28 March 2022

Submission from the Freight on Rail Group

The Freight on Rail Group (FORG) appreciates the opportunity to provide this submission to the Productivity Commission's Inquiry into Australia's Maritime Logistics System.

The members of FORG are Australia's nine major rail freight businesses: Pacific National, Australian Rail Track Corporation (ARTC), One Rail Australia, Aurizon, Qube Holdings, SCT Logistics, Arc Infrastructure, Watco Australia and Southern Shorthaul Railroad (SSR). These rail freight companies contribute more than $11 billion to the nation's economy each year, employ almost 20,000 Australians (many based in the regions), operate in every Australian state and territory (except Tasmania), use 1,600 locomotives and 34,000 wagons serviced and maintained in Australia, and manage and operate 23,000 kilometres of critical rail track connecting the country. Our members provide freight and logistics services that are part of freight and logistics supply chains involving different transport modes.

This submission is mostly concerned with item 6 of the scope of the inquiry, 'the interlinkages and dependencies between the maritime logistics sector and other logistics systems, such as air freight and landside supply chains'.

Executive summary

Most of Australia's exports, imports and some of the domestic freight task relies, and will continue to be reliant, on efficient and competitive freight transport supply chains linking ports and maritime services with land-based networks comprising rail and road transport infrastructure and operations.

Australia's freight task is forecast to continue to grow with this growth expected to place pressure on the national freight supply chain network. The Inquiry Report on Australian Freight Supply Chain Priorities stated that "even with extra investment, Australian transport infrastructure will be hard pressed to meet this demand without additional costs or time delays[1]".

FORG recognises the importance of efficiently meeting future freight demand and continuing to improve the competitiveness of freight supply chains. The focus of this submission is on impediments and opportunities to realise economic and community benefits from increasing the use of integrated, rail-based freight supply chains linked to significant ports and maritime services in Australia.

A major part of the nation's export and import freight task is efficiently facilitated by high volume bulk freight ports that primarily provide for the export of iron ore and coal, including the ports in the Pilbara region of Western Australia, Central Queensland and the Port of Newcastle. These ports and the supply chains that are linked to them have benefited from fit for purpose investment, operate efficiently and are generally supported by effective policy settings for high volume bulk supply chains.

However, it is the ports servicing containerised, break-bulk or non-containerised cargo (mixed ports) that pose the major challenges from a rail-based supply chain perspective with respect to investment,

[1] Inquiry into National Freight and Supply Chain Priorities; Report, March 2018, p. 21.

operational and planning and development challenges. These includes the ports located in the major capital cities and regional ports that handle or have the potential to handle significant freight volumes.

Rail-based freight supply chains could be utilised to make a substantial contribution to enabling these freight supply chains to efficiently meet projected future growth in demand for freight, and at the same time providing major safety, environmental and other community benefits such as reduced congestion.

As the Inquiry Report on National Freight and Supply Chain Priorities stated, "road transport will experience increased congestion and associated higher costs over the next 20 years. Investment in efficient rail freight connections to major ports and rail freight paths through metropolitan networks will take pressure off the road system"[2]. As has already been mentioned, the assessment of FORG is that this applies to regional ports.

There are, however, significant impediments to utilising rail freight that are relevant to freight supply chains linked to ports.

The Australian Infrastructure Plan 2021 identified urban and agricultural supply chains as facing challenges [3]. In the view of FORG, regional supply chains used for general freight, including agricultural, containerised and low to medium bulk size bulk freight tasks also face challenges.

The main impediments to the utilisation of rail freight include:

- Policy differences, including substantial differences in infrastructure access and usage costs that favour road compared to rail, have resulted in increased use of road only land transport for general, agricultural and containerised freight carried to and from major ports;
- The provision of increased access for higher productivity heavy vehicles to road infrastructure, including roads linked to ports;
- First and last mile infrastructure gaps or challenges for rail operations that include:
    - Inadequate rail links to ports and to points of production;
    - Capacity constraints relating to loading, unloading and handling of rail freight at ports and at production or distribution locations;
- Reliability challenges faced by rail operations on existing rail networks that link to ports; and
- A lack of consistent attention to improving productivity on rail freight networks; and
- A lack of an integrated approach to planning and developing freight supply chains.

The rail freight industry agrees with the Productivity Commission's assessment of transport services in the report, *Shifting the Dial, 5 Year Productivity Review*:

> More efficient utilisation of existing transport infrastructure and better integration of transport services, where possible, is needed[4].

[2] Inquiry into National Freight and Supply Chain Priorities; Report, March 2018, p. 35.
[3] Infrastructure Australia, *Reforms to meet Australia's Future Infrastructure Needs: 2021 Australian Infrastructure Plan*, p. 317
[4] Productivity Commission, Inquiry Report no. 84, *Shifting the Dial, 5 Year Productivity Review, 2017, p. 132.*

The following priorities are proposed to address the impediments:

- Policy settings should enable export and import supply chains to be competitive and flexible, utilising rail-based supply chains that are integrated with other transport modes where they offer benefits by:
    - Where rail and road compete to transport the same freight, consistent infrastructure access and usage costs between rail and road freight achieved by one or a combination of the following:
        - Road pricing reform that introduces cost-reflective user charging for heavy vehicles, as previously agreed by the Federal and State Governments; or
        - Alternatively, a national rail mode share incentive or grant scheme, informed by the policy and effectiveness of the freight Mode Shift Revenue Support (MSRS) Scheme, administered by the United Kingdom's Department for Transport and the Scottish and Welsh Governments[5]. The purpose of the scheme is to 'facilitate and support modal shift, generating environmental and wider social benefits from reduced lorry journeys on Britain's roads'[6]. The incentive payable would be based on the benefits to the economy and the community of using rail over road.
    - Developing integrated freight supply chains as an objective of freight planning and infrastructure investments by governments;
    - Recognising the safety, congestion and environmental benefits of rail freight in cost-benefit and other economic assessments of infrastructure development; and
    - Freight transport policy settings should enable efficient connections of rail transport to mixed use ports and major container ports, with rail connection and efficiency improvements required at a number of ports.
- Improve the reliability of rail freight movements on rail lines that link to ports, noting that improving reliability of freight movements was also identified by the Inquiry into National Freight and Supply Chain Priorities[7].
- FORG supports a number of priorities from the National Freight and Supply Chain Priorities Report, including priority 3.11, to "identify any potential gaps in existing infrastructure investment programs to allow funding for smaller, collective packages of investment in freight projects that could lift regional productivity, which may not otherwise be considered for Commonwealth funding[8]". We recommend targeting supply chains that utilise rail and/or have the potential to increase the use of rail.

[5] Department for Transport of the United Kingdom, *Guide to the Mode Shift Revenue Support (MSRS) Scheme*, February 2022.
[6] Ibid.
[7] Inquiry into National Freight and Supply Chain Priorities Report, March 2018, p. 13
[8] Inquiry into National Freight and Supply Chain Priorities Report, March 2018, p. 13

- The Inland Rail Project will enable significant benefits for regional import and export freight through the major ports, in particular grain, cotton and other commodities and products.

- Coastal shipping regulation for the transportation of domestic freight should recognise investments in land transport operations and provide for efficient utilisation of land transport modes where infrastructure and services are available. Furthermore, coastal shipping regulation should not provide unreasonable competitive advantages to foreign flagged ships to enter and participate in Australia's domestic freight services market.

- The opportunity to achieve the decarbonisation of freight transport supply chains. Decarbonisation objectives and actions have the potential to contribute to maintaining and potentially improving the competitiveness of export and import supply chains while contributing to meeting government and industry climate change emissions reduction commitments.

FORG proposes a coordinated approach from the Federal and State Governments to addressing impediments to the utilisation of rail freight on freight corridors that are linked to ports, resulting in safety, economic and environmental benefits.

The objective should be to improve the competitiveness of the nation's freight supply chains in ways that provide sustainable economic and community benefits.

Freight supply chain competitiveness

Australia's exports, imports and some of the domestic freight task relies on efficient and competitive freight transport supply chains linking ports and maritime services with land-based networks comprising rail and road transport infrastructure and operations.

The Freight on Rail Group (FORG) recognises that there are efficiencies available from an integrated approach to freight supply chains planning and development, enabling innovation in supply chain utilisation resulting from the benefits offered by different combinations of transport modes and services.

Policy priorities and the administration of transport, however, are often developed as mode or infrastructure specific priorities that do not take into account all components of multi-modal freight supply chains.

Despite the benefits offered by rail-based supply chains, there are barriers and impediments to the utilisation of rail freight at container ports and mixed-use ports.

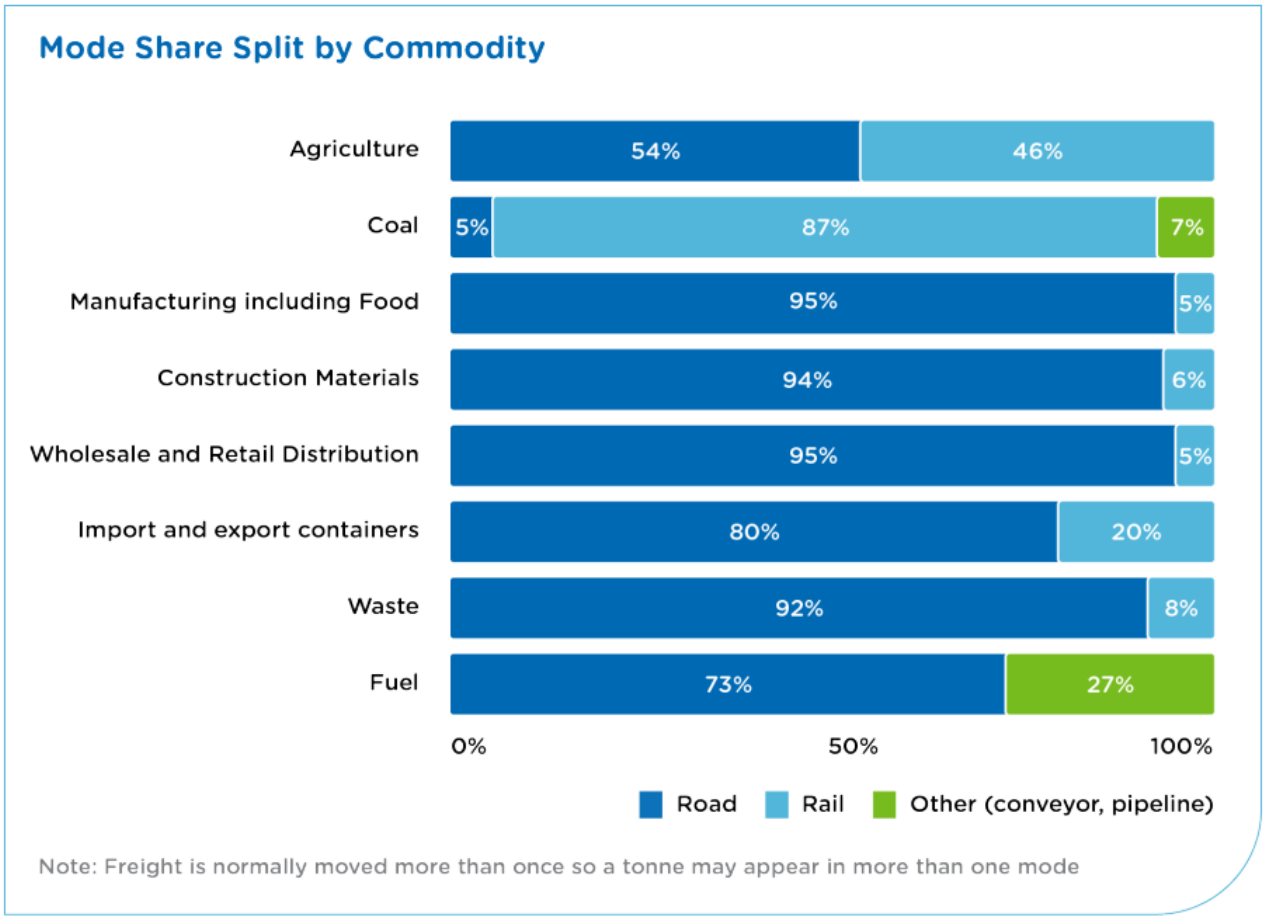
In Sydney, the NSW Government has had a long-standing policy of increasing rail market share for containerised import/export traffic though Port Botany to 28 per cent, that was targeted to have been achieved by 2021-22. This has been supported by significant investment in rail-based supply chains. A $400 million upgrade and duplication of the Port Botany rail line is currently underway. Concurrently the private sector has invested in intermodal terminals, including terminals and facilities at Moorebank, Enfield and St Marys and freight technology for rail operations at Port Botany. Recognising that investments are still being made in the rail-based supply chain, currently rail market share to and from Port Botany for containerised freight is approximately 16 per cent. One of the factors that has impeded the use of rail freight for containerised freight at Port Botany is that higher productivity road vehicles have been provided with increased access to the port precinct.

As a point of comparison, there has been an increase in the proportion of containerised freight transported to the Port of Fremantle, with the Western Australian Government and industry working to improve the utilisation of rail freight through actions that include a rail freight incentive scheme. FORG proposes that the incentive scheme available for intrastate containers carried to the Port of Fremantle inform a model that can be implemented in other port supply chains. We further propose that a national scheme should be linked to clear externality benefits from the use of rail, particularly its benefits with regard to reducing greenhouse gas emissions.

There are opportunities to increase the utilisation of rail freight on freight supply chains in all states and territories. As shown in the draft New South Wales Freight and Ports Plan, the majority of the freight task for most products that rely on freight transport is conducted by road[9]. The one exception for major commodities transported in NSW is coal including export coal, which is primarily carried by rail.

The potential opportunities to increase the utilisation of rail should involve consideration of increasing rail's mode share for the following commodities: construction materials, fuel, manufacturing and agricultural products. The road-rail mode shares for each of these commodities are shown in the following chart from the New South Wales Government's 2017 Draft Freight and Ports Plan[10].

Chart 1: Mode Share Split for freight provided in 2017 Draft NSW Freight and Ports Plan



[9] New South Wale Government Draft Freight and Ports Plan, December 2017, page 52.
[10] Ibid. p. 52.

In Melbourne, the Victorian Government in conjunction with industry is implementing the Port Rail Transformation Project (PRTP), a $125 million investment in new rail infrastructure interfacing with the container terminal at East Swanson Dock, financed by a charge on import containers implemented by the Port of Melbourne. The Australian and Victorian Governments are also investing in connections to intermodal terminals at South Dandenong, Somerton and Altona in support of a Port Rail Shuttle Network. The objective is to increase the proportion of containers transported by rail to and from the Port, which has recently been approximately 6 per cent of containerised freight. Planning for new intermodal terminals at Truganina and Beveridge is also proceeding, which are expected to be focused on domestic markets but may also have a role in serving port supply chains interfaced with the interstate rail network.

Victoria has also extended the Mode Shift Incentive Scheme until 30 June 2022, providing incentives for movements of freight by rail from regional Victoria to the Port of Melbourne.

The impediments to the use of rail freight are also evident in regional supply chains used for mixed freight including, for example, the Murray Basin region in Victoria. There has been a decline in the use of rail freight on the Murray Basin Rail Network extending over a number of years. Current rail-freight mode share is estimated to be 35 per cent for regional mixed freight that is transported to major Victoria ports for export.

The main impediments to the utilisation of rail freight include:

- Policy differences, including substantial differences in infrastructure access and usages costs that favour road over rail and have resulted in increased use of road only land transport for general, agricultural and containerised freight carried to and from major ports;
- Higher productivity road vehicles gaining increased access to road infrastructure, including roads linked to port precincts;
- First and last mile infrastructure gaps or challenges that include:
    - Inadequate rail links to ports and to points of production;
    - Capacity constraints relating to loading, unloading and handling of rail freight at ports and at production or distribution locations;
- Reliability challenges faced by rail operations on existing rail networks that link to ports;
- A lack of consistent attention to improving productivity on rail freight networks; and
- A lack of an integrated approach to planning and developing freight supply chains.

As a result, containerised freight, agricultural freight and mixed freight has increasingly been transported on to and from ports by heavy road vehicles, even where there is a rail transport available. Examples of freight corridors where this has occurred include the Murray Basin Rail Network mentioned above, as well as freight supply chains linked to regional ports in other states.

Notably, there has been an increase in the proportion of containerised freight transported to the Port of Fremantle, with the Western Australian Government and industry working to improve the utilisation of rail freight with actions that have included a rail freight incentive scheme for containerised freight.

However, at many container and mixed freight ports, the trend has been away from using rail with freight shifting to transport by heavy vehicles.

Freight transported by road, particularly when there are significant volumes of freight involved, has negative impacts from high externality costs compared to rail transport.

The benefits of rail-based supply chains to industry and the community include:

- Environment: Rail freight produces 16 times less carbon pollution than road freight per tonne kilometre[11].
- Safety: Rail transport is a far safer mode of transport than road, with the freight volume carried by one freight train equivalent to 70 of the largest road trains. Over the course of a year, the freight task carried by one train removes the need for thousands of truck journeys on regional roads and therefore improved safety for all other road users.
- Reduced congestion: The use of rail freight for transport to ports in major capital cities reduces congestion costs for the community.
- Productivity: Significant economic and productivity gains are potentially available where there are large volumes of freight and/or where the freight is carried over longer distances.

Policy actions are required to address a number of substantial disadvantages for rail freight compared to road, including inequity in infrastructure costs, first mile barriers including costly or inefficient links between production sites and rail infrastructure and an inconsistent focus on enabling improvements and investment in the performance and competitiveness of rail freight.

FORG proposes that Federal and State Governments inform policy priorities by whole of supply chain assessments and considerations that include the following components:

- Adopt cost-benefit and other assessment methods that explicitly consider the externality benefits of using rail freight; and
- Identify and address capacity constraints for rail freight at ports, focusing on ports used for general freight, including better utilisation of rail links and/or developing cost-effective links with port terminals.

Removing the differences in rail and road infrastructure access costs

The differences in infrastructure access costs between rail and road infrastructure for general freight should be reduced in one of the following ways.

- Road pricing reform that introduces cost-reflective user charging for heavy vehicles, as previously agreed by the Federal and State Governments; or
- Alternatively, a national rail mode share incentive or grant scheme, informed by the freight Mode Shift Revenue Support (MSRS) Scheme, administered by the United Kingdom's Department for Transport and the Scottish and Welsh Governments[12]. The purpose of the

[11] Deloitte Access Economics, *Value of Rail 2020: The rail industry's contribution to a strong economy and vibrant communities,* prepared for the Australasian Railway Association, November 2020, page 4.
[12] Department for Transport of the United Kingdom, *Guide to the Mode Shift Revenue Support (MSRS) Scheme*, February 2022.

scheme is to 'facilitate and support modal shift, generating environmental and wider social benefits from reduced lorry journeys on Britain's roads'[13].

FORG proposes that a similar national mode shift incentive scheme should be considered and linked with existing emissions reduction programmes due to the ability of the increased use of rail to contribute to reducing overall transport sector emissions.

Targeted improvements to existing rail-based supply chain improvements

Infrastructure funding programmes often focus on new projects and those that do focus on existing infrastructure often do not prioritise the productivity and performance of rail freight supply chains.

Priority 3.11 of the 2018 Inquiry into National Freight and Supply Chain Priorities recognised there would be benefits from "identifying any potential gaps in existing infrastructure investment programs to allow funding for smaller, collective packages of investment in freight projects that could lift regional productivity, which may not otherwise be considered for Commonwealth funding[14]".

The assessment of FORG is that this priority is important and reflects a gap in current freight supply chain infrastructure investment spending by governments, and recommends that there should be an increased priority given to:

- Targeted improvements to existing rail infrastructure that provides linkages to ports and domestic freight hubs and allows rail freight operators to improve both the productivity and reliability of rail freight operations.

It is noted that action 1.2 of the National Freight and Supply Chain Action Plan, which is concerned with "providing regional and remote Australia with infrastructure capable of connecting regional Australia with major gateways" is aimed at addressing a similar gap in infrastructure provision and that examples of rail freight projects identified under this action[15]. The assessment of FORG is that there is a case for targeted infrastructure improvements specific to rail freight.

A further example of how targeted infrastructure development could improve the utilisation of rail freight is the need for empty container handling and storage and international shipping equipment to be positioned at intermodal facilities, and these requirements should be included in port rail models and designs. Too often, the planning and design of facilities does not provide for these requirements with the result that there are additional costs involved in the handling of empty containers and the overall use of rail. Similarly, consideration should be given to incentives or other policy actions to encourage shipping operators to develop and utilise empty container arrangements that provide opportunities to utilise rail freight. These arrangements could also be linked to modal shift incentives based on recognising the externality benefits of rail.

A further practical step that could be taken is to improve the availability of information about supply chain facilities. This could include publishing a freight transport and logistics map for each port (where applicable) with outer region intermodal hub models to be included, where they are relevant, as part of the availability of information about supply chain infrastructure and operations.

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[13] Ibid.
[14] Inquiry into National Freight and Supply Chain Priorities Report, March 2018, p. 13
[15] Transport and Infrastructure Council, *National Freight and Supply Chain Strategy: National Action Plan*, August 2019, p. 8.

In addition, FORG supports the facilitation of exports by rail transport from regional intermodal and logistics facilities that include conducting pre-export inspections and other administrative procedures at regional locations rather than only at ports. This would extend the limited arrangements that are already in place at some regional locations, allowing the export process to be streamlined when export cargo reaches a designated port.

Linking infrastructure investment to productivity and performance improvement together with investments that provide for efficient rail freight links to ports would make a positive contribution to supply chain competitiveness for the benefit of Australian industries reliant on freight and logistics services.

Coastal shipping regulation

In relation to freight shipping operations that form part of Australia's transport supply chains, the position of FORG is that the distinction between maritime shipping participating in international export and import trade and shipping participating in domestic freight services continues to be important.

The distinction is necessary because maritime shipping services that participate in the domestic freight market (coastal shipping) are, on most shipping routes, competing against land-based rail and road services.

The implications of policy and regulatory settings for coastal shipping are critically important to our industry as a number of our major domestic intermodal and general freight routes.

FORG has raised concerns about previous proposals to reduce regulatory restrictions on foreign flagged ships participating in the domestic freight market.

Although the proposals to reduce regulatory restrictions were not introduced, FORG remains concerned about the potential for foreign owned shipping companies that choose to compete in Australia's domestic markets to have an unreasonable competitive advantage in that particular market.

The concerns held by FORG are specific to domestic transport corridors where rail and road compete directly with shipping services. These corridors include:

- The East-West freight corridor between Victoria, South Australia and Western Australia;
- The coast of Western Australia between the Port of Esperance and Geraldton (north of Geraldton);
- The freight corridor between Victoria, New South Wales and Queensland, from Melbourne to Cairns.

Policy settings should carefully consider, evaluate and address the full impacts of coastal shipping regulation in domestic markets. In summary, the key considerations should be:

- Taking into account that foreign shipping companies are not subject to the same workplace relations requirements as land transport businesses operating in Australia.

- Similarly, foreign shipping companies are not subject to the same regulatory and taxation requirements as land transport businesses or Australian flagged coastal shipping businesses.

- Rail freight operators pay substantial track access charges for provision and maintenance of rail freight infrastructure.

- Major investments in rail terminals, infrastructure and rolling stock have been made by rail freight companies in Australia. Any relaxation of regulations for foreign flagged vessels could have a negative impact on these investments and therefore on the rail freight industry.

- A modal shift towards sea would be expected to result in land transport companies reducing investment and spending on capacity and operations, creating a significant reliance on foreign shipping companies in moving our domestic cargoes between capital cities.

The significance of these issues for rail freight operators warrants consideration being given to potential arrangements for additional regulatory arrangements that prevent foreign flagged ships being given an unreasonable competitive advantage.

The FORG position is that because foreign flagged ships participating only in export and import trade are not competing with land transport operators, the considerations outlined above are not applicable because there are not negative impacts on the domestic freight transport industry.

Inland Rail Project

The Inland Rail Project has the potential to make a large contribution to improving land freight supply chain productivity for industries in Victoria, New South Wales and Queensland in the following ways:

- Providing a major investment in infrastructure that will increase rail freight productivity and reliability; and

- The potential to efficiently utilise and offer new multi-modal rail and road freight solutions linked to freight terminals, handling and distribution facilities in the capital cities and in regional locations, including Parkes, where there are freight aggregation centres.

While the major benefits of Inland Rail are oriented towards domestic freight markets, by improving the cost and service competitiveness of rail in the key intercapital freight markets, there will also be significant benefits for regional import and export freight through the major ports, in particular grain, cotton and other commodities and products. As well as connecting to Brisbane and Melbourne, Inland Rail will provide network linkages through the existing network to Port Botany, Port Kembla and Geelong.

In Melbourne, it is noted that Inland Rail will benefit directly from the improvements in port connectivity that are being separately implemented by the Victorian Government, Port of Melbourne and industry stakeholders.

In Brisbane, FORG notes that an existing dual gauge connection from the nominal end point of Inland Rail at Acacia Ridge to the Port of Brisbane already exists, but that additional capacity would be required as Inland Rail volumes grow. The medium- and longer-term needs for a connection from Inland Rail to the Port of Brisbane have been the subject of a recent study by the Federal and

Queensland Governments in consultation with industry. It will be important that capacity is provided in line with demand growth to ensure that a connection to the Port of Brisbane does not become a constraint on ability of rail freight operations to meet future demand.

The Australian Government is also undertaking a business case of the potential for a connection from Inland Rail at Toowoomba to the Port of Gladstone that will assist in providing clarity on the viability of such a connection.

Opportunities from decarbonisation

FORG accepts the importance of making a transition to a low carbon future and that freight transport should contribute to the transition by reducing our carbon footprint.

We accept the science of climate change and the need for decarbonisation by industry globally aimed at reducing the increase in global temperatures.

At the same time, freight customers including major retailers such as supermarket chains and global customers of Australia's minerals and processed minerals are seeking to reduce their own scope 1 and 2 emissions, as well as scope 3 emissions that include emissions from transport supply chains.

The ability of the freight transport industry to reduce greenhouse gas emissions and to work towards decarbonised transport supply chains is already a component of freight supply chain competitiveness and will become a more significant factor in the future.
There are substantial decarbonisation benefits that can be realised immediately from increasing the utilisation of rail freight on transport supply chains. As has already been mentioned, rail freight produces 16 times less carbon pollution than road freight per tonne kilometre travelled[16].

FORG proposes the following policy options for realising decarbonisation benefits:

- Recognise the carbon reduction benefits of increasing the use of rail in cost-benefit analyses and other assessments used to inform government policy priorities for freight supply chains.

- As outlined above, there is the opportunity to link existing emissions reduction programmes to a national mode shift incentive scheme for rail freight operations on rail corridors competing with road where the road infrastructure (user) charges are lower than rail access charges. This would remove an impediment to the use of rail freight and potentially contribute to reducing overall transport sector emissions.

- Develop an option for carbon emission tax incentives for exporters and importers that contribute to lower emissions by choosing to use and also to invest in using rail freight supply chain operations.

Decarbonisation actions being taken by the rail freight industry

The rail freight industry is working to further extend the contribution of rail to the decarbonisation of freight and logistics supply chains in the future.

[16] Deloitte Access Economics, *Value of Rail 2020: The rail industry's contribution to a strong economy and vibrant communities,* prepared for the Australasian Railway Association, November 2020, page 4.

In partnership with research and industry collaborators, the rail industry is developing new technologies aimed at reducing rail freight's current scope 1 emissions, which are predominantly due to use of diesel locomotives.

The industry is currently working to test and develop the potential application of the following technologies:

- Hydrogen locomotives that, depending on how the hydrogen fuel is produced, could enable rail transport services with zero carbon emissions.
- Battery technology that could be used in conjunction with diesel or hydrogen locomotives

These and other technologies have the potential to reduce almost all of the current total of four million tonnes a year of greenhouse gas emissions from rail operations in Australia.

The potential application of these new technologies provides an opportunity for port and maritime services, by growing volumes carried to and from ports by rail, to make a substantial contribution to the decarbonisation of supply chains and to further improving their global and domestic competitiveness.

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