



**CEMENT INDUSTRY  
FEDERATION**



**CEMENT INDUSTRY FEDERATION  
SUBMISSION**

National Freight and Supply Chain Strategy Review  
Discussion Paper

**September 2023**



## 1. Introduction

Thank you for the opportunity to provide comment on the **National Freight and Supply Chain Strategy Discussion Paper**.

The Cement Industry Federation (**CIF**) is the peak industry body representing all Australian integrated cement manufacturers and comprises the three major Australian cement producers - Adbri Ltd, Boral Cement Ltd and Cement Australia Pty Ltd.

Australian cement manufacturing supports over 1,200 employees directly in high paid positions as well as hundreds of apprentices, contractors and transport operators. The cement, lime<sup>1</sup> and concrete value chain supports over 15,000 jobs in Australia.

The CIF agrees it is timely to update the National Freight and Supply Chain Strategy, following key lessons learnt during the COVID-19 pandemic and to ensure our freight systems and critical supply chains are resilient and sustainably competitive into the future, especially as Australia decarbonises its transport and supply chain systems.

The Strategy needs to be a key policy framework that provides overriding guidance to inform how Australia will have a fit-for purpose, efficient, flexible, cost effective and sustainable freight and supply chain system to manage the projected 35 per cent growth in freight volumes expected between 2018 and 2040.

Having 350 initiatives associated with the current strategy is ambitious and possibly unrealistic. This submission focusses on the core goals of the strategy, as they relate to the Australian cement industry, and provides comment on suggested changes, especially in relation to incorporating **decarbonisation**, **productivity** and **resilience** objectives into the updated plan.

The continued growth in Australian cement consumption, combined with recent volatile global and domestic supply chain conditions, highlights the essential need for well-informed planning of our current and future domestic and global supply chains. Governments at both the federal and state/territory levels need to take action with industry to this ensure this need is met.

## 2. Supply Chain Strategy Terms of Reference

The CIF supports the review terms of reference announced by the Federal Minister for Infrastructure, Transport, Regional Development and Local Government in August 2023 that will focus on:

- **Assessment of the Strategy's goals** to ensure it remains relevant, including by drawing on lessons learned following significant disruptions in the last few years, including COVID-19, various natural disasters/environmental disturbances and armed conflicts.
- **Measuring the performance of the strategy** to date and priorities for the next five-year National Action Plan.
- **Development of a small number of national, data-driven and high impact national key performance indicators.**

It is important that the results of the review are made publicly available when the final report is provided to the Infrastructure and Transport Ministers by the end of 2023, and an updated Supply Chain Strategy and Action Plan for the next five years by mid-2024.

## 3. Overview of the Australian Cement Industry Freight and Supply Chain

There are five integrated cement manufacturing facilities in Australia that produce approximately 60 per cent of Australia's domestic cement consumption - with a further 40 per cent imported (mainly as clinker) and then delivered to Australian coastal grinding facilities to produce cement).

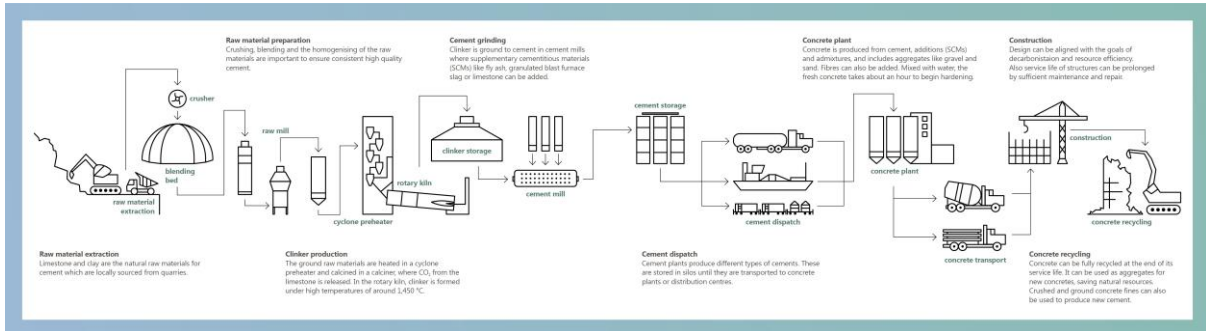
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<sup>1</sup> CIF members also produce lime, either in conjunction with clinker and cement or at stand-alone facilities

Cement manufacturers rely on road, rail and sea transport as part of its manufacturing supply chain to deliver inputs to the facilities and to deliver products to key destinations around Australia.

Domestic and imported cement (along with other cementitious materials) are then delivered to concrete batching plants that are located across Australia.

**Figure 1: Overview of the Cement Supply Chain**



Source: VDZ (2021)

**Freight accounts for 60 per of cement supply chain costs** with road transport being the most significant cost item. This is unsurprising as cement manufacturers manage one of the largest road transport fleets in Australia.

The majority of cement manufacturing facilities are also reliant on coastal shipping to move key inputs and to deliver final products to market. Future shipping, port and distribution efficiencies are key to ensuring the Australian cement industry remains sustainably competitive.

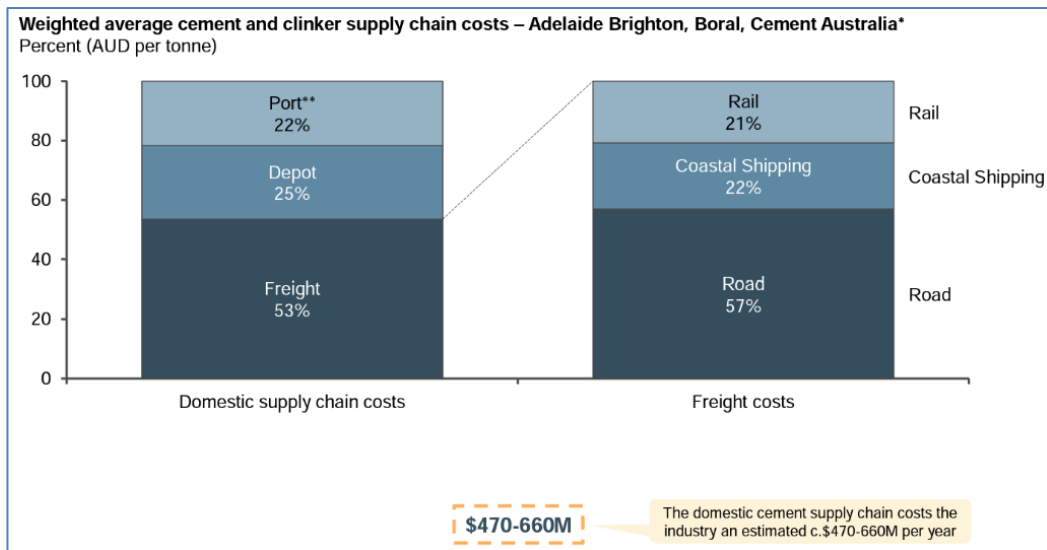
Future cement consumption is closely related to population growth – with cement consumption expected to nearly double of the next 30 years.

#### 4. L.E.K. Cement Freight and Supply Chain Study

The former Federal Department of Infrastructure and Transport commissioned L.E.K., a strategic and economic advisory firm, to provide a benchmarking analysis of Australian cement freight and supply chain costs in 2020. The Cement Industry Federation and its member companies provided significant input and resources to inform the L.E.K. project. The L.E.K. benchmarking analysis found:

- Australia's domestic supply chain accounts for a significant proportion of the cost of cement – estimated be 25-35 per cent.
- Cement manufacturers are highly reliant on road, sea and rail transport to move required inputs and the final product to market - **see Figure 2**.
- The competitiveness of Australian cement manufacturing competitiveness is being significantly impacted by plateauing freight productivity and increasing costs and regulation.

**Figure 2: Weighted average cement and clinker supply costs**



L.E.K. (2020)

## 5. Proposed Changes to the Strategy Goals

It is critical that the National Freight and Supply Chain Strategy continues to have the support of all levels of government and provides the framework to meet Australia's growing freight task. The domestic cement industry supply chain is forecast to double in size as the demand for cementitious materials continue to expand in line with Australia's population.

The Strategy's current national vision for freight systems and domestic and international supply chains is to contribute to a strong and prosperous Australia to 2040 and beyond through achieving seven goals. The CIF proposes that these goals be amended as follows:

- Improved efficiency and international competitiveness
- Safe, secure, **flexible, cost-effective, resilient** and sustainable operations
- A fit for purpose regulatory environment
- Innovative solutions to meet freight demand
- A skilled and adaptable workforce
- ~~An informed understanding and acceptance of freight operations.~~
- **A technology led decarbonisation of freight operations and related supply chains be pursued that is economically and sustainably practical.**

The CIF proposes that the second strategy goal should be changed to: 'safe, secure, **flexible, cost-effective, resilient** and sustainable operations.'

We further suggest that the last goal in the current strategy be changed to: 'a technology led decarbonisation of freight operations and related supply chains be pursued that is economically and sustainably practical'.

It is proposed that the Strategy goals and related Key Performance Indicators (KPIs) also be aligned with the 2050 net zero decarbonisation targets of the Australian Government and that interim goals be set that are realistic and achievable.

The CIF suggests that the goal in the current strategy: 'an informed understanding and acceptance of freight operation' be deleted. Action plans can inform the data requirements required to inform Australia's supply chain future capability. Collecting unnecessary data is expensive and time consuming.

## 6. Proposed Critical Action Areas

The current Strategy outlines four critical areas aligned with the key goals of the Plan. The CIF has highlighted in red proposed changes for inclusion in any future critical action areas:

- Smarter and targeted infrastructure investment
- Enable improved supply chain **sustainability, productivity**, efficiency and **resilience**
- Better planning, coordination and regulation
- **Efficient and cost-effective decarbonisation of Australia's freight and supply chains.**
- **Policy levers to consider ways to mitigate shortage of labour, in particular drivers (short- and long-haul) across the country, with a focus on supporting regional industries and**
- **Reducing unnecessary regulation and red-tape in an effort to boost productivity and competitiveness.**

The CIF agrees that the first three areas of alignment listed above be retained. Whilst data collection is important to inform policy and project decision making, the Cement Industry Federation remains concerned that any data collection project should have a purpose and that data should be collected on a needs basis to inform the Strategy.

The CIF agrees that it will be critical that our freight and supply chains decarbonise and should be aligned with the current national 2030 and 2050 goals. Financial and other incentives should be available to support this critical action area.

## 7. Strengthening the cement freight and supply chain

The National Freight and Supply Chain Strategy Discussion Paper requests feedback on what are the key national action areas that the future Strategy should focus on.

The Cement Industry Federation suggests the following be included as a priority:

- Infrastructure planning and investment
- Regulation and planning
- Heavy vehicle access
- Supporting and growing a strong and flexible labour force
- Maritime freight regulation
- Decarbonising the cement manufacturing freight supply chain

### 7.1 Infrastructure Planning and Investment

The cement manufacturing industry supports a strong and consistent pipeline of infrastructure projects to support a productive and efficient Australian economy. This means identifying those key freight routes required to support business as well as maintaining and developing infrastructure that best meets future freight needs.

The mapping of current and future supply chains alongside effective infrastructure forecasting and investment are vital to providing an effective freight system into the future. Ensuring we have a productive freight network can be funded through taxes, levies and other funds raised from the freight industry, provided it is 'ring fenced' to be invested back into infrastructure maintenance and development.

In May 2023 the Federal Minister for Infrastructure and Transport announced a comprehensive 90-day review of Australia's pipeline of infrastructure. Three months have since passed and an announcement of what is to be retained in Australia's infrastructure agenda is yet to be made.

The 90-day infrastructure review, spurred by rapidly rising labour and raw material costs, has exposed the vulnerability of an overburdened and overcommitted infrastructure pipeline. With construction costs soaring and many projects facing delays and cancellations, the Australian experience underscores the need for a judicious approach to planning and delivery – one that emphasises prioritisation, coordination and innovation.

## **7.2 Regulation and Planning**

A supportive regulatory and planning environment should be a key priority to support the decarbonisation of manufacturing facilities and their associated supply chains into the future.

Whilst regulatory and planning frameworks need to ensure safe and secure practices are supported, the timeframes for related approvals to be granted can take years. Elongated time periods to finalise planning and regulatory approvals must be improved – especially in light of the significant supply chain changes required to meet the national decarbonisation targets of 2030 and 2050.

The CIF urges the National Freight and Supply Chain Strategy to develop a framework that brings together Federal and State regulatory and planning bodies to create a streamlined and consistent approval process across all jurisdictions.

The CIF is concerned that trends in recent planning policy have tended to favour residential development over other uses, therefore allowing these developments to encroach upon industrial lands, freight infrastructure and corridors.

Examples include previous suggestions to move working ports and allowing rezoning to occur next to manufacturing facilities that has resulted in residential housing being built in previous exclusion zones.

The CIF recommends that the National Freight and Supply Chain Strategy establishes practical measures to ensure that proper consideration is given to the importance of industrial lands, ports and freight corridors in urban planning systems.

## **7.3 Heavy Vehicle Access**

The CIF strongly advocates for significantly improved heavy vehicle access, including the promotion of strategic road freight routes for higher productivity vehicles and options for addressing first and last mile issues.

Unfortunately, there is not a unified or standardized heavy vehicle regulation across the country. In practice, this means that heavy vehicles carrying cement may be compliant in New South Wales but not compliant in Queensland. A unified approach decreases the risk of companies breaching heavy vehicle regulations and laws, simplifies their regulatory compliance regime and boosts productivity.

Greater engagement and consistency across Local Government boundaries is a key barrier for our industry.

Further work needs to be done with Local Government and industry to identify and resolve first and last mile access issues. The CIF believes that Local Government heavy vehicle access systems need to be streamlined to provide consistency and ensure that heavy vehicle access is not impeded.

Our members are strong supporters of Performance Based Standards and their implementation across Australian jurisdictions. There should also be a consistent national approach for Higher Mass Limits, and that vehicles should be regulated on their performance, rather than length and mass. The industry asserts that increased mass limits for truck and dog trailer combinations would provide for strong productivity gains, increased capacity, as well as congestion reduction on the current network.

## 7.4 Supporting a Strong and Flexible Labour Force

The CIF worked closely with all levels of Government to ensure our manufacturing facilities could continue to produce cementitious products during the COVID-19 pandemic. Cement kilns must operate at a temperature of around 1,450 degrees Celsius and therefore need to run 24 hours a day, seven days a week. Allowing different approaches to manage staff in a safe and supportive environment was made possible during this period.

There were many lessons learnt from the pandemic, including measures that supported our freight and supply chains to function.

However, there is a deep concern amongst our members that the current Federal workplace reform agenda will lead to significant inefficiencies across our freight and supply chain and therefore require further scrutiny.

With labour shortages also prevalent across our supply chain, especially in terms of road transport drivers, it is critical that continued emphasis is placed on attracting new employees, especially in terms of diversification.

## 7.5 Maritime Freight Regulation

Australian cement manufacturers are highly reliant on Australia's maritime logistics system. Australian Maritime infrastructure and services are critical for the timely delivery of domestic manufactured cementitious materials and related bulk imports.

The CIF is concerned that the system is underperforming and requests this review includes investigates:

- Current **port congestion issues** resulting in unnecessary and expensive demurrage charges and other flow-on impacts that are seriously undermining the efficient and cost-effective delivery of goods and services. These delays are significant in a number of ports that the Australian cement industry is reliant upon and can inhibit our members' ability to meet contractual obligations to key infrastructure projects.
- The extensive regulatory burden and related costs being placed on Australian cement manufacturers due to the introduction of the **Coastal Trading (Revitalising Australian Shipping) Act** in July 2012. Australian manufacturers are highly reliant on coastal shipping to move their inputs and final products around Australia's coastline.

The Federal Department of Infrastructure and Transport has undertaken numerous reviews that have identified the unnecessary complexity and regulatory burden associated with of the Coastal Trading Act 2012. In the 2019 review, submissions on proposed 'pragmatic reforms' were requested. The CIF proposals included:

- Removal of the five-voyage minimum requirement to apply for a temporary licence
- Streamlining the processes for making changes to temporary licences by creating a single variation process
- Amending voyage notification requirements so notifications are only required when voyage details have changed from those approved on the licence
- Amending the tolerance provisions for temporary licence voyages to better reflect industry practice
- Allowing for temporary licences to be issued in emergency situations
- Amending the definition of coastal trading to include voyages commencing and concluding at the same port
- Allowing the coastal trading regime to include ships engaged in dry-docking

- Amending the definition of coastal trading to include voyages between ports and other defined places in Australian waters such as offshore facilities and
- Making minor technical amendments to several definitions in the Coastal Trading Act that require clarification to assist with administration.

These proposed changes to the Coastal Trading Act 2012 should be implemented as a matter of urgency to ensure sea freight costs remain sustainably competitive.

- **Biosecurity inspection charges** undertaken by Federal authorities should be based on sound cost recovery guidelines that include principles to ensure any proposed increase in Federal Government charges can be validated in terms of being both equitable and transparent. Bulk shipping carriers are subject to a cost recovery charge to cover biosecurity inspections on arrival into Australian ports.
- There has been a commitment by the Federal Government to consider providing financial support for a commercially operated '**strategic maritime fleet**' to secure key international supply chains. It is certainly not a regulatory impost that should be placed on Australian manufacturers reliant on coastal shipping (either directly or indirectly).

## 7.6 Decarbonising the Cement Manufacturing Freight and Supply Chain

Decarbonising cement manufacturing and the related freight and supply chain is a challenging task. However, our members are committed to reducing CO<sub>2</sub> emissions across the entire value chain. This means future freight and supply chain planning will need to be closely aligned to Australia's decarbonisation plans.

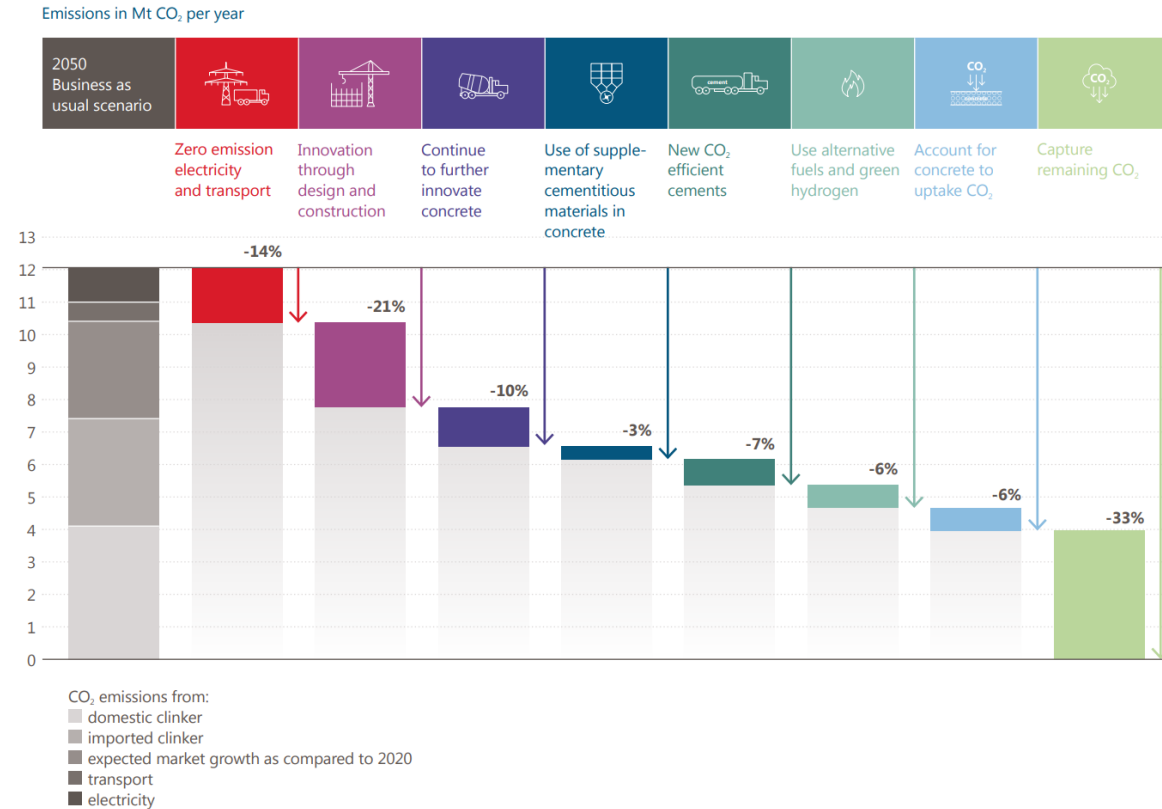
The national strategy should consider Australian design rules for vehicles that are more closely aligned to Europe. For example, the Australian Government should strongly consider adopting European standards around electric, hydrogen and other sustainable heavy vehicles, specifically focussing on the design of axle weights. Presently, it is not possible for European sustainable heavy vehicles to be used on Australian roads because they do not meet Australian design rules. This simple change to conform Australian design rules around axle weights with those of Europe, would likely see an influx of sustainable heavy vehicles on Australian roads.

VDZ, a world-renowned cement and concrete research centre, was commissioned to undertake a study to better understand the technologies and practices necessary to decarbonise Australian cement and concrete in 2021. The [report](#) identified eight decarbonisation pathways and key research requirements for the Australian cement and concrete industry to meet its declared ambition to deliver net zero carbon cement and concrete by 2050 (see Figure 3):

- Zero emissions electricity and transport
- Innovation through design and construction
- Innovation in concrete
- Use of SCMs in concrete
- Clinker substitution (new CO<sub>2</sub> efficient cements)
- Alternative fuels and green hydrogen
- Recarbonation
- Carbon Capture, Use and Storage



**Figure 3: Identified decarbonisation pathways for cement and concrete**



The business as usual scenario is based on a 40 per cent growth of the construction market by 2050

Importantly, the VDZ report demonstrated that a decarbonised cement and concrete sector is possible through concerted action across the full cement and concrete value chain. One of the key pathways is carbon capture, use and storage (CCUS). This will require significant investment in new infrastructure and transport as well as a supportive regulatory framework. Further information can be found in the following reference:

- CSIRO (2023 forthcoming) A Roadmap for Carbon Capture, Utilisation and Storage for Production of Low Emissions Cement and Lime.

## 7. Concluding Remarks

Australian cement manufacturers are significant freight users, especially road and maritime transport. The CIF looks forward to further engagement during this review and future implementation plans.

## 8. Contact for Further Information

Please contact Margie Thomson, CIF CEO if further information is required