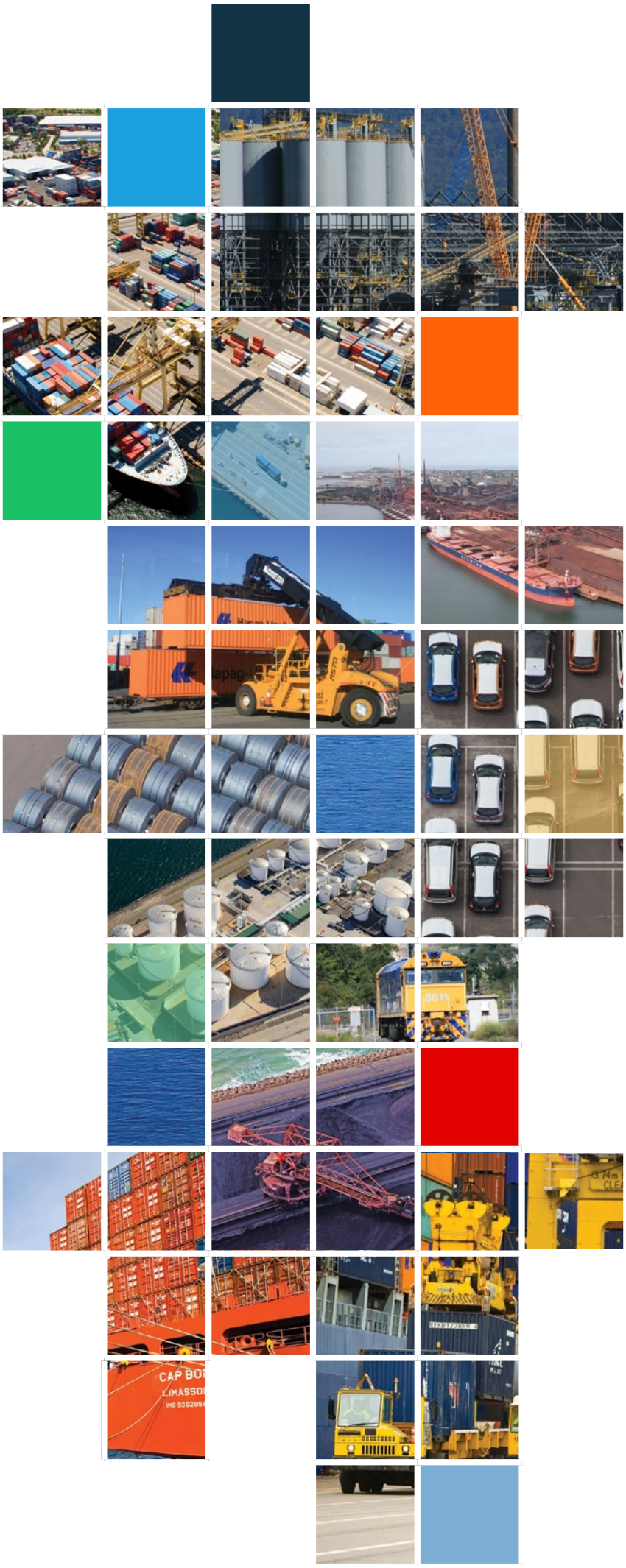
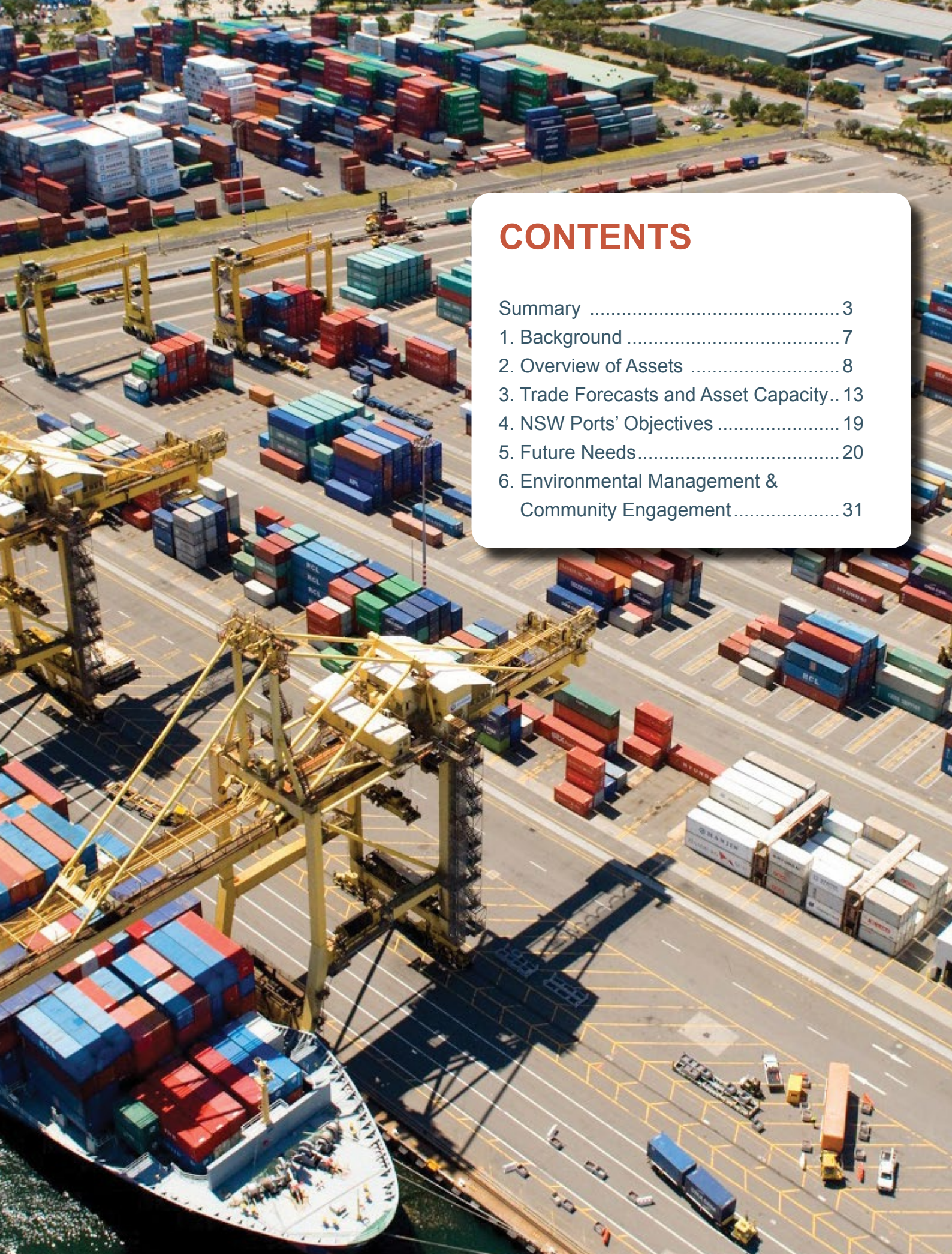


FIVE YEAR
PORT DEVELOPMENT
PLAN

MARCH 2014

NSW Ports



CONTENTS

SUMMARY

Port Botany, Port Kembla, and the Intermodal Terminals at Cooks River and Enfield, are vital economic and trade assets essential for supporting the needs of business and consumers in New South Wales.

As the nation's most populous state, New South Wales' population is forecast to grow to 9 million people in 2031, from a current level of 7.3 million[1]. This population growth, coupled with the strength of the NSW economy, will see increased volumes of trade through the Ports. NSW Ports is committed to ensuring that this trade growth is accommodated by Port Botany and Port Kembla in a sustainable and responsible manner.

Port Botany is NSW's primary container and bulk liquids port and the only liquefied petroleum gas (LPG) import and export facility in NSW.

Port Kembla is the only significant bulk port in southern NSW. It is Australia's largest vehicle import facility, has the largest grain handling terminal on the East Coast and is NSW's second largest coal export facility.

Cooks River Intermodal Terminal has been operating as a freight terminal since 1947 and is a key container facility connected to Port Botany by dedicated freight rail.

Enfield Intermodal Logistics Centre, once operational in 2014, will be critical for increasing the volume of containers moved to and from Port Botany by rail.

NSW Ports became the custodian of these key assets on 31 May 2013 and manages these assets on behalf of the State of NSW.

This document is the five year Port Development Plan for Port Botany, Port Kembla, Cooks River Intermodal Terminal and Enfield Intermodal Logistics Centre.

The purpose of this Plan is to:

- outline development objectives and proposals for the Port and Intermodal Terminal precincts managed by NSW Ports; and
- identify future freight requirements outside the Port and Intermodal Terminal precincts.

This Port Development Plan also provides:

- an overview of the activities that occur within the Port and Intermodal Terminal precincts;
- an outline of the significance of these precincts to the local and state economy; and
- an explanation of the environment within which these assets operate.

OUR OBJECTIVES

NSW Ports' overall objectives for these Port and Intermodal assets are to:

- Manage and develop the port land and port-related infrastructure in a safe, secure, efficient and environmentally responsible manner to cater for the import and export demands of the NSW economy.
- Support the State and Commonwealth to deliver freight infrastructure by promoting and facilitating an integrated freight transport system capable of servicing the State's growing needs.

[1] NSW Population Bulletin October 2013
http://www.planning.nsw.gov.au/Portals/0/HousingDelivery/Population_Bulletin_October_2013.pdf

OUR FOCUS

Over the next five years, NSW Ports' focus for the Ports and Intermodal Terminals will be to:

- Maintain and improve the efficiency of existing infrastructure for Port users and provide the capability for new port developments.
- Continue the implementation of current development approvals, resulting in additional and expanded Port uses and Port capacity.
- Improve utilisation of existing Port land, including through re-development or additional capacity on existing sites.

The size and scale of the port assets means that new developments, strategies and modes of operation are evolutionary in nature. Good infrastructure planning requires decisions to be made in advance of the actual need.

A range of infrastructure works will be undertaken by NSW Ports over the term of this Plan, to maintain assets and cater for forecast trade growth. In addition, tenants at the Port will continue to develop their tenanted areas to meet market demands and service future trade growth.

THE GREATEST CHALLENGE:
Efficient Road & Rail Connections to and from the Ports

An integrated freight transport system is essential to achieving sustainable growth of the State, which is in the long term interest of the people of NSW and the NSW Government.

The greatest challenge facing the NSW Port-related transport-logistics chains is the provision of efficient road and rail connections to and from the Ports. As Port-related throughput increases over the next five years, landside transport volumes will increase. This will require improvements in the efficiency and productivity of landside transport operations, optimising the use of existing infrastructure, and building new infrastructure to provide additional capacity.

Trucks currently form the most vital link in the freight chain to and from Ports Botany and Kembla, and across NSW. To cater for truck growth from the Ports, efficiencies on the existing road network need to be optimised, with the goal of moving more freight with proportionately fewer vehicle movements. Even with these improvements, additional road capacity is required to be delivered.

NSW Ports sees itself as the long-term custodian of these major port assets and therefore recognises that increased usage of rail is an important factor in achieving efficient Port operations that can cater for forecast trade demands. Increased use of rail will reduce the growth in Port-related truck movements, managing the volume of trucks on the shared road network.

The use of rail to and from the Ports is currently constrained by a number of factors including: the need to travel on the shared passenger rail network, which gives priority to commuter trains; the lack of intermodal terminal capacity; inadequate rail siding lengths requiring shunting; and operational inefficiencies at varying stages of the rail journey.

NSW Ports is committed to assisting the State to address this challenge, with port tenants as key business partners, by supporting a sustainable integrated freight transport system as well as developing the Port and Intermodal Terminal facilities as part of the overall freight infrastructure task.

NSW Ports supports current initiatives by the NSW Government aimed at increasing rail utilisation at both Port Botany and Port Kembla and will work with the government in achieving this objective.

Building and improving the landside infrastructure to service the Ports requires substantial lead time. It is imperative that decisions to proceed are made well ahead of the demand that the landside infrastructure is designed to meet.

The NSW Freight and Ports Strategy (2013) outlines key actions required to deliver improvements in network efficiency and capacity as well as delivering a sustainable freight network which balances efficient freight movements with community expectations and good environmental outcomes.

NSW Ports supports these initiatives to deliver improvements in the efficiency of the freight network.

POLICY REQUIREMENTS TO FACILITATE CHANGE

In order to facilitate efficient Port operations and infrastructure delivery, effective legislation and clear government policy is required. The State and Commonwealth Governments have recognised the economic significance of both Port Botany and Port Kembla and the importance of creating efficiencies in their logistics chains through the development of a number of strategic plans and policies including the NSW Freight and Port Strategy (2013) and the National Ports Strategy (2011). It is also essential that planning legislation for the Ports recognises the state significance of the Port assets. Such recognition should facilitate efficient Port development and protect the Port from inappropriate surrounding developments.

A strategic planning approach is required to minimise conflicting land uses in close proximity to the Port and intermodal Terminals. It is more effective to avoid conflicting land uses in the first place than to attempt to mitigate impacts once they occur.

OUR COMMITMENT

NSW Ports is committed to the principles of sustainable development and to consulting with local communities surrounding the Ports regarding Port operations, developments and appropriate environmental management measures. NSW Ports is aware of the potential for amenity impacts from expanding Port operations and is committed to working with tenants, the community and authorities to manage this issue.

This is NSW Ports' five-year Port Development Plan: a plan for a growing population and expanding economy.

1. BACKGROUND

NSW Ports has prepared this five year Port Development Plan for Port Botany, Port Kembla, the Cooks River Intermodal Terminal and the Enfield Intermodal Logistics Centre. The purpose of this Plan is to:

- outline development objectives and proposals for the Port and Intermodal Terminal precincts managed by NSW Ports; and
- identify future freight requirements outside the Port and Intermodal Terminal precincts.

This Port Development Plan also provides:

- an overview of the activities that occur within the Port and Intermodal Terminal precincts;
- an outline of the significance of these precincts to the local and state economy; and
- an explanation of the environment within which these assets operate.

This Port Development Plan is not intended to provide a definitive list of infrastructure investments within or around the Ports, the Cooks River Intermodal Terminal and the Enfield Intermodal Logistics Centre over the next five years. Instead, it provides an indication of the likely development and policy requirements, and strategies for managing trade and trade growth.

This Plan supports the objectives of the National Ports Strategy (2011) and the NSW Freight and Ports Strategy (2013) which are to improve the efficiency of port related freight movements across infrastructure networks such as road and rail. The implementation of these Strategies and the Port Development Plan will assist with the development of efficient and sustainable ports and port-related infrastructure.

NSW Ports supports current initiatives by the NSW Government aimed at increasing rail utilisation at both Port Botany and Port Kembla and will work with the government in achieving this objective.

The Port Development Plan will be reviewed and updated every five years.

NSW PORTS

NSW Ports became the custodian of these public Port and Intermodal Terminal assets on 31 May 2013, following its successful purchase of the 99 year lease rights from the New South Wales (NSW) Government.

NSW Ports is a consortium of leading institutional investors. The consortium is comprised of IFM Investors, Australian Super, Tawreed Investments Limited and Q Super, as well as Cbus, Hesta and Hostplus. The shareholders are long-term investors with interests in a range of Australian infrastructure assets including airports, seaports, toll roads, railway stations and social infrastructure assets.

The Ports and Intermodal Terminals leased to NSW Ports are important strategic assets that play a vital role in the economies of the Sydney, Illawarra and greater NSW regions.

NSW Ports Assets

2. OVERVIEW OF ASSETS

NSW Ports is responsible for managing, maintaining and developing the Port and Intermodal Terminal assets to cater for trade demand. Much of the NSW Ports land is leased to commercial tenants such as stevedoring companies. Operations and maintenance within tenanted areas are the responsibility of the tenant. Tenants also undertake developments within their leased areas to cater for trade demand and improve operational efficiencies.

NSW Ports maintains common infrastructure such as internal roadways, as well as wharves, jetties and berths. In limited circumstances NSW Ports is responsible for some aspects of Port operations such as operations at Port Botany's bulk liquids berths.

PORT BOTANY

Port Botany is, and will continue to be, NSW's primary container and bulk liquids port. The Port is a major international gateway for freight and is strategically important for the economic growth of NSW. Port Botany operates 24 hours a day, 7 days a week.

Port Botany is located on the northern shore of Botany Bay. It handled over 2.1 million twenty-foot equivalent units (TEUs) in the 2012-13 financial year. It has three operational container terminals. Container-related services such as empty container parks, warehouse pack-and-unpack facilities and Australian Customs, are provided within the Port precinct.

The Port provides critical infrastructure for bulk liquids trade, including berthing and storage facilities, and is the only liquefied petroleum gas (LPG) import and export facility in NSW. In the 2012-13 financial year, approximately 2.8 million mass tonnes of bulk liquids were exchanged through the bulk liquids berth. A second bulk liquids berth became operational at the Port in December 2013 providing additional berthing and exchange capacity for bulk liquids within the Port Botany precinct.

In the 2012-2013 financial year, 1371 vessels visited the Port. The majority of container ships servicing Port Botany have a capacity of less than 4000 TEUs however due to the long-term trend of increasing container ship sizes internationally, vessels with a carrying capacity of up to 6000 TEUs are visiting the Port. The second bulk liquids berth also caters for larger vessels, accommodating vessels up to 270 metres in length with 120,000 dead weight tonnes.

In order to efficiently, securely and safely facilitate trade, other Port related facilities are located within the Port Botany precinct. These include:

- berthing facilities for tugs, lines boats, pilot vessels and bunker barges;
- emergency response and vessel traffic services facilities;
- a truck marshalling area, to manage early-arriving trucks at the Port precinct and minimise queuing on roads and related areas; and
- customs and quarantine facilities.

PORT KEMBLA

Port Kembla is the only significant bulk port in southern NSW, is Australia's largest vehicle import facility, has the largest grain handling terminal on the East Coast and has the second largest coal export facility in NSW. The Port services significant steel, iron ore and bulk product markets. In the 2012-2013 financial year, 946 vessels visited the Port.

Located to the south of Wollongong, Port Kembla is a key infrastructure asset in the Illawarra region and a driver of economic growth in the region. It is located approximately 90 kilometres south of Sydney and has strong links to the Sydney region. Port Kembla operates 24 hours a day, 7 days a week.

In the 2013 financial year, Port Kembla handled 4.8 million revenue tonnes of motor vehicle imports (about 330,280 motor vehicles), 2.6 million tonnes of grain exports, 14.4 million tonnes of coal and coke exports and 4.2 million tonnes of iron ore imports. Port Kembla's coal, grain and other bulk trades are principally handled by rail. Motor vehicles are moved entirely by road transport.

Some container handling occurs at Port Kembla.

Port-related facilities essential for the efficient and safe operation of Port Kembla are located within the Port precinct. These include berthing facilities for tugs, lines boats, pilot vessels and bunker barges.

COOKS RIVER INTERMODAL TERMINAL

Cooks River Intermodal Terminal is located on Canal Road, St Peters, and has been an operational freight terminal since 1947.

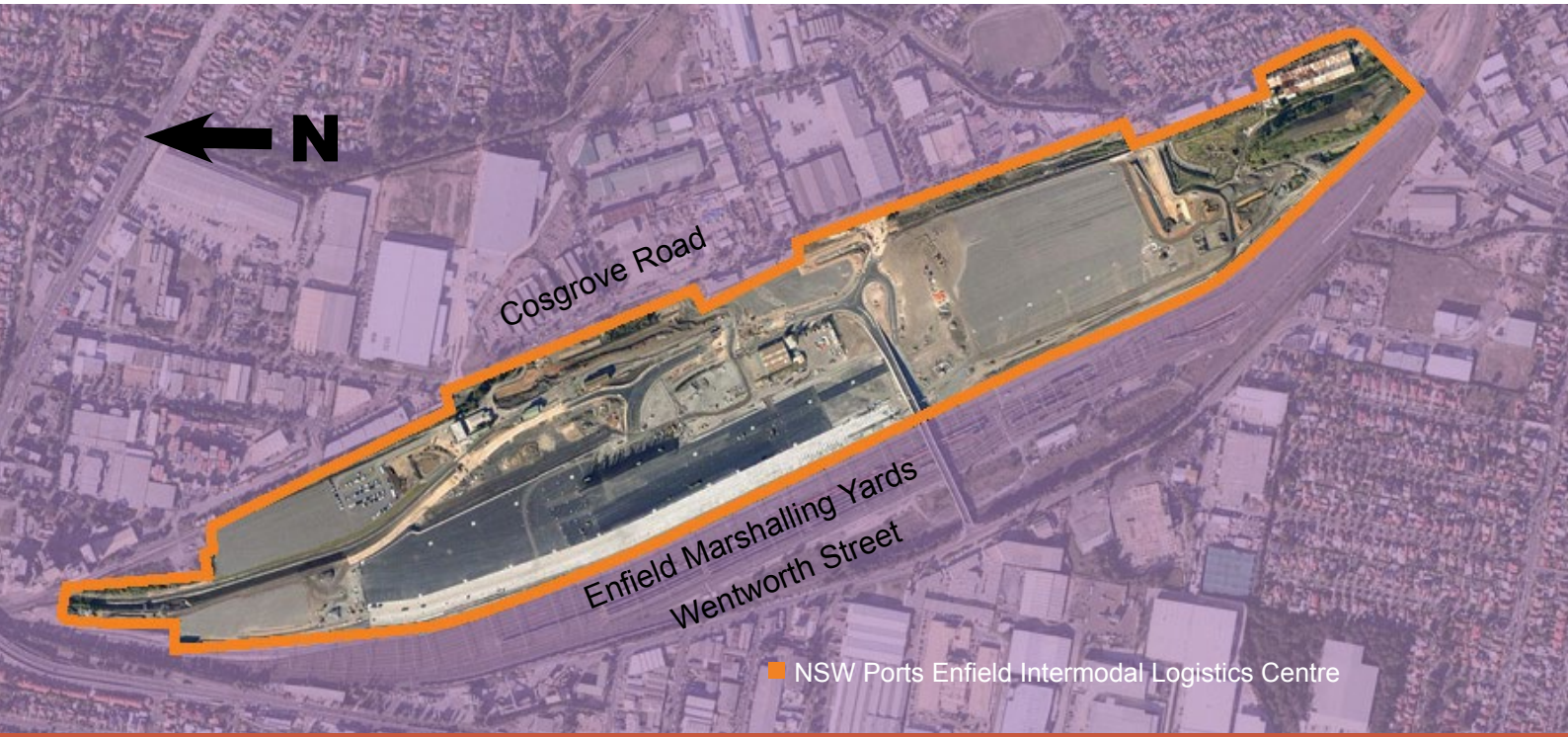
Cooks River Intermodal Terminal contains container storage areas, rail sidings for the loading and unloading of containers and other ancillary container-related services. The site provides storage space for empty and full containers as well as facilities for the repair, washing and upgrading of containers. The Intermodal Terminal operates 24 hours a day, 7 days a week.

The site has a direct rail connection to Port Botany via the Botany Freight Rail Line and utilises both road and rail for the inward and outward movement of containers.

ENFIELD INTERMODAL LOGISTICS CENTRE

The Enfield Intermodal Logistics Centre is under construction and expected to be operational in the second half of 2014. It occupies a site of 60 hectares in inner-west Sydney and when fully operational will include the Enfield Intermodal Terminal, empty container storage areas, container storage facilities and warehousing. The site is connected to Port Botany via the Botany Freight Rail Line and has planning approval to handle 300,000 TEUs per annum by rail. Operations will occur 24 hours a day, 7 days a week.

As part of the NSW metropolitan intermodal network, the Enfield Intermodal Logistics Centre is expected to increase the volume of containers transported by rail, thereby reducing the growth in container trucks on the roads and making the Port Botany freight task more efficient.



3. TRADE FORECASTS AND ASSET CAPACITY

Trade through Port Botany and Port Kembla is strongly linked to the strength of the NSW economy. The economic performance of NSW is expected to be relatively solid over the period of this plan. Other main influencers of trade through the ports are:

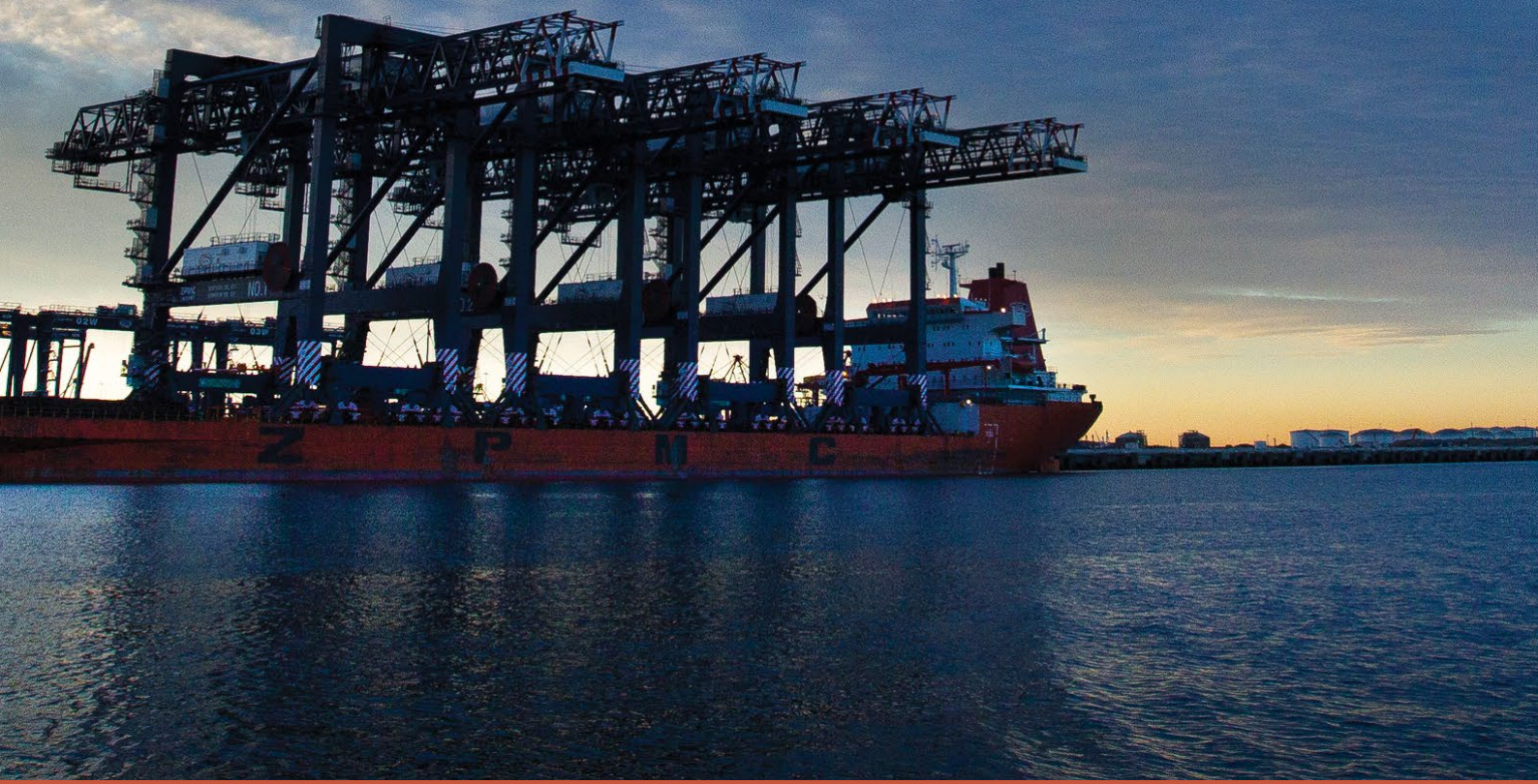
Population and consumerism – as population increases, demand for goods also increases, resulting in increased volumes of imports through the ports. In the last decade Australia has become a more affluent society. This affluence, and the reduced prices of consumer goods, results in household goods being replaced with newer models or new items being purchased instead of repaired when broken. As the majority of household goods are imported, this results in increased levels of imports.

Australian dollar currency fluctuations – a higher Australian dollar makes imports cheaper and leads to increases in import volumes, however a high Australian dollar hinders export markets.

Levels of domestic manufacturing – Sydney and NSW do not possess a large manufacturing base and therefore have a significant dependence on imported goods.

Levels of agricultural production – levels of agricultural production are affected by weather conditions. This affects the volume of exports.

Government trade policies – entering into Free Trade Agreements with major trading countries assists with trade growth. Changes to government policy, such as the abolition of single-desk marketing arrangements for Australian agricultural industries, also influence trade volumes.



PORT BOTANY

Over the next five years, trade growth through Port Botany will continue to be strong with a forecast average annual growth rate of 6.2 per cent for containers and 4.2 per cent for bulk liquids cargo.

Containers

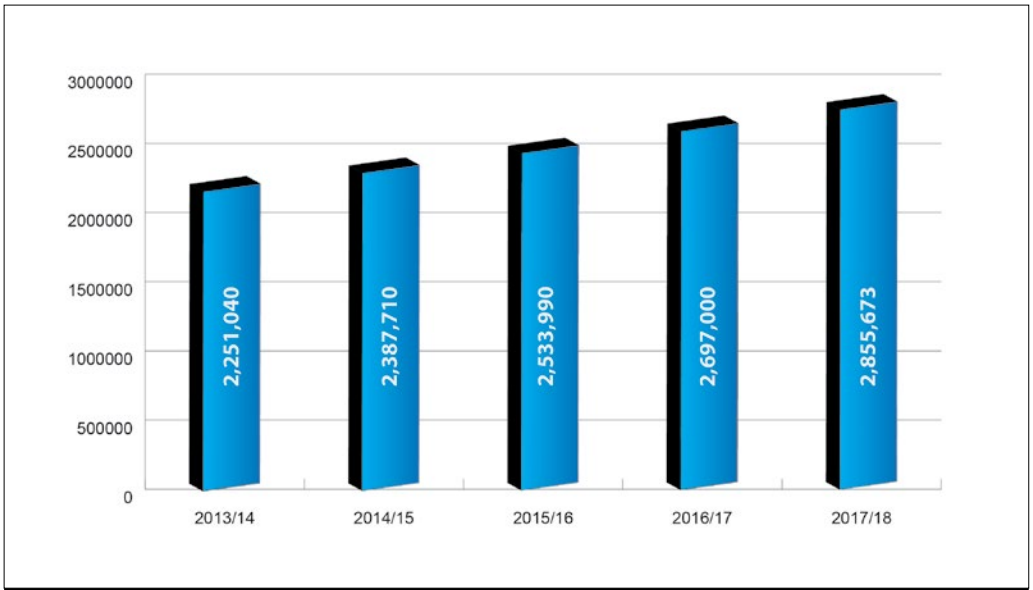
The primary form of trade through Port Botany is containers. The number handled through Port Botany is principally driven by imports, which is influenced by a range of factors including population growth, the NSW economy, the value of the Australian dollar, local production and consumer behaviour.

The people of NSW rely on imported containers to supply many items in their daily lives, such as electronic goods, furniture, whitegoods and food products. Australian products are also loaded into containers and sent to overseas markets, filled with wine, farm produce, manufactured goods, wool and cotton. Container shipping allows NSW to connect with the rest of the world and is vital in keeping the NSW economy functioning.

Port Botany's total container volumes doubled over a ten year period, growing from approximately 1 million TEUs in financial year 2002 to approximately 2 million TEUs in 2011. This reflects an average annual growth rate of 7.3 per cent. NSW Ports projects that strong container growth will continue over the next five years (6.2%), with container volumes expected to reach nearly 2.9 million TEUs in the 2018 financial year.

NSW Government forecasts indicate that annual container growth could be as high as 7 per cent, reaching 3.2 million TEUs by 2018[2]. This forecast, generated for the purposes of infrastructure planning, is important for understanding when new infrastructure may be required to support container trade.

Port Botany's container terminal capacity has increased significantly since the end of 2013 due to the commencement of operations at the third container terminal. The Port has 12 berths, 3,793 metres of quay line and 147 hectares of terminal area in addition to lands which support the container trade with warehouses and distribution centres. Container terminal capacity is expected to be sufficient to accommodate the growth in total containers at Port Botany over the next five years.



NSW Ports Container Trade Forecasts (FY2014 – FY2018)

[2] Transport for NSW (November 2013) *NSW Freight and Ports Strategy*, p31

Bulk Liquids

Port Botany plays a critical role in the supply of refined petroleum to NSW, including the supply of aviation jet fuel. Port Botany has the only import and export facility in NSW for LPG and also handles bulk chemicals.

Bulk liquid trade grew at a compound average annual growth rate of 5.8 per cent between the 1996 and 2013 financial years.

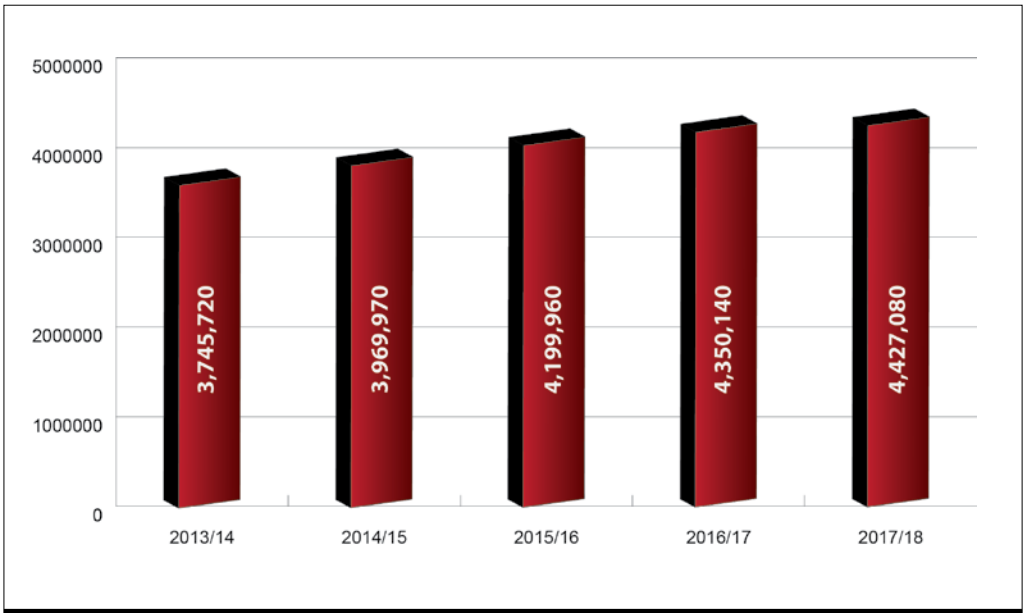
Changes to the operation of the oil refineries at Clyde and Kurnell have resulted in imports through the bulk liquids berth increasing, in particular with bitumen and LPG. Further increases are expected as changes continue in the petroleum products supply chain.

NSW Ports forecasts continued growth in bulk liquids at an average annual growth rate of 4.2 per cent over the next five years.

Bulk liquid cargo has previously been serviced by a single bulk liquids berth at Port Botany. A second bulk liquids berth has been constructed and commenced operations in late 2013 to cater for the growth in bulk liquids cargo. Port Botany's two bulk liquids berths will collectively be capable of handling the growth in the bulk liquids trade over the next five years.

PORT KEMBLA

Port Kembla's trade is predominantly bulk and general cargo such as coal, grain, iron ore and motor vehicles. There is sufficient land capacity at Port Kembla to meet the incremental growth needs of current Port users over the next five years. However there is limited land capacity to accommodate new business opportunities. If demand for additional space arises, or if existing berth facilities are unable to meet the required shipping task, further land reclamation and berth construction would need to be undertaken in the Outer Harbour.



NSW Ports Bulk Liquid Trade Forecasts (FY2014 – FY2018)

General Cargo

General cargo refers to cargo which is not containerised and is not wet or dry bulk. General cargo handled at Port Kembla includes both the import and export of wood products, project cargo, wind turbines, steel and motor vehicles. Motor vehicles are the main form of general cargo handled at the Port.

The import of motor vehicles is underpinned by a combination of local demand and the decline in domestic manufacturing. NSW Ports anticipates car imports will grow, at an annual rate of approximately 3.1 per cent, to nearly 6 million revenue tonnes over the five year period.

Port Kembla has three berths available for the motor vehicle trade (Berths 105-107). They have the capacity to handle the forecast motor vehicle volumes over the next five years.

Exports of steel products have decreased significantly in recent years due to changes at the adjacent BlueScope Steel integrated steel manufacturing facility. Continued steel export activity through BlueScope's berths is expected, but volumes are unlikely to increase over the next five years.

Port Kembla's existing capacity is expected to be sufficient to accommodate general cargo trade needs over the next five years.

Dry Bulk

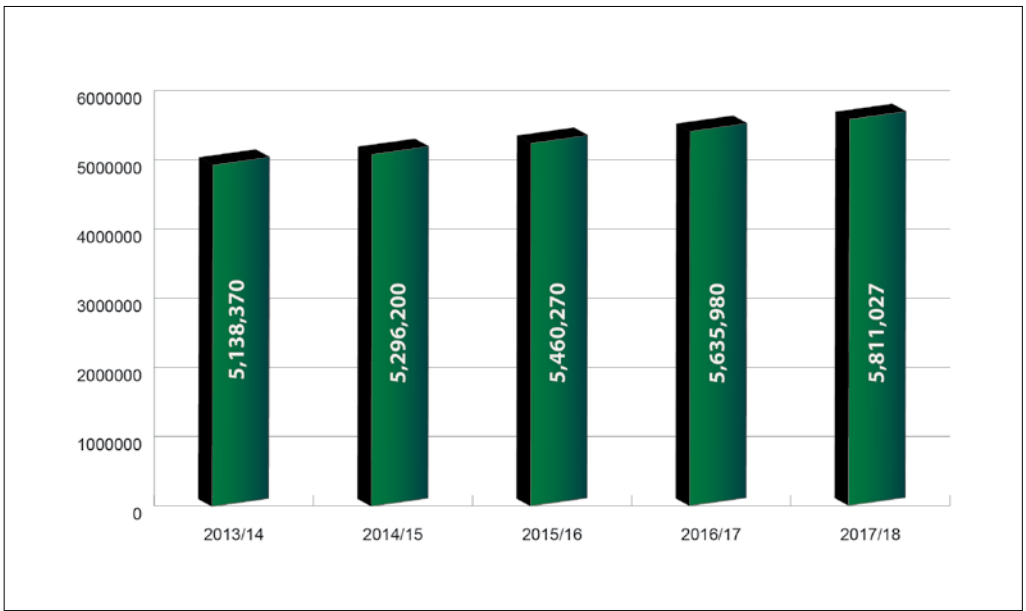
The major dry bulk commodities handled at Port Kembla are coal, iron ore and grain. Other dry bulk cargoes currently handled at Port Kembla include coke, granulated slag, gypsum, soda ash, fertilisers and copper concentrate.

Grain exported out of Port Kembla typically comes from areas south and west of Sydney. Over the last decade, annual grain exports through Port Kembla have ranged between 0.4 million tonnes and 2.9 million tonnes. Due to uncertain weather patterns and the cyclical nature of historic grain exports, it is difficult to project future grain volumes.

The existing Port Kembla Grain Terminal has an annual capacity of 5 million tonnes. However it is expected that additional grain facilities will be established in Port Kembla to take up new export opportunities.

Port Kembla handles approximately 11 per cent of total coal exports from NSW and services mines located in the southern and western coalfields of NSW. The Port Kembla Coal Terminal is operated by a consortium of coal producers and can handle 17-18 million tonnes per annum. Additional throughput is limited by the rail supply chain.

Products such as iron ore, coke, limestone, dolomite and manganese are imported at



NSW Ports Motor Vehicle Trade Forecasts (FY2014 – FY2018)

Port Kembla for utilisation in the steel making process by BlueScope Steel. In the 2013 financial year imports in these products were significantly lower as a result of the decrease in steel making at BlueScope Steel's Port Kembla site.

Port Kembla Gateway facility is currently expanding its bulk cargo storage capacity and its operators are proposing to receive clinker imports for the adjacent Cement Australia grinding mill.

It is expected that the existing dry bulk trades at Port Kembla will continue for the next five years and there is sufficient land capacity at Port Kembla to cater for this. There is potential for new mineral export trades, such as bauxite, which would service new mining projects. If demand for new business opportunities arises during the five year period, further land reclamation and berth construction associated with the Outer Harbour development would be required.

Bulk Liquid Trades

Port Kembla currently receives imported oils, fuels, petroleum products and sulphuric acid. Coal tar is exported from the Port.

National Biodiesel has an approved proposal to import biodiesel through Port Kembla. Construction for this project is likely to commence in late 2014.

The Port Kembla bulk liquid facilities are expected to be able to accommodate anticipated trade volumes over the next five years.

COOKS RIVER INTERMODAL TERMINAL

The primary form of trade through the Cooks River Intermodal Terminal is containers. The Cooks River Intermodal Terminal stores both empty and full containers for transport to and from the Port. Containers are transported on road and rail.

The Cooks River Intermodal Terminal is primarily used as an empty container storage facility for Port Botany, providing facilities for: the release of empty containers to exporters throughout NSW for packing; storing empties for container owners; the receival of empty containers from importers; and the repair, cleaning and the upgrade of containers. The Intermodal Terminal also transports full containers (i.e. imports and exports) to and from Port Botany via road and rail and has more recently commenced regular train shuttle services to and from the Port.

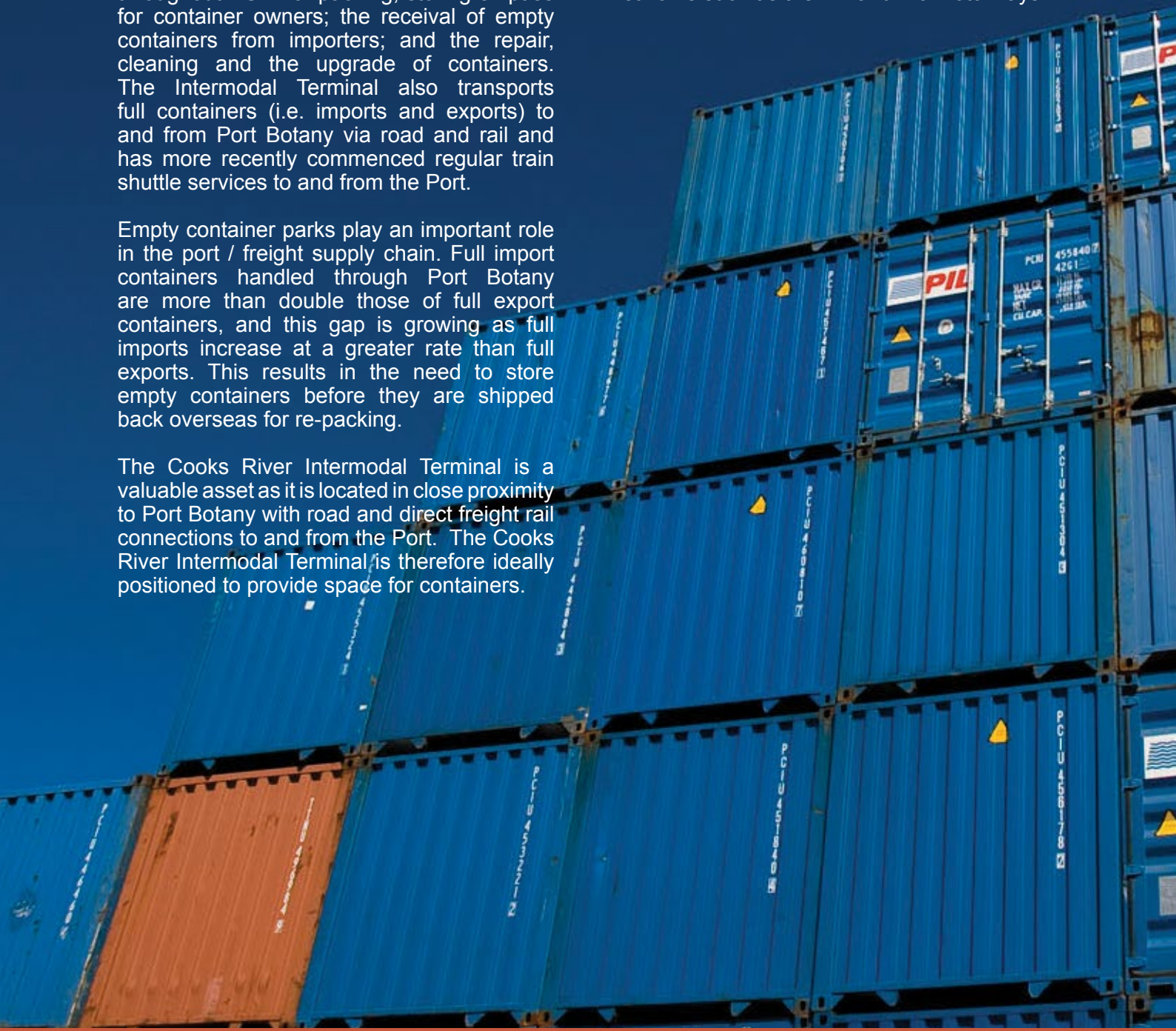
Empty container parks play an important role in the port / freight supply chain. Full import containers handled through Port Botany are more than double those of full export containers, and this gap is growing as full imports increase at a greater rate than full exports. This results in the need to store empty containers before they are shipped back overseas for re-packing.

The Cooks River Intermodal Terminal is a valuable asset as it is located in close proximity to Port Botany with road and direct freight rail connections to and from the Port. The Cooks River Intermodal Terminal is therefore ideally positioned to provide space for containers.

ENFIELD INTERMODAL LOGISTICS CENTRE

The primary form of trade through the Enfield Intermodal Logistics Centre once operational will be containers. The Intermodal Logistics Centre will handle full and empty containers. The site will also have container packing and unpacking facilities.

The Enfield Intermodal Logistics Centre will assist in the efficient transfer of containers to and from Port Botany via a dedicated freight rail line and connections to major road networks such as the M4 and M5 Motorways.



4. NSW PORTS' OBJECTIVES

NSW Ports' overall objectives for these Port and Intermodal assets are to:

- Manage and develop the port land and port-related infrastructure in a safe, secure, efficient and environmentally responsible manner to cater for the import and export demands of the NSW economy.
- Support the State and Commonwealth to deliver freight infrastructure by promoting and facilitating an integrated freight transport system capable of servicing the State's growing needs.

Over the next five years, NSW Ports' focus for the Ports and Intermodal Terminals will be to:

- Maintain and improve the efficiency of existing infrastructure for Port users and provide the capability for new port developments.
- Continue the implementation of current development approvals, resulting in additional and expanded Port uses and Port capacity.
- Improve utilisation of existing Port land, including through re-development or additional capacity on existing sites.

5. FUTURE NEEDS

NSW Ports recognises that Port Botany and Port Kembla are critical to the future economic growth and development of NSW. Ensuring these Ports operate efficiently will be integral to supporting the Port supply chain and strengthening the state's economic future. Securing the efficiency of the Port supply chain over the next five years will require success on two main fronts: firstly, optimising the use of existing infrastructure (i.e. maximising existing land usage; implementing operational and technological changes; and maintaining and upgrading existing infrastructure); and secondly, identifying the need for and developing new infrastructure before the forecast demand arrives.

Over the term of this Plan, the Port Botany precinct will continue to cater for the container and bulk liquid trades while developments at Port Kembla will cater for bulk, break bulk and general cargo. The Cooks River Intermodal Terminal will continue to be used for container-related trade needs as will the Enfield Intermodal Logistics Centre once operational in late 2014.

NSW Ports currently does not anticipate undertaking any infrastructure projects over the next five years that would be funded with a port infrastructure charge. However, NSW Ports would consider making strategic land purchases to support the Ports' operations, should opportunities arise.

INFRASTRUCTURE WITHIN THE PORTS AND INTERMODAL TERMINAL PRECINCTS

Port Botany

Two significant port infrastructure projects - the second bulk liquids berth facility and the third container terminal - became operational towards the end of 2013 and are designed to cater for forecast trade growth.

Infrastructure works anticipated to be undertaken over the next five years include:

- Bulk Liquids Berth 1 refurbishment: Refurbishment works are planned to extend the life of the existing bulk liquids berth BLB1 for the continued import and export of bulk liquids (project commencement: 2014).
- Brotherson Dock maintenance dredging: Maintenance dredging of Brotherson Dock is planned to remove sediment build-up and restore the dock to its original dredged depth, for improved vessel access (project commencement: 2014).
- Brotherson Dock wharf: Investigation of the Brotherson Dock wharves for the purpose of implementing required protection systems to ensure the longevity of the wharf structures (project commencement: 2015).
- Resurfacing of main Port access roads: Partial resurfacing of existing Port access roads to extend their operating life (project commencement: 2014).
- Bunnerong Stormwater Canal sediment traps: Installation of sediment traps in the Bunnerong Stormwater Canal to capture sediment before it is deposited in Brotherson Dock (project commencement: 2016).
- Minor projects and refurbishment works: Minor works to maintain existing assets or extend the life of existing assets within the Port precinct (ongoing project).
- Additional tug facilities: Additional tug facilities may be required at the northern end of the third container terminal to service the shipping needs of the Port.

NSW Ports is considering installing a new vehicle security access gate on Prince of Wales Drive to address safety concerns and antisocial behaviour within the carpark area at the north-eastern end of Prince of Wales Drive. The security gate would result in approximately 20 car parking spaces not being accessible during the hours of sunset to sunrise.

There would be no additional restrictions to pedestrian access during this period.

No land reclamation works are anticipated at Port Botany in the next five years.

Over the term of the Port Development Plan, operators of facilities at Port Botany will continue to develop their tenanted areas to meet market demands and cater for future trade growth. For example, Patrick Stevedores will automate their container terminal to enable safer and more efficient operations. Works commenced on the Patrick Stevedore project at the end of 2013 with automated operations due to commence in the first quarter of 2015. Developments that cater for future trade growth and which facilitate improvements and efficiencies in the freight logistics chain will be encouraged / supported by NSW Ports.

Over the next five years, new developments proposed for Port Botany will be port-related and will comply with the relevant planning and environmental legislation such as the Environmental Planning and Assessment Act, 1979. New developments will also implement environmental management measures for construction and operational activities.

Port Kembla

Stage 1A of the Outer Harbour expansion project has largely been completed and provides 6.9 hectares of additional port land to allow for more storage, handling and processing of bulk cargo. A large portion of the reclamation area has provided land for Cement Australia's cement grinding facility which is due to commence operations in 2014. The remaining area allows future development of bulk or break bulk cargo facilities.

Further dredging and land reclamation will be subject to demand for additional land, or demand for new berth facilities to meet shipping requirements. The construction and operation of a container terminal at Port Kembla is unlikely within the next five years. Containers will be handled through Port Botany where capacity exists to accommodate trade growth over the next five years.

Other infrastructure works anticipated to be undertaken over the next five years include:

- Inner & Outer Harbour maintenance dredging: Berth and shipping channel maintenance is planned in the harbour to restore the depth of the harbour, for improved vessel access (ongoing project).

- Extension and deepening to Berth 103: Dredging and wharf construction is planned to facilitate larger vessels at Berth No.103 (project commencement: 2014).

- New access road: Construction of a new access road and services corridor to service the Outer Harbour development (project commenced: 2013).

- Tug jetty demolition: Demolition of the decommissioned timber tug jetty (No. 3) to create a safer working environment and to facilitate the further development of the Outer Harbour (project commenced: 2013).

- Rail infrastructure upgrades: Rail works to improve the efficiency of rail operations in the Port precinct (project commencement: 2014).

- Minor projects and refurbishment works: Minor works to maintain existing assets or extend the life of existing assets within the Port precinct (ongoing project).

Over the term of the Port Development Plan, operators of facilities at Port Kembla will continue to develop their tenanted areas to meet market demands and cater for future trade growth. Examples of such developments include:

- Port Kembla Coal Terminal: Continued upgrades to the terminal's coal handling equipment (project commencement: 2014).

- National Biodiesel project: Construction of a new biodiesel import facility (project commencement: 2014).

- New grain facilities: Possible establishment of new grain storage and loading facilities (project commencement: 2014).

Over the next five years, new developments proposed for Port Kembla will be port-related and will comply with the relevant planning and environmental legislation such as the Environmental Planning and Assessment Act, 1979. New developments will also implement environmental management measures for construction and/or operational activities.

Developments that cater for future trade growth and which facilitate improvements and efficiencies in the freight logistics chain will be encouraged/supported by NSW Ports.

Cooks River and Enfield Intermodal Terminals

Over the next five years, additional development at the Cooks River Intermodal Terminal may occur to facilitate container trade. Developments could include container pack/unpack facilities and enhancing the use of rail to and from Port Botany.

The Enfield Intermodal Logistics Centre will continue to be developed in accordance with the planning approval over the next five years. Development activities for the site will relate to facilitating container trade particularly to and/or from Port Botany.

LOGISTICS CHAIN AND TRANSPORT INFRASTRUCTURE IMPROVEMENTS

The Ports and Intermodal Terminals have good connections to existing major road and rail networks. Port Botany heavily relies on Foreshore Road, General Holmes Drive, the M5 Motorway and the Port Botany Freight Rail Line to transport freight to and from the Port, particularly within the Sydney region. Port Kembla relies on Five Islands Road, Mount Ousley Road, Picton Road, the Princes Highway and the Illawarra Rail Line to transport freight to and from the Port.

The NSW Freight and Ports Strategy (November 2013) identifies that some of the existing road freight networks, including those that support the Ports, have limited available capacity during peak traffic periods to facilitate the efficient movement of freight over the next 20 years. The Strategy also notes that by 2031 all key rail corridors will struggle to meet freight demand unless action is taken.

Efficient landside transport-logistics are essential to the operation of the Ports and the Intermodal Terminals. The NSW Government has estimated that each one percent increase in freight efficiency saves the national economy $1.5 billion[3]. The people of NSW therefore directly and indirectly pay the costs for inefficiencies in the freight transport network.

The greatest challenge facing the Port-related transport-logistics chain is the provision of efficient road and rail connections to and from the Ports. As Port-related throughput increases over the next five years and beyond, landside transport volumes will increase. Improvements in the efficiency and productivity of landside transport operations, optimising the use of existing infrastructure and building new infrastructure to provide additional capacity will all be required.

Building and improving the landside infrastructure to service the Ports requires substantial lead time in order to gain approvals, secure finance, undertake procurement processes and then construct and operate the infrastructure. It is therefore imperative that decisions to proceed are made well ahead of the demand that the landside infrastructure is designed to meet.

The NSW Freight and Ports Strategy outlines key actions required to deliver improvements in network efficiency and capacity as well as delivering a sustainable freight network which balances efficient freight movements with community expectations and good environmental outcomes. As part of delivering and achieving the actions, the Strategy includes an Infrastructure Program focusing on short to medium term projects (over the next 10 years) that will deliver transport infrastructure improvements and efficiencies in the logistics chain. These projects, relevant to the Ports and Intermodal Terminals, include:

- Corridor protection and reservation for freight infrastructure including the Western Sydney Freight Line and Intermodal Terminal.

[3] Transport for NSW (November 2013) *NSW Freight and Ports Strategy*, p51

- Delivery of the Port Botany – Sydney Airport Transport Improvement Plan including planning for increased rail capacity between Port Botany and Enfield and the construction of the light vehicle road underpass of the rail line at General Holmes Drive.
- Undertaking the Botany Freight Rail Line duplication project to increase capacity between Marrickville and Port Botany.
- Planning and preconstruction investigations for the Maldon to Dombarton Rail Line.
- Construction of the WestConnex project, linking Sydney's west and south-west with the City, Airport and Port Botany.
- Completion of the M5 West Widening project providing additional road capacity.
- Construction of additional climbing lanes on Mt Ousley Road.
- Upgrading the Botany Freight Rail Line and Enfield Staging Roads including signalling works in order to support an increase in rail freight capacity to and from Port Botany.

NSW Ports supports these initiatives to deliver improvements to the efficiency of the freight network.

Rail

NSW Ports believes that increased usage of rail is an important factor in achieving long term efficient Port operations that can cater for forecast trade demands. Increased use of rail will reduce the growth in Port-related truck movements, managing the volume of trucks on the shared road network.

NSW Ports strongly supports current initiatives by the NSW Government aimed at increasing rail utilisation at both Port Botany and Port Kembla and will work with the government in achieving this objective.

The use of rail to and from the Ports is currently constrained by a number of factors including: the need to travel on the shared passenger rail network, which gives priority to commuter trains; the lack of intermodal terminal capacity; inadequate rail siding lengths requiring shunting; and operational inefficiencies at varying stages of the rail journey.

Rail and Port Botany

Over 278,000 TEUs were transported to and from Port Botany by rail in the 2012-13 financial year. This is a 14 per cent share of the Port Botany container trade. NSW Ports anticipates that Port Botany container volumes by rail will increase with the commencement of intermodal terminal operations at the Enfield Intermodal Logistics Centre in late 2014. Intermodal terminals promote rail freight into and out of ports because they cater for both truck and rail traffic at one hub, and then shuttle the containers to the port on regular trains. Proposals to construct and operate intermodal terminals – such as the Moorebank Intermodal Terminal – are considered essential to support growth of rail's share of the Port trade.

NSW Ports intends to investigate opportunities to cater for long-term future rail growth at Port Botany. The outcome of these investigations could result in changes to the current layout and operation of rail at Port Botany as well as the need to construct new infrastructure to cater for an increased volume of containers transported by rail to and from the Port.

Rail and Port Kembla

Freight to and from Port Kembla is often transported via the passenger rail network. As passenger trains have priority over freight trains, there is a limit to the available capacity on the line for freight trains.

Currently, 60 per cent of coal exported from Port Kembla is transported to the Port by rail from the Port Kembla hinterland and Lithgow coal regions, predominantly via the passenger network on the Illawarra rail line. The Moss Vale dedicated freight rail line is a much less used option due to the additional travel distance and the limited length of the rail passing loops which restrict the capacity of the line to service longer trains.

If Port-related truck movements are to be minimised at Port Kembla, rail capacity improvements to service Port Kembla will be required to accommodate trade growth. Transport for NSW is currently proceeding with pre-construction activities for the Maldon to Dombarton Rail Link. Should the project proceed, the Rail Link would connect Port Kembla to the Southern Sydney Freight Line thereby improving productivity at the Port and providing an efficient rail connection between Port Kembla and future intermodal terminals in western and south-western Sydney. The Rail Link would free up capacity for commuter needs on the heavily used Illawarra passenger rail line as well as facilitate other trades to and from the Port and discourage trades being lost to other Australian states (for instance iron ore, through a Victorian or South Australian port).

Rail and Cooks River Intermodal Terminal

The Cooks River Intermodal Terminal plays an important role in facilitating landside efficiencies through the use of both road and rail freight movements along designated freight corridors to and from Port Botany. However, the configuration of the rail access to the Cooks River Intermodal Terminal does not allow for trains to directly access the site from Port Botany off the main freight line. Also, trains dealing with Cooks River have to shunt on the main line. As rail movements on this line increase over time, windows to undertake shunting and splitting activities will reduce.

The recent installation of automated points at the site by ARTC allows for automated rail operations to occur instead of the need to have manual intervention by staff, as previously required, resulting in safety and efficiency improvements as part of the Intermodal Terminal's operations.

Roads

Trucks currently form the most vital link in the freight chain across NSW. While Port-related traffic is a small contributor to overall traffic volumes in the Illawarra and Sydney metropolitan road network, general traffic congestion has an impact on the efficient movement of Port-related trucks.

The Ports utilise the State's major motorways (e.g. the M1, M4, M5 and M7 Motorways) and other major arterial roads such as the Princes and Hume Highway to transport goods to and from the Ports. Containers transported by the road network to the Cooks River Intermodal Terminal also utilise arterial and major roads such as the Princes Highway, General Holmes Drive and Foreshore Road. The Enfield Intermodal Logistics Centre once operational will primarily utilise the M4 and M5 Motorways, the Hume Highway and Roberts Road.

To cater for truck growth from the Ports, efficiencies on the existing road network need to be optimised, with the goal of moving more freight with proportionately fewer vehicle movements. This can be achieved through:

- The introduction of reforms to allow high-productivity vehicles to be more broadly utilised across the road network.
- Carrying out upgrades to existing road infrastructure to allow for heavy vehicle movements and loads.
- Encouraging two-way loading of trucks to and from the Port.
- Increasing the container-to-truck carrying ratio.

Reducing the impact of freight movements on road traffic congestion can be encouraged by facilitating a 24 hour/7 days a week logistics chain which does not rely on operating in "peak" commuter times. This could be achieved through:

- Consent authorities not imposing development approval conditions which restrict 24/7 operations at freight receival or dispatch locations.
- Implementing an 'Off-Peak Freight Action Plan' which would shift Port-related truck movements into the off-peak period.
- Greater community awareness of the benefits of the logistics chain being permitted to operate 24/7.

The above measures have also been identified for consideration and/or implementation within the NSW Freight and Ports Strategy. This coupled with the physical infrastructure upgrades outlined, will facilitate additional road capacity.

PORT NAVIGATION SERVICES

Sydney Ports Corporation and Port Kembla Ports Corporation continue to play key roles in regards to shipping operations, emergency response and navigation safety within the Ports. In order to provide certainty to Port users regarding the timely delivery of pilotage services and information about Port operations (such as Port closures due to weather conditions), NSW Ports and the Port Corporations will be preparing operational protocols that specify the level of service to be provided. Agreement on these protocols is important and will provide clarity regarding port responsibilities.

LEGISLATION, POLICIES AND STRATEGIES

In order to facilitate efficient Port operations and infrastructure delivery, effective legislation and clear government policy is required.

Government Policies and Strategies

The State and Commonwealth Governments have recognised the economic significance of both Port Botany and Port Kembla and the importance of creating efficiencies in their logistics chains. This has been acknowledged through the development of a number of strategic plans and policies. At the state level these have included the NSW Long Term Transport Master Plan (2012), the NSW Freight and Ports Strategy (2013), the draft NSW Metropolitan Strategy for Sydney to 2031 and The Illawarra over the next 20 years: A Discussion Paper (2013). At a federal level, policy documents have included the National Ports Strategy (2011) and the National Land Freight Strategy: A place for freight (2012). Such plans and policies propose recommendations to be completed in the coming years to provide improvements in the logistics chain.

Strategies of particular relevance to improving efficiencies in the freight logistics chain include the National Ports Strategy and the NSW Freight and Ports Strategy.

National Ports Strategy

The main objective of the National Ports Strategy is to facilitate trade growth and improve the efficiency of port related freight movements across infrastructure networks. In order to achieve this, the Strategy recognises that a coordinated and collaborative approach must be taken to the future development and planning of Australia's major ports and freight infrastructure.

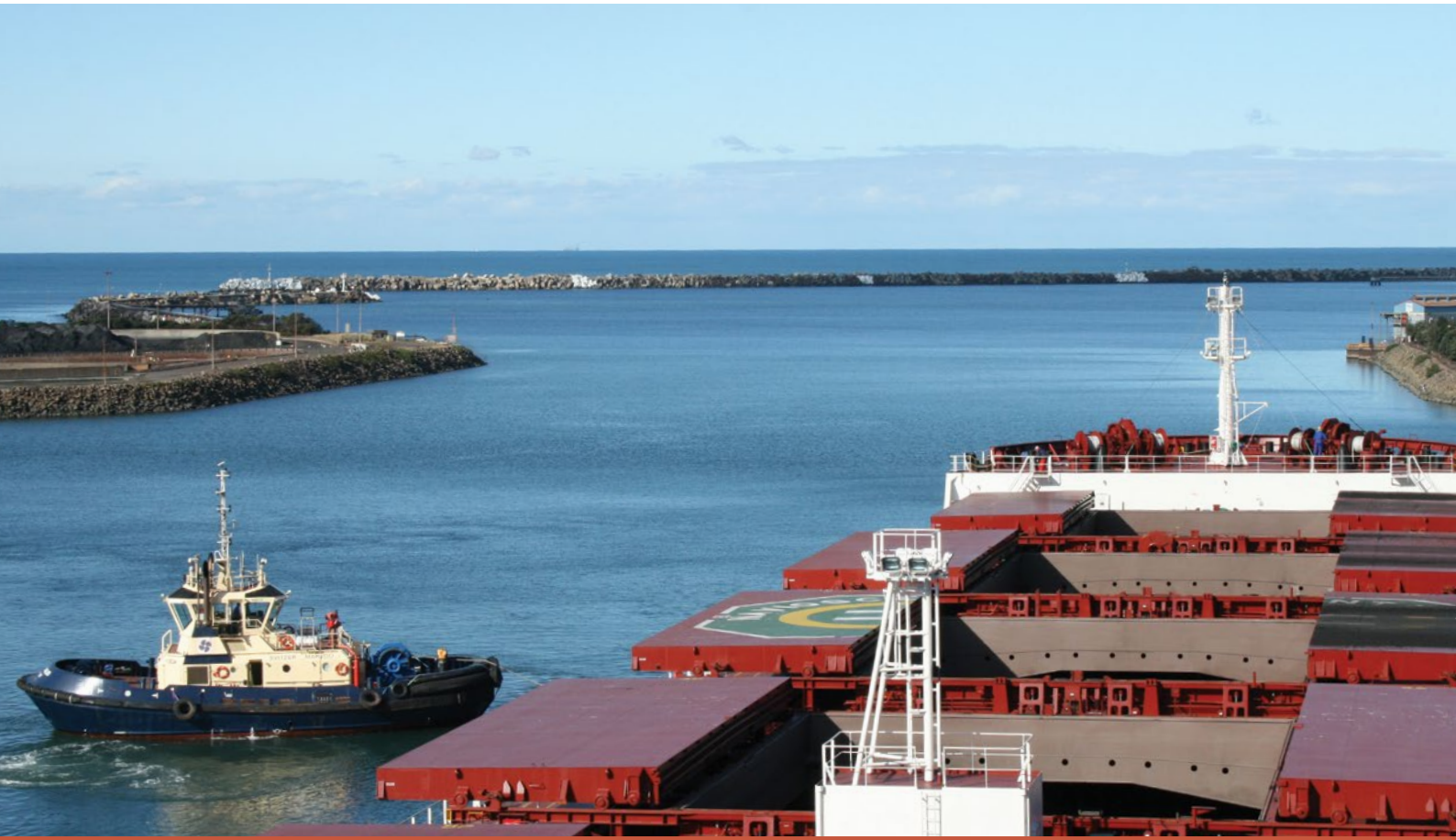
NSW Ports is committed to working with governments and industry stakeholders to drive greater efficiencies and reduce costs in Australia's trade performance.

NSW Freight and Ports Strategy

The aim of the NSW Freight and Ports Strategy is to provide a transport network that allows the efficient flow of goods to their market. To achieve this, the Strategy outlines a number of actions that require implementation to deliver improvements to transport network efficiency and capacity including the policy and planning requirements to achieve a sustainable transport network.

NSW Ports supports the principles and actions proposed within the Strategy to deliver improvements to the transport network. This includes:

- Embedding freight requirements within planning schemes (e.g. corridor protection and reservation within strategic land use plans).
- Planning decisions needing to consider freight logistics needs and network implications (e.g. truck access routes and truck access times).
- Implementing an 'Off-Peak Freight Action Plan' to shift Port-related truck movements into the off-peak period.
- Fostering intermodal terminal network developments within metropolitan and regional areas.



Planning Legislation

It is a crucial component of NSW Ports' ability to plan for the future that it can rely on a planning regime for its strategic Port assets that: recognises the state significance of the Port assets; facilitates efficient Port development; and protects the Port from inappropriate surrounding developments.

The NSW Government is proposing to implement a new planning system for the state. The new planning regime will result in the abolishment of State Environmental Planning Policies which currently play a role in protecting the significance of the Ports. Strategic planning policies at a state, regional and subregional level under the new planning system will need to ensure that the importance of the Ports and port-related infrastructure (i.e. roads, rail, intermodal terminals, employment /industrial lands) is acknowledged and protected through appropriate planning process.

These planning processes could include:

- the consent authority for port and port-related (e.g. intermodal terminals) developments to be the State Government e.g. the Minister for Planning and Infrastructure;
- restricting new sensitive use developments in proximity to the Ports and port-related infrastructure; and
- requiring more detailed assessments to be prepared for the rezoning of lands in the vicinity of ports and port-related infrastructure.

Port Botany and Port Kembla are covered under the State Environmental Planning Policy (Port Botany and Port Kembla) 2013 (Port SEPP). As a minimum, this form of legislation must remain at the core of any new planning legislation and must be regularly developed to protect the long-term efficiency of the Port and the adjoining non-industrial land users.

Other actions NSW Ports will advocate with the NSW Government for delivery over the next five years, to assist with the future growth of the Ports, include:

- Increase the recognition and protection of the Ports, and their road and rail access corridors, by requiring sensitive use developments in neighbouring areas to be designed to mitigate against amenity impacts. Specifically, update the Department of Planning and Infrastructure's Development Near Rail Corridors and Busy Roads – Interim Guideline (2008) to include infrastructure such as ports and intermodal terminals, and to make the requirements in this Guideline mandatory.
- Ensure that local and state governments identify and protect buffer zones around the Ports, intermodals terminals and freight road and rail corridors, to ensure the long term viability of these economic assets. This should include identifying lands which have the potential to be impacted by freight activities and therefore restricting sensitive land uses from being developed on these lands. Land use within these buffer zones would need to be controlled and appropriate design measures required for developments within these zones.
- Require, as a priority, that the NSW Building Professionals Board make the necessary policy amendments to enable private certifiers to be accredited for the purposes of certifying complying development at the Ports.

6. ENVIRONMENTAL MANAGEMENT & COMMUNITY ENGAGEMENT

NSW Ports is committed to the principles of sustainable development. We plan to operate and develop the Ports and Intermodal Terminals over the next five years in an environmentally responsible manner which ensures long term viability and responsible growth.

One of the major challenges for the Ports will be maintaining and expanding Port operations in an urbanising environment. A significant concern for NSW Ports is urban encroachment near the Ports, Intermodal Terminals and around key freight road and rail corridors, due to the potential impact on local amenity that can occur with freight-related activities.

Closest residences to operational lands at the Ports and Intermodal Terminals are located: 200m from Port Botany; 110m from Port Kembla; 60 metres from the Enfield Intermodal Logistics Centre; and 100m from the Cooks River Intermodal Terminal. All sites are separated from residences by roads. In some cases these roads are major transport corridors, which can also affect the amenity of nearby residents.

A strategic planning approach is required to minimise conflicting uses in close proximity to the Ports, Intermodal Terminals, supporting industrial lands and supporting transport connections. The approach should consider:

- the appropriateness of land use zones as well as the uses permitted within those zones;
- identification of future freight requirements in order to protect the long term growth of these economic assets (e.g. NSW Long Term Transport Master Plan and the NSW Freight and Ports Strategy); and
- reservation and protection of existing and future infrastructure corridors including the identification and preservation of buffer zones based on maximum infrastructure utilisation.

It is more effective to avoid conflicting land uses in the first place than to attempt to mitigate impacts once they occur. Means by which legislation could be enhanced to achieve this has been outlined in Section 5.

The main amenity impacts affecting the local communities around Port Botany, Port Kembla and the Cooks River Intermodal Terminal are noise and traffic generation. Air emissions from adjoining industrial lands are also an environmental issue affecting Port Kembla.

Environmental impacts arising from development and operations at the Ports and Intermodal Terminals are identified and assessed during the planning approval phase for developments, including impacts on neighbouring areas. Mitigation measures to address identified impacts are incorporated into the developments and the development approval via conditions of consent.

Once a development is approved, a Construction Environmental Management Plan is prepared. This Plan identifies the types of environmental impacts that could occur throughout the construction phase and incorporates mitigation measures to manage these impacts. Construction environmental impacts are often short-term and temporary.

Prior to operations commencing on a site, an Operational Environmental Management Plan is prepared. This Plan identifies the environmental impacts that could occur during operations, and mitigation measures to address these impacts.

NSW Ports' Environmental Management Plan will also provide an overarching framework for the management of Port and Port-related activities within the Ports and Intermodal Terminal precincts.

NSW Ports is committed to engaging and consulting with local communities surrounding the Ports regarding Port operations, developments and appropriate environmental management measures. NSW Ports participates in five regular forums to discuss environmental issues regarding the Ports and the Enfield Intermodal Terminal development:

- Port Botany Community Consultative Committee – this consists of representatives of the local community, local Councils, the NSW Environmental Protection Authority and Port Botany tenants.
- Port Kembla Harbour Environment Group – this consists of representatives of the local community, Port users, Office of Environment and Heritage (OEH), local Council, universities and Conservation Volunteers Australia.
- Port Kembla Pollution Meeting – a public meeting convened and attended by local residents with input from OEH.
- Enfield Community Liaison Committee – this consists of representatives of the local community, local Councils and Intermodal Terminal tenants established to discuss construction activities and environmental matters as part of the Enfield Intermodal Logistics Centre development.
- Enfield Road Transport Coordination Group – this consists of representatives from the local Councils, the Department of Planning and Infrastructure and the NSW Roads and Maritime Services.

Community awareness and support is an important part of the long term operation of the Ports and Intermodal Terminals. NSW Ports will continue to communicate with the community and through these forums to share information regarding port activities.

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