

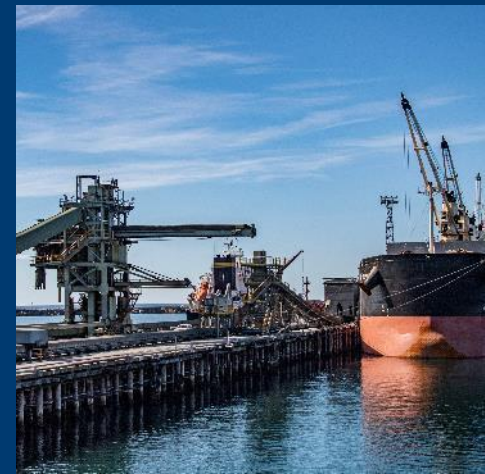
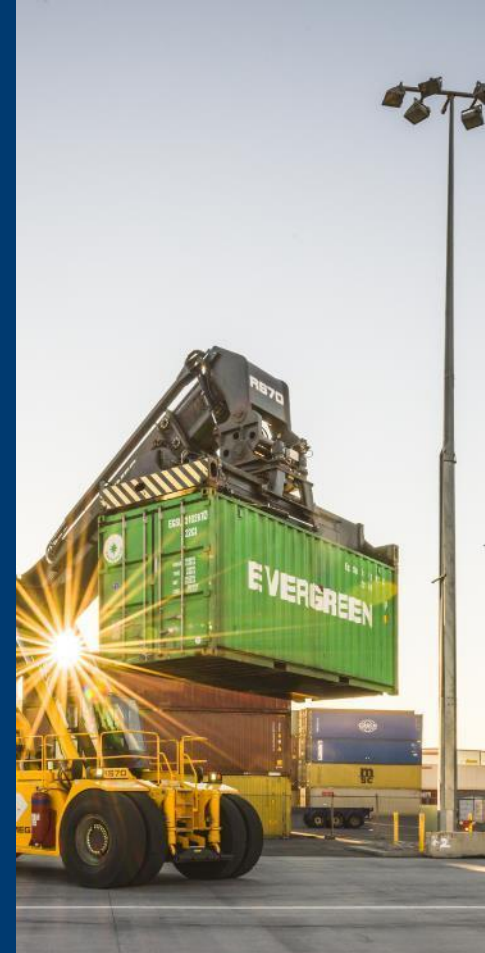
nswPorts

# APSA Conference

## Ports & Shipping panel session

Wagga Wagga, NSW

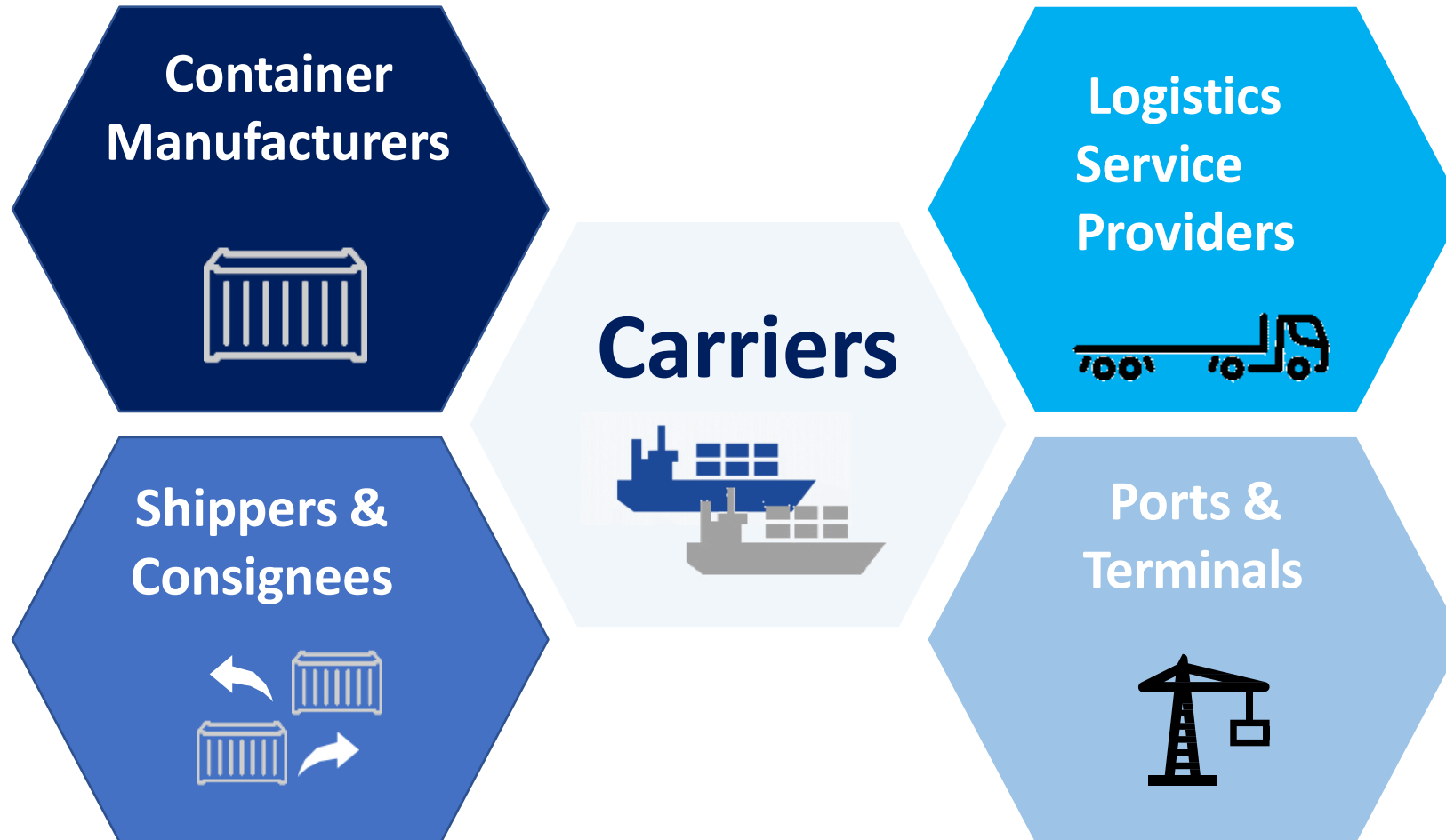
31 August 2022



# Acknowledgment of country

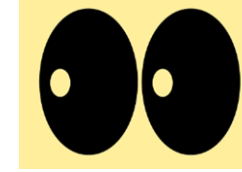


# All parties in the eco-system play a part



# What just happened?

A quick look back at 'Covid period' trade conditions



- Schedule reliability impacted
- Severe weather exacerbated delays
- Ad hoc port omissions to recover time
- Fewer port calls reduce 'effective capacity'
- Worsening supply-demand imbalance
- Pressure on ocean freight rates



- Labour availability down globally – lockdowns and illness (terminals, transport, warehousing)
- Vessels 'off-window' - port delays globally
- Pockets of congestion (esp overseas)

- Dramatic seasonal turnaround
- Bumper harvests (grains and cotton)
- High bulk & containerised volumes
- East coast weather disrupted rail
- Vessel delays = 'moving target'
- Services to some markets unavailable
- Modal diversification

- Spending pivoted from services to household goods (& DIY)
- Government support: cash boost
- Some panic buying
- Shift from 'just in time' to 'just in case'
- Surge in southbound volumes
- Higher freight costs
- Warehouse congestion

Turning to the focus question:

*Will market forces deliver intermodal, port and shipping capacity to meet the needs of exporters ?*



All infrastructure capacity along the chain needs to keep pace to maintain the 'size of the pipe' :

- Intermodal terminals
- Rail and road networks
- Ports
- Shipping



# Container intermodals



# Regional intermodal infrastructure

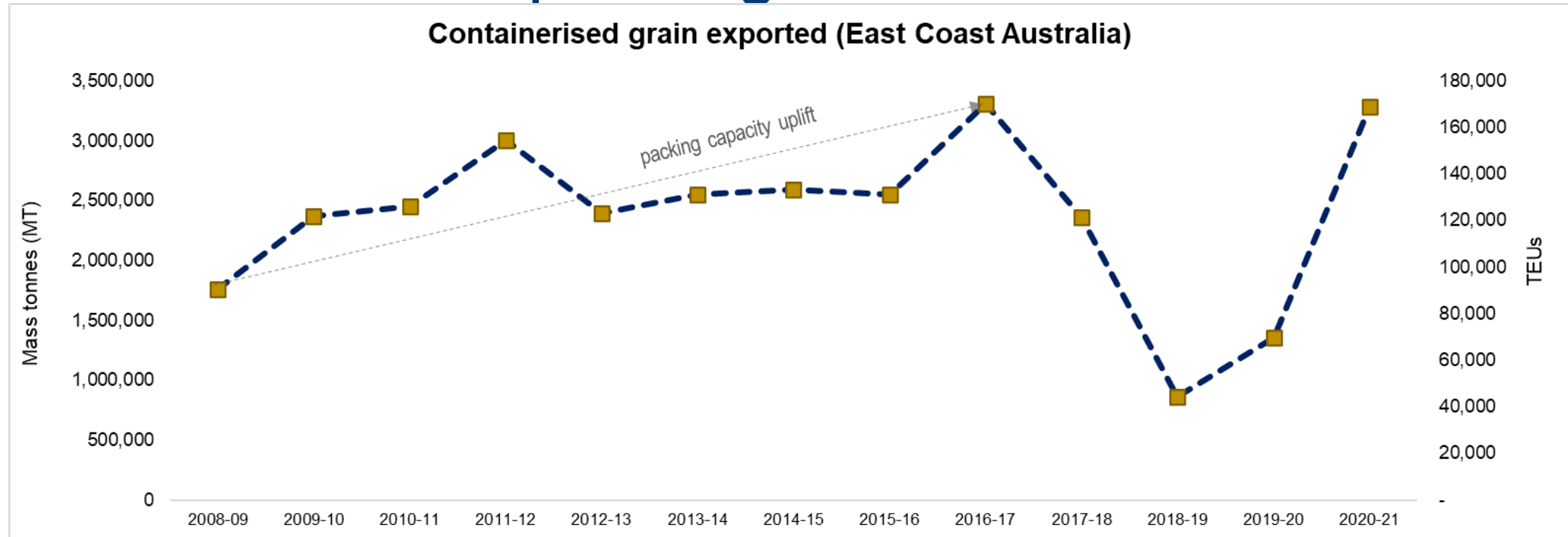
NSW context - principally developed and operated by private logistics sector operators and exporters

Government support is an important enabler in terms of streamlined planning (e.g. Special Activation Precincts)





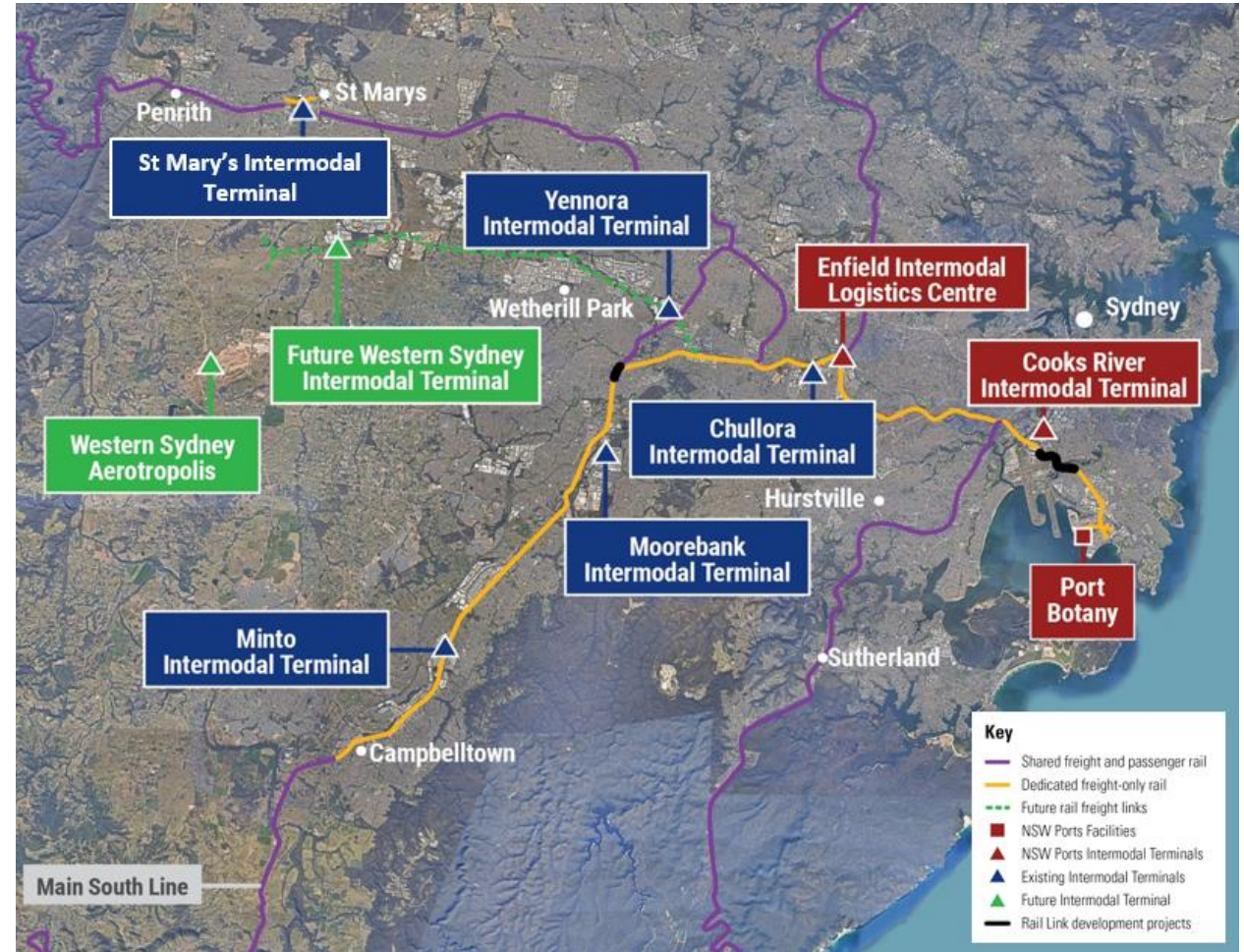
# Grain container packing



# Metropolitan intermodal terminals

NSW context – metropolitan intermodal terminals operated by private logistics providers but governments have key involvement in facilitating development e.g:

- State government owns Enfield and Cooks River facilities (leased to NSW Ports)
- Moorebank involved collaboration between Federal Government and Qube
- Western Sydney Intermodal (Mamre Rd) being driven by TfNSW – and is linked to the Western Sydney Freight Line project
- Western Sydney Aerotropolis – both Federal and State governments involved in planning and corridor preservation



# Bulk grain intermodals



# Bulk Grain Terminals

## East Coast Australia has significant capacity upcountry

Many service providers: GrainCorp, Cargill (Grainflow), AGT, Qube Agri, Fletchers, Louis Dreyfus, Robinson, Arrow, Emerald, Viterra, Namoi Cotton, Grain Link and others

On Farm Storage represents approximately 50%

## Key Investment

- Upcountry Rail Loading capability
- Siding extensions to accommodate larger trains
- Passing loops to increase productivity
- Storage expansion in constraint areas and growth areas

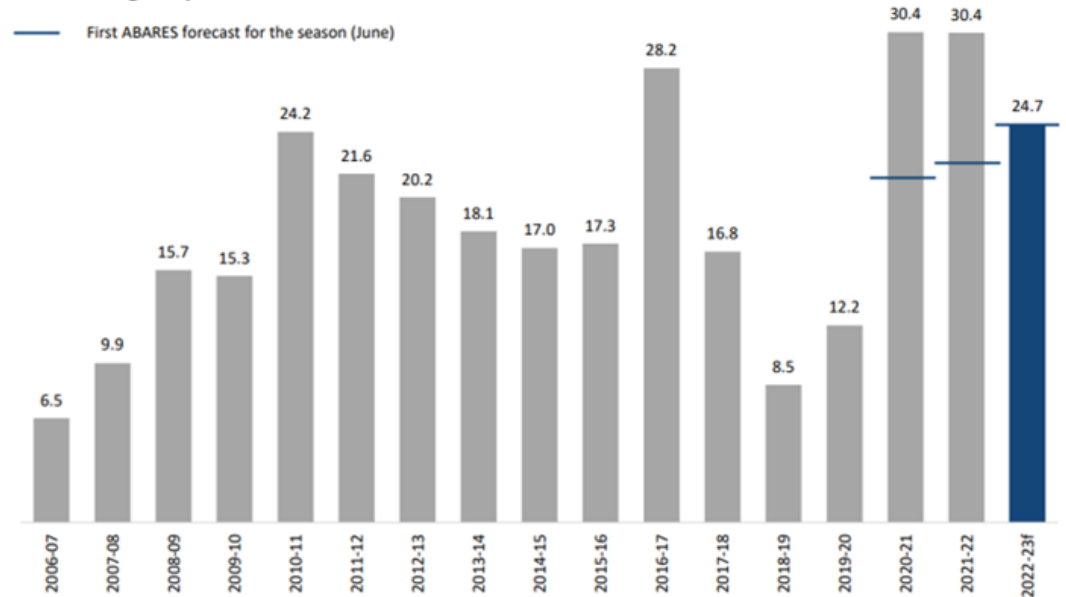


## Record crop production in ECA, positive longer-term trend

Consecutive bumper crops, potential for third in 2022-23

### ECA winter grain production<sup>1</sup>

— First ABARES forecast for the season (June)



The current situation for the Australian grains industry is extraordinary and unprecedented.

- Back-to-back enormous crops – with very strong prospects of a third consecutive bumper harvest
- Disruption to global grain flows due to Ukraine conflict and geopolitical uncertainty
- Very high levels of carry-over in the network
- There is no historical precedent for the volume of grain currently moving through the Australian supply chain.

# The rail network



# Rail network investment

Network enhancement (new & upgraded infrastructure) is a combination of:

- ❖ Government investment:
  - Federal - ARTC (existing network and Inland Rail)
  - State - regional and metropolitan networks (eg NSW government's Fixing Country Rail programme)
  
- ❖ Private sector investment:
  - Up Country rail loading and intermodal facilities
  - Metropolitan intermodal facilities
  - On-dock rail facilities (port operators and stevedores)
  - Rolling stock (rail operators)

Market forces will drive private sector investment – which needs to be coupled with government investment in '*below rail*' works

Rail freight industry advocacy is critical to inform government capital allocation and corridor preservation decisions








# Port infrastructure



# Investment in port infrastructure

Capital investment over the last decade in NSW Ports' facilities: **\$2.3 Billion** (& further investment committed)

	<b>Port Botany</b> (incl. Enfield & Cooks river)	<b>Port Kembla</b>	
	NSW Ports: <ul style="list-style-type: none"> <li>• Port Botany rail infrastructure</li> <li>• Port Botany road grade separation</li> <li>• Enfield infrastructure &amp; warehousing</li> <li>• ECP infrastructure</li> <li>• Bulk Liquid berth upgrade</li> <li>• Channel dredging</li> </ul>	NSW Ports <ul style="list-style-type: none"> <li>• Road and rail infrastructure</li> <li>• Grain facility</li> <li>• Berth and breakwater upgrades</li> <li>• Utility infrastructure</li> <li>• Channel dredging</li> </ul>	
	Tenants (incl, stevedores): <ul style="list-style-type: none"> <li>• Patrick automation and rail facility</li> <li>• DP World cranes and pavement</li> <li>• Hutchison civils and equipment</li> <li>• Bulk liquid facilities</li> <li>• Qube and ACFS improvements</li> </ul>	Tenants: <ul style="list-style-type: none"> <li>• Coal terminal upgrade</li> <li>• Grain handling facilities</li> <li>• LNG import terminal works</li> <li>• Cement import facilities</li> </ul>	



# Bulk Grain Port Capacity

Significant Capacity across ECA from multiple bulk handlers

Mackay



## Port of Mackay

GrainCorp

## Port of Newcastle

GrainCorp

NAT



Carrington

Gladstone



## Port of Gladstone

GrainCorp

Mobile Ship Loaders

## Port Kembla

GrainCorp

Quattro



Port Kembla

Fisherman's Island



## Port of Brisbane

GrainCorp

QBT

## Port of Geelong

GrainCorp

Mobile Ship Loaders –  
Riordan's Grain



Geelong

Pinkenba



Mobile Ship Loaders

## Port of Portland

GrainCorp

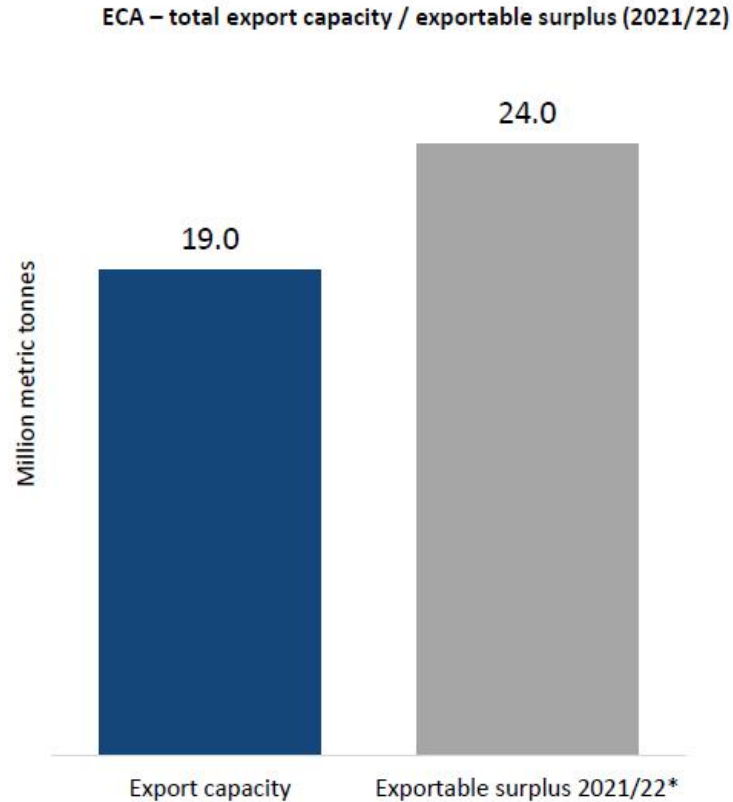
Mobile Ship Loaders –  
Riordan's Grain & Port of  
Portland



Portland

# Exportable surplus exceeding export capacity in ECA

Supply Chains running at full capacity to move grain to domestic and international customers



Source: ACCC, ABARES, Rabobank 2022

\* Assuming constant YOY domestic consumption/stocks



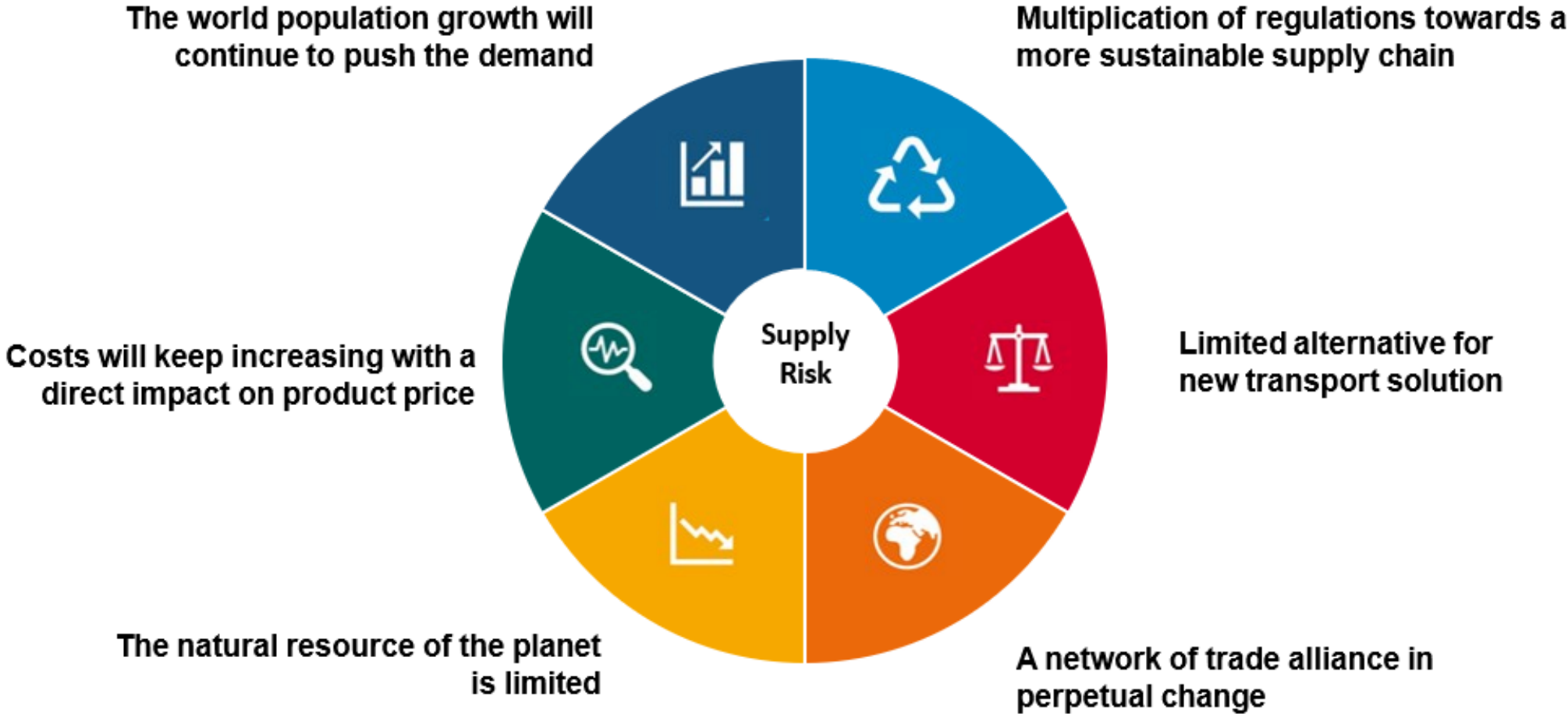
## The single biggest constraint on our industry is ability to get the grain to port

While there is more than adequate storage capacity in the country and bulk ports generally only operate at one-third capacity, the connecting supply chain is currently operating at 250% of an average task according to the ACCC Bulk Grains Monitoring Report

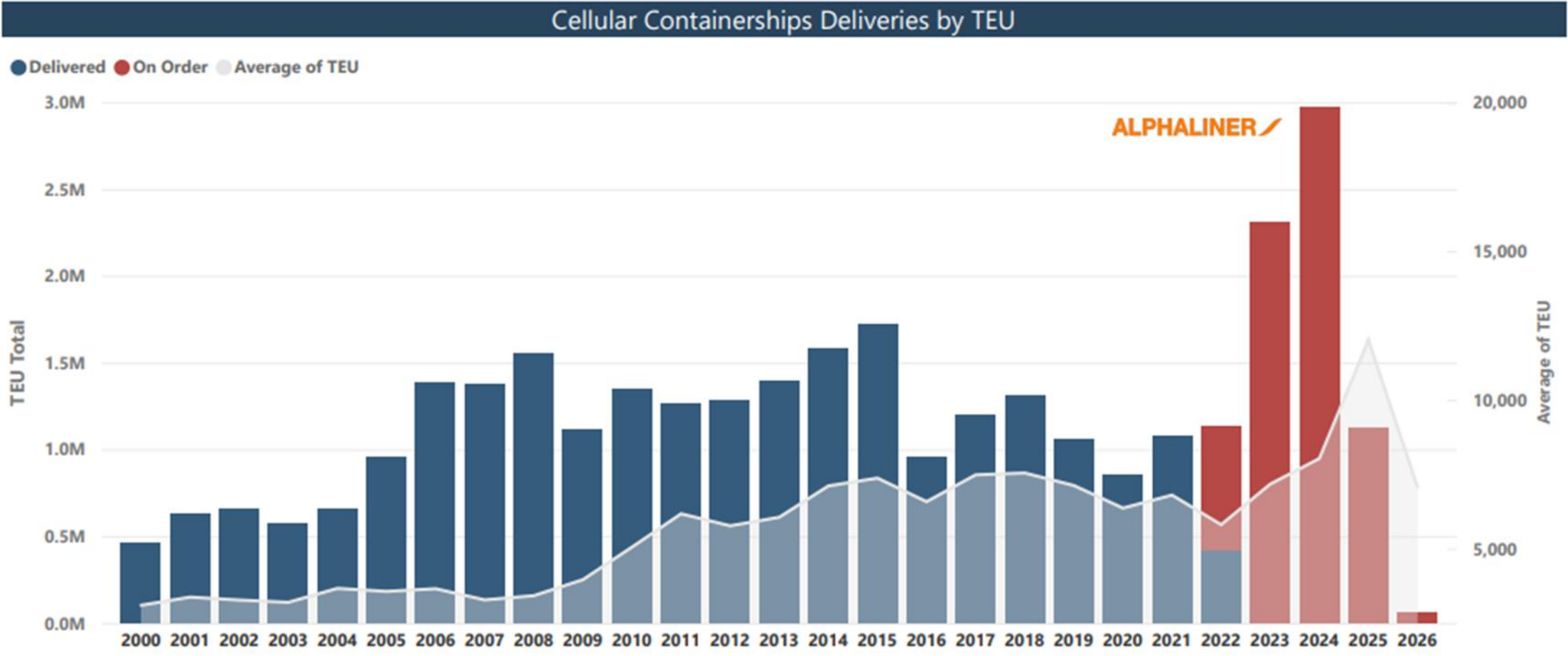
# Shipping



# Six majors challenges for the Supply Chain of Tomorrow



# Shipping industry response - ships



Capacity on order (>7 m TEU) has now reached 27.9% of on-the-water capacity. The ratio was a mere 8.2% at the cycle low in October 2020 (Alphaliner)

# Shipping industry response - containers

- In 2021, a record 7.2M TEUs (up 14%) were manufactured and added to the global container fleet, taking the total to 50.5M TEUs.
- China dominated container manufacturing in 2021 and accounted for 97% of all container production
- Current production is predominantly 40 ft containers. (Shipping lines to collaborate with exporters re solutions to meet future container type demand).





National Freight and  
Supply Chain Strategy



# Workforce Issues

How can we:

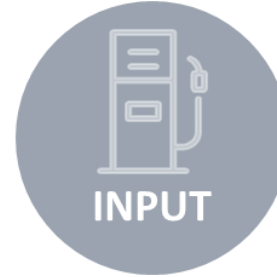
- Attract new workers to the transport sector
- Address barriers to workers entering the industry, including the transferability of skills
- Reduce areas of acute skills shortages
- Improve opportunities to gain skills and provide broader career path options
- Identify any data shortcomings that should be rectified





# Road and Rail Supply Chain Resilience Review

Components of a supply chain:



For example:	transport workforce (e.g. drivers, mechanics, logistics staff)	physical infrastructure (e.g. roads, rail), vehicles (e.g. trucks)	fuel, including additives	imports
Government initiatives addressing these issues include:	<b>Department of Education</b>	<b>Department of Infrastructure, Transport, Regional Development, Communications and the Arts</b>	<b>Department of Industry, Science and Resources</b>	<b>Department of the Prime Minister and Cabinet</b>
	<b>Department of Employment and Workplace Relations</b>	National Freight and Supply Chain Strategy Ongoing stewardship work across all transport modes	Supply Chain Resilience Initiative AdBlue Taskforce	<b>Department of Foreign Affairs and Trade</b>
	National Skills Commission	<b>Road and Rail Supply Chain Resilience Review</b>	Office of Supply Chain Resilience	Supply Chain Resilience Initiative (Australia-India-Japan)

Other government bodies that consider supply chain resilience from a whole-of-community perspective include:

<b>Department of Home Affairs</b> , including Emergency Management Australia, Critical Infrastructure Resilience and National Coordination Mechanism	<b>Department of Climate Change, Energy, the Environment and Water</b> , including the Australian Climate Service	<b>National Recovery and Resilience Agency</b>	<b>Department of Defence</b>
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State and territory governments and industry are also involved and consider supply chain resilience from a jurisdictional and industry perspective.

# Overview



# Connectivity is critical to cargo flow

Private sector will over time invest in infrastructure to meet demand (where adequate return is projected)

Government investment in road and rail is also key to create an effective network and '*size of pipe*'

- Upcountry to Port connectivity needs '*flex capacity*' to handle the irregular agricultural commodity task

Beyond infrastructure, governments also play a role in:

- Strategic co-ordination (e.g National Supply Chain Strategy)
- Rail network access (operational hours, pathing allocation, passenger sharing balance)
- Skills training and addressing other workforce issues
- Network resilience and contingency planning
- Data sharing across industry
- Future proofing & corridor preservation

*Will market forces deliver intermodal, port and shipping capacity to meet the needs of exporters ?*

# *Q&A Discussion*