

Meeting: Port Botany Community Consultative Committee – Meeting No. 20

Held: Hutchison Training Room, Sirius Road, Port Botany
Tuesday 7 August 2018, 5.30pm-7.30pm

Present:

John Burgess (JB) – Community	Marie Gibbs (MG) – Patrick Stevedores
Lynda Newnam (LN) – Community	Neville Johnstone (NJ) – DP World
Paul Pickering (PP) – Community	Michael Martin (MM) – Vopak
Peter Fagan (PF) – Community	Aldo Costabile (AC) – Elgas Limited
Marcus Dwyer (MD) – Botany Bay Business Enterprise Centre	Lyndon Reeves – Elgas Limited
John Carnahan – Botany Bay Business Enterprise Centre	Gary McKay (GM) – Caltex
Bronwyn Englaro – Randwick Council	Jos Kusters (JK) – Caltex
Lisa Williams (LW) – Electorate Offices for Member for Maroubra	Blair Moses (BM) – Hutchison Ports
Clare Cullen (CC) – Electorate Offices for Member for Kingsford Smith	Jonathan Lafforgue (JL) – NSW Ports
Brendan Rabbitt – STA Port Botany Depot	Alison Wedgwood (AW) – NSW Ports
Erin Barker (EB) – EPA representative	Greg Walls (GW) – NSW Ports
Zeeshan Qureshi – SafeWork NSW	Roberta Ryan (RR) – Chairperson
Catherine Blaine (CB) – Port Authority of NSW	Sandra Spate (SS) – Minute taker
Andrea Spencer-Cooke – Consultant, One Stone Advisors	

Apologies: Karen Jones – Orora, Claere Kay – DP World Stevedores, Mal Jagdev-Imrich (MJI) – Community, Patrick Medway (PM) – Bayside Chamber of Commerce, Stephanie Dekker (SD) – DP World, Trevor Brown (TB) – NSW Ports, Mark Walker – Qenos,

Item	Description	Action/Responsibility
1	Apologies and Introductions	
1.1	RR welcomed attendees. She reported, in the interests of transparency, that she has been engaged by Bayside Council for community consultation around the development of the Local Strategic Planning Statement.	
1.2	Apologies are as recorded above.	
2	Accept minutes of last meeting Acceptance of the minutes from May 2018 was moved by GM and seconded by MG. The minutes were accepted.	
3	Actions arising from previous minutes	
3.1	Action 5.1 February 2018. Include in the agenda for next meeting a presentation by Elgas on their Major Hazardous Facility Licence renewal. This is on tonight's agenda. The action is closed.	
3.2	Action 2.3 May 2018. GW to report on the status of Mod 16 at the next meeting.	

	The action is closed. See discussion in item 7.9.	
3.3	Action 4.2 May 2018. RB to take the request for an onsite meeting with JB to the new Assets Manager. CB reported she has taken over the role of the Assets Manager. The action is closed.	
3.4	Action 4.4 May 2018. RB to provide detail on frequency of beach grooming to the CCC. The action is closed. See discussion under item 4.1.	
4	Port Botany community assets	
4.1	- Updates on Foreshore Beach CB reported the Asset Management team has engaged a contractor to groom the beach fortnightly. A new cleaning contract will go to tender again in six months. Sand has been redistributed from Millstream to the beach area over three days this week. Line marking has been undertaken in the car park. Additional vegetation planting has occurred. Black cockatoos have been sighted. Information from RB is that shorebird monitoring continues for 2018. The new patch of Zostera seagrass has expanded fourfold which is excellent news. Phytobenthos has expanded. The 2017 annual report will soon be on the website.	
4.2	- Update on Cruise Passenger Terminal CB reported on last week's release of the NSW Cruise Development Plan. It's a long term strategy to develop the cruise industry in NSW. A reference group looked at short, medium and long term capacity shortage. One measure was to develop a strategic business case for a cruise terminal at Molineux Point and Yarra Bay. This is currently being prepared and will hopefully be completed by the end of 2018 for consideration by government. If this suggests the proposal is feasible a more formal business case will be developed looking at impacts and potential hazards.	
4.3	RR asked if the business case would be developed by Port Authority or the reference group. CB replied it would be developed by Port Authority in conjunction with NSW treasury. JB asked whether RMS has a role in this as he understands they undertook the original work around this. CB isn't sure what RMS's role is. Port Authority will be talking to other organisations.	
4.4	MG asked for detail on the two locations. The locations are Molineux Point and Yarra Bay, on the other side of the revetment wall.	
4.5	LN asked if it is known who is on the Reference Group other than Peter Collins. Who represented Infrastructure NSW, the cruise industry and Port Authority? There was no one from the Department of Planning. This information was unavailable at the meeting.	
4.6	JB thought RMS were floating a kite with scoping study but it seems to have more teeth. We need to watch carefully how this develops. He suggested Port Authority and Treasury would be wise to consult this group and suggested community representatives should be represented on the group developing the strategic business case. This request is supported by community members of the CCC. PF said the strategic case can't come to a valid conclusion without hearing the views of the community. CB replied this step is to consider whether it is a viable option. If so, a formal business case would involve community consultation. PF said a large part assessing viability involves what the community thinks.	The CCC requests that community representatives be invited to the committee developing the strategic business case. CB to pass this request onto Port Authority.

	<p>JB said the community would be very concerned see alienation of a further section of the north side of Botany Bay. Yarra Bay now has 5 to 6 metre waves and beach erosion is right up to the cemetery as a direct result of dredging for the port. There is precious little seashore left. It would be a disaster if another sea wall was built.</p>	
4.7	<p>LN asked whether Hutchison has been consulted in regard reports that Hayes Dock has been considered. BM said they were contacted informally a couple of times over the years by a number of cruise lines but have no formal agreement. They heard nothing more till they read the report. It is a surprise to Hutchison. LN suggested the proposal was pulled out of the air without talking to people who have leased the area. JL said NSW Ports was not part of the reference group. CB said this is a very first step looking at whether it is feasible at a high level. There are a lot of steps to follow including community consultation. AW suggested there will need to be further consultation with NSW Ports and port tenants. JB noted the context of a ferry between Kurnell and La Perouse and up the Georges River. He recalls a draft plan for a major ferry docking area in tug berth area in Penrhyn Estuary. NSW Ports opposed ferries going there. There should be consultation with NSW Ports. PP asked if there have been discussions with councils in the Shire to look at potential for a terminal on the south side of Botany Bay. BE noted Randwick Council has had no communications or consultation. The first Council heard was the report. A Save the Bay community group has been set up to fight the proposal.</p>	
5	NSW Ports Sustainability Update	
5.1	<p>- Presentation of Best Practice Port Sustainability Research – ASC AW reported the next version of the NSW Ports Sustainability Plan is due to be released next year. The first step was engaging a consultant to research and benchmark best global practice in port sustainability. The next version will ensure consultation with stakeholders. ASC updated the CCC on her research (presentation attached to minutes). A summary was distributed to the meeting with a questionnaire for feedback. ASC urged CCC members to provide feedback. She would like feedback by 10 September.</p>	
5.2	<p>MG asked NSW Ports why they want to become a world class sustainable port. As it would be tenants implementing it, they would like to understand the reasons. AW replied this is the position of the company. It comes from the board and the executive and is all about being able to grow our trade efficiently and sustainably. Best practice sustainability is economic, environmental and social to ensure we can grow and meet our obligations to port customers, NSW Ports’ shareholders and other stakeholders, like the community. GW noted NSW Ports 30 year vision envisages trade growth and port growth. To meet this growth NSW Ports has to do that sustainably otherwise they won’t be able to meet trade forecasts or their social licence. We need to convince the government and the people of NSW that growth is occurring responsibly. RR suggested this is a good question to include in the purpose statement. ASC said with growth projections and shipping footprint growth the need to manage this environmentally and socially is recognised. There has not been much focus in the shipping industry previously but now industry stakeholders are asking shippers to do their bit. There are moves by</p>	

	<p>shippers to try and reduce impacts on the supply chain. UN and WWF sustainable shipping initiatives provides a roadmap to 2040. There is realisation there needs to be more strategic planning for industry. What is sustainable? Not using more resources than you have or future generations will need.</p>	
5.3	<p>MG requested a reasonable phase in period. Businesses here are already trying to do what they can and have more compliance requirements than any other port.</p> <p>AW said there will be more extensive consultation on this. The first plan focused on what NSW Ports as a business needed to do. The next plan will be expanded more to the ports precinct. As part of the process NSW Ports wants to talk to tenants to find out what they are already doing and what can be done to better support this. The plan is not currently decided and will be taken to stakeholders for their feedback.</p>	
5.4	<p>JB made the observation that many of the features presented here are outside the scope of NSW Ports or Port Authority e.g. emission controls, low sulphur fuel. Ports may be able to exert pressure for these but can't do it themselves. Road transport is a major bane and outside the scope of Port. It would be good for the community and business if there was influence over this.</p> <p>AW said NSW Ports don't have illusions about what they can control but are working to identify potential areas of influence as presented at the last meeting. For example – the green incentives for shipping to encourage cleaner ships will kick in next January. There is a growing appetite and commitment in the industry to do what we can. NSW Ports is looking at identifying what the priorities are.</p> <p>MG noted some vessels are great and others are shockers. Let's look at the vessels that turn up and look at what we can do.</p> <p>BM reported a major push by shippers such as COSCO driven by customers who want to be carbon neutral. Another push is for ship to shore power to address the biggest greenhouse gas consumption phase. In order for that there has to be a massive infrastructure change. The entire wharf would have to be torn up. It is a long term prospect which is why there needs to be global responsibility.</p> <p>AW said NSW Ports want to be on the front foot to be more efficient in anticipating what may be required in the future rather than be suddenly faced with regulation and have to change at the last minute. We are starting to think and plan for the future now, to be better resourced and able to adapt to where the industry is heading.</p>	
5.5	<p>- Update on Brotherson Dock Life Extension Project</p> <p>AW reported work on the installation of the cathodic protection system at Brotherson Dock hopefully starts Wednesday. The project is undergoing an Infrastructure Sustainability Council of Australia rating. Replying to questions from JB on potential impacts to marine life, she has spoken to Caltex who are undertaking a similar project at Kurnell and also to their own project engineers. In summary, their response is that there would be no detrimental impact to marine life from the operation of the electrical anodes. It is a small voltage protection mechanism which doesn't suffer corrosion and prevents deterioration i.e. rust from the dock entering waterways which will benefit water quality in the long run.</p> <p>JB suggested any aluminium subject to electrolysis results in terrible corrosion. He suggested an observation study of marine life at the dock would be interesting.</p>	
6	NSW Ports Update	
6.1	<p>- NSW Ports' Port Development Plan – 5 year update</p> <p>GW reported work has commenced on the draft 5 yearly Development Plan which is a government requirement to ensure the port is used for</p>	

	<p>port purposes. It is within the framework of the 30-year Masterplan. The Masterplan and existing 5 year plan are on the NSW Ports website. Major changes are unlikely but there will now likely be some mention of cruise ships, given the release of the NSW Cruise Development Plan. The draft should be with government at the beginning of November. Depending on their input it will hopefully be finalised by the end of the year.</p>	
7	<p>Development activities in the Port</p> <ul style="list-style-type: none"> - Elgas Major Hazardous Facility Licence Renewal - Tenant developments - NSW Ports developments – GW/TB - Planning and legislation update – GW/TB 	
7.1	<ul style="list-style-type: none"> - Elgas Major Hazardous Facility Licence Renewal <p>AC delivered a presentation to the CCC. The background is Elgas is a Major Hazard Facility Licence holder. First licence was obtained in 2014. It is up for renewal next year. Elgas is going through a Safety Case Review on site. 5.5m tons of LPG have so far come through the terminal. Storage is 135m below ground in the aquifer with water pressure on storage ensuring LPG stays confined to storage and in a liquid phase. The review process identifies all hazards on site and distils those that could result in a major incident. This has resulted in potential 25 major incident scenarios where critical controls are required to be in place. One such scenario could be the release of LPG from the Mechanised Loading Arm during ship unloading. There are sufficient barriers to prevent this and robust controls should it occur. The risk contours confirm that the 50 pmpy contour is contained within the site boundary, as required, and that the 1 pmpy contour is not close to residential areas, as required.</p>	
7.2	<p>LW asked whether there have been any incidents since the facility was first licensed. Any release of gas, fatalities or unforeseen problems? AC replied there hadn't been. The last injury on site was in 2014 in which someone repairing equipment caught their finger. JB recalled an incident with a relief valve in the past. AC replied this was in September 2011. A relief valve failed which resulted in a local release contained within the site boundary. Operations were closed down and emergency services attended. Everything worked as planned. JB said this incident triggered moves for the development of an emergency plan for the whole port precinct which still isn't finalised.</p>	
7.3	<p>PF asked if the possible proximity of a cruise ship terminal would impact on Elgas. He would be interested in impacts on Elgas and on the community. AC cannot foresee impacts. He expects Elgas would be consulted with at some point but doesn't expect any direct impacts.</p>	
7.4	<p>MD asked whether the tunnel is through sandstone. AC replied it is. It provides a perfect medium as it is porous. Water comes in and gas doesn't get out but it is not friable.</p>	
7.5	<p>GW asked when the licence is due for renewal. AC said it expires next year with six months lead time. Elgas is still well within this.</p>	
7.6	<p>Vopak MM reported their modification proposal is still with government. They have been issued a set of draft conditions and Vopak is responding. LN couldn't find draft conditions on the DPE website.</p>	
7.7	<p>Caltex Nothing new to report</p>	

7.8	DP World GW reported a crane is currently in the process of being dismantled.	
7.9	Planning and legislation update GW reported that Mod 16 is an administrative modification to fix departmental errors. It can't now progress as a Part 3A modification. Ports has no information from the Department of Planning as to how to progress it. It was agreed to take this off the list of actions for the CCC. GW reported finalisation of the three Ports SEPP has been held up by discussions with Port of Newcastle. The final Freight and Ports Plan is due to be released this month. GW will send the link to the CCC when available.	GW to send the link to the final Freight and Ports Plan to the CCC when available.
7.10	JB noted discussion in the past of wave action moving sand and exposing Energy Australia power lines across the bay. Three options were suggested as doing nothing, starting again or dumping boulders on top of the lines. He asked whether anything has happened. BE understood the preferred option communicated to Council was to drop cement bags on top at the La Perouse end to stop anchors catching cables. JB suggests it's also a hazard to vessels in other parts of the bay.	GW and LW will follow up on actions regarding exposed power lines across Botany Bay.
8	Port Botany Expansion Operational Update	
8.1	- Hutchison including stockpile update BM said the Operational and Environmental Management Plan (OEMP) sent to key stakeholders has received a lot of feedback from councils and the landlord. Hutchison is going through feedback. Once finalised it will be published on the website. After a lot of discussion dust suppression measures including stabilising the pile will start on Thursday. Hutchison is still looking to use it for future development at the terminal. After the EPA classified the stockpile as waste it couldn't be removed from site.	
8.2	RR suggested for the future more forewarning for a matter like the OEMP. It could then be put on the agenda and talked through with members. It would provide a good opportunity for feedback which is the purpose of these meetings. It's hard for members to provide feedback without someone taking them through it. LN said with the short notice she wrote to Planning and the EPA for advice without response. As a community member it is hard to comment without advice.	
8.3	- Patrick There was nothing to report from Patrick	
9	Port Botany Noise Update	
9.1	- Port Botany Expansion Rail Noise (as per CoA 2.28) AW reported there were no PBE rail related noise complaints.	
10	Safety and Environmental Incidents/Complaints	
10.1	- YM Efficiency Container incident AW outlined NSW Ports had received questions from the community on the YM Efficiency incident in which the ship hit rough seas and containers were washed overboard. The vessel was brought to DP World to manage the clean-up of the ship. JL reported the Australian Transport Safety Bureau and Australian Maritime Safety Authority (AMSA) are responsible for undertaking investigations into the incident. JB reported that of the 81 containers overboard, 50 have been located and the fate of 31 is unknown. It is assumed they drifted beyond the current search area. The question is what happens now? It's damning that comments have been made about shipping practices of the vessel	

<p>with containers not stacked properly. Who pays for this? Presumably the insurer. Commercial fishers are affected as they can't trawl in affected areas and could probably make a case for compensation. Another concern raised at the Orica community meeting is shipping of HCB to Finland to be destroyed which he thought would concern environmental groups. A previous shipment of phosphates from Orica had containers washed overboard in a similar location and no one knows what happened to those containers. If loaded with phosphate he would think it posed an environmental risk.</p> <p>RR asked what the implications are for NSW ports.</p> <p>JL said that NSW Ports is involved only as the ship was bound for Port Botany. The ship could have been bound for anywhere. There are international standards for securing containers and it is the responsibility of the Chief Officer to ensure cargo is safely secured. NSW Ports isn't in the position to tell the Chief Officer how this is done. It is up to the shipping line to ensure vessels have lashing equipment and the Chief Officer advises the stevedore of the lashing plan. More lashing requires more physical labour. It is an issue which fortunately doesn't happen often. A thorough investigation and costs and fines to the company will hopefully ensure proper securing in future.</p> <p>JB suggested that even with best practice here, there is no control of other ports, most ports of which have nowhere near the safety standards of here.</p> <p>JL hopes shipping lines increasing concern with environmental sustainability and incentives at Port Botany and Port Kembla will put newer vessels on this run.</p> <p>NJ supported comments by JL. The incident didn't happen in the port area. Planning and stowing of cargo on vessels is not done by DP World who has no control over the vessel. DPW was gracious enough to put the vessel up for cleaning and worked with NSW Ports to do that. DPW inspects each vessel before it leaves port to ensure they meet international and AMSA standards. This incident wouldn't have occurred to a vessel leaving here but there is no control over incoming vessels. DPW were directed to clear a berth to take the vessel which had great productivity and commercial impacts.</p> <p>JB noted with thousands of ports round the world it could have happened off Botany Bay. It is not ships going out but those coming in.</p> <p>MG said costs imposed by salvage and bad publicity and environmental fines should provide disincentives for these practices. Shipping lines just want to sail and put on cargo. They will be going through extensive procedures to ensure these situations don't occur.</p> <p>PF asked whether penalties under Australian law could be applied to the shipping line.</p> <p>BM noted that it was highly likely. The vessel stricken off Moreton Island incurred heavy penalties. There are fines levied by government and repercussions from the international authority.</p> <p>JL said the incident had been taken extremely seriously.</p> <p>JB noted 324 containers exceeded weight limits. Is there a processes for weighing containers here?</p> <p>BM replied there are scales on quay cranes for containers unloaded to the wharf. If there are exceedences these won't be reloaded. It doesn't happen often. If a vessel doesn't meet international standards notice goes to the ship's captain and the ship won't be worked.</p> <p>NJ reported DPW practice of notifying the captain to fix deficiencies before a vessel is worked. If they are extreme AMSA is called and the vessel is confined to wharf to fix or an arrangement made with AMSA. DPW track vessels at each DPW port and notice whether a vessel from Melbourne to Sydney has fixed deficiencies.</p>	
---	--

	<p>PF asked how often this occurs. BM replied it doesn't happen often but depends on shipping lines. MG said at Patrick deficiencies have to be fixed to enable their people to work the vessel. PF was mystified by the attitude of the NSW Government when horrified residents went down to the beach to try and clean up. They were told by RMS spokespeople to go away and mind their own business. The reason wasn't well explained by government. MG said the way it was delivered was inappropriate but it was a safety issue, as with volunteers turning up to fight a bushfire. People could have been swept off rocks. JB noted there was also no idea of what is in the product so that could also pose a hazard to the community trying to clean it up.</p>	
10.2	<p>- Biosecurity update AW reported on recently completed biosecurity targeted training for NSW Ports operations and asset maintenance employees at Port Botany and Port Kembla with Local Land Services and Department of Agriculture staff to identify exotic/pest species and how to respond. From here that information has also been included in contractor inductions and all new and existing contractors working for NSW Ports will have to complete that induction.</p>	
10.3	<p>- Waste and recycling services Issues have been raised by AC that Elgas is not a beneficiary of council services for recycling. AW had asked Randwick Council if port tenants could use the Perry Street recycling depot for office based recycling and was told no. Would other tenants be interested to progress this? AC said it was driven by the fact as a special facility rates have gone up 55% in a year with \$250,000 paid in rates and what services are they being provided for that money? This is not just an issue for NSW Ports and operators. There are not enough recycling streams. MG supports being part of this conversation. BE said council provides a commercial waste service which incurs a fee on top of the standard rates. Perry Street is free service for residents only. AC said tenants don't see what services they get for the rates they pay. They pay contractors for industrial waste removal and normal office waste. They want to start to recycle office waste. BE said Council offers recycling services to business for payment. AW said there is opportunity for Elgas to become a council waste customer but it is only for paper and cardboard. The question is what can we do in this space? The NSW Ports office originally only recycled paper and cardboard but paid for a new contract to collect additional recycling. LN suggested a bigger question is that Council collects rates but tenants feel they are not getting a service. It is a significant rate rise. MG asked whether Bayside offers commercial recycling. BE will check whether Randwick Council can take glass.</p>	<p>AW to follow up with Bayside Council to find out whether Bayside Council offers commercial recycling.</p>
	<p>- Summary of complaints There were no complaints.</p>	
12	<p>General Business/Next meeting: Next meeting is 6 November 2018.</p>	
<p>These minutes have been endorsed by the meeting Chair</p> <p>Signed:  Date: 24.8.2018</p>		

REVIEW OF BEST PRACTICE IN PORT SUSTAINABILITY:

Research to inform stakeholder consultation
and preparation of the NSW Ports
Sustainability Plan 2019

Port Botany – August 2018

Andrea Spencer-Cooke

one
stone

NSW Ports

Aims & scope

- Identify key trends and drivers affecting the global industry.
- Capture material issues, initiatives and performance indicators leading global ports, shipping and logistics providers are reporting on.
- Engage NSW Ports' stakeholders in development of new plan to ensure it reflects their priorities.
- Use research insights and stakeholder feedback to develop a draft 2019 Sustainability Plan and identify new short-term actions and milestones for next three years.

What does it mean to be a sustainable world class port?



THE LEADING MARITIME CAPITALS OF THE WORLD 2017

Leading maritime capitals of 2017

RANK	SHIPPING	FINANCE AND LAW	MARITIME TECHNOLOGY	PORTS AND LOGISTICS	ATTRACTIVENESS AND COMPETITIVENESS	OVERALL RANK
1	SINGAPORE	LONDON	OSLO	SINGAPORE	SINGAPORE	SINGAPORE
2	HAMBURG	OSLO	SINGAPORE	SHANGHAI	OSLO	HAMBURG
3	ATHENS	NEW YORK	BUSAN	ROTTERDAM	COPENHAGEN	OSLO
4	LONDON	SINGAPORE	TOKYO	HONG KONG	HAMBURG	SHANGHAI
5	HONG KONG	SHANGHAI	SHANGHAI	HAMBURG	DUBAI	LONDON

THE 30 NOMINATED MARITIME CITIES

ORDERED BY RANKING

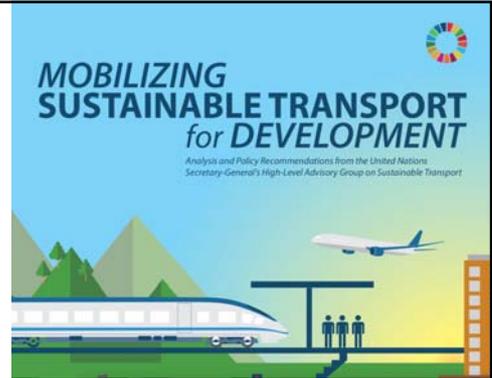
- SINGAPORE
- TOKYO
- OSLO
- HAMBURG
- SHANGHAI
- ROTTERDAM
- LONDON
- HONG KONG
- NEW YORK
- DUBAI
- COPENHAGEN
- ATHENS
- BUSAN
- HOUSTON
- GUANGZHOU
- KUALA LUMPUR
- MUMBAI
- ANTWERP
- SYDNEY
- JAKARTA
- LOS ANGELES
- BERGEN
- ISTANBUL
- VANCOUVER
- KAOHSIUNG
- RIO DE JANEIRO
- LIMASSOL
- MANILA
- PANAMA CITY
- CAPE TOWN

“Sustainable transport is recognised as one of the biggest challenges of the 21st century.”

WWF

WWF
Sustainability
Shipping and sustainability
Based on the Global Sustainable Shipping Initiatives report for WWF

90 %
SHIPPING IS RESPONSIBLE FOR THE TRANSPORTATION OF APPROXIMATELY 90 PER CENT OF WORLD TRADE.

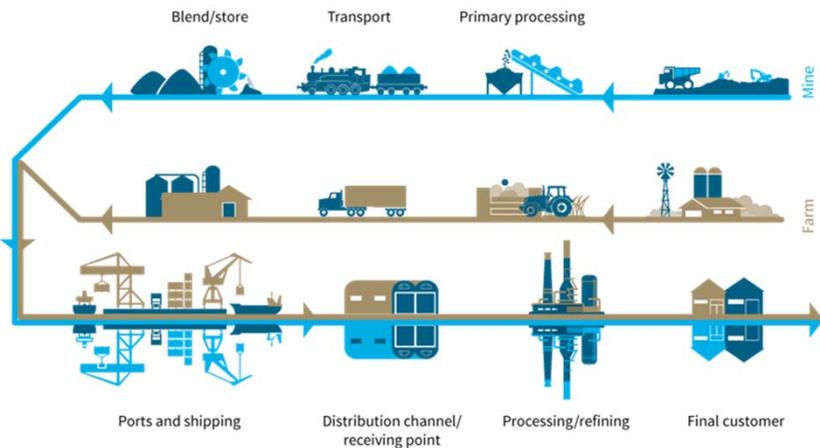


“Sustainability trends are becoming business drivers for shipping”

Sustainable Shipping Initiative

What do we mean by ‘sustainable’?

- **Brundtland Commission (1987):** “Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.”
- **Sustainable Shipping Initiative:** “Finding ways to combine positive social and environmental performance with commercial success.”
- Creating sustainable value across the whole shipping value chain and minimising cradle to cradle impacts.



What we did

one
stone

1. **Review of industry trends** (e.g. International Maritime Organisation (IMO); European Sea Ports Organisation (ESPO); OECD International Transport Forum (ITF); Sustainable Shipping Initiative (SSI); World Ports Sustainability Program (WPSP); Asian Development Bank (ADB); UNCTAD; www.portstrategy.com, etc.
2. **Desk research on leading global ports** including: Antwerp, Busan, Copenhagen, Fremantle, Gothenburg, Hamburg, Los Angeles, Oslo, Rotterdam, Shanghai, Singapore, Vancouver
3. **Insights from shipping & logistics leaders** and tenant companies (e.g. A.P. Moller-Maersk Group, Oriental Overseas International Ltd, etc.) & NGOs (e.g. WWF, Forum for the Future, etc.)



Trend 1—innovation

- Digitisation, automation and 5G to optimise port operations, lower environmental footprint, increase safety, transform efficiency in global supply chains.
- Development of sky-sails, energy-efficient propulsion systems and 'slow steaming' to save money and fuel. For ferries, internet-connected surveillance cameras and radios; GPS; data sensors on weather, speed, direction, fuel use and maintenance.
- MoU between International Association of Ports and Harbors (IAPH) and International Cargo Handling Coordination Association (ICHCA International) to speed up testing/implementation of sustainable innovations in technology, equipment, cargo handling & financial services.

Trend 2—decarbonisation

- **On ships:** use of alternative fuels/renewable energy (e.g. biofuels, methanol, ammonia, hydrogen); technological measures (e.g. hull design, bulbous bows and air lubrication); operational improvements (e.g. slower ship speeds, use of larger ships, better ship-port coordination).
- **In ports:** ambitious emissions reduction targets for maritime transport; green financial incentives/differentiated fees for maritime shipping (e.g. ESI); onshore power facilities, electric charging systems and bunkering facilities for alternative fuels.
- **At the interface:** improvements in 'ship-port interface' like flexible berth planning, better collaboration/data exchange to optimise ship waiting times and minimise emissions/fuel use from auxiliary engines.

Trend 3—sustainability

- Need to address broader, more complex global impacts across entire shipping value chain, e.g. human rights, anti-bribery & corruption and wider impacts on ecosystems, e.g. [Sustainable Shipping Initiative \(SSI\)](#).
- Broader agenda encapsulated by [UN Sustainable Development Goals \(SDGs\)](#) in which business has a key role to play to ensure progress by 2030.
- Committing to SDGs not just about mapping existing activities to goals, involves raising level of ambition, quantifying progress against individual targets and developing understanding of interlinkages between different goals.
- Growing uptake and integration of UN Sustainable Development Goals across ports, shipping and logistics sectors. IMO has identified 15 goals impacted by its work, and several global ports are including SDGs in their strategic plans and sustainability reports.
- [World Ports Sustainability Program \(WPSP\)](#) set up to coordinate and accelerate industry contribution.

World Ports Sustainability Program

- Nearly 1000 ports & port-related entities committed to achieving the SDGs (via founding partners AAPA, ESPO, AIVP, PIANC & IAPH)
- Aim to demonstrate global port leadership on local, regional and global challenges
- Signed WPSP Charter
- Key focus on resilient infrastructure, climate & energy, community outreach & port city dialogue, safety & security, and governance & ethics
- Regular reporting on sustainability performance of global port sector
- Website, best practice library, project platform, events & initiatives



Sustainable Development Goals (SDGs)



- 17 social, environmental and economic goals
- Underpinned by 169 targets
- A sustainability roadmap for the next 12 years
- Universal & integrated—apply to all
- A shared language and vision
- Strong focus on business leadership and multi-stakeholder partnerships
- Australia has signed up & delivered our first national report in 2018. A Senate Inquiry on the SDGs is underway

Headline findings

- Decarbonisation the industry’s biggest priority. Ports on frontline of climate change means taking ambitious action now through digitisation, innovation, port & equipment upgrades, operational energy efficiency, transitioning to low carbon/renewable fuels and partnering along shipping value chain to incentivise and measure progress.
- Decarbonising will also deliver significant co-benefits for local communities like improved air quality (lower NOx, SOx & particulate matter (PM) emissions) leading to better health and wellbeing and long-term benefits from remaining within a 2°C warming scenario.
- To be a sustainable world class port, NSW Ports must show leadership and work with partners in shipping and logistics sphere of influence to accelerate just energy transition.
- As well as addressing global environmental challenges, new NSW Ports Sustainability Plan should take integrated approach that includes social and governance objectives. The [10 principles of the UN Global Compact](#) and [17 UN SDGs](#) and supporting targets provide useful universal framework.

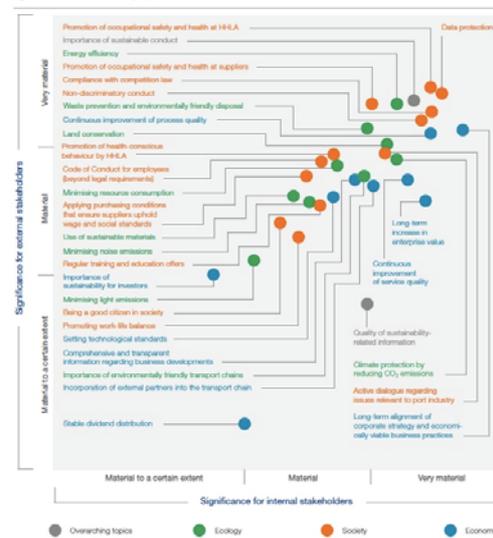
Material issues for ports

According to European Port Industry Sustainability Report 2017, ‘top ten’ environmental priorities of port sector are:

- air quality, energy consumption, noise, water quality, dredging operations, port waste, port development (land-related), relationship with local community, ship waste and climate change



Materiality Matrix (Outcome of the Most Recent Stakeholder Survey)
Evaluating the Relevance of Sustainability Topics for HFLA



Material issues—economic & governance

Type of impact/value created	Material Issues	
Economic	Sustainable economic growth	Job creation
	Accommodating larger ships	Inclusive trade (e.g. SMEs, etc.)
	Land acquisition, use & planning / urban encroachment	Optimisation & operational efficiency
	Inland freight handling	Digitisation & automation
	Industry consolidation	Innovation & technology
Responsible Business Practices	Ethics, anti-bribery & corruption	Respect for human rights & Non-discrimination
	Land acquisition & resettlement	Modern Slavery
	Risk management	Security
	Sustainable procurement	Transparency & accountability
	Compliance	Tax practices

OVERVIEW OF 6 KEY MATERIAL ISSUES

Safe, Efficient and Sustainable Shipping

This material issue addresses the importance and impact of MPA's role as a driving force behind Singapore's port and maritime development. In developing Singapore as a premier global hub port and IMC, MPA must manage multiple economic, environmental and social risks and opportunities, and use its influence to drive positive change in the industry. MPA seeks to partner the industry and other agencies to enhance safety, security and environmental protection in port waters, facilitate port operations and growth, expand the cluster of maritime ancillary services and promote maritime R&D and manpower development.

Economic Contribution

This material issue addresses the importance and impact of MPA's role in contributing to Singapore's Future Economy. Presently, the maritime industry contributes 7% of Singapore's Gross Domestic Product (GDP) and employs over 170,000 people. The launch of the Sea Transport Industry Transformation Map (ITM) builds on MPA's strategic long-term plans to develop Singapore's next-generation port and strengthen our IMC. With the aim to grow the sector's value add by \$4.5 billion and create more than 5,000 good jobs by 2025, MPA's significant role as industry champion is critical to the success and sustained prosperity of Singapore.

International Support and Community Engagement

This material issue addresses the importance of local and international partnerships to, and its impact on MPA, by considering MPA's engagement with, and contributions to local communities, and initiatives to strengthen partnerships with the international maritime industry.

Financial Sustainability

This material issue addresses the importance and impact of MPA's economic performance. As a self-funded statutory board, maintaining a competitive business and sustainable revenue stream is critical to MPA's long-term financial viability.

Environmental Sustainability

This material issue addresses the importance and impact of MPA's operations on the environment through MPA's energy and water consumption, carbon emissions, and waste generation.

Our People and Culture

This material issue addresses the importance and impact of maintaining a skilled and productive workforce in MPA, in meeting its current and future needs. MPA seeks to build a workforce that is rewarding and engaging, and places strong emphasis on employee learning and development.



SUSTAINING A FUTURE - READY MARITIME SINGAPORE
SUSTAINABILITY | RELEASED APRIL 2017

Marine Port Authority Singapore

Future-Ready Framework	SDGs	Material Matters
1 Safe, Efficient & Sustainable Global Hub Port		
2 Vibrant IMC Eco-System		
3 Safeguard Strategic Maritime Interests & An Influential Voice		
4 Maritime Knowledge & Innovation Hub		
5 Quality Maritime Workforce		
6 Strong Maritime Singapore Identity		
7 Culture of Excellence		
8 Strong Partnerships		
9 Choice Employer		

- 1st in 2017 Xinhua-Baltic International Shipping Centre Development Index Report (4th consecutive year)
- 1st in 2017 Menon Economic Report Leading Maritime Capitals of the World (3rd consecutive year)
- Best Seaport in Asia (29th time)
- Global Reporting Initiative (GRI) & International Integrated Reporting (IIRC) report
- MPA Sustainability Office set up 2014 to promote good practices, sound governance in resource management & environmental sustainability within MPA and the wider maritime industry in Singapore
- Aligned with the UN SDGs

Material issues—environmental

Environment	Energy use	Resource use
	Energy efficiency	Air pollution & emissions
	Carbon emissions (direct & indirect logistics—Scope 1, 2, 3)	Climate change & adaptation
	Clean energy	Waste by type & treatment
	Chemicals / hazardous substances	Food waste
	Biodiversity & ecosystems	Light & dust
	Water use	Noise (incl. underwater)
	Marine pollution/water quality	Disaster management & response
	Dredging / silt / erosion	Congestion

Busan

- UNGC signatory since 2015
- GRI G4 'in accordance' report
- ISO 26000 social responsibility standard
- 1st port in Asia to introduce ESI green incentives
- Emphasis on reducing GHG emissions, securing environmental energy sources & creating a 'water-friendly' and 'resource recycling' port

BPA Sustainability Performance

Environmental Value Creation

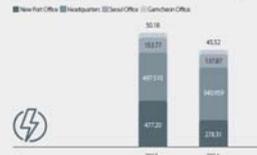
Greenhouse gas emissions

BPA calculates and manages greenhouse gas (GHG) emissions at the headquarters, New Port Office, Garmcheon Office, and Seodol Office. Environmental organizations regularly visit our business sites to check and review GHG emissions calculation method and criteria. GHG emissions of BPA in 2014 was 69.27 tons.

GHG emissions	(tCO ₂ e)	
	2013	2014
GHG emissions	4944	5110
Scope 1	2275	1839
Scope 2	2669	3271
Total tCO ₂ e	7219	6927

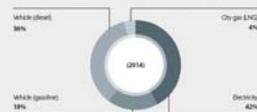
■ Data scope: Headquarters, New Port Office, Garmcheon Office, and Seodol Office
 ■ Criteria: GHG Energy Target Management System
 ■ Use of data: Reported to regulator for disclosure of environmental information

Consumption of energy sources



■ Energy consumption at New Port Office decreased thanks to replacing 10 room-lightings with high-efficiency ones.

Consumption of energy sources



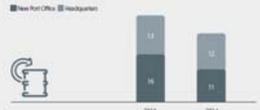
Other environmental data

It is not easy to calculate water consumption and waste discharge due to a lot of leased buildings at each business site. New Port Office and Garmcheon Office consumed 1,561 tons and 107 tons of water in 2014, respectively. Waste discharge at New Port Office and the headquarters amounted to 11 tons and 12 tons, respectively.



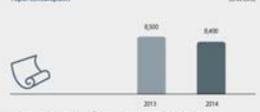
■ The figure of the headquarters was estimated by dividing total consumption amount of the building by the percentage of used area because the headquarters leases office spaces.

Waste discharge



■ The figure of the headquarters was estimated by dividing total consumption amount of the building by the percentage of used area because the headquarters leases office spaces.

Paper consumption



■ Paper consumption data at all business sites is managed by the headquarters.

Material issues—social

Labour	Health & Safety (balance btw. speed & safety)	Human rights
	Gender & diversity	Culture
	Working conditions	Training & skills
	Inclusion & equal opportunities	Engagement & satisfaction
	Labour/management relations	
Stakeholders	Social value created/investment	Complaints
	Enhancing amenity & heritage	Consultation & engagement
	Customer satisfaction	Treatment of suppliers

Gothenburg

Inclusive workplace

The Gothenburg Port Authority shall be an inclusive workplace where equality and diversity prevail, where nobody is discriminated or abused. A workplace that harnesses our employees' varied experiences and skills. Human rights shall characterise every aspect of our operation. Our code of conduct, which is based on our core values of cooperation, sustainability, innovation and reliability, leads the way.

OUR FOREMOST RISKS

These are our foremost potential risks regarding human rights: the risk of discrimination in one or more ways if we do not recruit on the basis of competence and with the focus on diversity and equality; the risk that our staff and others who visit our workplace are subjected to abuse and harassment; the risk of unjustified differences in pay between men and women; and the risk of unacceptable conditions further down the supplier chain.



GOVERNING POLICY AND RESPONSIBILITY

- The Gothenburg Port Authority's code of conduct, equality policy for the City of Gothenburg, employee and work environment policy for the City of Gothenburg, the City of Gothenburg's policy for procurement and purchasing.
- The chairperson of the equal opportunities group is responsible for work on our equal opportunities plan, while the purchasing manager is responsible for the "Procurement" support process.

WORK ON EQUAL OPPORTUNITIES

In 2017, the company's equal opportunities team worked in accordance with the relevant equal-opportunities plan which contained goals linked to: Equal-Opportunity Gothenburg, human rights, equality, personnel, review of the equal-opportunity group's work method based on recent anti-discrimination legislation, knowhow about and awareness of equality-related issues, harassment, recruitment and competence enhancement, internal mobility and parenthood.

This year's equal-opportunities plan also had an activity linked to our code of conduct and the way we

Creative initiatives at the workplace are appreciated by all.



Our diversity, equal opportunities and non-discrimination work contributes to UN sustainability goals 5, 8 and 10.

The 2017 employee day attracted considerable involvement by all the employees.



treat one another, resulting in a successful employee day that focused on the code of conduct, corporate culture and our core values. With a high degree of participation and considerable involvement by all employees, this created a sound basis for further work on these issues and a new employee day in 2018.

During the year the equal-opportunities group discussed how diversity and equal-opportunities issues can engage and involve the entire organisation. One result is 12 information events on our intranet linked to subjects such as: WestPride, an equal-opportunity quiz, and an alternative Advent calendar that encouraged good deeds.



Key research takeaways

10 elements of a world class approach to sustainability:

- Decarbonising and developing zero/low-carbon roadmap.
- Avoid-Shift-Improve approach (e.g. moving more freight to rail).
- Uptake of clean/renewable energy.
- Availability of Onshore Power Supply (OPS) & Liquid Natural Gas (LNG) bunkering.
- Offering green shipping incentives (e.g. ESI).
- Setting ambitious SMART (specific, measurable, achievable, relevant and time-bound) goals and targets & reporting regularly on progress.
- Measuring customer satisfaction and developing sustainable services.
- Implementing sustainable procurement/sharing value with SMEs.
- Addressing seafarer wellbeing & focusing on youth outreach to develop maritime careers skills pipeline.
- Partnering with key stakeholders (customers, tenants, regulators, communities) to achieve shared goals, promote port-wide sustainability practices and green transport supply chains.

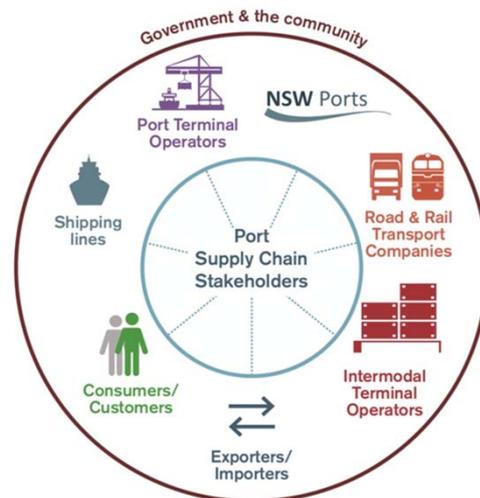
NSW Ports opportunities for improvement

- **Expansion of 5 Focus Areas** include social and economic impacts and performance and responsible business practices (including safety, leadership & procurement).
- **Extension of sustainability goals** under Focus Areas 3, 4, and 5, include topical material issues identified in best practice research, e.g. introducing sustainability services to shipping; developing Customer Satisfaction surveys; rolling out staff sustainability training and awareness programs, introducing ESI green incentives, etc. (TBD in consultation with NSW Ports & CCC).
- **Strengthening performance management and monitoring** by setting 'SMART' goals and targets for energy, water, waste, GHGs, NOx, SOx, PMs, diversity & employment, etc., using a core set of industry-recognised KPIs with a clear baseline, and developing new policies for e.g. sustainable procurement.
- **Explore potential for port-wide partnerships** NSW Ports, tenants, shipping companies and other stakeholders collaborate to achieve shared sustainability goals based on 'avoid, shift, improve' framework (e.g. low carbon innovation, operational efficiencies, development of new 'green' services, longer term viability of OPS/LNG bunkering, waste sorting and closed loop waste streams/circular communities, etc.).
- **Build credibility** by aligning with universal and recognised global sustainability frameworks like the 10 principles of the UN Global Compact and 17 UN SDGs.

Community consultation & feedback process

5 discussion points around three themes:

- Where are we now?
- Where do we want to go?
- How do we bring others along?



Discussion points

Where are we now?

1. What do you believe NSW Ports' strengths currently are in terms of sustainability?
2. What do you believe NSW Ports' weaknesses currently are in terms of sustainability?

Discussion points

Where do we want to go?

3. What do you believe should be the top two sustainability priorities for NSW Ports for each of the aspect areas in the Table below? You can refer to the Table of Material Issues on Page 5 to assist with your answer (i.e. reducing carbon emissions, improving air quality, better consultation/ engagement) or feel free to provide another response not listed.
4. For each of your sustainability priorities and based on industry drivers and global best practice—and in the Australian context—what do you think are some actions that NSW Ports could realistically do in the next three years to become a 'world class' sustainability port? (i.e. based on the above example of carbon emissions – report on whole-of-port emissions, set targets to reduce carbon emissions across the port precinct, liaise with tenants to reduce carbon emissions, etc.).

Discussion points

How do we bring others along?

5. What can NSW Ports do to engage better with you on our sustainability journey?

Thank you. We welcome your input.

Please submit your response via email or mail by 10 September. NSW Ports will present a summary of the feedback received at the November community meetings. Responses or comments/questions should be sent to:

Alison Wedgwood

Environment & Sustainability Co-Ordinator NSW Ports

PO Box 297 Botany NSW 1455

T: +61 1300 922 524 | D: +61 2 9316 1134 | M: +61 408 814 315

E: Alison.Wedgwood@nswports.com.au | www.nswports.com.au

NSW Ports

The logo for NSW Ports, featuring the text "NSW Ports" in a bold, sans-serif font. Below the text is a stylized, curved line that starts under "NSW" and ends under "Ports", resembling a wave or a swoosh.

REVIEW OF BEST PRACTICE IN PORT SUSTAINABILITY:

**Research to inform stakeholder
consultation and preparation of the
NSW Ports Sustainability Plan 2019**

1. Background

NSW Ports' 2015 sustainability plan is reaching completion and a new strategic plan is being developed. As part of its commitment to embedding sustainability across the organisation and involving its stakeholders in shaping this plan, NSW Ports engaged external support to review global best practise in the ports sector, and facilitate external stakeholder engagement sessions at its main geographic locations: Port Botany, Port Kembla and the Enfield Intermodal Logistics Centre.

NSW Ports has a vision to be a world class port and logistics manager driving sustainable growth and has developed a 30-year Master Plan and 5-year Business Plan to achieve this. The existing three-year sustainability plan aligns with this vision and sets out five main focus areas:

1. Transport and logistics
2. Land use planning and development
3. Local environmental outcomes
4. Resource conservation and efficiency
5. Stakeholder consultation and relations.

For each focus area, high-level goals, strategic directions and short-term actions and milestones are set out, with a broad timeframe for achievement.

Aim & Scope

NSW Ports is currently developing a new sustainability plan, using the 2015 Plan as a foundation. While many of the same focus areas and goals will remain, the aim is to expand its scope to reflect a broader approach to sustainability that includes social and responsible business aspects. A number of strategic directions and short-term actions and milestones will also be updated, accompanied by meaningful Key Performance Indicators (KPIs) to support plan implementation and communication.

To help inform this process, global good practice desk research was undertaken and stakeholder consultation is being carried out around what 'being a world class port' means in terms of sustainability.

The aims are to:

- Identify key trends and drivers affecting the global industry.
- Capture what material issues, initiatives and performance indicators leading global ports, shipping and logistics providers are reporting on.
- Engage NSW Ports' stakeholders in the development of the new plan to ensure it reflects their priorities.
- Use the research insights and stakeholder feedback to develop a draft 2018 Sustainability Plan and identify new short-term actions and milestones for the next three years to 2021.

2. Global trends

Around the world, the shipping industry is undergoing significant change, from consolidation, the emergence of major alliances, and the switch to bigger vessels to digitalisation, automation and innovation. Among the key trends impacting the sector is a drive for greater sustainability and the need to decarbonise global supply chains.

According to the International Maritime Organisation (IMO), the global industry regulator, shipping is responsible for moving around 80% of world trade. It is by far the most efficient and environmentally sound way to transport goods around the world, accounting for only some 2% of the world's carbon emissions. However, as world population, trade and consumption grow, the *Third IMO GHG Study 2014* estimates that Greenhouse Gas (GHG) emissions from international shipping could grow by between 50% and 250% by 2050.

As well as addressing climate change, the industry will increasingly need to respond to the growing number of shipping customers looking to cut carbon impacts throughout their global supply chains. Earlier this year the IMO adopted an initial strategy on reduction of GHG emissions from ships that aims to reduce total annual GHG emissions by at least 50% by 2050 compared to 2008, with a view to ultimately phasing them out completely.

Examples of these key industry drivers are summarised briefly here:

Innovation

- Digitisation, automation and 5G to optimise port operations, lower environmental footprint, increase safety and transform efficiency and collaboration in global supply chains. Smart ports and growth of 'networks of trusted networks' offer huge opportunities but also involve risks (e.g. cybersecurity, job security).
- Key maritime freight sector innovations include development of sky-sails, more energy-efficient propulsion systems and 'slow steaming' to save money and fuel. Other innovations from the ferry sector include internet-connected surveillance cameras and radios; GPS; and sensors that collect data on weather, speed, direction, and fuel use and maintenance needs.
- An MoU between the International Association of Ports and Harbors (IAPH) and the International Cargo Handling Coordination Association (ICHCA International) aims to speed up testing and implementation of sustainable innovations in technology, equipment cargo handling and financial services.

Decarbonisation

- The use of alternative fuels and renewable energy (e.g. complementing existing biofuels with methanol, ammonia and hydrogen); technological measures (e.g. hull design, bulbous bows and air lubrication); and operational improvements (e.g. slower ship speeds, use of larger ships, and better ship-port coordination).
- Clear and ambitious emissions reduction targets for maritime transport and providing smart financial incentives for maritime shipping. Options for shore power facilities, electric charging systems and bunkering facilities for alternative fuels, as well as applying environmental criteria to differentiate fees.
- Improvements in 'ship-port interface' like flexible berth planning, better collaboration, digitalisation and data exchange can optimise or reduce ship waiting times and minimise emissions and fuel use from auxiliary engines.

Sustainability

- Growing recognition of the need to address broader, more complex global impacts across the entire shipping value chain, like human rights, anti-bribery and corruption and wider impacts on ecosystems. Groups like the [Sustainable Shipping Initiative \(SSI\)](#) have been set up to do just this.
- This broader agenda is encapsulated by the [UN Sustainable Development Goals \(SDGs\)](#), in which business has a key role to play to deliver progress by 2030. Committing to the SDGs is not just about mapping existing activities to the goals, it

involves raising the level of ambition, quantifying progress against individual targets and developing an understanding of the interlinkages between different goals.

- There is growing uptake and integration of the UN Sustainable Development Goals across the ports, shipping and logistics sectors. The [World Ports Sustainability Program \(WPSP\)](#) has been set up to coordinate and accelerate the industry contribution to the goals, the IMO has identified 15 goals that are impacted by its work, and a number of global ports are including the SDGs in their strategic plans and sustainability reports.



United Nations 2015

Headline findings

Decarbonisation is the industry's biggest priority. As ports are on the frontline of climate change, it is important to take ambitious action now. This can be done through a combination of digitisation, innovation, port and equipment upgrades, operational energy efficiency, transitioning to low carbon and renewable fuels and partnering along the shipping value chain to incentivise and measure progress. Decarbonising will also deliver significant co-benefits for local communities in the form of improved air quality (lower NOx, SOx & particulate matter (PM) emissions) leading to better health and wellbeing and long-term benefits from remaining within a 2°C warming scenario.

To be a sustainable world class port, NSW Ports must show leadership and work with its partners in the shipping and logistics industries to accelerate just energy transition. As well as incorporating global environmental challenges, the new NSW Ports Sustainability Plan should take an integrated approach that includes social and governance objectives. In this regard, the [10 principles of the UN Global Compact](#) and [17 UN SDGs](#) and supporting targets provide a useful and universal framework.

3. Industry Peer best practice

Research was conducted on the following global ports and shipping and logistics industry leaders: Antwerp, Busan, Copenhagen, COSCO, Fremantle, Gothenburg, Hamburg, Los Angeles (LA), Maersk Line (A.P. Moller-Maersk Group), Orient Overseas (International) Ltd (OOIL), Oslo, Rotterdam, Shanghai, Singapore, and Vancouver. An overview of material issues and priorities, key measures and initiatives, Key Performance Indicators (KPIs)/metrics used, stakeholder engagement, and use of green incentives was undertaken.

Material Issues

Based on the desk research using companies' websites, sustainability reports and third party news articles, the following material issues were identified for the sector:

Type of impact/value created	Material Issues	
Economic	Sustainable economic growth	Job creation
	Accommodating larger ships	Inclusive trade (e.g. SMEs, etc.)
	Land acquisition, use & planning / urban encroachment	Optimisation & operational efficiency
	Inland freight handling	Digitisation & automation
	Industry consolidation	Innovation & technology
Responsible Business Practices	Ethics, anti-bribery & corruption	Respect for human rights & Non-discrimination
	Land Acquisition & resettlement	Modern Slavery
	Risk management	Security
	Sustainable procurement	Transparency & accountability
	Compliance	Tax practices
Labour	Health & Safety* (balance btw. speed & safety)	Human rights
	Gender diversity	Culture
	Working conditions	Training & skills
	Equal opportunities	Engagement & satisfaction
	Labour/management relations	
Environment	Energy use	Resources use
	Energy efficiency	Air pollution & emissions
	Carbon emissions (direct & indirect logistics—Scope 1, 2, 3)	Climate change & adaptation
	Clean energy	Waste by type & treatment
	Chemicals / hazardous substances	Food waste
	Biodiversity & ecosystems	Light & dust
	Water use	Noise (incl. underwater)
	Marine pollution/water quality	Disaster management & response
	Dredging / silt / erosion	Traffic/Congestion
Stakeholders	Social value created/investment	Complaints
	Enhancing amenity	Consultation & engagement
	Customer satisfaction	Treatment of suppliers

KPIs

A very wide range of Key Performance Indicators (KPIs) is used by leaders across the port, shipping and logistics industries. These vary according to the nature of sustainability goals and targets companies have set, the material issues identified, the comprehensiveness of reporting as well as the sustainability standards and reporting frameworks used, such as the Global Reporting Initiative (GRI).

Key research takeaways

Based on the research, 10 key things have been identified that leading global ports are doing as part of a world class approach to sustainability:

- ✓ Decarbonisation and developing zero or low-carbon roadmaps
- ✓ Shifting more freight to rail
- ✓ Switching to clean/renewable energy
- ✓ Offering Onshore Power Supply (OPS) & Liquid Natural Gas (LNG) bunkering
- ✓ Offering green shipping incentives
- ✓ Setting ambitious SMART (specific, measurable, achievable, relevant and time-bound) goals and targets and reporting regularly on progress
- ✓ Measuring customer satisfaction and developing sustainable services
- ✓ Implementing sustainable procurement and sharing value with SMEs
- ✓ Addressing seafarer wellbeing and focusing on youth outreach to develop the skills pipeline for maritime careers
- ✓ Partnering with key stakeholders (customers, tenants, regulators, communities) to achieve shared goals, promote port-wide sustainability practices and green transport supply chains

4. NSW Ports opportunities for improvement

The Sustainability Plan 2015 has a number of strengths and provides a solid foundation for aspiring to ‘world class’ sustainability practice in the port sector. Nonetheless, in the light of key industry drivers and insights from global best practice, there are several areas that could be built on and improved in the 2019 Sustainability Plan.

One Stone recommendations

In line with the direction already set out by NSW Ports at the May 2018 CCC meeting, and the Sustainability Advantage diagnostic, key opportunities for improvement include the following:

1. **Expansion within the 5 Focus Areas** to include social and economic impacts and performance and responsible business practices (safety, leadership & procurement).
2. **Extension of sustainability goals** under Focus Areas 3, 4, and 5 to include topical material issues identified in the best practice research, e.g. introducing sustainability services to shipping; developing Customer Satisfaction surveys; introducing ESI green incentives, etc.
3. **Strengthening performance management and monitoring** by setting ‘SMART’ goals and targets for energy, water, waste, GHGs, NOx, SOx, PMs, diversity & employment, etc., using a core set of industry-recognised KPIs with a clear baseline, and developing new policies for e.g. sustainable procurement.
4. **Explore potential for port-wide partnerships** where NSW Ports, tenants, shipping companies and other stakeholders collaborate to achieve shared sustainability goals based on the ‘avoid, shift, improve’ framework (e.g. low carbon innovation, operational efficiencies, development of new ‘green’ services, longer term viability of OPS/LNG bunkering, waste sorting and closed loop waste streams/circular communities, etc.).
5. **Build credibility** by aligning with universal and recognised global sustainability frameworks like the 10 principles of the UN Global Compact and 17 UN SDGs.

Community Consultation Questions

NSW Ports is keen to evolve its strategic approach to sustainability in the new 2019 Sustainability Plan and welcomes the opportunity to involve its stakeholders in this process. To facilitate discussion, you are invited to consider the following questions:

Where are we now?

<p>1. What do you believe NSW Ports' strengths currently are in terms of sustainability?</p>	<p>2. What do you believe NSW Ports' weaknesses currently are in terms of sustainability?</p>

Where do we want to go?

3. What do you believe should be the top two sustainability priorities for NSW Ports for each of the aspect areas in the Table below? You can refer to the Table of Material Issues on Page 5 to assist with your answer (i.e. reducing carbon emissions, improving air quality, better consultation/ engagement) or feel free to provide another response not listed.

Aspect Area	Priorities
<i>Economic</i>	<i>Priority One:</i>
	<i>Comments:</i>
	<i>Priority Two:</i>
	<i>Comments:</i>
<i>Responsible Business Practice</i>	<i>Priority One:</i>
	<i>Comments:</i>
	<i>Priority Two:</i>
	<i>Comments:</i>
<i>Labour</i>	<i>Priority One:</i>
	<i>Comments:</i>

	<i>Priority Two:</i>
	<i>Comments:</i>
<i>Environment</i>	<i>Priority One:</i>
	<i>Comments:</i>
	<i>Priority Two:</i>
	<i>Comments:</i>
<i>Stakeholders</i>	<i>Priority One:</i>
	<i>Comments:</i>
	<i>Priority Two:</i>
	<i>Comments:</i>

4. For each of your sustainability priorities and based on industry drivers and global best practice—and in the Australian context—what do you think are some actions that NSW Ports could realistically do in the next three years to become a ‘world class’ sustainability port? (i.e. based on the above example of carbon emissions – report on whole-of-port emissions, set targets to reduce carbon emissions across the port precinct, liaise with tenants to reduce carbon emissions, etc.).

<i>Aspect Area</i>	<i>Proposed Actions</i>
<i>Economic</i>	<i>Priority One Actions:</i>
	<i>Priority Two Actions:</i>
<i>Responsible Business Practice</i>	<i>Priority One Actions:</i>
	<i>Priority Two Actions:</i>

<i>Labour</i>	<i>Priority One Actions:</i>
	<i>Priority Two Actions:</i>
<i>Environment</i>	<i>Priority One Actions:</i>
	<i>Priority Two Actions:</i>
<i>Stakeholders</i>	<i>Priority One Actions:</i>
	<i>Priority Two Actions:</i>

How do we bring others along?

5. What can NSW Ports do to engage better with you on our sustainability journey?

Please submit your response via email or mail by 10 September. NSW Ports will present a summary of the feedback received at the November community meetings.

Responses or comments/questions should be sent to:

Alison Wedgwood
 Environment & Sustainability Co-ordinator
 NSW Ports
 PO Box 297 Botany NSW 1455
 T: +61 1300 922 524 | D: +61 2 9316 1134 | M: +61 408 814 315
 E: Alison.Wedgwood@nswports.com.au | www.nswports.com.au