

2019–2023

PORT DEVELOPMENT PLAN



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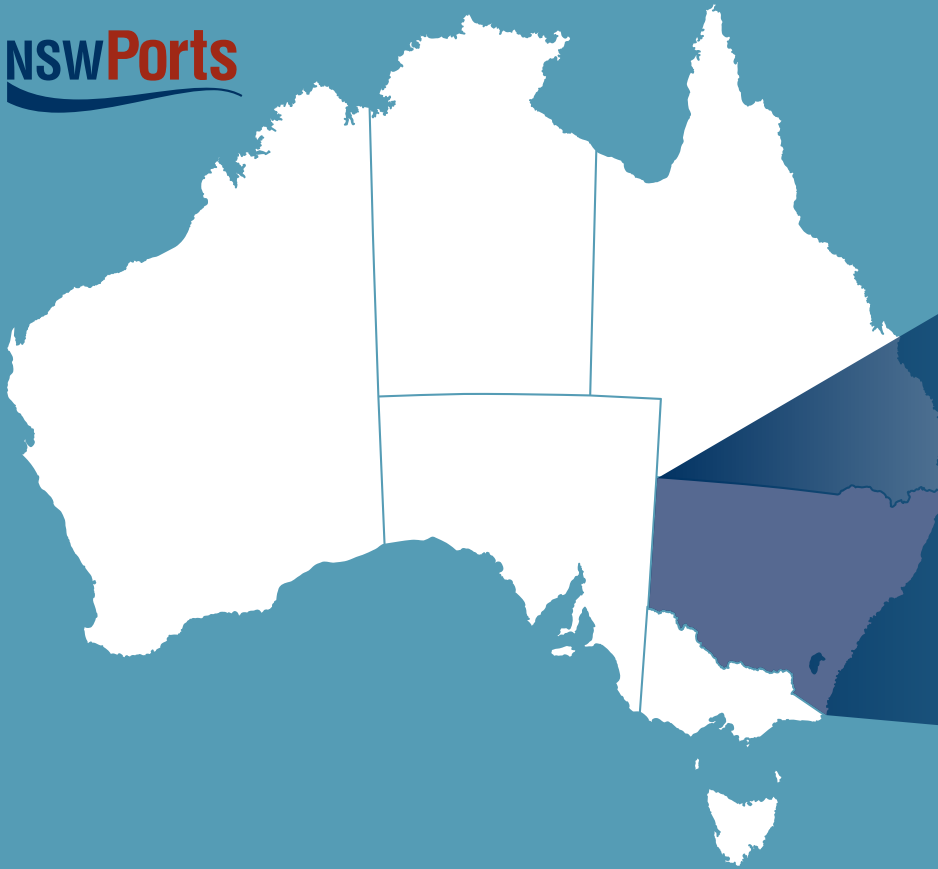


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1

PURPOSE OF THIS PLAN

NSWPorts



This *Port Development Plan 2019–2023* identifies the development objectives and proposals for NSW Ports’ assets of Port Botany, Port Kembla, the Enfield Intermodal Logistics Centre (Enfield ILC) and Cooks River Intermodal Terminal. Preparation of this Plan is a requirement of our long-term lease with the NSW Government.

This *Port Development Plan 2019–2023* is guided by the long-term growth objectives identified in our 30 Year Master Plan, *‘Navigating the Future’*. These include actions to meet the growing freight task in the short, medium, and long term. It is also guided by our *NSW Ports 2019 Sustainability Plan*, which provides a framework for sustainable growth.



OUR VISION

Be a world class port and logistic manager driving sustainable growth

OUR APPROACH

Manage key trade gateways connecting you to global and domestic markets


OUR VALUES

Care | Collaboration | Passion | Integrity | Accountability

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THE VALUE OF OUR PORTS





NSW Ports is responsible for the management and development of Port Botany and Port Kembla. These facilities handle a major part of the trade coming into and out of NSW and are significant contributors to the economy.

Our total contribution to Gross State Product (GSP) in 2015–16 was nearly \$4.4 billion, which is equivalent to \$574 for every person in the state.

Port Botany is one of Australia's largest container ports, handling:

- 99% of the state's container demand.
- 98% of the state's consumption of LPG.
- 90% of bulk chemical products.
- 30% of refined petroleum fuels.
- 100% of the state's bitumen products.

Port Kembla is:

- Australia's largest motor vehicle port.
- A major import port for cement.
- A major export port for coal and grain.

Both facilities are critical to the flow of consumer goods – from TVs to computers, cars, furniture and washing machines.

Almost half (42%) of all goods in a Sydney household, including food and beverages, are imported in containers via Port Botany.

More than 2.6 million Twenty Foot Equivalent Unit (TEU) containers and 5.5 million kilolitres of non-containerised bulk, including imports and exports, were traded through Port Botany in 2017–2018. Trade volumes through Port Kembla in the same year totalled around 22.5 million revenue tonnes of bulk product and 454,486 motor vehicles.

Driving job growth is another vital role our ports play. In 2015–16, we sustained around 29,400 jobs across the state. The majority were created through 'flow on effects' outside our facilities (63%). Approximately 33.5% of Port Botany's employees live in Bayside or Randwick Local Government Areas, while 99% of Port Kembla's employees live in the Illawarra.

Tenants using our facilities also include a diverse cross-section of other industries critical to state and local production, such as gas and steel.

Our Economic Contribution



Contributes

\$4.4bn

NSW GSP



Supports

29,400

Jobs



Local employer

33.5%
99%

of Port Botany &

of Port Kembla employees live locally



42%

goods in a Sydney household (including food and beverages) imported in containers via Port Botany



\$9m:

cost of a 24 hour port stoppage



Sydney Household Goods Imported Through Port Botany

Bathroom

imports



Taps



Sink



Handle



Toilet

Kitchen

imports



Tiles



Lights



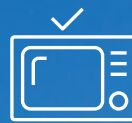
Crockery



Oven

Living room

imports



Television



Window



Sofa



Coffee table

Garden

imports



LPG



Chairs



Solar panel



Quay Conclusions

In February 2019, KPMG launched the report *Quay Conclusions: Finding the best choices for additional port capacity*.

The purpose of the report was to determine the relative competitiveness and the likely catchment areas of Port Botany, Port Kembla, and Port of Newcastle as container ports, considering the entire logistics chain costs from source to consumption including costs incurred from additional terminal investment, through the development of an evidence based origin destination model for containers in NSW.



The Quay Conclusions report found that:

1. Premature port investments = higher costs for NSW

New container terminal capacity is not needed in NSW for several decades at least. Premature development of a new terminal would increase costs across the entire supply chain and require massive public investment to fund landside freight infrastructure.

If a fourth container terminal was built prematurely then supply chain costs would increase by \$21 million per year if that port was located at Port Kembla and by \$45 million per year if that port was located at the Port of Newcastle. (These costs exclude public investment required for road and rail connectivity.)

Additional operating and investment costs have to be recovered across the same volume of containers. The increases will ultimately end up being borne by the NSW public and businesses who will pay higher prices for their goods, and by NSW importers and exporters.

2. Port Kembla makes the most sense for containers, but only once Port Botany nears capacity

Port Kembla's proximity to the population and employment growth areas in greater western Sydney and south western Sydney enhance its attractiveness as a second container port when required.

3. Containers at the Port of Newcastle makes the least sense for NSW

The research shows a container port in Newcastle would impose the highest overall costs and offer the lowest overall benefit as it is furthest (nearly double the distance of Port Kembla) to the key growth areas of greater western Sydney and south western Sydney and has the most constrained road and rail links to Sydney.

It would introduce thousands of heavy vehicles onto Newcastle's streets, the F3 motorway and across Sydney.

[Download KPMG's Quay Conclusion report here](#)

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OUR ROLE



Through management of Port Botany, Port Kembla, the Cooks River Intermodal Terminal and Enfield Intermodal Logistics Centre, we carry out a number of important functions which are detailed below.

Strategic port development and planning

The creation of our Master Plan helps us determine desired planning and development outcomes. This strategic approach to managing our assets helps ensure our sites are able to cope with the state's growing freight needs.

Landside precinct security and safety

We are responsible for safety and security on common port areas. This extends to all users of our infrastructure, as well as our staff and contractors.

Operating control of bulk liquids and common user berths

NSW Ports has operating control of the two common user Bulk Liquids Berths at Port Botany. The berths handle a variety of bulk liquid products and have direct pipeline access to nearby storage facilities, operated by private companies and our tenants.

At Port Kembla, we own and operate two dedicated Bulk Liquids Berths (Berths 201 and 206), primarily for fuel and acid imports.

We are also responsible for common user Berth 104 at Port Kembla.

Wharf infrastructure maintenance

The ongoing maintenance of wharves at both port facilities is our responsibility. We regularly inspect and undertake maintenance and life extension projects on these vital assets.

Port access and berths

One of our most vital roles is to ensure shipping access to Port Botany and Port Kembla is maintained at all times. We carry out maintenance of the approach channels, swing basins, and berth boxes to maintain specified depths. At times, we also carry out dredging to increase the depths and cater for larger vessels in the future.

Tenant management

The majority of our land is tenanted and managed through leasing arrangements. We work with our tenants to maintain their sites and grow capacity, thereby assisting us to meet our long-term trade objectives.

Road and rail access

We are responsible for common roads within our leased areas at Port Botany, Port Kembla, and Enfield, and actively seek and facilitate improvements to road operations for the benefit of all port users.

At NSW Ports, we also manage the rail network within the Inner Harbour and the Outer Harbour of Port Kembla, including rail lines, sidings and loops.

Rail operations are an increasingly vital component of the logistics network and the sustainable movement of freight to and from ports and intermodal facilities. By working closely with government and industry, we hope to bring about a greater role for this transport mode in meeting the port freight logistics task into the future.

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OUR STRATEGIC OBJECTIVES

In October 2015, NSW Ports released *Navigating the Future: NSW Ports' 30 Year Master Plan*. It details the expected trade growth and provides the framework for the creation of a sustainable port supply chain that will meet the needs of NSW over the next 30 years and beyond.

This Port Development Plan is the first to be developed within the framework of the Master Plan.

The five key objectives in the Master Plan will guide sustainable development decisions at our ports and intermodal terminals over the next five years.



Provide efficient road connections to the ports and intermodal terminals

Efficient road connections to and from ports and intermodal terminals are vital to the efficient movement of freight and essential to be able to cater for the growing NSW freight task. While increased use of freight rail will assist in managing the growth in truck volumes, roads will continue to be the primary means of moving freight to and from ports and intermodal terminals. It is therefore essential that efficient road connections are available to ports and intermodal terminals.



Grow rail transport of containers

Increasing the movement of containers by rail to and from Port Botany will assist the port to maximise its throughput capacity. In this way, forecast container growth can be accommodated in a cost-effective, efficient and sustainable manner.

We have set a target to move 3 million TEU per year by rail by 2045. Achieving this target requires action by all stakeholders involved in the container rail supply chain. The operation of intermodal terminals will be essential for achieving this target. The Enfield Intermodal Logistics Centre and Cooks River Intermodal Terminal will be part of this solution, with both being inland extensions to Port Botany.



Use land and infrastructure efficiently

Land and infrastructure within our ports and at our intermodal terminals is finite and in demand. Optimising the utilisation and productivity of existing land and infrastructure before investing in new land and infrastructure is at the core of our approach to sustainable asset management.



Grow port capacity

Even with improved productivity and greater land utilisation, new infrastructure will be required to cater for forecast trade growth. The timing for increasing capacity will depend on actual trade volumes, productivity improvements and wider market developments.



Protect the ports and intermodal terminals from urban encroachment

Ports and intermodal terminals need to operate 24 hours a day, seven days a week, in order to meet the demand of businesses and consumers and to maximise productivity of significant asset investments. Activities at the ports and intermodal terminals will intensify to cater for growing trade volumes.

Ports and intermodal terminals require protection from urban encroachment and redevelopment to higher-value land uses such as residential, retail and commercial uses in order to operate efficiently.

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WHAT WE'VE ACHIEVED: 2013–2018



The table below highlights progress against the previous **NSW Ports Five Year Port Development Plan (2013–2018)**.




Provide efficient road connections to the ports and intermodal terminals

Project	Status	Comment
Resurfacing of Port Botany access roads	 Complete and Ongoing	Resurfacing of Simblist and Friendship Road was undertaken from 2014 and investigations and designs were completed in 2018 for an upcoming major pavement upgrade.
New Port Kembla Outer Harbour access road	 Complete	Construction of a new access road and services corridor (Arawata Drive) to the Outer Harbour was completed in 2013.

Additional Highlights




Since the 2013 – 2018 Five Year Port Development Plan was released, we have delivered the following initiative over and above what we set out to achieve:

Higher Productivity Vehicles	 Complete	As the road manager, we have provided a number of pre-approved routes within both Port Botany and Port Kembla which facilitates access for higher productivity vehicles.
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Grow rail transport of containers

Project	Status	Comment
Rail infrastructure upgrades	 Complete and Ongoing	<p>The Hutchison Sydney Container Terminal commissioned its rail sidings in 2014.</p> <p>The long-term rail development plan for Port Botany was completed in 2015 and informs the requirements to facilitate 3 million TEU on rail by 2045.</p> <p>Industry and government collaborated to improve the efficiency of rail operations in the Port precinct through the Port Botany Rail Optimisation Group. The first stage of NSW Ports' Port Botany Rail Investment Program was announced in 2018, being additional rail capacity at Patrick container terminal.</p>
Additional development at the Cooks River Intermodal Terminal	 Complete and Ongoing	<p>Developments including wash bays, weigh bridges, pavement upgrades and demolition were completed.</p>
The Enfield Intermodal Logistics Centre (Enfield ILC) will continue to be developed	 Complete and Ongoing	<p>Construction of the intermodal terminal was completed in 2013 and operator works were commissioned in 2015. Additional rail sidings (2 x 300m) were completed in 2018. The intermodal terminal at the Enfield ILC has been operational from 2016 and has been managed since 2018 by the Linx Cargo Care Group.</p> <p>Warehouse construction commenced in 2018 after development approval was received for a new master plan. The development of the Enfield ILC will continue.</p>

Additional Highlights

Since the 2013 – 2018 Five Year Port Development Plan was released, we have delivered a number of initiatives over and above what we set out to achieve. These include:

Growth of rail volumes at Port Botany	 Complete	<p>The volume of containers transported to and from Port Botany by rail has grown by 52% since the 2015 financial year.</p>
Cement on rail from Port Kembla	 Complete	<p>In 2018 Cement Australia commenced transportation of cement by rail from Port Kembla to Sydney, saving about 4,200 truck movements per annum.</p>





Use land and infrastructure efficiently

Project	Status	Comment
Port Botany Bulk Liquids Berth 1 refurbishment	 Complete and Ongoing	Major refurbishment works were undertaken from 2014 to extend the life of the existing Bulk Liquids Berth 1 for the continued import and export of bulk liquids.
Port Botany Brotherson Dock life extension project	 In Progress	Detailed investigations into the condition and life-extension of the Brotherson Dock container wharves were completed in 2017. Concrete repairs and corrosion protection systems are currently being installed to increase the life of these assets without impacting shipping.
Minor projects and refurbishment works	 Complete and Ongoing	Existing assets at Port Botany, Port Kembla and the intermodal terminals are being progressively maintained and upgraded in accordance with a robust asset management system, updated since 2017.
Patrick Terminals automation at Port Botany	 Complete	Patrick Terminals expanded its container terminal with 17ha pavement, additional cranes, new access ramp, truck exchange and 45 automated straddle cranes to enable safer and more efficient operations. The Sydney AutoStrad™ Terminal opened in 2015.
Port Kembla tug jetty demolition	 Complete	Demolition of the decommissioned timber jetty (No. 3) was undertaken in 2013/14 to create a safer working environment and to facilitate the further development of the Outer Harbour.
Port Botany Brotherson Dock bed levelling	 Complete and Ongoing	Bed levelling of Brotherson Dock was undertaken to remove sediment build-up and restore the dock to its original dredged depth. Bed levelling activities were undertaken in 2014, 2016, and 2018.
Inner & Outer Harbour bed levelling at Port Kembla	 Complete and Ongoing	Berth and shipping channel bed levelling was undertaken in the harbour to restore and increase the depth of the harbour for improved vessel access. Bed levelling activities were undertaken in 2013, 2014, 2015, 2017, and 2018.






Use land and infrastructure efficiently (continued)

Project	Status	Comment
Bunnerong Stormwater Canal sediment traps at Port Botany	 Did Not Progress	The installation of sediment traps in the Bunnerong Stormwater Canal was flagged as a potential development however an alternative solution of clearing the canal's outfall of sediment build-up was delivered in 2014.
Port Kembla Coal Terminal	 Complete	Upgrades to the terminal's coal handling equipment, including reclaimers and stackers, have been systematically undertaken between 2015 and 2018.

Additional Highlights

Since the 2013 – 2018 Five Year Port Development Plan was released, we have delivered a number of initiatives over and above what we set out to achieve. These include:

Port Kembla's first cruise ship	 Complete	<p>On 30 October 2016, the <i>Radiance of the Seas</i> became the first cruise ship to arrive at Port Kembla.</p> <p>The ship berthed at the AAT Terminal giving the 2,200 passengers and almost 800 crew the opportunity to sample the sights and sounds of the Illawarra.</p> <p>The NSW Government's <i>Cruise Development Plan</i> (July 2018) identifies Port Kembla as an important part of supporting the growth of the cruise industry in the state. Since the arrival of the <i>Radiance of the Seas</i>, there have been another five cruise ships visit Port Kembla.</p>
Bulk Liquid Berth 1 (BLB1) gangway tower	 Complete	<p>In March 2018, NSW Ports completed the installation of a new gangway tower at BLB1 in Port Botany. The new gangway tower ensures safe access to both large and small ships. It also improves efficiency by reducing berth occupancy time for each ship by over 30 minutes.</p> <p>The gangway tower features a 22-metre carbon steel column section, with lightweight marine grade aluminium stairways and gangway telescoping ladder. Self-levelling stairs reduce weight and loads.</p>
Largest car carrier to visit Port Kembla	 Complete	<p>One of the largest car carriers in the world visited Port Kembla on 5 July 2018. The MV Salome is 265 metres long, 30 metres high and has nine decks.</p> <p>The vessel is capable of carrying approximately 6,000 cars and demonstrates a trend towards using larger vessels to achieve greater efficiency.</p>

Additional Highlights (continued)

Largest container ships to arrive at Port Botany



Complete

In 2018, Port Botany achieved a new milestone, with a visit by its largest ever vessel. The COSCO Northern Jade has a capacity of 8,814 TEU and came to Port Botany on two occasions.

Since August 2018, visits by vessels with a capacity of over 8,000 TEU have become a regular occurrence at the Port.

DP World quay crane replacement program



Complete

In 2017–2018, DP World undertook a crane replacement program at Port Botany which saw the removal of two existing cranes and the introduction of three larger cranes. The aim of the program was to ensure DP World's capability to meet the vessel fleet upsizing of its customers. The new cranes, worth approximately \$14 million each, have an outreach of 51 metres and a hoist height of 38 metres from the crane rail and achieve this goal.

Oenos tank demolition



Complete

In 2014 Oenos demolished two under-utilised tanks at their site on Freindship Road, Port Botany. The demolition of the tanks has freed up valuable land for redevelopment for port purposes.

Svitzer Tug Jetty Upgrade



Complete

In 2014 Svitzer undertook works to upgrade their existing leased jetty in Brotherson Dock, Port Botany. The refurbishment works extended the life of the jetty and allow for the ongoing use by tugs to meet future vessel demands.

Port Kembla Rail Upgrades



Complete

Renewal and upgrade of rail lines within the Inner and Outer Harbour at Port Kembla. Works (including the replacement of timber sleepers with concrete sleepers) will provide an extension to the life of the rail assets.

Sustainable concrete for port infrastructure








Complete

Two research projects have been undertaken to trial the use of more sustainable concrete options for marine structures. The use of alternative concrete compositions will reduce energy consumption during the concrete making process and utilise more environmentally friendly materials and waste products.






Grow port capacity

Project	Status	Comment
Extension and deepening to Berth 103 at Port Kembla	 Complete	Dredging and wharf construction was undertaken at Berth No.103 in 2015/16 to facilitate larger vessels and service the newly commissioned Quattro grain storage and handling facility.
Quattro Grain Facility at Port Kembla	 Complete	A new grain storage and loading facility was completed at Port Kembla and opened in April 2017.
Terminals new bulk liquid facility	 Complete	Terminals Pty Ltd has carried out the redevelopment of its bulk liquids facility at Port Botany. Adding to the thirty-five existing tanks, six new bulk liquid tanks were installed including two for Unleaded Premium Gasoline petroleum storage. These are connected by pipeline to the Bulk Liquid Berths.
Additional tug facilities at Port Botany	 Did Not Progress	Port Botany was able to operate with existing tug facilities, the Services Area at the northern end of the third container terminal serviced lines boats and project barges to facilitate the needs of the Port.
National Biodiesel project at Port Kembla	 Did Not Progress	This project did not progress. Instead, TQ Holdings successfully sought planning approval to develop a bulk liquid storage and handling facility on the site at Port Kembla.



Protect the ports and intermodal terminals from urban encroachment

Project	Status	Comment
Advocacy to increase recognition and protection of the ports	 Complete and Ongoing	<p>Advocacy around the recognition and protection of the Ports through the work of the Greater Sydney Commission in 2017 resulted in strong support for Port Botany and its operations. The Greater Sydney Commission has also implemented a policy position whereby industrial land must be retained and protected by local Councils, consistent with NSW Ports' long term advocacy position.</p> <p>The 2018 NSW Freight and Ports Plan also strongly supports the protection of the port areas from urban encroachment, consistent with NSW Ports' objectives.</p>
Advocacy to ensure that local and state governments identify and protect buffer zones around the ports	 Complete and Ongoing	<p>Buffer zones are entrenched in the overarching planning legislation for Port Botany and Port Kembla. Work is continuing to expand these state-legislated areas and includes development application referral areas which would allow NSW Ports some oversight of nearby development proposals.</p>
Advocacy for private certification of complying development at the ports	 In Progress	<p>This is being progressed by the State Government.</p>

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SUSTAINABILITY

NSW Ports is committed to the long-term sustainable growth of our business. We recognise that along with delivering value for our shareholders, we also need to make a positive contribution to the communities in which we operate, protect the environment and act in an ethical and transparent manner. This focus is reflected in the development of our new *NSW Ports 2019 Sustainability Plan*, which follows on from the first Sustainability Plan, released in 2015.



NSW Ports has established a sustainability framework focused on the key risks and opportunities which are most relevant to our business and stakeholders.

NSW Ports will assess and benchmark our sustainability performance against our commitments. We have adopted a range of indicators to measure and report on our sustainability performance.

The scope of the *NSW Ports 2019 Sustainability Plan* has expanded beyond environmental sustainability to include 'whole of port' goals, including environmental, social and economic factors. Our sustainability strategy and actions are also aligned with the United Nations Sustainable Development Goals, which provide a roadmap to global sustainability.

Environmental Management and Community Engagement

We are committed to the principles of sustainable development and will operate and develop our Ports and Intermodal Terminals over the next five years in an environmentally responsible manner. In this way we will ensure their long-term viability.

Our overarching Environmental Management Plans for Port Botany, Port Kembla, and our Intermodal Terminals identify the environmental impacts of activities that commonly occur at the facilities. They also identify mitigation measures in place to reduce our potential impact on surrounding communities.

We communicate regularly and openly with port and intermodal terminal operators and users, government agencies and the community.

Engaging and consulting with local communities is a priority. Community consultation and liaison groups discuss port and intermodal terminal operations and developments, receive information regarding environmental improvement initiatives and discuss construction activities.







Port Kembla Harbour Environment Group

The Port Kembla community is engaged through the Port Kembla Harbour Environment Group (PKHEG). The PKHEG provides a forum for port stakeholders to work collaboratively towards a sustainable and healthy waterway and harbour-side environment. We host regular meetings of the Group to exchange information and promote the achievement of environmental goals around Port Kembla. The Group consists of representatives from port related industries, the community, local government, environmental regulators, education and research interests, and the port authority.

Port Botany Community Consultative Committee

We engage with the wider Port Botany community through the Port Botany Community Consultative Committee (PB CCC) and have been running quarterly meetings of the PBCCC since November 2013. The committee comprises representatives of NSW Ports, port tenants, the local community, government agencies and local council.



Enfield Community Liaison Committee

The Enfield Community Liaison Committee (CLC) is our engagement platform in the Enfield area. The CLC was established in May 2009 as a way to consult with and inform stakeholders (including the local community) about the progression of development at the Enfield ILC site. The committee includes representatives from the local community, Local Councils, and Enfield ILC Operators/Tenants and main construction contractors.



Community awareness and support is important to long-term operations and we will continue to engage on port activities through these forums.

Further cooperation with tenants on strategic environmental and sustainability initiatives will also be initiated through environmental and sustainability working groups at Port Botany and Port Kembla.

State and local governments are crucial for implementing planning protocols and environmental regulations that allow for growth, while maintaining environmental standards and residential amenity. We will continue to work together to pursue positive sustainability outcomes.

Over the long term, we will work constructively and consistently with all stakeholders to:

- Explain the value of our ports and intermodal terminals and increase stakeholder awareness of the importance and sustainability of shipping, ports and logistics.
- Foster whole-of-port action towards sustainability among staff, contractors, tenants, community and government.
- Receive feedback on operational impacts and input to development and planning processes.



Sustainability Highlights

Environmental Shipping Incentive

In 2019 NSW Ports was the first Australian port to introduce an environmental incentive for ships. The incentive is applied to vessels that perform better in reducing their emissions than the levels required by current standards of the International Maritime Organisation. The incentive takes the form of a discount on vessel charges for Port Botany and Port Kembla. This initiative supports the World Ports Sustainability Program.

Enfield Intermodal Lookout

In April 2017 we opened the Enfield Intermodal Lookout which provides a walkway and viewing areas for public access in the southern precinct of the Enfield ILC.

Open during daylight hours, the lookout is designed to take visitors on a journey of the site's history, the local environment and current operations. Key historical features on display include the repositioned rail turntable, the heritage-listed Tarpaulin Factory and Pillar Water Tank. Ecological features such as the Green and Golden Bell Frog ponds and newly established native vegetation on the slopes of Mt Enfield can also be viewed from the lookout.

Conservation partnerships at Sir Joseph Banks Park and Port Kembla Heritage Park

In August 2018 we launched a three-year partnership with Bayside Council and Conservation Volunteers Australia (CVA), to carry out environmental conservation works at Sir Joseph Banks Park, Botany.

The park holds significant environmental importance, with vital fresh water wetlands and remnant Eastern Suburbs Banksia Scrub. It is an asset to the community from a conservation standpoint, and also provides valuable open space for community recreation.

The project will engage up to 600 local community members in rehabilitating areas of native vegetation which provide significant habitat for native fauna.

We have also partnered with Conservation Volunteers Australia to enhance wetlands and habitat for the endangered Green and Golden Bell Frog at the Port Kembla Heritage Park.



Solar energy and electricity consumption monitoring

In 2017 we installed solar systems on our office buildings at Port Botany and Port Kembla and began tracking energy usage using an energy monitoring and metering service.

At Port Kembla we installed a 42kW solar system while at Port Botany we installed an extra 17kW system to increase existing solar capacity and reduce the environmental footprint of office activities. By monitoring our energy usage, we are able to manage unexpected energy spikes and surges.

We have also achieved a 21% reduction in electricity consumption at our Port Botany and Port Kembla office buildings compared to our FY15 baseline.

Maintaining heritage values at Port Kembla

Repair and maintenance of heritage-listed items is an important part of the sustainable management of our assets at Port Kembla Heritage Park. As part of this work, we have repaired and repainted the Mobile Block Setting Steam Crane in 2018 and refurbished the associated original wagons in 2019. The Crane is the last of its kind remaining in NSW and provides a valuable link to the history of port construction in the early 1900s.

Great care has been taken in repairing damage, removing rust and repainting. The wagons are being restored using local timber and re-using as much of the original materials as possible.



In 2017 we proudly partnered with the Australian National Maritime Museum to develop a free, outdoor and educational interactive exhibition – *Container, 'The Box That Changed the World.'*

Housed entirely within six shipping containers each with a specific theme – Ship, Cargo, Port, Ocean, Build and Things, the exhibition invites visitors from our communities to explore the technical, economic, social and cultural impacts of containerisation and the role shipping containers play within our lives.

NSW Ports promoted the exhibition in local schools and provided transport for students to visit and experience it first hand.

More than 300,000 people have attended the exhibition, which was held in Darling Harbour from October 2017 for 12 months before touring regional centres in Wollongong, Wagga Wagga, Narrabri and Dubbo in 2019.





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PORT BOTANY DEVELOPMENT PLAN

Port Botany is Australia's premium port and vital to the economic wellbeing of Sydney and NSW. It contributes \$3.7 billion annually to gross state product and is responsible for the creation of 25,000 jobs.



Port Botany Overview

Port Botany is home to the state’s primary container, bulk liquid and gas port. It also has the largest dedicated common user bulk liquid facility in Australia. This facility handles petroleum products, chemicals and liquefied petroleum gas (LPG).

The map below shows the land area of Port Botany that we manage.

Port Botany is serviced by a deep-water shipping channel, twelve dedicated container berths, two dedicated bulk liquids berths, and several smaller jetties and wharves that provide space for support vessels such as tugs, pilot boats and lines boats.



Port Botany Key Strengths and Advantages

Located within

Australia's largest population

centre

Able to service vessels larger than

12,000 TEU

today

The only port in Australia with

'on-dock' rail at each of the three container terminals

connected to metropolitan and regional intermodal terminals by dedicated and shared freight rail.

Home to

Container-related services

such as empty container parks, transport operations, warehouse facilities and Australian Customs.

Deep and stable shipping channel and berths

that require minimal maintenance dredging.

Short shipping channel

that minimises pilotage and vessel transit time and contributes to port efficiency.

Connected to pipelines

to distribute bulk liquids, including aviation fuel to Sydney Airport and chemicals and gas to Botany Industrial Park.

Operates

24 hours

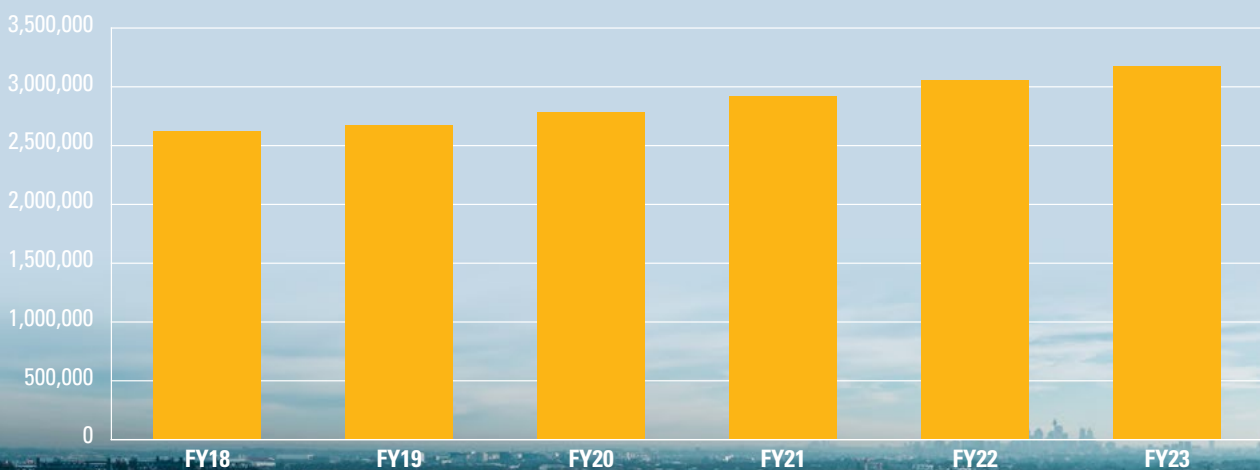
per day, seven days a week (24/7).

Port Botany forms part of an international gateway precinct alongside Sydney International Airport. Together with Sydney Airport, we contribute the equivalent of 7.3% of the NSW economy, a contribution vital to ensuring the state's ongoing economic prosperity.

Facilitating the efficient and sustainable handling of increasing trade volumes through the Port will maximise this economic benefit while minimising environmental impacts on the local and wider community. Without careful planning, inefficiencies in the port supply chain could result in additional costs borne by consumers and businesses, and reduced competitiveness of Australia's exports in the global marketplace.

In the financial year ending 2018, Port Botany had a total container trade throughput of 2.62 million TEU. This number is expected to rise over the period of this Port Development Plan to 3.18 million TEU.

Port Botany 5 Year Container Trade Forecasts (TEU)



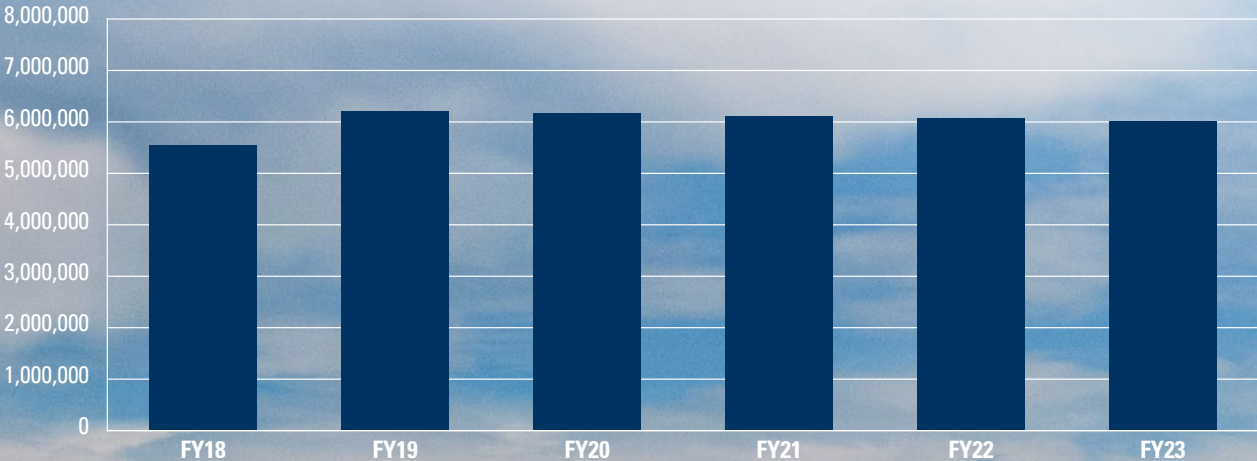
We will manage and develop Port Botany in a safe, secure, and efficient manner over the next five years to ensure the facility continues to meet the growing container, bulk liquid, and gas needs of Sydney and NSW.

Developing the facility in line with the stated Master Plan goals will ensure we can sustainably cater for this forecast trade growth.

As well as an increased demand for goods, Port Botany will also accommodate increased efficiencies in the supply chain, such as larger ships, more productive vehicles, and increased rail movements.

In the same financial year, Port Botany had a total bulk liquid and gas throughput of more than 5.5 million kilolitres (kLs). This number is expected to remain relatively steady at around 6 million kLs over the period of this Port Development Plan.

Port Botany 5 Year Bulk Liquids Trade Forecasts (kLs)



Port Botany Planning Framework

The key planning instrument for development at Port Botany is the *State Environmental Planning Policy (Three Ports) 2013* (the Three Ports SEPP), made under the *Environmental Planning and Assessment Act 1979* (the EP&A Act).

The Three Ports SEPP identifies development that is exempt, complying, permissible with consent, or permissible without consent.

Importantly, the Three Ports SEPP also provides the zoning and objectives for industrial land surrounding Port Botany. As such, it guides state-level protection of areas pivotal in supporting the Port and the freight and logistics network.

The entirety of our land at Port Botany has been zoned by the Three Ports SEPP as SP1 (Special Activities).

In March 2018, the Greater Sydney Commission released the Greater Sydney Region Plan as well as specific District Plans covering the Sydney Metropolitan Area. Port Botany and our intermodal assets of Cooks River and Enfield fall within the Eastern City District.

These plans form the strategic framework for Sydney and include policy positions on industrial land and related port and freight uses.

In relation to industrial land, and supported by us through the consultation process, the Plan provides for:

- The protection of all industrial zoned land in the Eastern Harbour City.
- A review to confirm protection or transition of industrial land in the Central River City.
- The protection of existing, and review of potential future, industrial land in the Western Parkland City.

We strongly support these directions in the Greater Sydney Region Plan and believe it is vital for protection of the ongoing freight needs of NSW, including:

- Providing buffer areas between sensitive uses such as residential uses and 24-hour port and freight functions.
- Protecting industrial lands for port, intermodal and logistics uses from the encroachment of commercial, residential and other non-compatible uses which would adversely affect industry viability to facilitate ongoing operation and long-term growth.
- Requiring sensitive developments within the influence of port and airport operations to implement measures that reduce amenity impacts.

- Improving communication of current and future noise conditions around Port Botany, airports, surrounding road and rail networks, intermodals and supporting private lands.
- Identifying and preserving land and corridors for future port, airport, intermodal and rail infrastructure use.
- Preventing uses that generate additional private vehicle traffic on roads that service Port Botany and Sydney Airport such as large-scale car based retail and high density residential, to reduce conflicts with large dangerous goods vehicles (for example, Foreshore Road and Denison Street, Banksmeadow).

Freight related lands in close proximity to Port Botany are an extension of the Port precinct and need to be protected. They support port-related uses and help facilitate the efficient movement of goods.

Residential development within close proximity to the Port and its supporting industrial lands with insufficient mitigation measures pose a risk to ongoing port operations. Land use conflict has the potential to adversely impact future planning decisions, particularly for port users.

We are strong advocates for the need to strengthen the legislative planning controls that protect Port assets and the surrounding industrial lands. It is important that the Three Ports SEPP continues to safeguard these lands which are crucial to efficient Port operations and the flow on benefits to the people of NSW.

Port-related uses, such as container storage, require larger parcels of land. The continuous subdivision of industrial land is preventing these sites from being able to be used for this vital function. The introduction of a minimum lot size of 2 hectares for the industrial land surrounding Port Botany would allow for the continued viability of the land and should be introduced. Of the 390 hectares of industrial land around the facility, 219 hectares is made up of lot sizes exceeding two hectares. We will continue to advocate for the protection of these areas from subdivision that would restrict the ability of a site to support the Port and the container supply chain at large.

Across the wider supply chain, efficiencies can be found in the planning system for freight and logistics. These efficiencies include allowing for the flexibility for warehouses to meet industry standard building heights and the ability for facilities to operate 24/7. Conversely, inappropriate conditioning creates restrictions and impacts efficiency. Examples include mandating specific truck routes, limiting the ability to service vehicles on site, and restrictions on the movement of dangerous goods.

Road and Rail Access

Roads

Restrictions imposed on heavy vehicles utilising Botany Road and Bunnerong Road means that there are now only two main access routes for heavy vehicles accessing Port Botany. These two routes are Foreshore Road / General Holmes Drive and Beauchamp Road / Denison Street / Wentworth Avenue. It is vital that these road connections are able to continue to serve the needs of the Port, including providing access for vehicles carrying dangerous goods.

The two key access routes face pressures in their ability to provide efficient connections to and from the Port. The intersection of Foreshore Road / General Holmes Drive is a vital node for connecting the Port to Sydney's motorway network. Congestion issues are common during the commuter peak periods because of the large volume of private vehicles heading in an east-west direction. Denison Street has been subject to an intensification of traffic generating development resulting in land use conflicts. It is vital that work continues on the strategic and physical protection of these two heavy vehicle routes.

The Greater Sydney Commission has identified a need to manage the interfaces of industrial areas, trade gateways and intermodal facilities by preventing uses that generate additional private vehicle traffic on roads that service Port Botany such as large scale car based retail and high density residential, to reduce conflicts with large dangerous goods vehicles and the Greater Sydney Region Plan specifically identifies Foreshore Road and Denison Street, Banksmeadow as key routes to which this policy should apply.

An increased use of high-performance vehicles (HPVs) on the Sydney road network would result in more efficiencies in the movement of containers. However, managing evenly distributed truck arrivals at port terminals and intermodals will still be important to limiting congestion around those sites.

Shifting containers to rail will also help limit truck volume growth and the impact on the Sydney road network and local community. However, even with a significant shift of containers to rail, trucks will remain the primary means of moving containers to and from Port Botany.



Port Botany Road Traffic Study

In November 2017, we carried out a detailed and comprehensive traffic study of the roads around Port Botany.

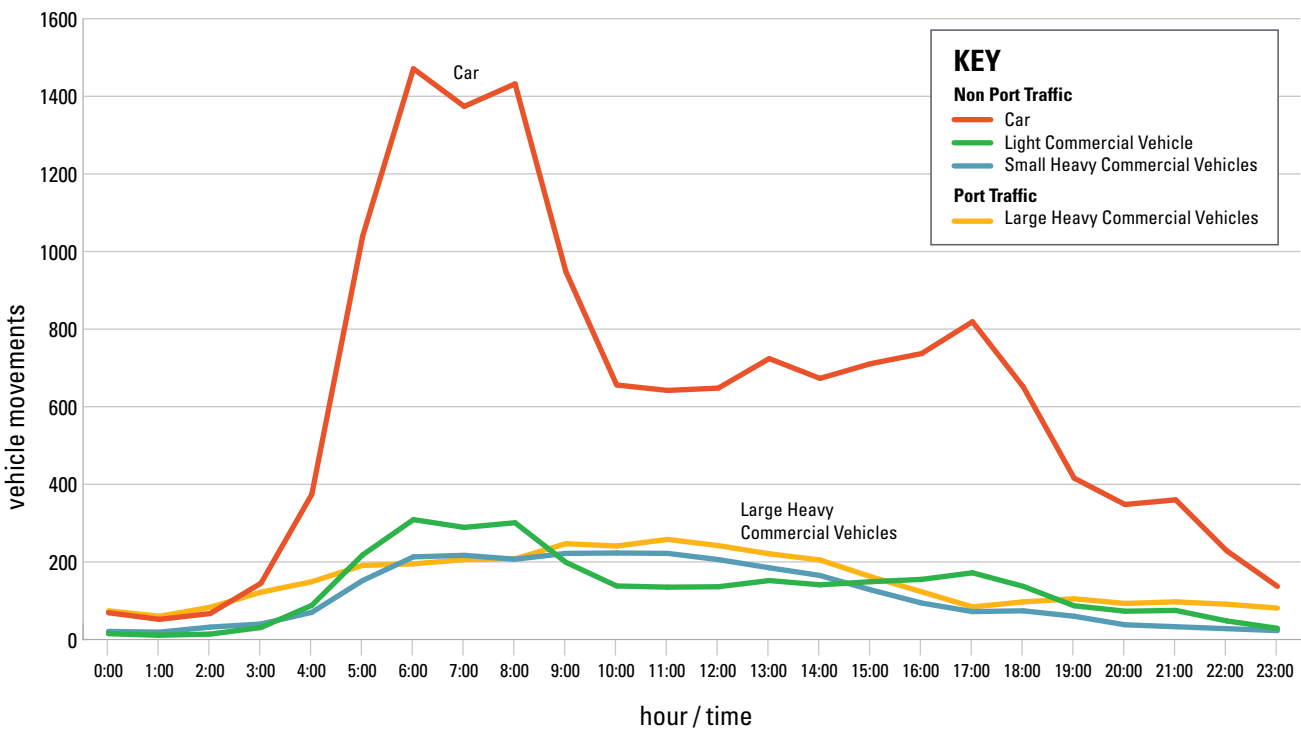
We found that the wider port precinct is a heavily trafficked area, however 78% is non-port related. These are generally private vehicles moving from the motorway network at General Holmes Drive to the Eastern Suburbs of Sydney.

Port related traffic constitutes 22% of the traffic volume in the wider port precinct, of which 8% is private vehicles for port workers and visitors. This means that heavy port trucks account for only 14%.

For example, the graph below shows the type of vehicle entering Foreshore Road from General Holmes Drive across a 24-hour period. Car and light commercial vehicle (LCV) traffic entering the Port Precinct via Foreshore Road had a peak of around 1,400 vehicles per hour between 5:00 AM and 9:00 AM. Both Small and Large Heavy Commercial Vehicle (HCV) volumes are much more evenly spread through the day.

The image below indicates the split of vehicles at this same intersection and the direction in which they are travelling.

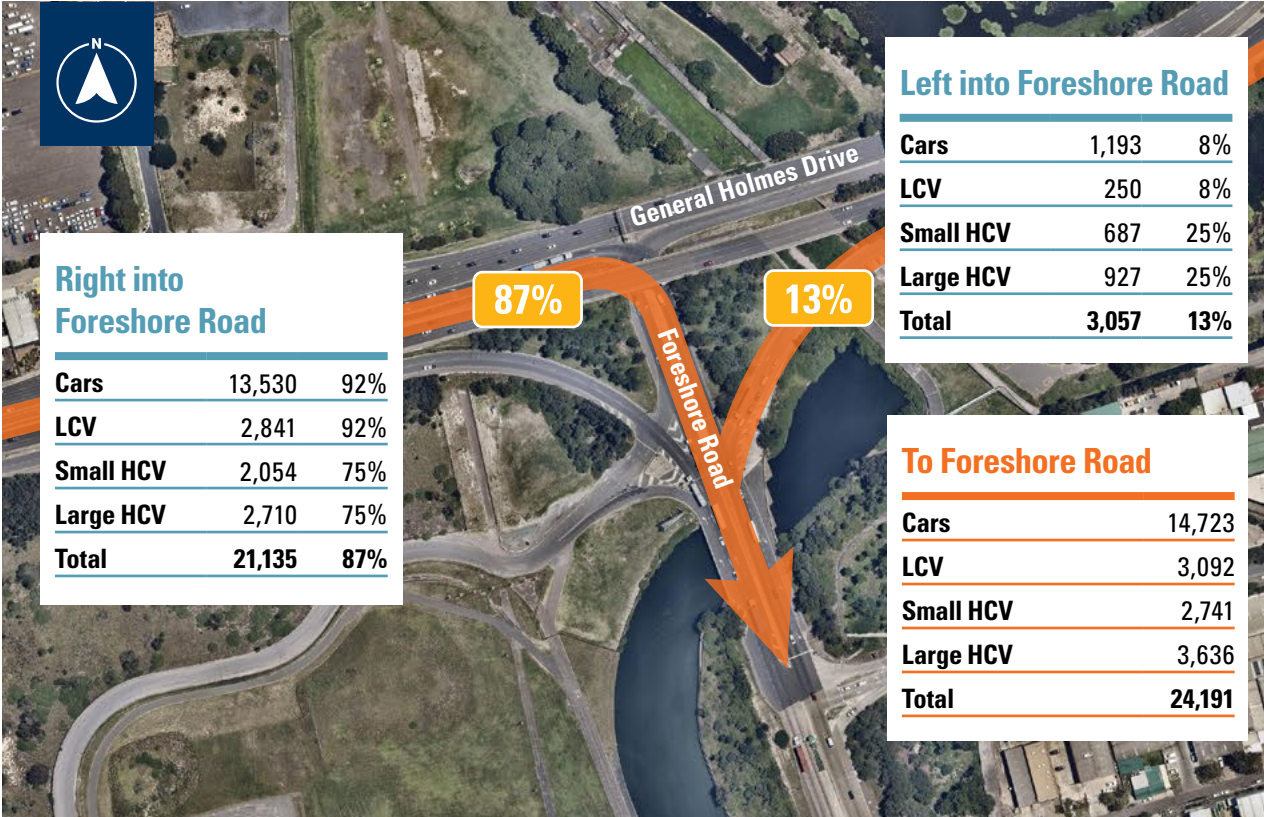
Movement of vehicles entering Foreshore Road from General Holmes Drive, Port Botany



The evidence-based outcomes of this traffic study will be shared and used to inform improvement and investment requirements for the precinct. This ensures we are able to maintain the long-term sustainability of Port Botany and support the resulting economic growth in NSW.

Port trucks are high value road users and should be prioritised to enable efficient traffic flow on the network to and from the port.

Vehicle movements at the intersection of Foreshore Road and General Holmes Drive, Port Botany



Rail

In order to optimise the port’s overall capacity, rail must become a more significant component of the port logistics chain. Our target is to be transporting 3 million TEU per year by rail by 2045. That is around 40% of forecast container volumes. Achieving this target requires action by all stakeholders involved in the container rail supply chain and we are committed to working with all levels of government, rail operators, shipping lines, stevedores and intermodal operators.



Commencing in 2019, we are investing in ‘on-dock’ rail infrastructure capacity at each of the three container terminals at Port Botany. Investment will be staged with \$120 million to be spent on Stage 1 over the next four years.

Stage 1 will double Port Botany’s rail capacity to 1.5 million TEU.

When fully operational truck kilometres (kms) travelled in Sydney will be reduced by at least 10 million kms a year and 2 million less litres of diesel used. That is the equivalent to a net reduction in CO₂ emissions of more than 5,400 tonnes a year.

Stage 1 work is planned for completion by 2023.

Enfield IMT



Future Development



Provide efficient road connections to the ports and intermodal terminals

Potential developments at Port Botany 2019–2023 [within the NSW Ports leased footprint]

Improvements to the NSW Ports managed road network (road pavement upgrades, line marking, intersection upgrades etc).

Improvements to trafficked areas of tenanted sites, including gate facilities, truck booking systems, load-out facilities, truck marshalling, car-parking and pedestrian amenity.

Physical and IT Infrastructure to measure and report on the performance of road connections within the Port.

Ongoing road maintenance works to improve the safety, efficiency and reliability of the NSW Ports road network.



Grow rail transport of containers

Potential developments at Port Botany 2019–2023 [within the NSW Ports leased footprint]

Rail infrastructure, including improving the capacity and efficiency of on-dock rail facilities and necessary rail maintenance activities.

The ongoing development of the Enfield and Cooks River Intermodal Terminals to encourage the movement of containers by rail to and from Port Botany.



Use land and infrastructure efficiently

Potential developments at Port Botany 2019–2023 [within the NSW Ports leased footprint]

Quay crane improvements, including the introduction of newer, more efficient cranes, and the removal of older cranes.

Improvements to yard equipment and container handling equipment.

Dredging of Brotherson Dock, Hayes Dock, and approach channels to support growing vessel capacity.

The development of additional facilities and pipelines to move more product by pipeline, including to Sydney Airport and the Western Sydney Airport which will see a growing demand.

The continued development of the Hutchison container terminal.

The development of vacant land for port-related uses including at the southern end of Simblist Road and the northern end of Bumborah Point Road.



Grow port capacity

Potential developments at Port Botany 2019–2023 [within the NSW Ports leased footprint]

Development to cater for growing trade demand.

Bulk liquid and gas terminal development and related facilities, including the development of the approved Vopak expansion and improvements to existing bulk liquid terminal infrastructure.

The development of other areas (i.e. the Hayes Dock Services Area, the head of Brotherson Dock etc) to continue to cater for Port needs through provision of supporting services.



Protect the ports and intermodal terminals from urban encroachment

Potential developments at Port Botany 2019–2023 [within the NSW Ports leased footprint]

Continued development of the Port for port purposes.

Priority Supporting Infrastructure Improvements (By Others)

The below are the priority supporting infrastructure improvements to be undertaken by others to support the growth of Port Botany over the period of this Port Development Plan.

Committed initiatives

- Port Botany Rail Line Duplication¹
- Cabramatta Rail Loop¹
- Sydney Gateway^{1,2}
- WestConnex³
- Improvements to the management of rail windows at Port Botany, through better coordination of stevedores, rail operators and rail infrastructure managers¹
- NSW Government will investigate a program similar to Fixing Country Roads to fund improvements to allow greater mass and more productive vehicles on roads and bridges in identified freight links in metropolitan Sydney¹
- Operational commencement of additional intermodal capacity in Sydney including Moorebank Intermodal Terminal^{2,3}.

Initiatives for investigation

- Western Sydney Freight Line^{1,2}
 - Northern Sydney Freight Corridor Stage 2¹
 - Chullora Junction Upgrade²
 - Capacity Upgrade to Foreshore Road at Port Botany¹
 - Western Sydney Fuel Pipeline^{1, 2}
 - NSW Government will investigate options to amend the State Environmental Planning Policy (Three Ports) 2013 to protect land around the ports, particularly land for port-related uses near Port Botany¹.
-

Other initiatives / actions not formally identified by government

- General Holmes Drive / Foreshore Road Intersection Improvements
- Upgrade of local intersections including:
 - Botany Road / Foreshore Road
 - Botany Road / Beauchamp Road
 - Botany Road / Bumborah Point Road
 - Bumborah Point Road / Military Road
- The development of dynamic underkeel clearance systems in order to optimise shipping movements
- Technological improvements for the freight rail network (i.e. signalling, automation etc)
- Public transport enhancements around the wider region
- Optimisation of empty container handling in the supply chain network
- Optimisation of waterside performance through towage licences, pilot resourcing etc
- Preservation of freight related lands around the Port
- Prevention of the further subdivision of large parcels of industrial land around the Port
- Prohibition of rezoning and prevention of expanded permitted uses on freight related industrial lands around the Port, including bulky goods retail.

Footnotes:

¹NSW Freight and Ports Plan 2018-2023

⁴Regional NSW Services and Infrastructure Plan

²Infrastructure Australia Priority List

⁵Illawarra-Shoalhaven Regional Plan

³Future Transport 2056 – Greater Sydney Services and Infrastructure Plan

8

PORT KEMBLA DEVELOPMENT PLAN

Port Kembla is NSW's port of growth. Located south of Wollongong, it is a key infrastructure asset and economic driver in the Illawarra region.





Port Kembla Overview

Port Kembla accommodates a range of dry bulk, bulk liquid and general cargoes. It is home to the state’s largest motor vehicle import hub and grain export terminal. Port Kembla will be the next container port to service the state once Port Botany nears capacity.

The map below shows the land area of Port Kembla we manage.



Port Kembla Key Strengths and Advantages

Proximity and access to the growing
population
 and employment lands of south-west
 Sydney and the Illawarra.

Capacity
 to handle new trades and increased
 volumes of existing trades.

**Approved for
 containers**
 Already approved as NSW's next container
 port once Port Botany nears capacity.

Capable of handling
large cargo
 vessels.

Excellent
 supply of well-connected nearby
 industrial land to support key trades
 and port-related activities.

Connections
 to regional NSW, including freight rail
 connections, to support agriculture
 and mining.

Proximity and access to
**Greater Sydney
 and the new
 Western Sydney
 Aerotropolis.**

Deep water
 shipping channel and berths that
 require minimal maintenance dredging.

Short shipping channel that minimises
 vessel transit time and contributes to
port efficiency.

Operates
24 hours
 per day, seven days a week (24/7).

Over the next 30 years, Port Kembla’s role in supporting the state’s mining, agriculture, manufacturing and construction industries as well as its population centres will grow and strengthen. Port Kembla will continue to connect NSW with overseas markets through exports and be a gateway for the imports required for the motor vehicle, manufacturing and construction industries.

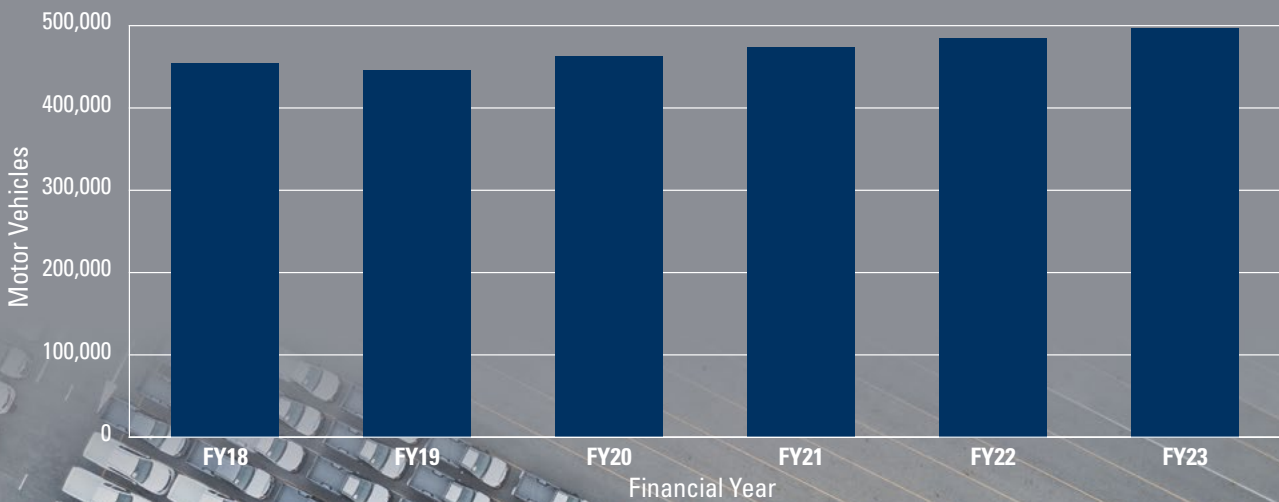
Over the last 10 years, Port Kembla has diversified from servicing traditional regional export markets (agriculture and minerals) and local steel-making materials to become a growing, vibrant facility. This is evidenced by the strong growth of imports of vehicle and construction materials, such as cement and gypsum.

This trend is expected to continue. As well as remaining the state’s largest motor vehicle import hub and bulk grain export port, the next three decades will see Port Kembla handle an increasingly diverse range of dry and liquid bulk products.

This will in turn strengthen Port Kembla’s role as the second container port after Port Botany, servicing the needs of metropolitan Sydney, in particular southern and western Sydney, and NSW more broadly.

In the financial year ending 2018, Port Kembla imported 454,486 motor vehicles. Over the period of this Port Development Plan that number is expected to rise to close to 500,000.

Port Kembla 5 Year Motor Vehicle Trade Forecasts (units)



Port Kembla’s connectivity to regional NSW and proximity to major growth areas in Sydney’s south-west, along with its ability to be flexible and cater for new trades, makes it central to the state’s future economic prosperity.

Port Kembla will be able to meet the growing motor vehicle, dry bulk, bulk liquid, gas and construction material needs of NSW over the next five years. It will cater for increased demand for goods as well as increased efficiencies in the supply chain (including larger ships, more productive vehicles, and increased rail movements).

We will continue to manage and develop the Port in a safe, secure, and efficient manner whilst sustainably catering for the expected trade growth.



NSW currently imports more than 95% of the natural gas it uses, with the majority of supplies coming from Victoria and South Australia. In recent years, gas supplies to the Australian east coast market have tightened, resulting in increased natural gas prices for both industrial and domestic users. Several recent economic studies have predicted significant future gas shortfalls for the state by 2022.

The proposed Port Kembla Gas Terminal will be made up of a floating storage and regasification unit with a connection to the existing NSW gas network. Should it proceed, it is anticipated this project will be operational within the timeframe of this Port Development Plan.



Port Kembla Container Terminal

Port Kembla will be home to NSW’s second container port once Port Botany reaches capacity. Concept plans for the facility have already been approved. There will be an ongoing refinement of these plans as the state’s container trade grows to meet increased population demands.

The diagram below shows the relative location of Port Kembla to the growth centres of Sydney based on the Three Cities model of the Greater Sydney Commission. These are the Eastern Harbour City, the Central River City, and the Western Parkland City.

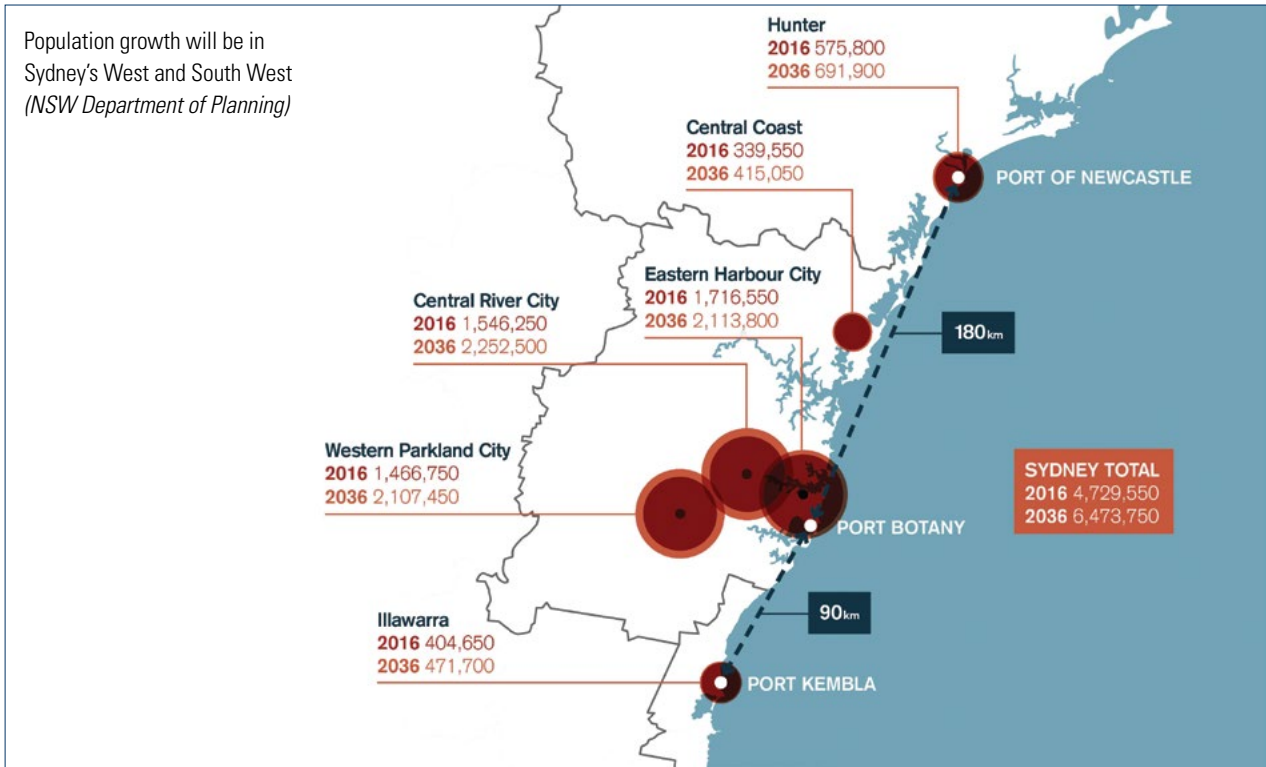
The work of the Greater Sydney Commission has strengthened the role of the Western Parkland City in particular. This has been further emphasised by the Australian and NSW Governments, together with eight local governments, signing the Western Sydney City

Deal on 4 March 2018. The investment, including the development of the Aerotropolis in the south-west, positions the region as one of significant growth over the next 20 years. Port Kembla is well positioned to meet this need.

“Port Kembla has been identified as the location for the development of a future container terminal to augment capacity of Port Botany when required”

Transport for NSW
(NSW Freight and Ports Plan, September 2018)

Population growth drives the destination of imports. Currently over 80% of containers through Port Botany are delivered within a 40km radius, and 90% of containers within a 50km radius. The map below details the forecast population for each location.





Port Kembla: NSW's next container terminal once Port Botany nears capacity



Port Kembla Planning Framework

The key planning instrument for development at Port Kembla is the *State Environmental Planning Policy (Three Ports) 2013* (the Three Ports SEPP), made under the *Environmental Planning and Assessment Act 1979* (the EP&A Act).

As with Port Botany, the Three Ports SEPP identifies development that is exempt, complying, permissible with consent, or permissible without consent. The exempt and complying provisions of the Three Ports SEPP allow port users to undertake certain minor developments without the need to apply for development consent under the EP&A Act.

Larger projects that do not meet exempt or complying development standards are subject to an assessment by the Department of Planning and Environment (DPE), including a public consultation process.

Importantly, the Three Ports SEPP provides the zoning and objectives for industrial land surrounding Port Kembla. As such, it guides state-level protection of areas pivotal in supporting the Port and the freight and logistics network.

The Three Ports SEPP zones the entirety of our land at Port Kembla as SP1 (Special Activities).

The Illawarra-Shoalhaven Regional Plan was released in November 2015. It is the first of nine regional plans providing a vision and direction for land use planning priorities and decisions addressing future needs for housing, jobs, infrastructure and a healthy environment.

The Plan identifies the strategic value and importance of Port Kembla with the aim of growing it to be an international trade gateway. It states that the NSW Government will:

- Require that Councils continue to protect the corridor for the proposed Maldon-Dombarton freight rail line in local planning controls.
- Identify and reduce land use conflicts between growing residential areas and the freight network and, where appropriate, include buffer measures to minimise the impact of development on the efficient functioning of the port and freight industry.

The existing industrial lands around Port Kembla have great value to NSW and need to be protected from competing uses. Even though they are currently underutilised, these areas have incredible potential for future manufacturing, technology and logistics.

Residential development within close proximity to the Port and its supporting industrial lands with insufficient mitigation measures pose a risk to ongoing port operations. The suburb of Port Kembla has grown through direct employment at the Port, however the gentrification and densification of the suburb is increasing the future risk of land use conflict. This has the potential to adversely impact future planning decisions, particularly for port users.

Road and Rail Access

Roads

Port Kembla is relatively well serviced by significant movement corridors connecting to the motorway network. Springhill Road and Five Islands Road provide high volume linkages.

There are existing road connections of strategic importance between Port Kembla and Sydney. The Princes Motorway provides a strong connection, however some further capacity works are required, including the Mt Ousley Interchange. Connections to Western and South Western Sydney are generally via Appin Road, Picton Road, or Heathcote Road. Upgrades to these roads have been flagged in state planning documents (i.e. Future Transport 2056) as well as by Infrastructure Australia, which lists 'Picton Road Capacity' as a high priority initiative.

NSW Ports will continue to advocate for improvements to these local and regional road connections. This would allow freight to bypass metropolitan Sydney and further strengthen Port Kembla's servicing of the growing population centres of Western Sydney.

Rail

The growing demand for passenger services on the South Coast Illawarra Line is going to result in an increasing shortage of rail freight paths. As a result, an alternative rail route for freight will be required.

The existing freight rail network in Southern Sydney and the Main South Line should be extended to the north into the planned Sydney Orbital and to Port Kembla in the south through the Maldon-Dombarton corridor. This would allow freight to bypass inner Sydney and further strengthen Port Kembla's role in servicing the growing population centres of Western Sydney.

Future Development



Provide efficient road connections to the ports and intermodal terminals

Potential developments at Port Kembla 2019–2023 [within the NSW Ports leased footprint]

Ongoing road maintenance works to improve the efficiency and reliability of NSW Ports' Port Kembla road network. Improvements to the NSW Ports road network, including potential road and intersection widening to cater for larger vehicles, road pavement upgrades, line marking etc.

Internal improvements to trafficked areas of tenanted sites, including car-parking arrangements, load-out facilities, and pedestrian amenity.



Grow rail transport

Potential developments at Port Kembla 2019–2023 [within the NSW Ports leased footprint]

Rail infrastructure, including improving the capacity and efficiency of existing rail facilities and catering for the future development of Port Kembla as a container terminal serviced by rail.

Ongoing rail maintenance works to improve the efficiency and reliability of the immediate Port Kembla rail network and service existing and emerging demands.



Use land and infrastructure efficiently

Potential developments at Port Kembla 2019–2023 [within the NSW Ports leased footprint]

Dredging of the Inner Harbour, Outer Harbour, and approach channels to ensure vessel capacity is achieved (this would be outside NSW Ports' lease boundary but within our area of responsibility).

Development to allow for a diversification of trades.

Development of additional bulk liquid and gas facilities.

Expansion and remodelling of existing facilities to cater for growing trade volumes, within existing land footprint.



Grow port capacity

Potential developments at Port Kembla 2019–2023 [within the NSW Ports leased footprint]

Development to cater for growing demand in Sydney and the Illawarra for bulk construction material, including sand, cement, gypsum, and aggregate.

Bulk liquid terminal expansion, including the development of the approved TQ Holdings bulk liquids facility and improvements to existing bulk liquid terminal infrastructure.

Development for the purposes of gas importation and distribution (i.e. storage facilities and pipeline infrastructure).

Potential development to cater for increased cruise ship movements, including the potential to utilise Port Kembla for cruise ship turnarounds.

Continued refinement of future container port development plans and implementation strategy.

Facilitation of early reclamation works in the Port Kembla Outer Harbour to support opportunities to use surplus spoil material, such as from excavation projects. This will also allow the Outer Harbour to be developed to meet demand.

The development of other areas (i.e. the Tug area, Christy Drive etc) to continue to cater for Port needs through provision of supporting services.



Protect the ports and intermodal terminals from urban encroachment

Potential developments at Port Kembla 2019–2023 [within the NSW Ports leased footprint]

Continued development of the Port for port purposes.

Priority Supporting Infrastructure Improvements (By Others)

The below are the priority supporting infrastructure improvements to be undertaken by others to support the growth of Port Kembla over the period of this Port Development Plan.

Committed initiatives

- M6 Stage 1³
- Princes Motorway, Interchange at Base of Mount Ousley⁴
- Princes Motorway Improvements, Bulli Tops to Picton Road⁴
- Protection of industrial lands surrounding Port Kembla⁵.

Initiatives for investigation

- Maldon-Dombarton Railway Line^{1, 4}
- Appin and Picton Road Improvements^{1, 2, 4}
- Outer Sydney Orbital from Hume Motorway to Illawarra^{1, 2, 4}
- M6 Stages 2 and 3²
- Moss Vale to Unanderra and Coniston Junction rail improvements⁴
- Illawarra Escarpment long term solution⁴.

Other initiatives / actions not formally identified by government

- The development of dynamic underkeel clearance systems in order to optimise shipping movements
- The reservation of sites in Western Sydney for the receipt of bulk materials by rail from the Port.
- The provision of additional lanes on the M1 Princes Motorway at Mt Ousley
- Technological improvements for the freight rail network (i.e. signalling, automation etc)
- Optimisation of waterside performance through towage licences, pilot resourcing etc
- Preservation of freight related lands around the Port
- Prevention of the further subdivision of large parcels of industrial land around the Port
- Prohibition of rezoning and prevention of expanded permitted uses on freight related industrial lands around the Port, including bulky goods retail.

Footnotes:

¹NSW Freight and Ports Plan 2018-2023

⁴Regional NSW Services and Infrastructure Plan

²Infrastructure Australia Priority List

⁵Illawarra-Shoalhaven Regional Plan

³Future Transport 2056 – Greater Sydney Services and Infrastructure Plan

9

ENFIELD AND COOKS RIVER DEVELOPMENT PLAN

Intermodal terminals are critical to the logistics chain and essential to increasing the volume of containers moved by rail.





Enfield Intermodal Logistics Centre Overview

The Enfield ILC will be a key logistics hub in central-west Sydney, 18km from Port Botany.

Occupying 60 hectares, this industrial site has a direct freight only rail connection to Port Botany via the Port Botany Freight Line.

The Enfield ILC includes an intermodal terminal, empty container storage areas and industrial lots for logistics, freight forwarding, pack-unpack, transport and warehousing uses. These industrial uses will benefit from their interactions with the facility.

The strategy for developing these intermodal facilities with dedicated freight rail connections is well recognised by industry, the NSW and Federal Government as necessary to meeting Sydney's growing container transport needs.

Over the next five years, we will manage and develop the intermodal terminals in a safe, secure and efficient manner whilst sustainably catering for trade growth.

The map below shows the area of the Enfield ILC we manage.



Enfield Intermodal Logistics Centre Key Strengths and Advantages

Located near

industrial lands

in central and western Sydney.

Significant capacity

to handle containers to meet growth in the area.

Located on, and accessible from,

key arterial road infrastructure,

including Hume Highway, Roberts Road, M5 and M4 motorways.

Direct freight rail connection

to Port Botany.

Industrial lots and empty container storage areas within the site allowing

efficient transfer operations.

Ability to operate

24 hours

per day, seven days a week (24/7).

Cooks River Intermodal Terminal Overview

The Cooks River Intermodal Terminal is ten kilometres by road and eight kilometres by rail from Port Botany. The Terminal is an inland extension to the Port and provides an important contribution to the container logistics freight task.

The Cooks River Intermodal Terminal is directly connected to Port Botany by the Port Botany Freight Line.

The Intermodal Terminal provides the largest empty container storage facility in the state as well as opportunities for the repair, washing and upgrading of empty containers and other ancillary services.

Trucking operators make use of the facility to deliver empty containers and collect full containers, optimising truck fleets and minimising the number of vehicles travelling to Port Botany.

The map below shows the area of the Cooks River Intermodal Terminal we manage.



Cooks River Key Strengths and Advantages

Located close to

Port Botany.

Accessible from

**key arterial
road
infrastructure**

including the Princes Highway,
M5 Motorway and Eastern Distributor.

Capacity

to handle additional container volumes
to service the needs of the Port.

**Direct freight
rail connection**

to Port Botany.

Operates

24 hours

per day, seven days a week (24/7).

Located opposite the proposed
WestConnex St Peters Interchange
to provide a

**future direct
connection**

to the M4 Motorway and a more direct
connection to the M5 Motorway.

Intermodal Terminal Planning Framework

The strategy for developing these facilities with dedicated freight rail connections is well recognised by industry and the NSW and Federal Governments as necessary to meeting Sydney's growing container transport needs. Over the next five years, we will manage and develop the intermodal terminals in a safe, secure, and efficient manner whilst sustainably catering for trade growth.

Unlike Port Botany and Port Kembla, the Three Ports SEPP does not apply to the Enfield ILC or Cooks River Intermodal Terminal. These sites are subject to the respective Local Environmental Plans of the local councils. These councils are Strathfield Council for Enfield and Inner West (formerly Marrickville) Council for Cooks River. Generally, development is identified as an exempt or complying development under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. If not, it would require a development approval.

The Enfield ILC is subject to a major project approval covering the construction and operation of the entire site. Any amendments will generally trigger a requirement for a modification under the *Environmental Planning and Assessment Act 1979* (EP&A Act). These need to be lodged for assessment with DPE, as the consent authority of the original approval.

Development not covered by the major project approval may require the consent of Strathfield Council as the consent authority. This was the case with the garden centre, recently approved at the south-west of the site.

Development at the Cooks River Intermodal Terminal generally requires development consent from Inner West Council as the consent authority. For example, recent approval for the development of a container washbay was sought and granted through the local development process.

Industrial lands around intermodal terminals allow for container-related businesses to be located close to rail hubs, reducing road transport distances. These lands need to be protected.

Residential development within close proximity to the intermodals and rail lines or with insufficient mitigation measures pose a risk to ongoing intermodal operations. Land use conflict has the potential to adversely impact future planning decisions.

Road and Rail

Roads

Our intermodal terminals will not achieve optimum capacity if road connections to and from these facilities are limited. Congestion on Sydney's road network remains the key issue.

Inappropriate conditions of consent, such as operational limits, have the ability to reduce the efficiency of road connections.

Intermodal truck traffic is, and will remain, a small component of the overall traffic volumes on the city's roads.

Rail

Rail access to and from the intermodal terminals is of crucial importance to their operational efficiencies. Separation of freight and passenger services between the intermodals and Port Botany have brought increased operational capability. The freight rail corridors between the intermodals and the Port must be preserved and protected from encroachment to ensure 24/7 supply chain operation is maintained.

Future Development



Provide efficient road connections to the ports and intermodal terminals

Potential developments at Cooks River and Enfield 2019–2023 [within the NSW Ports leased footprint]

Ongoing road maintenance works to improve the efficiency and reliability of the immediate road network.

Internal improvements to trafficked areas of tenanted sites, including car-parking arrangements, load-out facilities, and pedestrian amenity.



Grow rail transport of containers

Potential developments at Cooks River and Enfield 2019–2023 [within the NSW Ports leased footprint]

Rail infrastructure, including improving the capacity and efficiency of existing rail facilities and catering for future container growth. This could include additional sidings and improvements to existing turnouts and switches.

The continued development of our intermodal terminals, which will allow for the growth of rail transport of containers.



Use land and infrastructure efficiently

Potential developments at Cooks River and Enfield 2019–2023 [within the NSW Ports leased footprint]

Development of warehousing at the Enfield ILC to support the existing and future intermodal operations.

Development and optimisation of the Cooks River Intermodal Terminal including removal of redundant buildings, increases to hardstand area, and improvements to traffic circulation.

Increases to permitted stacking heights at the Cooks River Intermodal Terminal, currently limited through planning approval conditions of consent.

Development of the approved Garden Centre at the existing Tarp Shed at the Enfield ILC.



Grow port capacity

Potential developments at Cooks River and Enfield 2019–2023 [within the NSW Ports leased footprint]

Continued development of the intermodal terminals to improve the efficiency of movements to and from Port Botany (i.e. new sidings, uses with high import / export requirements etc.).



Protect the ports and intermodal terminals from urban encroachment

Potential developments at Cooks River and Enfield 2019–2023 [within the NSW Ports leased footprint]

Continued development of the Intermodal Terminals for freight purposes.

Priority Supporting Infrastructure Improvements (By Others)

The below are the priority supporting infrastructure improvements to be undertaken by others to support the growth of Enfield and Cooks River over the period of this Port Development Plan.

Committed initiatives

- Port Botany Rail Line Duplication¹.

Initiatives for investigation

- A3 and A6 Corridor Capacity².

Other initiatives / actions not formally identified by government

- Direct connections from Cooks River Intermodal to Sydney Gateway
- Construction of a new turnout or shunting line to provide access to Cooks River without blocking the main line
- Improvements to the road network in the vicinity of Cooks River including the Princes Highway and the heavy vehicle route to Port Botany
- Improvements to the road network in the vicinity of the Enfield ILC including the Hume Highway and the A3 Corridor
- Protection of surrounding industrial lands to the Intermodal Terminals
- The expansion of the Three Ports SEPP to cover the key freight hubs of Enfield and Cooks River and their surrounding industrial lands
- Improved utilisation of the Enfield Marshalling Yards in order to provide better access to the Southern Sydney Freight Line.

Footnotes:

¹NSW Freight and Ports Plan 2018-2023

⁴Regional NSW Services and Infrastructure Plan

²Infrastructure Australia Priority List

⁵Illawarra-Shoalhaven Regional Plan

³Future Transport 2056 – Greater Sydney Services and Infrastructure Plan

IMPLEMENTING THE PORT DEVELOPMENT PLAN

This Port Development Plan has been created within the framework of the objectives set in our 30 Year Master Plan. These objectives have been identified to sustainably cater for trade growth and guide our decision-making.

The trade and movement of goods into and out of our ports is essential to the community's wellbeing and the strength of the economy. This Port Development Plan acknowledges that we will respond sensibly, strategically and sustainably to meet NSW's growing trade needs.

For stakeholders, this Plan articulates our priorities and the actions we believe should be taken to ensure a sustainable and efficient port supply chain. Changes are inevitable as new information and trends come to light and this Port Development Plan will be looked at again should the need arise.

The *Ports and Maritime Administration Act 1995* allows us, as the port operator, to charge a 'Port Infrastructure Charge' for the acquisition or development of land or the provision of services and facilities to port users at Port Botany and Port Kembla. We do not currently impose such a charge, however may do so if needed to provide for port infrastructure.

This Port Development Plan will be reviewed in 2023 for the next five-year period and with consideration of our long-term trade forecasts and development objectives.



