercial renewable diesel production or supply in Australia, however several companies are looking to develop domestic production. The feedstocks of choice for these projects are oil mallee, agricultural residues, forestry residues and waste vegetable oils which are accessible domestically.

Government funding programs that incentivise local manufacturing/production of this industry will support take-up of such solutions. Additionally, policy settings and grant funding opportunities that: facilitate the supply of renewable diesel in Australia; and incentivise the take-up of such fuel will be a key contributor to rail in furthering modal shift from road. Policy settings in Europe are already having an influence on this matter – for

example, German train operator, HVO Deutsche Bahn, has doubled its consumption of biofuel in its diesel locomotives than originally planned for this year.

ARTC also acknowledges the Federal Government's establishment of the Powering the Regions Fund and welcomes rail access to $400 million in grant funding for emissions reduction, however further funding assistance will potentially support investment in the development an Australian low carbon liquid fuel market that will assist with the decarbonisation focus in the transport sector.

**Emerging Technologies in Rail**

ARTC notes the acknowledgement that electrification of the national rail freight network is not a financially viable solution for Australia's regional and interstate rail networks and that to achieve net zero, a combination of other technologies will be needed. The development and implementation of these technologies will be largely driven by other industry participants, with above rail operators embarking on research and development into zero emission locomotives across a range of initiatives, support for which is critical to ensuring the success of their implementation. ARTC is actively supporting these developments and working with Operators to ensure their utilisation on our network is not constrained, although some physical constraints such as axle loading limits will need significant consideration. Whilst ARTC therefore does not play a direct role in the development of these technologies, it realises it will play a significant role in managing the utilisation of these technologies on its network.

In addition to ensuring that ARTC is not a barrier to the implementation of new rolling stock technologies, ARTC will increasingly focus on limiting the extent of any embodied carbon in its network initiatives, which incorporates a focus on reducing emissions from both our materials and asset lifecycle. This is critical to ensure that emissions associated with the optimised transport supply chain are minimized over the asset life.

**Net Zero Pathway Timeline for Rail**

ARTC supports the proposed pathway timelines identified for rail's net zero pathway.

However, we encourage the Government to consider, engage and learn from international peers such as Network Rail, UK to understand their journey and the challenges and opportunities they've faced. Network Rail manages 20,000 miles track for passenger and freight trains, aligned with the UK Government they have a science-based net zero by 2050 target and plan to remove diesel trains from their network by 2040.

The UK network is 50% electrified and largely passenger-based and therefore very different to ARTC's. Nevertheless, the process they used to engage industry and governments to develop their *Traction Decarbonisation Network Strategy (TDNS)* Interim Business case is a useful case study including the subsequent policy, technology and cost challenges for progressing this strategy.

Other case studies from Deutsche Bahn which is leader in use of alternate fuels and CPKC (Canada) which has commenced installation of hydrogen production and fuelling facilities are also useful.

The importance of funding that will be required for the installation of appropriate infrastructure, such as charging stations is critical, which reinforces statements above in respect of ensuring the power system requirements of transport are considered in the whole of system review.

This reinforces the most significant message of ARTC's response to the Net Zero Roadmap, being the overarching criticality of adopting a master planning approach to the optimization of the transport supply chain to ensure the most efficient (and resilient) supply freight network is developed to meet the freight needs of the Australian economy now and in the future.

## Support for Guiding Principles and Existing Policies

ARTC supports the five guiding principles outlined in the consultation paper. ARTC also supports the acknowledgement within the consultation paper of the importance of transport for Australia. Notably, the transport sector contributes billions of dollars to the economy, employs more than a million people (BITRE, 2023) and enables billions of tonnes of freight to be moved across Australia. With Australia's population and economy expected to increase significantly by 2050, it is essential that any new climate related policies allow the sector to continue the critical movement of goods across Australia.

It is essential that any new policies that aims to reduce carbon emissions and reach net zero consider the actions and plans already put in place by both Federal and State governments. ARTC notes that the Existing Australian Government Policy on page 13 of the consultation paper lists 35 different polices that focus on emission reduction and climate change, as well as numerous State and Territory government led decarbonisation policies/plans on page 14. The Safeguard Mechanism and National Climate Risk Assessment are also key in this regard (as outlined below).

Noting the extensive list of existing policies, it is important that when developing the Net Zero Roadmap, additional and unnecessary administrative burdens are not placed on rail freight participants, allowing them to remain focussed on the essential work of moving of goods and people across Australia. In addition, it is critical to ensure that the benefits of rail are considered from a whole of transport network perspective given that the emission benefits of rail are realized in lower emissions in the road sector.

Safeguard Mechanism

This is most evident in respect of the application of the Safeguard Mechanism to transport. ARTC recommends that when developing the Net Zero Roadmap, any emission reduction targets incorporating assessment of the transport sector, must be aligned and support the Safeguard Mechanism.

Recently reformed, the Safeguard Mechanism sets legislated limits on the greenhouse gas emissions of Australia's largest industrial facilities, with a declining trajectory consistent with achieving Australia's emissions reduction targets. Noting that the policy currently captures a larger portion of the rail freight sector than road freight, ARTC agrees that this has the potential to disproportionately impact freight on rail and overall modal shift, despite it being a low-emissions mode. There are currently seven rail freight operators and two road freight operators covered by the Safeguard Mechanism.

Significant headway has been made in reforming the Safeguard Mechanism to being a fit-for-purpose instrument that enables some of Australia's most important rail freight operators to reduce carbon emissions in a fair and realistic manner. ARTC, other rail infrastructure managers and many rail operators have been consulted in the development of the policy mechanism to date.

Accordingly, ARTC recommends that any consideration on emission reduction targets inclusive of the transport sector through the development of a Net Zero Roadmap, consider (1) the established significant requirements placed on rail operators in relation to emission reductions and(2) the inclusion of embodied emissions as part of value for money assessments of new projects funded by the State or Federal Government (noting that the benefit of emission reduction arising from modal shift is already incorporated as part of the Cost Benefit Analysis undertaken by ARTC in its assessment of projects)..

National Climate Risk Assessment: First Pass Assessment Alignment

It is recommended that consideration also be given to the findings of the recently released National Climate Risk Assessment: First Pass Assessment Report, which identified 56 nationally significant climate risks facing Australia, and a subset of 11 priority risks for analysis in the second pass assessment.

This Report is a key document for the Federal Government in determining and responding to the multiple risks that Australia faces from current and future changes in our climate, and all State-based legislative changes that are focused on climate change should be aligned.

The Report contributes to:

- An understanding of national climate risks
- A better understanding of the complex and cascading risks that will cause damage to our environment and society
- Insights into the wider social and economic impacts of hazards such as bushfires, floods and disease
- An evidence base for the National Adaption Plan, which will set the frameworks to drive adaption in Australia.

The outcomes of the Risk Assessment will help all levels of government, industry, businesses, First Nations peoples and communities to better understand their climate risks and inform their adaption actions.

ARTC would also like to acknowledge the work currently underway by the Australian Government through the review of the National Freight and Supply Chain Strategy that has garnered support from all levels of government and industry to refresh the important framework that will play an essential role in meeting Australia's growing freight task, as well as net zero by 2050. ARTC supports the decision to use the findings from the consultation to inform the final Net Zero Roadmap and Action Plan.

Additionally, the Rail Freight Productivity Review which was led by ACRI and the ARA in 2023 is also an important document that provides insight into the required policy changes and investment that is required to deliver a more reliable, efficient and sustainable rail freight network.