PORT of NEWCASTLE

UNLEASHING COMPETITION AMONG AUSTRALIAN CONTAINER PORTS

A SUBMISSION TO THE PRODUCTIVITY COMMISSION'S DRAFT REPORT ON AUSTRALIA'S MARITIME LOGISTICS SYSTEM

NEWCASTLE, 14 OCTOBER 2022
FINAL

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OVERVIEW

The Port of Newcastle ("**PON**") welcomes the Productivity Commission's ("**PC**") review of Australia's maritime logistics system. In addition to its observation that Australian bulk ports are among the most efficient in the world (including Newcastle for coal), the PC's draft report appropriately focuses on containerised trade, and identifies a range of issues that plague containerised shipping activities in Australia.

In particular, draft findings 3.7 to 3.9 of the PC's draft report state that:

- Australian container ports take longer to turn ships around than many international ports;
- international evidence suggests that Australian container ports could lift their productivity; and
- improving container port productivity would deliver significant benefits.

The findings underscore the importance of efficient ports for the functioning of the Australian economy.

The PC also puts forward a set of draft recommendations for increasing competition in other markets and for resolving workforce arrangement issues. However, the PC does not set out recommendations for promoting competition among container ports, even though draft findings 5.1 to 5.4 of the PC's draft report accept that:

- major container ports are currently regional monopolies;
- privatisation in New South Wales (NSW) has impeded efficient outcomes;
- ports face little countervailing power; and
- no case has been found for further regulation.

PON agrees with the PC that well-functioning, efficient container ports are important for reducing the costs of imports and increasing the competitiveness of Australian exports, while ensuring the reliability of the maritime supply chain and logistics systems more broadly. To that end, PON considers that reducing barriers to entry for new container terminals is an important step for boosting port competition that will promote efficiency among existing major container ports. This will generate several direct and indirect benefits for the Australian economy, including alleviating the considerable cost-of-living pressures that Australian consumers presently face.

As the PC observes, Port Botany and PON currently participate in a market for general container freight transport in Sydney, but PON only shifts very small volumes of container freight and will be penalised if it expands its container operations. This means that PON currently provides little competitive constraint against Port Botany's container operations.

PON is proposing to invest in a modern multi-use deepwater container terminal in Newcastle ("**NDCT**") that will accommodate larger ships and utilise spare capacity on existing road and rail infrastructure. We envisage that this terminal will provide additional container port capacity to serve NSW's growing container freight transport needs while also applying competitive pressure on Port Botany's container freight activities.

However, the penalties that would be levied if container operations at PON were expanded make it uneconomic to proceed with the considerable capital investments required for the Newcastle NDCT. These penalties are thus a significant barrier that prevents PON's competitive entry as a major container port in the market for general container freight transport in Sydney.

As such, PON suggests that the PC should include a recommendation that encourages governments to remove uneconomic impediments to greenfield container terminal developments, such as those impeding the proposed NDCT.

AUSTRALIAN CONTAINER PORTS ARE INEFFICIENT

Two of the PC's draft findings include that:[1]

- Australian container ports take longer to turn ships around than many international ports (draft finding 3.7); and
- international evidence also suggests that Australian ports could lift their productivity (draft finding 3.8).

These findings are supported by analysis from the World Bank as well as the PC's own empirical analysis. Among Australian container ports, Port Botany tends to be one of the two most inefficient ports under several measures considered by the PC.

The inefficiency of Australian container ports contrasts with container ports in New Zealand, which the PC observes as being more efficient than Australian ports.[2] It also contrasts with Australian bulk ports, which are among the most efficient in the world.[3]

This section summarises the empirical findings of the PC's draft report. We set out the PC's observations regarding the efficiency of Australian container ports on a global scale, and contrast that with container ports in New Zealand and Australian bulk ports. Finally, we summarise the PC's analysis regarding Port Botany's relative efficiency among Australian ports.

KEY POINTS

- Analysis by the World Bank and the PC show that Australian container ports are inefficient
  - World Bank analysis shows that Australian container ports take longer to turn ships around than many international ports
  - The PC's alternative methodology finds that most Australian ports are not operating efficiently
  - Bulk ports in Australia and container ports in New Zealand are efficient on a global scale
- Port Botany is one of two most inefficient Australian ports under several measures
  - Constructing a greenfield container terminal in Newcastle will increase competition that provides additional incentives for Port Botany to pursue productivity enhancing improvements, while also increasing the resilience of the maritime supply chain

Analysis by World Bank and the PC show that Australian container ports are inefficient

The PC's draft report includes two empirical approaches for benchmarking Australian container ports, namely:

- analysis by the World Bank that measures the time each container port takes to turn ships around; and

[1] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 37.

[2] Productivity Commission, *Container port productivity*, Technical paper, September 2022, pp 44, 66.

[3] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 94.

- the PC's own analysis that measures how productive Australian container ports are at generating TEU throughput from the inputs available to them.

The results from the two approaches suggest that Australian container ports are inefficient compared to international ports and are not using their inputs efficiently.

PON is concerned by these findings and the resulting implications for the rest of the economy. We consider that increasing competition among Australian container ports by facilitating the entry of greenfield container port terminals should be deemed an important priority for government policy.

World Bank analysis shows that Australian container ports take longer to turn ships around than many international ports

The PC's draft report refers to a benchmarking study of 351 international container ports in 2019-20 and 2020-21. These studies were jointly conducted by the World Bank and his Markit.

In these studies, the World Bank ahisIHS Markit develop a Container Port Performance Index ("**CPPI"**) that measures the time a port takes to turnaround ships, i.e., the time from when a ship reaches the port limit until it departs from the berth. This time includes anchorage, steam in and cargo handling operations, with more efficient ports expected to handle a given ship-call-size combination more quickly than less efficient ports.[4]

The CPPI ranks nearly all Australian ports in the bottom 20 per cent of the ports assessed. The lone exception is Port of Brisbane, which ranks in the bottom 30 per cent.[5] These findings are also consistent with the PC's literature review, in which several previous empirical studies find that Australian container ports perform poorly relative to international ports.[6]

The PC notes several criticisms of the World Bank's study,[7] and thus carries out a deeper analysis into the factors that drive the poor performance of Australian container ports. The PC observes that:[8]

- most Australian container ports perform particularly poorly when handling medium and large ships, while Port Botany handles even feeder ships poorly;
- Australian ports are substantially slower than the top three international ports at turning around medium-sized ships of all call sizes, and are typically slower than the average global port;
- Australian ports take up to three times longer to turn around large ships than top international ports and often take considerably longer than the average international port;
- cargo operating times at Australian ports are longer than the international average for medium and large sized ships, eg, for large ships with a call size of 2001-2500 containers:
    - the top three international ports take under 20 hours to handle cargo while the global average is 29 hours;
    - Sydney and Fremantle take over 44 hours to handle cargo, which is more than double that of the top three international ports and 50 per cent longer than the global average; and
    - Melbourne and Brisbane take over 36 hours to handle cargo.

[4] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 91.

[5] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 92.

[6] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 94..

[7] See: Productivity Commission, *Container port productivity*, Technical paper, September 2022, pp 45-46.

[8] Productivity Commission, *Container port productivity*, Technical paper, September 2022, pp 48-53.

The PC's alternative methodology finds that most Australian ports are not operating efficiently

The PC also carries out its own alternative approach for benchmarking Australian ports. This analysis is restricted to a smaller sample of 166 international container ports that the PC considers broadly comparable to Australian ports.[9] It evaluates the productivity of a port by comparing:

- the output it generates in terms of TEU throughput; against
- five inputs, namely, number of terminals, number and total length berths, maximum draft, and number of container cranes.[10]

The PC's analysis shows that Port Adelaide is operating efficiently, but other Australian ports are not. Specifically, Port of Melbourne is operating at 90 per cent efficiency, while Sydney, Brisbane and Fremantle are operating at between 71 per cent and 75 per cent efficiency.[11]

Based on these results, the PC concludes that Australian ports have the ability to increase their container throughput by utilising their inputs more efficiently.[12]

Other ports in Australia and New Zealand are efficient on a global scale

The PC finds that the observed inefficiency of Australian container ports does not apply to other ports in Australia and New Zealand. In particular:[13]

- the PC's alternative benchmarking approach finds that three ports in New Zealand are operating efficiently, while Ports of Auckland operates at 90 per cent efficiency; and
- a study by the OECD finds that Australian bulk ports are among the most efficient in the world.

These findings are consistent with the PC's draft finding that there is significant scope for Australian container ports to lift their productivity, since other closely comparable ports in the region are able to operate efficiently relative to other international ports and in terms of maximising their outputs for a given set of inputs.

In addition, the findings suggest that there are opportunities to draw lessons from international port operations and experience. However, without competitive pressure from greenfield container terminals, the vast distances among existing major Australian container ports mean that there is little incentive for them to seek out productivity enhancing improvements.

Port Botany is one of two most inefficient Australian ports under several measures

In addition to the international benchmarking analysis shown in the previous section, the PC has conducted a domestic analysis of Australian container ports. This analysis finds that Port Botany has the lowest or second-lowest efficiency among Australian ports under several measures.

[9] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, pp 136-137.

[10] The PC's alternative approach involves using data envelopment analysis (DEA) to estimate a production possibility frontier. The efficiency of Australian ports can then be assessed in terms of their positions relative to that frontier. See: Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, pp 135-140.

[11] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 138.

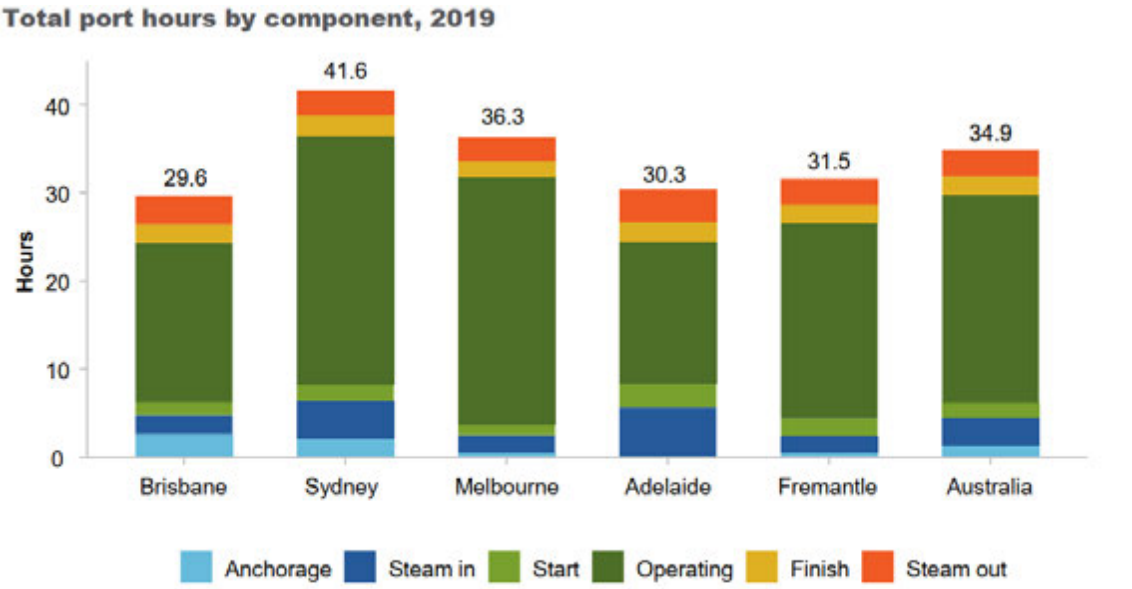
[12] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 138.

[13] Productivity Commission, *Container port productivity*, Technical paper, September 2022, pp 8, 44.

The average time that container ships spent at each Australian port is shown in figure 1, which reproduces figure 4 from the PC's technical paper. The figure shows that among Australian container ports, Port Botany:[14]

- has the longest average ship turnaround time;
- has the second longest average anchorage time after Port of Brisbane;
- has the second longest steam-in time after Port Adelaide;
- has the second longest combined start and finish times; and
- has the longest operating time.

FIGURE 1: AVERAGE TIME SPENT AT CONTAINER PORTS – (REPRODUCES FIGURE 4 FROM THE PC'S TECHNICAL REPORT)



a. Observations with arrival hours greater than 72 hours are removed from sample data cleaning advice provided by IHS Markit. Observations with data on all time-based metrics are included in the sample, 85 per cent of full sample.

Source: IHS Markit's Port Performance Program data.

Source: Productivity Commission, *Container port productivity*, Technical paper, September 2022, p 29.

PON suggests that if a greenfield container terminal is constructed in Newcastle, the increased competition will provide additional incentive for Port Botany to pursue productivity enhancing improvements, while also increasing the resilience of the maritime supply chain.

[14] Productivity Commission, *Container port productivity*, Technical paper, September 2022, pp 28-33.

EFFICIENCY AND RESILIENCE CAN BE BOOSTED BY UNLEASHING COMPETITION AND PROVIDING ALTERNATIVE PORT TERMINALS

The PC's draft findings include that:[15]

- major container ports are currently regional monopolies (draft finding 5.1);
- privatisation in NSW has impeded efficient outcomes (draft finding 5.2);
- ports face little countervailing power (draft finding 5.3); and
- no case has been found for further regulation (draft finding 5.4).

These findings suggest that major container ports in Australia currently face little competitive pressure. This lack of competitive pressure contributes to inefficiency among major container ports, which have less incentive to adopt efficient practices and to improve service quality and reliability.

PON agrees with the PC's draft finding 5.4 that there is no case for further regulation, given that there is insufficient evidence of container ports exercising market power under the current 'light touch' regulatory regime.[16] However, we consider that efficiency and resilience can be boosted by increasing competition among container ports, which includes removing uneconomic impediments to new container terminal developments.

The PC also observes that the inefficiency of major container ports in Australia may be driven by factors outside of their control. PON considers that several of these factors can also be ameliorated by removing impediments against constructing additional container terminals at other ports.

KEY POINTS

- Constructing a greenfield container terminal at PON will increase competition at Port Botany since both ports operate in the same market, so encouraging Port Botany to increase its efficiency on factors within its control
- Removing impediments against constructing greenfield container terminals at other ports boosts resilience against factors outside the control of container ports

Constructing a greenfield container terminal at PON will increase competition at Port Botany since both ports operate in the same market

The PC observes that each of the five major Australian container ports possesses market power over shipping lines, although they are not exercising this market power.[17]

As the PC explains, this market power arises because import cargo destinations tend to be local to each port and it is uneconomic to move cargo between cities using landside transport, meaning that shipping lines cannot credibly threaten to move their business elsewhere.[18] Based on the information available to

[15] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, pp 38-39.

[16] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 172.

[17] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 15.

[18] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 15.

it, the PC strongly considers that there are separate state-based markets for port services, including a 'Sydney and Newcastle market for container port services'.[19]

It follows that constructing a new container terminal at PON will increase competition at Port Botany as both ports operate in the same market and compete for the same customers. This contrasts with the status quo, where PON provides little competitive constraint against Port Botany's container operations.

As the previous section discusses, Port Botany is one of two most inefficient Australian container ports under several of the PC's measures, while PON is one of the most efficient bulk ports in the world. The increased competition from PON therefore will likely generate significant incremental benefits to consumers and to the broader economy in NSW and Australia.

PON is confident that this increased competition will replicate the well-known case study in New Zealand, where Port of Tauranga's entry as a container port generated competitive pressure against Port of Auckland that led to lower prices, better service reliability, and improved efficiency.[20]

Removing impediments against constructing greenfield container terminals at other ports will boost resilience against factors outside ports' control

Aside from improving efficiency through increased competition, constructing a greenfield container terminal at PON will also boost the resilience of container port services in NSW and Australia.

The PC's draft report observes that inefficiency at Australian container ports may be affected by factors outside their control, such as:[21]

- disruptions to vessel loading and unloading caused by protected industrial action;
- number of ship visits, arrival times, and the number of containers to be handled;
- demand for imports in Australia and world demand for Australian exports;
- the size of ships operated by international shipping lines and service frequency; and
- delays due to inclement weather.

Consistent with our initial submission, PON considers that many of the above factors can be ameliorated if greenfield container terminals are constructed at other ports operating in the same market.[22] This is because some container ships can be diverted to the alternative container terminal if a disruption or delay occurs. This in turn will shorten the ship queues that build up due to the disruption or delay, while also shortening the period required to 'catch up' on the backlog of lost container port services.

For example, if an unannounced week-long protected industrial action occurs at Port Botany but not at PON, then it may not be possible to redirect container ships that are already waiting in Port Botany's waters, since doing so will have flow-on effects on the rest of the supply chain. In particular, containers with goods for export may already be stored at Port Botany and cannot be redirected to PON.

[19] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 151.

[20] A study by NZIER shows that closing Auckland's port will increase the cost of imports by between $533 million and $626 million a year through a reduction in competition. See: Ports of Auckland, https://www.poal.co.nz/media-publications/Pages/Auckland%E2%80%99s-port-saves-Aucklanders-over-$500-million-a-year.aspx, accessed 7 October 2022.

[21] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, pp 94, 138, 301, 306-307.

[22] See: Port of Newcastle, *Unlocking regional ports to drive maritime logistics productivity*, 4 March 2022, p 19.

However, there may be scope to redirect container ships that are scheduled to arrive at Port Botany one week later, at which point the rest of the supply chain can adapt to the effects of the week-long protected industrial action by redirecting their supply routes instead to go through the container terminal at PON. This reduces the queue of ships that will build up while Port Botany catches up on its backlog once the protected industrial action ends.

In this way, constructing greenfield container terminals at other ports will boost the resilience of the maritime supply chain by ameliorating the impact of factors outside the control of existing major ports.

IMPROVING EFFICIENCY AND RESILIENCE AT CONTAINER PORTS WILL HAVE POSITIVE DIRECT AND INDIRECT EFFECTS ON THE ECONOMY

The PC finds that improving container port productivity would deliver significant benefits (see draft finding 3.9), with inefficiencies at Australia's major container ports costing the Australian economy $605 million a year and rising.[23]

The PC also finds that, in addition to the direct costs associated with inefficiency at major container ports, there are significantly larger indirect economy-wide impacts associated with container port productivity that will affect the living standards of all Australians.[24]

PON agrees with the PC's findings. Furthermore, we consider that many of the container port productivity issues identified by the PC can be ameliorated by removing impediments against constructing greenfield container terminals at other ports, which in turn will generate benefits for the rest of the economy and for all Australians.

Given the significant cost-of-living pressures that Australian households currently face, PON considers that taking immediate steps to resolve these container port productivity issues is of paramount importance for government policy.

KEY POINTS

- Improving efficiency and resilience at container ports will result in cheaper imports and more competitive exports, which benefits both firms and consumers
- Improving efficiency and resilience at container ports will help to alleviate the cost-of-living pressures that Australian households currently face
- The PC's draft report does not include any draft recommendations aimed at incentivising Australia's worst performing container ports to seek productivity enhancing improvements or increasing competition among container port terminals
  - PON submits that the PC should include such recommendations as part of its final inquiry report

Improving efficiency and resilience at container ports will result in cheaper imports and more competitive exports

The PC estimates that if all five major container ports in Australia improve their turnaround times to the global average, then this will reduce the cost of container imports by $30 to $120 per TEU, which corresponds to annual cost savings of $605 million across Australia.[25]

[23] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 38.

[24] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 90.

[25] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, pp 94-95, 142.

The PC also observes that ports have large indirect impacts on Australian businesses, consumers and the economy, since:[26]

- some firms and consumers rely on ports to import and export containerised goods;
  - Australian seaports handled 99.93 per cent of all trade by volume and 83.6 per cent by value in 2018-19; and
- the economy and the wellbeing of Australians may be jeopardised if there are disruptions to:
  - imports of goods that are critical to local production of essential goods and services; or
  - exports that provide a significant share of national income and employment.

PON agrees with the PC's observations. As the previous section sets out, we consider that removing impediments against constructing greenfield container terminals at other ports will promote efficiency and resilience across the maritime supply chain through increasing competition and diversifying supply routes.

In particular, PON notes that:[27]

- the PC's estimates are broadly consistent with those reported in our initial submission, where we estimate cost savings from wait time improvements of approximately $70 per TEU for freight that passes through the Newcastle NDCT relative to Port Botany;
- constructing a more efficiently designed greenfield port at PON will further increase cost savings by $65 per TEU; and
- constructing a greenfield port at PON that can better accommodate large ships potentially can lower trade costs between Australia, South America, and South East Asia, which will improve the competitiveness of Australian exports while lowering the prices of imported goods;
  - one relevant case study in New Zealand is that challenges with Port of Auckland's automation project led to container volumes shifting to Port of Tauranga, which has been New Zealand's largest port by container throughput since 2017.[28]

Improving efficiency and resilience at container ports will help to alleviate the cost-of-living pressures that Australian households currently face

Australian households are facing considerable cost-of-living pressures, with:

- year-on-year inflation reaching 6.1 per cent in June 2022, which is the highest since the early 1990s;[29]
- interest rates on variable-rate mortgages increasing by approximately one-third this year, from 3.0 per cent as at December 2021 to 4.0 per cent as at July 2022;[30]
  - more than half of all Australian households are expected to experience significant mortgage stress if the Reserve Bank raises cash rates to the expected 3 per cent;[31] and

[26] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, pp 143-144.

[27] Port of Newcastle, *Unlocking regional ports to drive maritime logistics productivity*, 4 March 2022, pp 23, 30.

[28] Deloitte, *Building resilience through disruption | New Zealand Ports and Freight Yearbook 2022*, p 40.

[29] ABS, *6401.0 Consumer price index, Australia*, Tables 1 and 2 - CPI: All groups, index numbers and percentage changes, June 2022.

[30] Reserve Bank of Australia, *Housing Lending Rates*, Table F6, August 2022.

[31] 9news, https://www.9news.com.au/national/rba-interest-rate-hikes-could-send-many-australian-households-into-mortgage-stress/ae596c39-ea7b-4211-b596-c282182a6536, accessed 15 September 2022.

- consumer confidence falling alongside declining housing prices.[32]

In addition, the Reserve Bank points to supply-side problems as one of the important drivers of inflation,[33] and recently has referred to port congestion as one of the causes of supply chain problems around the world:[34]

> This shift in consumption patterns took suppliers by surprise, and has resulted in transportation issues becoming a major driver of supply chain issues since around mid 2020. This primarily reflects a global shortage of shipping containers, particularly out of China, and a mismatch of the location of containers, which are often full in one direction but empty in the other direction. **At various times this has been exacerbated by congestion at some ports around the world as increased import volumes have coincided with reduced capacity due to restrictions.** The lack of shipping containers has resulted in sharp increases in global shipping prices since mid 2020, as well as delivery delays… (emphasis added)

The Reserve Bank's observations are consistent with the PC's findings discussed in previous sections. As the PC states, efficient ports are vital to the functioning of the Australian economy.[35]

PON considers that the PC's findings about the inefficiency of Australian container ports are particularly concerning. With Australian households facing considerable cost-of-living pressures and consumers being pessimistic about the future, PON urges the PC to prioritise making recommendations that will alleviate some of these pressures by improving the efficiency and resilience of container ports and the maritime supply chain.

In particular, the PC's draft report includes several draft recommendations addressing:

- competition issues in other markets;
- workforce arrangements; and
- national shipping concerns.

However, the PC has not included any draft recommendations aimed at incentivising Australia's worst performing container ports to seek productivity enhancing improvements. The PC also has not recommended increasing competition among container port terminals, such as by encouraging governments to remove uneconomic impediments to greenfield container terminal developments.

In light of the deteriorating economic conditions that Australian households and consumers face, PON submits that the PC should include such recommendations as part of its final inquiry report.

[32] Reserve Bank of Australia, *Statement by Philip Lowe, Governor: Monetary Policy Decision*, 6 September 2022.

[33] Reserve Bank of Australia, *Statement by Philip Lowe, Governor: Monetary Policy Decision*, 6 September 2022.

[34] Reserve Bank of Australia, *Statement on Monetary Policy*, May 2021, p 25.

[35] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 94.

PORT OF NEWCASTLE'S PROPOSED CONTAINER TERMINAL

PON is proposing to invest in a modern multi-use deepwater container terminal ("**NDCT**") in Newcastle that will accommodate larger ships and utilise spare capacity on existing road and rail infrastructure. We envisage that this terminal will provide additional container port capacity to serve NSW's growing container freight transport needs while also applying competitive pressure on Port Botany's container freight activities.

In this section, we describe the key features of the proposed NDCT and how it will generate benefits across Australia's maritime logistics system, and for the Australian economy. Finally, we reiterate the importance of removing penalties against expanding container operations in Newcastle.

KEY POINTS

- The NDCT will drive port productivity across Australia's maritime logistics system
- The NDCT will divert traffic away from congested road and rail infrastructure towards existing underutilised infrastructure
- Removing the penalties levied against expanding container operations in Newcastle is an important first step for unleashing competition and supercharging productivity at Australian ports

The NDCT will drive port productivity across Australia's maritime logistics system

The Port of Newcastle is proposing to construct a state-of-the-art NDCT. Once fully constructed, the NDCT will have:[36]

- a capacity of 2.5 million TEU per year;
- 12 individual quay cranes;
- a total quay line of 1,320 metres with capacity to handle three large ships simultaneously, ie, two 400-metre vessels, and one 370-metre vessel;
- access to large amounts of land for container storage;
- an existing rail network linking PON to Sydney; and
- automated container movement and transfer onto rail.

These features are anticipated to provide significant efficiency benefits to PON's operations and drive port productivity across Australia's maritime logistics system.

The NDCT will also have scope to accommodate larger ships (between 10,000 and 24,000 TEU) which creates the opportunity to position Australia amongst a network of deepwater terminals, thus providing access to new, more efficient trade routes.

PON is confident that the cost savings that arise through improved productivity and the economies of scale from serving large ships will pass through to Australian consumers and exporters, which will provide significant benefits across the economy.

[36] See our initial submission: Port of Newcastle, *Unlocking regional ports to drive maritime logistics productivity*, 4 March 2022, pp 24-25.

The NDCT will divert traffic away from congested road and rail infrastructure towards existing underutilised infrastructure

PON expects that the NDCT will change the pattern of freight infrastructure use, allowing the transport system in NSW to be used more efficiently without requiring significant new investment in infrastructure.

In particular, the NDCT will:[37]

- redirect freight trucks away from congested roads around Port Botany, which serve as key routes to areas around the Sydney central business district (CBD);
- redirect rail traffic away from Sydney's passenger rail network towards spare rail freight capacity on the Northern Rail Line; and
- make more effective use of abundant land in the Western Sydney Employment Area without requiring large scale rezoning of land that is being used for other purposes.

Overall, the NDCT is estimated to deliver net economic benefits of almost $1 billion to NSW, consisting of:[38]

- $1.5 billion in non-port benefits such as reduced road freight costs and port productivity benefits;
- $1.1 billion avoided costs at Port Botany; less
- $1.7 billion in build and maintenance costs.

Removing the penalties levied against expanding container operations in Newcastle is an important first step for unleashing competition and supercharging productivity at Australian ports

The PC observes that port privatisation processes have entrenched Port Botany's market power over general container freight transport in Sydney by:[39]

- combining the ownership of Port Botany and Port Kembla; and
- penalising any development of container capacity at the Port of Newcastle.

PON considers that this entrenching of market power is a major contributor to Port Botany's inefficiency compared to global ports and other ports in Australia.

In particular, the penalties that will be levied for expanding container operations at PON make it uneconomic to proceed with the significant capital investments required for the Newcastle NDCT, despite evidence of the considerable economic benefits that will be generated by the NDCT. The penalties thus serve as a major barrier to entry that insulates Port Botany from competitive pressure and disincentivises it from seeking out productivity enhancing improvements.

PON notes the PC's observation that government policy responses in Australia:[40]

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[37] See our initial submission: Port of Newcastle, *Unlocking regional ports to drive maritime logistics productivity*, 4 March 2022, pp 24, 28.

[38] See HoustonKemp analysis in a submission to Infrastructure Australia.

[39] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 15.

[40] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 59.

- can only play a limited role in alleviating short and medium-term global supply and demand pressures; but
- will underpin the readiness of Australia's maritime logistics system to address the challenges of the future.

Well-functioning, efficient and dependable maritime ports are critical to the competitiveness of the Australian economy.[41] As such, PON strongly suggests that the PC should include a recommendation for removing the penalties levied against expanding container operations in Newcastle. This important government policy response will serve as a crucial first step for unleashing competition and supercharging productivity at Australian ports, as well as underpinning the readiness of Australia's maritime logistics system to address the challenges of the future.

[41] Productivity Commission, *Lifting productivity at Australia's container ports: between water, wharf and warehouse*, Draft report, September 2022, p 59.

APPENDIX A – RESPONSE TO THE DRAFT FINDINGS

Draft finding	Port of Newcastle's response
The performance of Australia's container ports	
3.1 The elapsed labour rate is not a measure of labour productivity	Agree. As container terminals become increasingly automated, labour productivity is expected to increase substantially, while the number of containers handled per hour will be limited to the number of cranes used per vessel, and the size of those vessels.
3.2 Data gaps limit assessment of port performance	Agree. PON supports improving the availability of data to monitor port performance. This will improve transparency of productivity outcomes and so benefit competition over the medium term.
3.3 The framework for measuring Australian container port performance could be enhanced	Agree. Collecting the necessary data for comparison purposes is the first step towards understanding how best to achieve productivity improvements in Australian ports.
3.4 There is scope to improve crane rates	Agree.
3.5 Container port productivity has increased in the last 30 years	Agree. However, there is a need to drive the next stage of port reforms to drive productivity improvements, through competition, into the future.
3.6 Each Australian container port has different strengths	Agree. Historically, each port has provided a unique service to trade, reflecting the economies of scale that have historically been involved. Looking forward, as the need for container terminal expansion is required, there is greater scope to promote competition between ports to the benefits of port users and the state.
3.7 Australian container ports take longer to turn ships around than many international ports	Agree. This reflects port constraints, particularly on the availability of landside space to accommodate the loading and unloading of increasingly larger container ships. Rethinking port operations can help to improve these outcomes. Greenfield developments like PON's proposed container terminal have the opportunity to be designed to maximise efficiency and so minimise port turn around times.
3.8 International evidence suggests that Australian ports could lift their productivity	Agree. There are opportunities to draw lessons from international port operations and experience. The lack of competition amongst Australian ports given our vast distances means there is little incentive for ports to seek out productivity enhancing improvements.
3.9 Improving container port productivity would deliver significant benefits	Agree. PON's analysis highlights that port competition in NSW through the construction of a container terminal at Newcastle can deliver net benefits of almost $1 billion over 30 years, principally through reducing landside transport costs.

Australia's container ports have market power	
5.1 Major container ports are currently regional monopolies	Agree. There are currently little cost-effective options for importers or exporters in New South Wales to access international markets, which places upwards pressure on port fees and charges
5.2 Privatisation in New South Wales has impeded efficient outcomes	Agree. This is most evident with the barrier that the penalty arrangements in Newcastle's Port Concession Deed prevent it from investing in a container terminal to provide alternative and competitive port services in NSW
5.3 Ports face little countervailing power	PON agrees that Australian container ports face little countervailing power currently, since the five major container ports are all located in different states and there are numerous small firms along the container freight supply chain. PON considers that constructing greenfield container terminals at other ports will help to reduce the monopoly power that the five major container ports possess. PON notes that Australian bulk ports face more countervailing power because several states contain multiple bulk ports, while adjacent segments of the bulk supply chain (such as commodity producers) tend to be more concentrated.
5.4 No case has been found for further regulation	Agree.
Competition issues in other markets need attention	
6.1 Shipping lines compete in regional markets	Agree. That said, there is scope for substitution between competing ports within a region, which is likely to become more important as container trade grows over time.
6.2 Competition is a constraint in the shipping line market	Agree.
6.3 Shipping lines have increasing bargaining power	Agree. PON has been focused on developing relationships with container shipping lines to encourage future calls at Newcastle. These engagements highlight the competition between terminal operators in NSW.
Infrastructure needs are being addressed	
7.1 Port expansions to accommodate bigger container ships do not need taxpayer funding	PON is wanting to invest in a container terminal that is expressly designed to accommodate the largest ships envisaged over the next 30 years.
7.2 Most container ports are planning substantial investments in rail infrastructure	Agree. Wherever possible, existing or spare rail infrastructure should be used to avoid the need for additional rail expenditure. That said, there is likely to be a role for inland ports linked by rail to accommodate improvements in port landside productivity particularly for land constrained ports close to built up urban environments.
7.3 Planning systems should allocate land around ports to highest value uses	Agree.

7.4 Long term planning appears to be adequate	Disagree. Port planning in NSW is fairly static (the last NSW Freight and Ports Plan was developed in 2017 and is now out of date. There is a need for a more agile freight and port planning system that takes into account changes in the system (eg, the construction of a container terminal at Newcastle), and changing technologies and opportunities. Lessons could be gained from the planning system currently operating in the electricity sector, and conducted by the Australian Energy Market Operator.
Workforce arrangements: framework	
8.1 Unions hold substantial bargaining power	PON agrees that unions hold substantial bargaining power. PON considers that the disruptive impact of a protected industrial action can be ameliorated by constructing Greenfield container terminals at other ports, such as the proposed container terminal at Newcastle.
Workforce arrangements: issues	PON does not have particularly opinions on the following findings.
9.1 Restrictions on merit-based hiring and promotion harm workers and productivity	-
9.2 Limits to the number of workers with flexible rosters is inefficient 9.3 'Order of pick' rules limit backfilling and restrict productivity	-
9.4 Container terminal enterprise agreements distort operators' ability to automate	-
9.5 Existing Fair Work Act mechanisms have not prevented lengthy bargaining in container terminals	-
9.6 Additional or improved mechanisms are needed to help address excessively lengthy bargaining and its costs in container terminals	-
9.7 Extensive protected industrial action in the ports during recent bargaining caused disruption and impact productivity in container terminals	-
9.8 Protected industrial action in the ports caused substantial disruption and economic costs to third parties in the supply chain	-
Skills and training raise few productivity concerns	
10.1 Port workers appear to acquire the skills they need	PON is committed to ongoing skills development for port workers, and works closely with institutions within Newcastle to ensure that opportunities are provided for workers to remain within the region.
10.2 If they arise, skills shortages for seafarers can be solved through immigration and industry-led solutions such as cadetships	-
Australian ports are adopting technology where desirable	
11.1 Technology use at Australia's major container ports is in line with international practice	Disagree. There are opportunities to drive greater adoption of productivity enhancing technologies. The current lack of competition

	between ports provides little incentives for innovation and adoption of cost-effective new technologies.
11.2 There is no case for a government-run port community system	Agree. A government-run port community system will add unnecessary administrative costs that will be passed through to the final prices paid by consumers.
11.3 Government should continue to overhaul cargo clearance systems	Agree. All aspects of the supply chain should be focused on achieving improvements in efficiency to lower supply chain costs in Australia, including in cargo clearance systems.
Two national shipping concerns	PON does not have particular opinions on the following findings.
12.1 Coastal shipping regulation impedes competition	-
12.2 A strategic fleet requires further evaluation as on present evidence it is not the best remedy for concerns about domestic shipping capacity and training	-

APPENDIX B – RESPONSE TO THE DRAFT RECOMMENDATIONS

Draft recommendation	Port of Newcastle's response
Competition issues in other markets need attention	
6.1 Repeal Part X of the *Competition and Consumer Act 2010 (Cth)*	-
6.2 Terminal access charges and other fixed fees for delivering or collecting a container from a terminal should be regulated so that they can only be charged to shipping lines and not to transport operators	Agree. PON is supportive of the levying of terminal access charges and other fixed fees on shipping lines, to improve competitiveness between container terminal operators, and limit the opportunity to exercise market power on transport operators.
6.3 Remove exemption for shipping contracts	-
Workforce arrangements: issues	
9.1 Prohibit enterprise agreement content that imposes excessive constraints on productivity in the ports and costs on the supply chain	-
9.2 Improving bargaining practices in the ports	-
9.3 Add options for protected industrial action by employers to the Fair Work Act	-
9.4 Increase disincentives for employees to notify and then abort protected industrial action	-
9.5 Make it easier for employers in the ports to extend the notice period for protected industrial action	-
9.6 Make it possible to suspend or terminate industrial action that could cause 'important or consequential' economic harm	-
9.7 Allow a broader range of third parties to apply to terminate protected industrial action occurring in the ports	-
9.8 Enable protected industrial action to be suspended or terminated when it is causing harm to either party, rather than both	-
9.9 Equip the Fair Work Commission for an extended role in the ports	-
9.10 Independent evaluation of changes to improve workplace relations in the ports	-
Two national shipping concerns	
12.1 Amend coastal shipping laws to increase competition	Agree. PON is supportive of any regulatory change that promotes competition across the entire supply chain.
12.2 A strategic fleet requires further evaluation as on present evidence it is not the best remedy for concerns about domestic shipping capacity and training	-