INQUIRY INTO NATIONAL FREIGHT AND SUPPLY CHAIN PRIORITIES

Submission by Port of Newcastle
July 2017

Port of Newcastle

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EXECUTIVE SUMMARY

> "It is important that the national and state freight, port and supply chain strategies create an environment in which ports can equally compete for trade, and in which cargo owners can choose the most efficient and cost-effective port supply chain for their cargo."

I am pleased to provide the following submission to the Inquiry into National Freight and Supply Chain Priorities on behalf of the Port of Newcastle.

The Port of Newcastle is the largest port on the east coast, and Australia's third largest port by trade volume. It is well placed to support the predicted doubling of Australian freight over the next 20 years and beyond.

The port has the capacity to handle more than 328 million tonnes of trade and more than 10,000 shipping movements per annum – more than double its current trade. This can be delivered via the existing deep water shipping channel and 200 hectares of vacant port land which presents a huge opportunity for state and national economic growth, without major government investment.

It is centrally located between Melbourne and Brisbane and in close proximity to the key export area for New South Wales, offering new efficiencies for cargo owners and an opportunity to avoid capital city congestion.

The Port of Newcastle is now privately owned, under a 98-year lease with the NSW Government. Brisbane, Botany and Kembla ports are now also privately owned.

Many of Australia's ports now operate in a commercial environment, in which port owners and managers are focussed on utilising the full capacity of their port to deliver greater efficiency and shareholder value.

It is important that the national and state freight, port and supply chain strategies create an environment in which ports can equally compete for trade, and in which cargo owners can choose the most efficient and cost-effective port supply chain for their cargo.

Reducing the cost base also increases Australia's competitiveness internationally, providing opportunities for domestic producers to access markets they are currently unable to reach. This has the potential to increase trade over and above existing projections.

In developing the National Freight and Supply Chain Strategy, I encourage the Federal Government to recognise the contribution of regional ports to Australia's economy, and the capacity that they offer to support the nation's current and future freight task. I would recommend that regional parts are a part of the review structure in future planning.

For example, the Port of Newcastle is already offering a solution to the population growth and associated congestion occurring in Sydney and Brisbane, without the need for significant government investment in infrastructure.

With 200 hectares of vacant port land and a shipping channel that can handle more than double the current trade, the Port of Newcastle offers significant value to Australian cargo owners and the broader economy.

Geoff Crowe
Chief Executive Officer, Port of Newcastle

THE PORT OF NEWCASTLE AT A GLANCE

- 200 hectares of vacant port land ready for development.
- Superior national road and rail network connection. Direct heavy vehicle access to the berth.
- Berth side rail connection.
- 15.2m deep shipping channel can handle more than 10,000 ship movements per annum (more than double the current trade)

PORT OF NEWCASTLE PROFILE

Our Role
Port of Newcastle is the commercial manager of the port and has a 98-year lease* with the NSW Government. We manage:

- Trade and port development.
- 792 hectares of port land.
- Wharf and berth services.
- Maintenance of major port assets.
- Vessel scheduling.
- Dredging and survey services.
- Cruise shipping.
- Legal, planning and environmental services.
- Community and stakeholder relations.

Port of Newcastle works in partnership with the Port Authority of NSW, customers and port and supply chain service providers to run a safe and efficient port.

$18.69 BILLION VALUE OF TRADE IN 2016

#1 WORLD'S LARGEST COAL EXPORT PORT

3rd LARGEST PORT IN AUSTRALIA

25th LARGEST PORT GLOBALLY

Overview of the Port
The Port of Newcastle handles nearly 168 million tonnes of trade per annum. By tonnage it is the largest port on the east coast, the third largest in Australia and the 25th largest globally. The port has capacity to more than double its trade.

Distance to major centres (kilometres)
- Sydney - 161 kms
- Brisbane - 781 kms
- Dubbo - 377 kms

Superior geographic gateway
- Market population catchment of 6 million.
- Convenient heavy vehicle transit time to Sydney, Brisbane and major NSW rural centres.
- National rail connectivity.

Capacity
- The port is less than 50% utilised. It can handle more than 328 million tonnes of trade and more than 10,000 ship movements per annum.

Port of Newcastle's shareholders are The Infrastructure Fund (TIF), one of Australia's top performing infrastructure funds whose investors include superannuation funds representing more than 2 million members, and China Merchants Group, which was established in 1872 as the first commercial corporation in China and now has more than $820 billion in global assets under management across 13 countries.

* Port of Newcastle operates under a 98-year lease with the NSW Government which commenced in May 2014.

PORT OF NEWCASTLE PROFILE

The Port of Newcastle's natural catchment area extends west to Parkes and north to Moree, taking in Dubbo, Tamworth, Armidale, Narromine and Walgett. It encompasses land rich in minerals and agriculture, meat, timber and the manufacture of steel and aluminium.

The port handles nearly 168 million tonnes of trade and 4,600 ship movements per annum. Its 25 cargo types span the variety of modes including dry bulk, bulk liquids, break bulk, project, Ro-Ro passenger and containers.

As the world's largest coal export port, the Port of Newcastle and its rail supply chain demonstrate the capability to move one of the largest haulages of export trade in Australia. The rail supply chain is also equipped to accommodate other large scale freight.

The Port of Newcastle's advantages include:

- 200 hectares of vacant portside land with existing deep water access, including the 90-hectare Mayfield Site, which is the largest parcel of vacant portside land on Australia's east coast
- An 11 kilometre shipping channel which can handle more than double the port's current trade - that is, more than 10,000 ship movements and 328 million tonnes of trade per annum.
- Berthside connection to the National ARTC and Hunter Valley rail networks with huge potential for trade growth.
- Road connectivity to the national heavy vehicle network, without capital city traffic congestion.

In addition to handling the world's largest coal export operation, the Port of Newcastle imports building materials, equipment and fuels which support developments across New South Wales including:

- Railway steel and tunnel boring machinery for the Sydney Metro Northwest Rail Project.
- Wind turbines for wind farms in the Glen Innes region.
- Rail wagons which have been placed on the berthside rail line and railed via the national network to Victoria and South Australia.
- Fuel imports support the mining, farming and logistics industries throughout New South Wales.

THE NSW GOVERNMENT'S HUNTER REGIONAL PLAN 2036

The NSW Government's Hunter Regional Plan 2036 notes that the Hunter region is *"the largest regional economy in Australia, ranking above Tasmania, the Northern Territory and the Australian Capital Territory in terms of economic output. It drives around 28 per cent of regional NSW's total economic output and is the largest regional contributor to the State's gross domestic product".*

The plan also notes that *"the Hunter is strategically situated to leverage proximity to Asia and the region's growing agricultural, health, education and tourism sectors to supply developing Asian economies with resources and products".*

The NSW Government notes that *"the Port of Newcastle will continue to play an important role in the regional economy through the international export of goods and commodities (including coal and grains) from the Hunter and Regional NSW. It is the largest coal exporting port in the world. The Port of Newcastle has diversified its operations over time to respond to changing markets and demands. The port's facilities and services will need to remain responsive to changes arising from global demand and national economic policy".*

Actions of the plan include:

- 2.1 Promote diversification of operations at the Port of Newcastle and the Newcastle Airport and enhanced connectivity to the Asia-Pacific.
- 4.4 Promote freight facilities that leverage the Port of Newcastle and its associated freight transport network.
- 4.5 Plan for multimodal freight facilities that support economic development of the region and respond to the location of the proposed Freight Rail Bypass.
- 26.3 Protect existing and planned major infrastructure corridors and sites, including inter-regional transport routes like the M1 Pacific Motorway and the railway, port and airports to support their intended functions.

WHAT IS MOVING WHERE, WHY AND HOW? (2.1)

- *What infrastructure is used in your supply chain and how well does it perform?*
- *What changes would you like to see to make your supply chain work better?*
- *What data gaps are you aware of in relation to Australia's freight and supply chains?*

RAIL

The Port of Newcastle has direct connections to the Australian Rail Track Corporation's (ARTC) network via:

- The North South Rail Corridor connecting Brisbane, Sydney and Melbourne; and
- The Hunter Valley Rail Network connecting the port to the Hunter Valley and Western NSW.

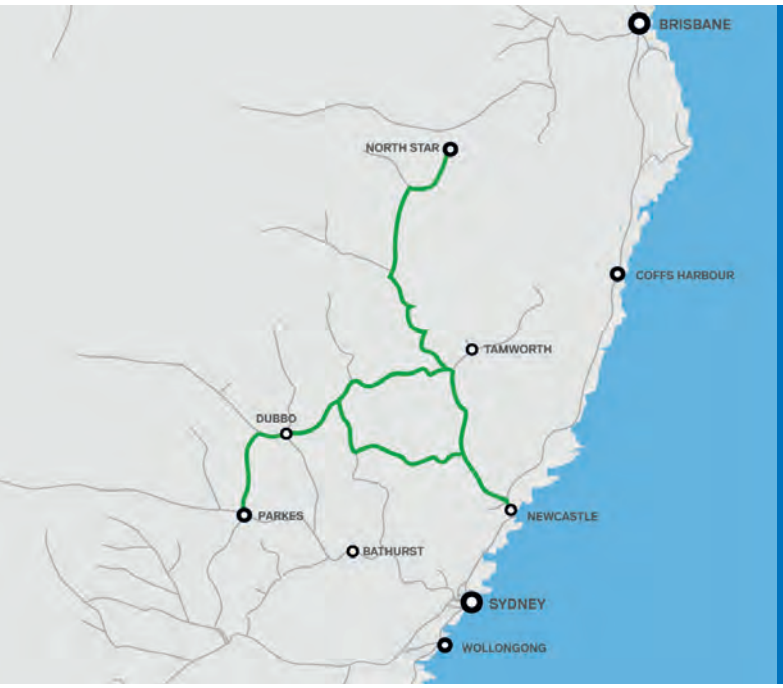
97% of the port's trade is moved by rail, and the vast network that enables the efficient movement of coal also benefits other trades, such as grains and mineral concentrates.

Via the national ARTC network, the port is connected to Western Australia, South Australia, Queensland and Victoria.

The port has direct access to the national ARTC rail network and the Sydney Metro Network.

We recognise the benefits to cargo owners and to the broader community in moving freight by rail, rather than road, where possible. Protecting rail corridors from urban encroachment is crucial for all ports, given the expected growth in freight volumes.

The Port of Newcastle has direct access to national rail and road networks.



THE ARTC NETWORK

The ARTC Hunter Valley Network consists of more than 1,000 kilometres of track, extending to Parkes via Dubbo in the Central West of NSW to North Star in the far north of the state. In 2016 the Hunter Valley network hauled around 37 billion gross tonne kilometres, which is equivalent to 132,000 B Triple movements.

The ARTC network has ample capacity for new freight. For example, it offers grain growers from Moree to Newcastle the opportunity to double or triple payloads.

The ARTC network can run heavier, longer grain trains than ever before:

- Grain trains: 1,200-1,350m or 70+ wagons long.
- Coal trains: 1,800m or 90+ wagons long.

INLAND RAIL

Existing rail connections nation-wide need to be protected and maximised. The Port of Newcastle has connections to the proposed Inland Rail route via existing rail networks. The first stage of the Inland Rail will intersect the east-west corridor at Parkes, improving the existing connection to the port directly with regional catchments in Victoria and New South Wales without the need to use the congested capital rail networks.

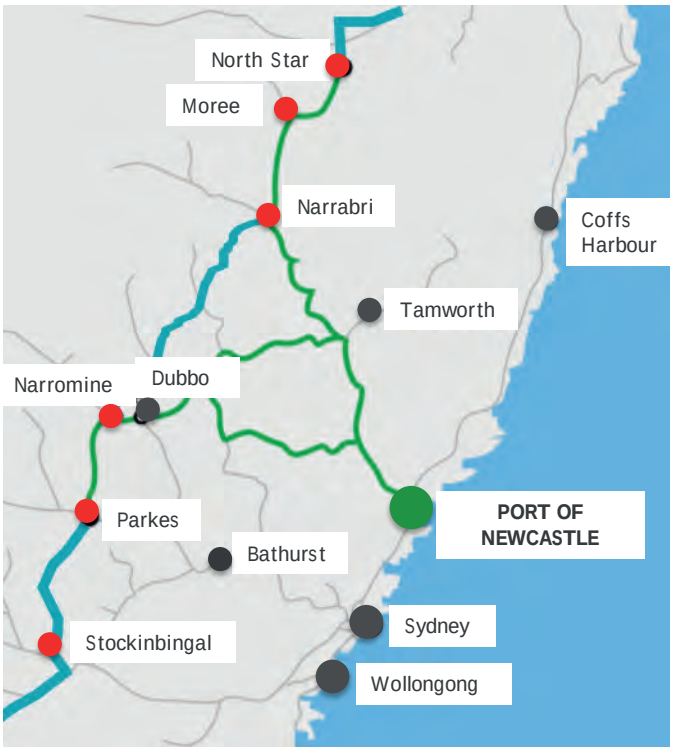
This introduces improved alternatives to road freight as well as the opportunity for the establishment of market-led supply chains through increased choice and competition between modes (road vs rail) and choice of export ports.

Along with connectivity, there is a need to investigate and identify smaller 'enabling projects' that can utilise, improve and enhance the existing rail network for greater efficiency, productivity and consequence and to ensure that this investment in the Inland Rail is fully captured and leveraged.

For example, investment in regional infrastructure such as rail bridge upgrades will provide the opportunity to increase train axle loads within the existing rail network and facilitate trains running more economically into Newcastle.

Existing rail connections nation-wide need to be protected and maximised.

The Port of Newcastle has connections to the proposed Inland Rail route via existing rail networks.



Pictured: The proposed Inland Rail and connections to the Port of Newcastle.

CASE STUDY: COST SAVINGS FOR AUSTRALIAN FARMERS

The Port of Newcastle welcomed the largest, continuously tipped export grain train in Australia's history in December 2015.

The 1.3 kilometre long train demonstrated the massive opportunity for grain producers to save transport costs by railing their freight to the Port of Newcastle.

In announcing the trial, the Hon. Warren Truss said: "The size of this train more than doubles the payload capacity of the standard grain train that current runs through the Hunter Valley Network.

"In simple terms, the increase in payload means at least $5 to $10 a tonne reduction in hard costs for the grower – a massive saving."

The train was loaded with more than 5,000 tonnes of wheat from a collection of North West growers at Louis Dreyfus facilities in Moree and Narrabri. The cargo was then railed to Newcastle Agri Terminal at the Port of Newcastle for export to Southeast Asia.

ROAD

Source: NHVR Journey Planner Website

RMS HEAVY VEHICLE NETWORK

Port operations and efficiencies rely on the continued provision and ongoing strengthening of heavy vehicle road networks.

The Pacific Motorway (M1), Pacific Highway, Hunter Expressway, New England Highway, Industrial Drive, Tourle Street and Cormorant Road are the primary freight roads that provide interstate access and link major regions across New South Wales. These roads form the primary freight route to the port and provide relatively congestion-free heavy vehicle freight movements to and from the port to regional, intrastate and interstate markets.

The ongoing protection of these transport corridors from urban encroachment is vital for continued efficient port operations and to minimise transport impacts within the broader community. The close proximity of these national and state roads to the port provide for efficient movement of freight to and from the port, minimising transport movements within urban areas.

The port's private road network enables customers to drive their trucks between the berth and storage facilities without accessing a public road network, which allows greater efficiencies.

All berths in the Port of Newcastle are B Double accessible. Port roads can accommodate overmass and oversized cargoes, such as the 63 metre long wind turbine blades that were imported in July 2017 – the largest to arrive in Australia.

Additionally, Port of Newcastle maintains 13 kilometres of publicly accessible roads within the port boundary which are maintained to Australian standard. These publicly accessible roads have a pre approved package with the National Heavy Vehicle Regulator for oversize and overmass cargoes.

NHVR REGULATORY FRAMEWORK

The National Heavy Vehicle Regulator's (NHVR) role is to develop and maintain a regulatory framework that supports the heavy vehicle industry and for all parties in the supply chain to take responsibility for safety while promoting sustainable improvements in productivity and efficiency.

The NHVR is developing a new regulatory framework by 2020 which aims to address inconsistencies between state regimes.

Port of Newcastle is supportive of initiatives that improve safety and have regard for efficiency and innovation. Port of Newcastle owns and maintains a heavy vehicle road network within the port.

Port of Newcastle encourages the NHVR to involve ports or the industry body, Ports Australia, in consultation around the proposed changes to ensure they are designed for the end to end supply chain.

The port's 15.2m deep shipping channel can handle more than 10,000 ship movements per annum (more than double the current trade)

SEA

The port has significant capability for shipping with a deep draft channel providing access for large vessels up to Capesize.

The Port of Newcastle, with its central geographic location on the eastern seaboard, is ideally placed to take advantage of growth in coastal shipping. It has connectivity to multi directional shipping routes serviced by the major shipping lines undertaking coastal and international trade.

The Port of Newcastle is serviced by shipping lines which call to multiple Australian ports as part of their regular shipping schedules. Cargo can be transported via rail between interstate and NSW regional centres and the port, reducing the reliance on road transport.

Pictured: Transport networks at the Port of Newcastle.

COMPETITIVENESS IN THE AUSTRALIAN FREIGHT SECTOR (2.2)

In your view, is Australia's freight system internationally competitive?

Port of Newcastle supports the Australian Government's view, expressed in the Inquiry into National Freight and Supply Chain Priorities Discussion Paper, that:

"Just as enhancements made by infrastructure owners to the transport network potentially offer supply chain managers new ways to achieve value, those supply chain managers must also ensure they choose the most efficient transport mode for a given freight task. An integrated supply chain perspective is therefore central to managing the performance and future design of each element of Australia's national freight infrastructure, whether ports, airports, roads, rail or intermodals."

As an island nation, ports are crucial to Australia's productivity and global competitiveness. Existing port capacity and supply chain infrastructure needs to be leveraged to drive greater value for cargo owners. Regional ports and their road and rail supply chains offer significant capacity that can be leveraged to avoid major government investment in the duplication of expensive infrastructure to at best partially resolve bottlenecks at capital city ports.

The capacity in the Port of Newcastle's land, channel and supply chains can be utilised to increase Australia's competitiveness. Within the port, there are a range of service providers, terminals and common user facilities for customers to choose from.

Competition between ports drives innovation. For example, Port of Newcastle has worked with Newcastle Agri Terminal to enable the refuelling of grain trains at the dump station, which saves 14 hours and 2 connect/disconnect movements to separate sidings.

What are the key indicators which tell us this?

Key indicators could include:

- The time and length of the cargo journey. For example, from cargo origin to port for export, and the port to cargo destination journey for import.
- The cost per tonne for cargo owners.

How important is freight movement to your business competitiveness?

Trade growth underpins the success of any port business. Similarly, efficient and cost effective freight options are key to the competitiveness of Australian importers and exporters. In planning state and national freight strategies, both ends of the supply chain need to be considered.

A significant portion of exports from Newcastle's catchment area are being railed to Botany or trucked to Brisbane, which incurs extra costs for the supply chain and ultimately, the customer - including farmers. A modal shift from bulk to containerisation is occurring, which is reducing some of the port's bulk exports.

A container terminal at the Port of Newcastle would offer choice for the cargo owner, and cost and efficiency savings.

Cost and efficiency savings have been demonstrated in railing bulk export grain to the Port of Newcastle, which increases the global competitiveness of Australian farmers.

Over $1.4 billion has been invested in the ARTC's Hunter Valley network over the last decade, resulting in additional capacity, catering for current and forecast coal volumes. This infrastructure, which supports a world class coal supply chain, also provides a platform to improve supply chain efficiencies within grain and other cargos.

Are regulatory factors affecting productivity for your business? How could this be improved?

It is important that government policies and infrastructure investments provide a level playing field for ports and their associated supply chains to compete for trade.

The private sector environment in which many major ports operate is an opportunity for governments to refresh freight policies. For example, the current State policy gives preference to the growth of containers at Port Botany and the development of a Port Kembla container terminal over Newcastle. Often there is opportunity in renewing and thinking afresh the solution to infrastructure bottlenecks and capacity constraints.

The Federal Government's proposed changes to competition legislation, which are in line with the recommendations of the Productivity Commission Review into the National Access Regime, are critical in providing a stable and solid platform for the growth of Australian assets.

The Productivity Commission Review accepted the view of its previous 2002 review that found the National Access Regime should only be used in limited exceptional circumstances. It also concluded that the benefits of the ACCC using its powers to arbitrate terms of access for infrastructure services would rarely outweigh the costs. The amendments introduced by the Treasurer on March 30, 2017 reflect these recommendations.

URBAN GROWTH PRESSURES (3.1)

What are the key issues for freight in Australia's major cities?

Bottlenecks in supply chains feeding capital city ports can be removed or eased by utilising neighbouring ports.

For example, the Port of Newcastle receives imports of building materials and equipment for Sydney-based developments, and developments throughout New South Wales. This avoids transporting oversized cargoes through busy city roads.

How Australia's urban networks can better prioritise passenger and freight services in the most effective manner possible

The Port of Newcastle's rail supply chain has minimal interface with the passenger network. It is important that these corridors are protected.

A tunnel boring machine is unloaded at the Mayfield 4 berth.

CASE STUDY: EQUIPMENT FOR THE SYDNEY METRO

The Port of Newcastle handles large, bulky cargoes for developments across New South Wales. Its port-side storage and uncongested road and rail supply chains provide an alternative to capital city ports.

Port of Newcastle imported about 6,500 tonnes of railway steel and tunnel boring machinery for the $8.3 billion Sydney Metro Northwest Rail Project.

The railway sleepers were received at the Port's Mayfield 4 berth in 20 metre lengths and were transported to Sydney by truck. The tunnel boring machinery was received in components and trucked to Sydney via the M1 Motorway.

Port of Newcastle now has a dedicated project cargo storage facility at the Mayfield Precinct to meet the increasing demand in NSW for large project cargo import facilities and appropriate storage areas. This need has been driven by the growth of the wind power sector and the need to import related equipment and components, the ongoing operation of the mining sector particularly in the Hunter region, and the increase in large infrastructure projects in NSW including road and rail projects in Sydney and the Hunter region.

The Mayfield Storage Facility utilises the heavy-duty deck at the Mayfield 4 berth, and has a large unencumbered area of hardstand for storage and staging with direct access to the national highway.

This is a competitive advantage as alternative ports are not ideally suited due to the large area of land required for project cargo, constraints arising from the need to transport oversize cargoes through congested urban areas, costs associated with significant distances from end markets and project locations.

How are our cities and supply chains being impacted by changing consumer behaviours such as online shopping?

New retailers require large scale warehousing with facilities for cargo staging, located near a port and heavy vehicle road networks.

The Port of Newcastle has 200 hectares of vacant land which can be used for port related developments, including warehousing. It also has a concept approval for a multi-modal freight facility.

The 90-hectare Mayfield site

What are the critical last mile issues you face in urban areas?

The importance of protecting transport corridors from urban encroachment is acknowledged and well understood by governments at a strategic and policy level. However, at a local decision-making level urban encroachment and land use conflict issues are often not adequately considered, at either the rezoning stage or the assessment of new development in close proximity to the port or transport corridors.

For example, in some parts of the Port of Newcastle there is limited separation between the port boundary and adjoining residential or commercial zoned land. There has been little allowance for buffer zones or the development of physical buffers. There have been cases of sensitive land uses being developed immediately adjacent to the port boundary causing land use conflict and potential for operational restrictions or constraints even though the port has operated for decades at the location. In other cases residents of new developments have been unaware of the potential amenity impacts that may arise from the normal operations of a working port including noise from ships horns, helicopter operations, tug boat operations, and loading and unloading operations.

Former port land and waterside locations are becoming increasingly attractive as redevelopment opportunities, particularly in cities. Revitalisation provides an opportunity to ensure that appropriate mitigation measures are included the design of new residential buildings at the outset. There is a strong need for leadership, and a coordinated approach to regulation across different jurisdictions. Education amongst decision makers as to the importance of freight as well as equal weight given to the economic justification for freight supporting developments is also needed.

"Managing the land uses surrounding important transport corridors is important to maintain efficiencies in the network, particularly the national freight network, and to allow for future growth."
(Hunter Regional Plan, NSW Department of Planning 2016)

"Land planning and corridor preservation needs to balance the freight requirement against community and traffic amenity."
(National Ports Strategy – Infrastructure Australia)

CASE STUDY: THE ECONOMIC CONTRIBUTION OF REGIONAL AUSTRALIA

The Federal Government's Regions 2030 Plan recognises the value of regional Australia to the national economy:

"Regional Australia is not just important to those of us who live here. The Australian economy is largely driven by its regions. Australia's agriculture, forestry, fishing and mining industries, predominantly located in regional Australia, made up 57 per cent of the value of Australia's merchandise exports in 2016. Forty five cents in every dollar spent in Australia by international or local visitors is spent in regional areas. Most of the gas and electricity which powers city households is produced in regional Australia.

"It is only logical that we should invest in Australia's regions because Australia's regions power Australia's economy. Investing in our regions pays massive dividends for our nation—strong regions are the foundation of a strong Australia," noted Senator the Hon. Fiona Nash, Minister for Regional Development, Minister for Local Government and Territories Minister for Regional Communities.

In a speech to the National Press Club on 19 April 2017, the Senator noted:

"Strategic investment in regional Australia can help fix overcrowding of capital cities, and my good leader has made a lot of comment about this and he's spot on the money. I'm sure most Sydney and Melbourne people have a horror story about the M7 or West Gate Bridge. Building new roads or rails in capital cities costs multiples more than it does in the country because the city projects require bulldozing houses and digging tunnels.

"The more people move to the country, the less it costs our nation—and I suspect that's something that many people have never considered. Work by the Department of Planning and Regional Development in Victoria revealed housing 50,000 new people in Sydney cost the government $4 billion in infrastructure; to house those people in regional New South Wales cost $1 billion. For every 50,000 people who choose to live in the country, governments save roughly $3 billion in infrastructure costs. Being good doesn't necessarily mean big, it means being a community of choice."

PORT CORRIDOR PRESSURES PROTECTING LAND, SEA AND AIR CONNECTIONS (3.2)

- *Do you face, or expect in the future to face, problems moving your freight through Australian air, land or sea ports?*
- *How can Australia's maritime channels be appropriately maintained and able to accommodate bigger ships?*
- *How are other countries dealing with the landside implications related to distributing cargo from bigger ships?*

As an island nation largely dependent on maritime trade, our ports allow Australia to trade with rest of the world and bring revenue through exports to the global market.

Shipping channels of ports need to be recognised as critical infrastructure and an essential corridor that needs protection. However, in order to ensure the ongoing sustainability and efficiency of the national freight network there must be recognition that shipping channels are nationally important assets and supported by appropriate regulatory framework.

The Port of Newcastle is a river port with the channel requiring continuous maintenance dredging, a task that has been continuously required and performed since 1859. Loss of channel depth equates to the inability to move freight into or out of Australia and additional supply chain costs.

There is a need for statutory certainty in terms of ongoing maintenance dredging and offshore placement. Currently, Port of Newcastle holds a 10 Year Sea Dumping Permit issued by the Department of Environment for the disposal of maintenance dredge material at sea. In order to secure the ongoing availability of the channel and protection of this corridor, the issue of a perpetual permit should be considered, subject to ongoing monitoring and reporting.

The nature of global shipping is changing with rapid growth in the size of vessels. In anticipation of accommodating larger vessels in the future, Port of Newcastle has undertaken extensive channel modelling and vessel simulations to understand what channel infrastructure improvements will be required.

As previously identified, the number of vessel movements accommodated by the Port of Newcastle shipping channel is less than 50% of its current utilisation. Minor additional dredging with additional navigation aids and marker buoys will allow larger vessels to access the port, providing the opportunity for a more diverse range of cargoes.

As vessels increase in size there are challenging landside implications faced by ports in discharging cargo vessel. Other ports are needing to create inland ports (e.g. intermodal hubs) or increasing land capacity by land reclamation, which has significant economic costs and environmental impacts. By contrast Port of Newcastle has vacant portside land accessible by deep water channel available for port development, which means higher efficiency, lower costs and lower environmental impact.

END TO END SUPPLY CHAIN INTEGRATION AND REGULATION (3.3)

- *Do you face, or expect in the future to face, problems moving your freight through Australian air, land or sea ports?*
- *How can Australia's maritime channels be appropriately maintained and able to accommodate bigger ships?*
- *How are other countries dealing with the landside implications related to distributing cargo from bigger ships?*

Transitioning freight between modes
The port has robust infrastructure which currently services the world's largest coal export operation, and previously also a large steelworks.

The rail infrastructure that services the coal industry has flow on benefits across other industries. It is an efficient, low cost supply chain.

Environmental regulations
In some areas there is a cross over between federal and state requirements. For example, the federal agency, DAFF Biosecurity, requires that certain cargoes be fumigated before leaving the port, whereas the NSW Environment Protection Authority is restricting the practice.

Another example is the NSW Government's attempts to regulate the fuel and emissions of foreign vessels in NSW, which is the role of international conventions and the Federal Government.

Security
Ports are required to comply with an increasing burden of national security regulations, which are required by the three Federal agencies – the Office of Transport Security, the Australian Border Force, and the Attorney General's Critical Infrastructure Centre. Ports currently bear the cost of new government security requirements, for example, closed circuit television, gates and fencing. This adds to the cost of freight and means less money is being invested in the supply chain. It would be good to see government investment and assistance offered to ports towards the cost of future security measures. Having three different regulators of security in port areas inserts duplication, uncertainty and added costs.

Empty containers
Newcastle does not have any issues with empty containers. In most other ports there is an oversupply of imports vs exports which adds costs. The Port of Newcastle doesn't have that issue as the Port has a higher demand for export than import. Additionally, the port has scope for intermodal capacity at the port side. If a container terminal and intermodal hub was developed at Newcastle, it could reduce supply chain movements and handling costs.

THE AIR FREIGHT MARKET (3.4)

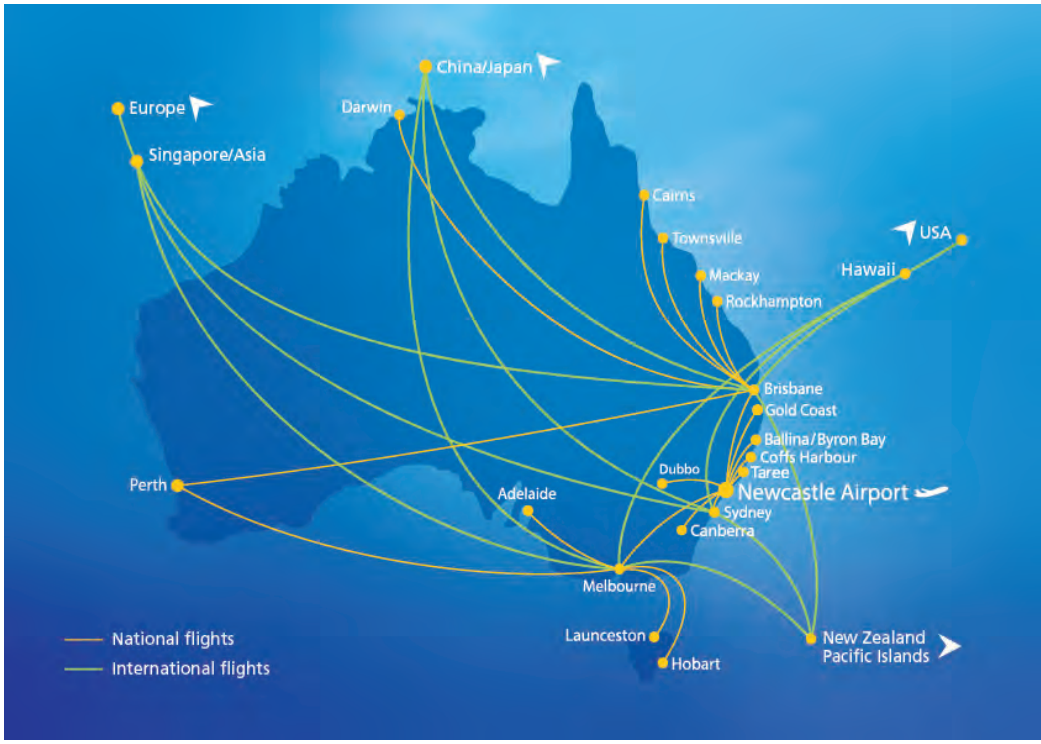
- *Are our airports appropriately integrated into surrounding freight networks?*
- *Are there any international examples of where airports are used more effectively in freight networks?*
- *Can Australia be making greater use of air freight?*

The Port of Newcastle is located 25 minutes from Newcastle Airport – an expanding hub with international capability.

Newcastle Airport has an annual throughput of 1.25 million passengers.

The Airport services nine direct destinations along the eastern seaboard and connects the region to the rest of Australia and internationally through hub airports Brisbane, Gold Coast, and Melbourne.

Qantas Freight operates an on-site freight service on all domestic flights from Newcastle Airport with cargo being transported on their aircraft belly hold. Virgin Australia also handles minor belly hold cargo at the airport. No off-site freight forwarders and integrators operate from the airport at present.



CHANGING TECHNOLOGY (3.5)

- *What emerging technological trends do you think will impact on your supply chain?*
- *When are these impacts likely to be felt and how does Australia's freight infrastructure need to be adapted to make best use of likely changes?*
- *Do you feel you can make use of the technology you need?*

New technologies
There is a global industry push towards automation for global competitiveness. This can be cost prohibitive if retro-fitting is required. Port of Newcastle's vacant land provides an opportunity to build new facilities that are fit for purpose. For example, a multi-modal freight facility.

There will be an increasing need for end to end cargo tracking, which will require cooperation across the supply chain including port operators and government agencies.

Drones
There is an increasing use of drones around Newcastle Harbour. There is a need for the regulator, the Civil Aviation Safety Authority, to ensure that regulations contemplate safety and security in port areas. For example, the safe transit of pilotage helicopters, and the safe loading and unloading of vessels.

CAPACITY FORECASTING (4.1)

Any data or insights you are willing to contribute to assist in capacity forecasting assessment would be appreciated

The Port of Newcastle is well placed to support future growth in Australian trade. The port can handle more than double its current trade volumes. Its shipping channel has been modelled at more than 328 million tonnes and 10,000 ship movements per annum. Terminal operators within the port have ample capacity to support the continued growth of bulk products.

- The coal terminal operators, Port Waratah Coal Services and the Newcastle Coal Infrastructure Group, have a combined terminal capacity of 211 million tonnes per annum. This is 48.2 million tonnes above the 2016-17 coal export volume of 162.8 million tonnes.

- Newcastle grain terminals, GrainCorp and Newcastle Agri Terminal, have a combined throughput capability of 4 million tonnes per annum. This is 2.4 million tonnes above the 2016-17 year to date volume of 1.6 million tonnes.

- In 2016-17, 1,639 megalitres (ML) of fuels was imported using 266 ML of tankage currently available across the three terminals within the Port of Newcastle. There is significant additional capacity available as only 43% of the approved tankage capacity has been constructed to date and a further 338ML of tankage has been approved for construction. Once all approved tankage is constructed and operational, 3,630 ML of fuels, both combustible and flammables, will be able to be imported per year.

Additionally, the Port of Newcastle manages 792 hectares of port land, zoned for port development, of which 200 hectares is vacant.The Mayfield Site has a concept approval for a multi-modal freight facility and further growth in bulk liquids imports.

KEY DRIVERS OF CHANGE FOR USE IN SCENARIO PLANNING (4.2)

The inquiry welcomes views on what factors and key drivers of change should be considered in the scenario planning analysis.

The inquiry is also keen to identify key functional elements of supply chains through case studies demonstrating how Australia's freight system is working on the group, including case studies about things working well, as well as examples of the problems and where improvements can be made. Identification of potential future trends in supply chains would be valuable.

Key drivers of change include:

- Many of Australia's east coast ports are now privately owned and compete for trade.

- There is increasing congestion around capital cities and the roads surrounding those ports. Regional ports can offset some of this congestion by feeding the capital cities from the outside-in.

- Growers/producers/customers need to compete effectively on cost and the Port of Newcastle can deliver a superior service and cost solution for customers.

A NATIONAL FREIGHT PERFORMANCE NETWORK

The inquiry is particularly interested in views on the potential need for a national freight performance framework and the likely key indicators.

Port of Newcastle is supportive of the Government's initiative to develop a national freight performance framework and success indicators. It would be good to measure:

- Modal split including the volume of freight transported by rail compared with road.
- The existing capacity within Australian ports including vacant land and shipping channels.
- The capacity in existing road and rail supply chains which feed the nation's ports.

Stolthaven's bulk liquids terminal at the port's Mayfield site

CASE STUDY: FUELLING THE RAIL AND MINING INDUSTRIES

Fuel imports are now the port's second largest trade with 2016/17 fuel imports totalling 1,639 megalitres (ML) in 2016/17.

The move away from refining fuel in Australia has created a new supply chain where refined fuel can be shipped to the port closest to the customer.

Major customers of diesel fuel in New South Wales include mining, agriculture and rail. The Port of Newcastle's close proximity to the mining regions and its direct access to roads is convenient for fuel imports. This has helped ease traffic congestion via less fuel trucks travelling through Sydney and up the M1 motorway.

The port has three bulk liquids import terminals run by Stolthaven, ATOM and Park Fuels. A dedicated bulk liquids berth is being constructed at the port's Mayfield Precinct which will accommodate vessels up to LR2 capacity.

There is capability for other fuel imports in the future such as aviation fuel and ethanol.

There is 266 mega litres of tankage available within the port across the three terminals. A further 338 mega litres of tankage is approved for construction. Therefore, the port is approved to double its fuel storage.

CASE STUDY: RAIL CONNECTION TO THE NATIONAL NETWORK

Port of Newcastle maintains and controls the only berth-side rail line on Australia's east coast.

This allows direct ship crane lift from the West Basin 3 and 4 berths to two rail sidings which are connected to the national ARTC network. This facility is available for both import and export.

For the customer, this provides a flexible and cost effective solution for moving rail assets in varying frequencies, from major campaigns, to one off shipments. The port also maintains an adjacent hardstand area for the establishment of these rail assets where required.

Rail wagons have been imported via Newcastle and railed to Victoria and South Australia. Imports have included locomotives, passenger cars, light rail, coal and grain wagons, flat top, intermodal, aggregate and track cleaning machinery.

CASE STUDY: IMPORTING NSW WIND FARMS

The Port of Newcastle is the port of choice for wind farm developments in New South Wales.

In 2016-17 the port worked with Goldwind Australia and its logistics providers to import 70 wind turbines for the White Rock Wind Farm in Glen Innes.

The turbines and blades were manufactured in China and were the largest to arrive in Australia to date – each measuring 59.5 metres long.

Port of Newcastle facilitated shipping, freight forwarding, stevedoring and transportation to deliver efficiencies and cost savings for the cargo owner.

"Port of Newcastle's proximity to the site and the ability to store the cargo for after-hours transport when the roads are quiet is an advantage. The storage area allows our technicians to prepare the turbines for road transport and deliver them when the site is ready to receive them."
John Gardner, Vice President of Program Delivery at Goldwind Australia.

In July 2017 the port welcomed the first shipment for the CWP Renewables Sapphire Wind Farm Project. The blades, each measuring 63 metres, are now the largest to have been imported to Australia.

CASE STUDY: EAST COAST MARINE HUB

A new East Coast Marine Precinct is being established at the Port of Newcastle.

Thales Australia, part of a global defence company, has announced a phased development which will create a major marine ship repair and maintenance hub for the east coast.

The facility will support ship docking, repair and maintenance work as well as engineering, deeper level repairs and maintenance.

The NSW Government has provided support for the upgrade of the slipway which will allow the port to handle bigger ships.

Phase one will involve the repair of the slipway to allow for ship repairs and maintenance on vessels from 20 to 55 metres in length and up to 1,000 tonne displacement. Seventy new jobs will be created in phase one. It will position NSW as a leader in maritime maintenance and drive economic growth.

CASE STUDY: RO-RO VESSELS

The Port of Newcastle has considerable capacity and experience in handling roll-on/roll-off (Ro-Ro) vessels and associated trade.

A global Ro-Ro vessel operator has been a regular caller to the port on numerous occasions over a 20-year period delivering high and heavy cargoes, mining machinery, construction equipment and rail rolling stock to our common user berths.

The multipurpose nature and diverse mix of cargoes of this trade enables shipping lines to determine which port best suits their needs. Customers with smaller volumes are sometimes disadvantaged by having their cargo sail past their closest port and delivered to an alternate port with the customer incurring the cost and significant transport times to truck back to the end destination.

A key example being mining machinery imports which are destined for the Newcastle and the Hunter Valley mining region which are currently delivered to other ports and are then unnecessarily trucked back through Sydney.

CONCLUSION

Innovative thinking is needed to meet Australia's future freight task and to ensure the competitiveness of Australian producers and importers. The Port of Newcastle is part of that solution.

The Inquiry recognises that there is an increasing demand for Australian resources and produce from Asian markets. The Port of Newcastle is already a major player in that space as the world's largest coal export port and a key exporter of Australian agricultural products.

The Inquiry also recognises the population growth that is occurring in major Australian cities. The capacity to double trade to more than 328 million tonnes per annum through the Port of Newcastle utilising existing port and rail supply chains presents an opportunity to reduce congestion in Sydney and Brisbane, and to leverage government supply chain investment. This also offers more choice to NSW growers and producers who benefit from competition and lower supply chain costs.

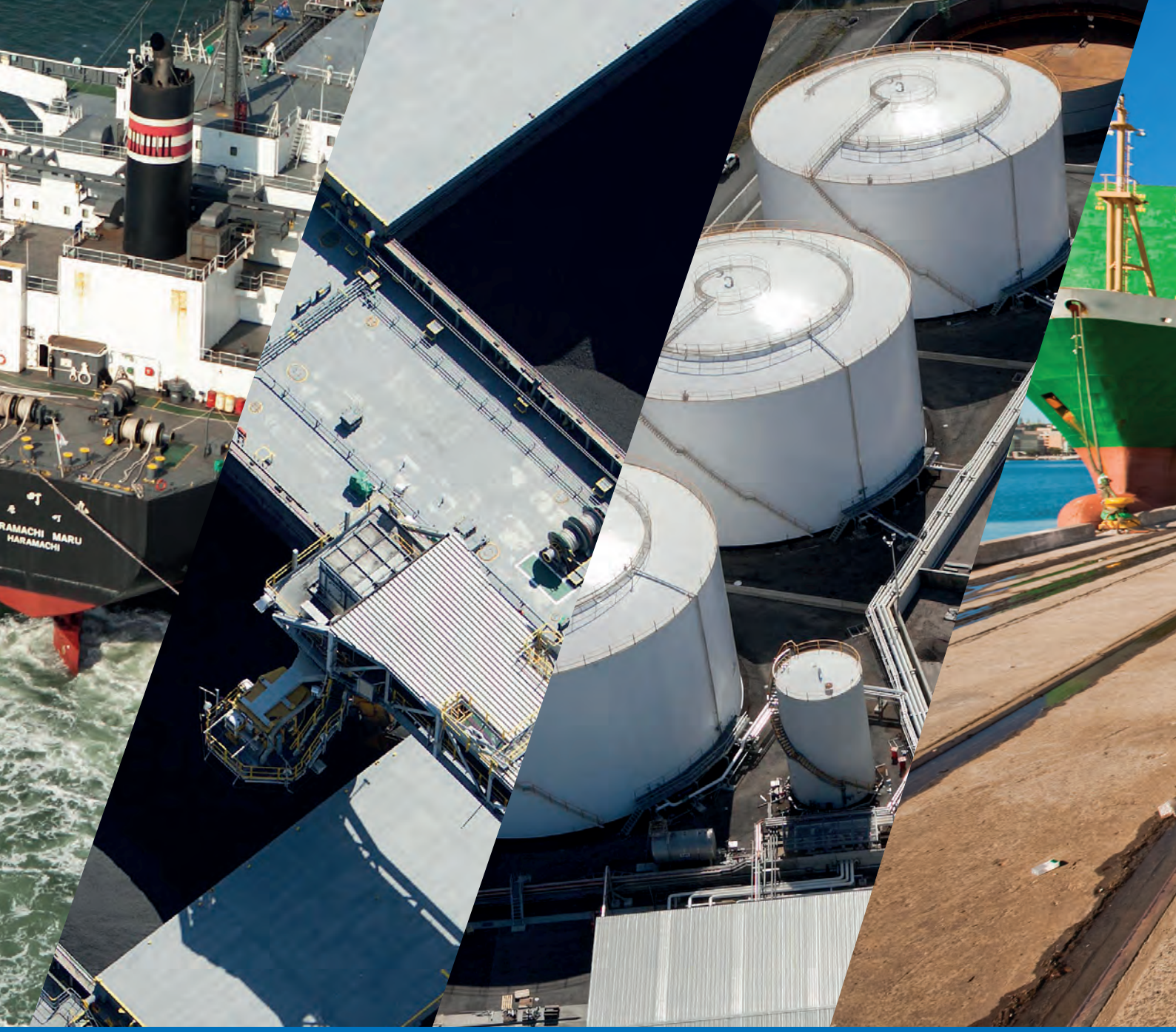
As the commercial manager of the port, Port of Newcastle is committed to working with governments and customers to grow all trades.

We would be pleased to host a port tour for government and industry representatives who are involved with the Inquiry.

ATTACHMENT - PORT OF NEWCASTLE TRADE 2016-17

COMMODITY EXPORTS	MASS TONNES	TEUs	TRADE VALUE ($ MILLION)
Aluminium	55,778	0	$139
Ammonia	93,459	33	$64
Ammonium Nitrate	2,930	125	$1
Coal	162,835,456	0	$19,011
Concentrates	412,618	0	$641
General Cargo	95,506	1,464	$81
Grinding Media	11,144	529	$11
Machinery, Project Cargo & Vehicles	18,621	936	$186
Meals & Grains	318,387	242	$54
Pitch & Tar Products	98,190	0	$62
Silica Sand	47,424	0	$0
Steel	108,221	280	$23
Timber	310	0	$0
Wheat	1,626,165	0	$339
TOTAL EXPORTS	**165,724,209**	**3,609**	**$20,612**

COMMODITY IMPORTS	MASS TONNES	TEUs	TRADE VALUE ($ MILLION)
Alumina	1,176,294	0	$303
Ammonia	35,106	0	$24
Ammonium Nitrate	26,152	0	$8
Cement	218,945	2	$16
Fertiliser	612,461	0	$205
Fuels	1,720,447	0	$965
General Cargo	65,005	4,529	$110
Machinery, Project Cargo & Vehicles	37,134	191	$371
Magnetite	84,746	0	$25
Meals & Grains	147,308	0	$68
Petroleum Coke	216,534	0	$80
Pitch & Tar Products	162,294	0	$128
Steel	189,512	4	$41
Timber	21,414	41	$1
TOTAL IMPORTS	**4,713,352**	**4,767**	**$2,347**



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