



PORT OF NEWCASTLE  
ECOPORTS PERS Report  
2019



## Contents

1.0.1 PON Environment, Social & Governance Responsibility.....	6
1.0.2 Port Location & Port Area.....	7
1.0.3 Legal Status and Port Operations.....	7
1.0.4 Main Commercial Activities.....	8
1.0.5 Main Cargos.....	8
1.0.6 Environmental Management.....	8
<b>1.1 Policy Statement.....</b>	<b>10</b>
1.1.1 PON Environment & Sustainability Policy.....	10
1.1.2 Policy Action Plan.....	12
<b>1.2 Environmental Aspects and Legal Requirements.....</b>	<b>13</b>
1.2.1 Environmental Regulations.....	13
1.2.2 Environmental Aspects Related to Each Division.....	15
1.2.3 Environmental Performance Indicators.....	15
<b>1.3 Responsibilities &amp; Resources.....</b>	<b>24</b>
1.3.1 PON Environmental Responsibility.....	24
1.3.2 Environmental Responsibility Within the Port Area.....	24
1.3.3 Environment & Social Resource Allocation.....	25
<b>1.4 Conformity Review.....</b>	<b>29</b>
1.4.1 Conformity Review on Legal Requirements and Policy.....	29
1.4.1.1 Policy.....	29
1.4.1.2 Managing Our Carbon Emissions.....	30
1.4.1.3 Managing Air Quality.....	30
1.4.1.4 Reducing Port Waste.....	31
1.4.1.5 Managing Biodiversity in the Port.....	31
1.4.1.6 Managing Contractors, Port Tenants and Operators.....	32
1.4.1.7 Supporting the Health and Wellbeing of PON Employees.....	32
1.4.1.8 Strengthen Relationships with Local Communities.....	33
1.4.1.9 Ensure Appropriate Training and Awareness for Our Employees.....	33
1.4.1.11 Maintaining Heritage Assets.....	34
1.4.1.12 Managing Maintenance Dredging.....	34

1.4.1.13 Managing Impacts on Stormwater .....	34
1.4.1.14 Ensuring Compliance.....	35
<b>1.5 Environmental Report .....</b>	<b>35</b>
1.5.1 Compliance .....	37
1.5.2 Energy Management.....	37
1.5.3 Emissions Management .....	37
1.5.4 Maintenance Dredging .....	38
1.5.5 Waste Management .....	38
1.5.6 Heritage Management .....	39
1.5.6 Biodiversity Management.....	39
1.5.7 Community Engagement .....	39
1.5.8 Employee Training .....	39
<b>1.6 Best Practices .....</b>	<b>40</b>

## Quality Information

Document                    Port of Newcastle EcoPorts Report  
 Date                         24.10.2019  
 Prepared By                Jackie Spiteri  
 Reviewed By                PON Executive Leadership Team

Revision	Revision Date	Details	Authorised	
A	17 Oct 2019	Draft for ELT Review	J Spiteri	

The content of this document and the self-diagnosis method has been discussed and confirmed jointly by the Port of Newcastle (PON) Executive Leadership Team, comprising of Chief Executive Officer, Chief Commercial Officer, Chief Financial Officer, Executive Manager Marine and Operations, Executive Manager Projects and Infrastructure, Executive Manager People and Culture and the Executive Manager of Corporate Affairs & Strategy as well as the Environment Sustainability and Planning Manager.

All records and related documents of the Port Environmental Review System (PERS) report are jointly maintained by relevant departments of PON, including Environment, Sustainability & Planning, People & Culture, Safety, Legal, Safety and Corporate Affairs.

This report will be reviewed and updated every two years or when any content modification is required.

## 1.0 Port Profile

The content of this chapter and the self-diagnosis method has been discussed and confirmed jointly by the PON Executive Leadership Team, comprising of Chief Executive Officer, Chief Commercial Officer, Chief Financial Officer, Executive Manager Marine and Operations, Executive Manager Projects and Infrastructure, Executive Manager Corporate Services and the Executive Manager of Corporate Affairs as well as the Environment and Planning Manager.

All records and related documents of the PERS report are maintained by the PON Environment Sustainability and Planning Manager. Partial chapter content is jointly maintained by the relevant departments.

The content of Chapter 1.0 “Port Profile” in this PERS report will be reviewed and updated every two years or when any content modification is required.

### 1.0.1 PON Environment, Social & Governance Responsibility

PON considers the robustness of its Environment, Social & Governance (ESG) systems and strategies as critical to a strong and successful future.

By embedding positive ESG practices across PON, the organisation seeks to mitigate against environmental, legal and reputational risks while also increasing Board oversight, enhancing employee engagement and positively influencing customer behaviour.

The PERS fits with PON’s ambition to be transparent about its approach and ESG performance, and to inspire other ports in the Pacific region to do the same.

PERS is primarily designed to assist ports in developing an environmental management program in line with the recommendations of the European Sea Ports Organisation (ESPO). The ESPO Environmental Code of practice 2004 recommends that ports should:

- Contribute towards a sustainable logistics chain;
- Encourage wide consultation, dialogue and cooperation with relevant stakeholders at a local level (port users, community NGOs);
- Generate new knowledge and technology and develop sustainable techniques which combine environmental effectiveness and cost efficiency;
- Enhance cooperation between port administrations in the field of environment, facilitate the exchange of experiences and implementation of best practices on environmental issues;
- Prepare a publicly available environmental policy to increase awareness of environmental concerns and integration of sustainable development;
- Conduct appropriate environmental impact assessments for both port projects and port development plans;
- Stimulate continual improvement in the port environment and its environmental management;
- Promote monitoring based on environmental performance indicators in order measure objectively identifiable progress in environmental port practices;
- Promote environmental reporting as a means of communicating environmentally good behaviour to stakeholders
- Intensify the communication about the environmental achievements made by ports.

PERS is based on internationally recognised professional best practice and yet remains a port specific system developed by ports for ports. It is formulated to be flexible and capable of evolution so it can be adapted to future changes in legislation and priorities for action. The system defines a basic standard of good practice for the port sector.

### **1.0.2 Port Location & Port Area**

There are several boundaries that are relevant to the Port operations and management:

- The SEPP (Three Port) 2013 Land Application area boundary, which is a regulatory boundary rather a land ownership boundary (and includes land outside PON control);
- The Lease Area, which is the land within PON control;
- The Port Area which includes the Lease Area, waterways where PON has access rights to allow shipping or waterfront infrastructure, as well as any land adjacent to the Lease Area that is managed by PON.

The Lease Area (as defined in the Lease) and Ports SEPP boundary are shown in *Figure 1*. PON does not undertake all activities within the Lease Area; much of the area is sub-leased to commercial organisations typically involved in export/import trade. References to ‘the Port’ in this report mean the land and waterways used by PON and defined as the Port Area in the Port Lease.

The EMP applies to:

- The Port Area as described above (and in the Lease);
- The operations and activities at the Port, including management of Core Port Infrastructure as described in the Lease.

These areas and activities also form the scope and boundary of the PON ECOPORTS PERS report

The Ports SEPP Area is often divided into precincts for ease of description:

- Carrington;
- Mayfield;
- Kooragang; and.
- Walsh Point.

*Figure 2* describes the Precinct Areas, which include the Lease Area as well as land that is outside the Lease and therefore outside PON control. This ECOPORTS PERS report uses the Precinct terminology to describe the Port. Where Precincts are referenced within this ECOPORTS PERS report, PON is describing the activities within the Lease Area, not the broader area that is outside PON control.

### **1.0.3 Legal Status and Port Operations**

PON has substantial environmental obligations (and rights) under the Port Lease and other contractual documents arising from the Port Transaction.

PON maintains a standard lease document for its tenants. Section 17 of the lease document defines the environmental obligations that the tenant is required to comply with, including requirements for base condition reporting at entry, environmental audits, contamination reports end of lease clean up, indemnities, compliance with all relevant environmental legislation; and requirement for notification and clean-up of pollution incidents.

PON has a range of associated subsidiary processes and procedures to deliver the requirements of the Lease, meets applicable environmental legislation and ensures PON's own organisational environmental objectives.

#### **1.0.4 Main Commercial Activities**

PON currently has 20 berths that operate 24/7. The Port manages 792 hectares of land and maintains the channel to a depth of 15.2 metres to ensure the safe navigation of vessels.

PON is embarking on a diversification strategy that leverages its natural advantages to the benefit of customers and the Hunter Region's economy

Current key strategic development opportunities include the Newcastle Container Terminal and Newcastle Bulk Terminal.

#### **1.0.5 Main Cargos**

The Port is a major trade and logistics hub, handling a diverse range of cargo types, including dry bulk, project cargo, bulk liquids, break bulk, Ro-Ro and containers

#### **1.0.6 Environmental Management**

PON has in place systems and processes to deliver good environmental practice and compliance with the environmental conditions of the Lease and applicable environmental legislation. These include:

- An Environmental Management Plan
- An Environmental Management System aligned with the ISO 14001:2015 standard
- A Land Use Planning Management System

The objectives of the above-mentioned systems and documents are to:

- ensure sound and responsible environmental management;
- identify measures to prevent or minimise potential adverse environmental impacts arising from PON operations;
- identify a framework to assist in ensuring compliance with environmental regulatory requirements relevant to Port and Port-related activities;
- Identify key environmental roles, responsibilities and governance arrangements;
- Identify emergency preparedness and response procedures, including detail of incident notification procedures and corrective actions; and
- meet the requirements of the Port Lease.



**Figure 2**  
**Port Precincts**

- Legend**
- SEPP Boundary
  - D Berth ID Code

Data sources:  
 - DPLI, OEH  
 - Imagery, Newcastle Port Corporation, July 2013



## 1.1 Policy Statement

The content of this chapter and the self-diagnosis method has been discussed and confirmed jointly by the PON Executive Leadership Team, comprising of Chief Executive Officer, Chief Commercial Officer, Chief Financial Officer, Executive Manager Marine and Operations, Executive Manager Projects and Infrastructure, Executive Manager Corporate Services and the Executive Manager of Corporate Affairs as well as the Environment Sustainability Manager.

All records and related documents of the PERS report are maintained by the PON Environment Sustainability and Planning Manager. Partial chapter content is jointly maintained by the relevant departments.

The content of Chapter 1.1 “Policy Statement” in this PERS report will be reviewed and updated every two years or when any content modification is required.

The Port takes seriously its corporate social responsibilities associated with environmental sustainability and development when pursuing corporate growth. Therefore, it has prepared environment and sustainability policy statements. By making these statements, PON commits to comply with environment-related regulations and supervisory standards, as well as propose improvement goals and action plans for major port-related environmental matters.

### 1.1.1 PON Environment & Sustainability Policy

PON’s mission is to promote and support the prosperity of the Hunter Region and New South Wales in a sustainable manner. This is achieved through safe, efficient and sustainable operations.

As the custodian of the Port for the people and government of New South Wales Government, PON recognises its responsibilities in providing and promoting a sustainable environment for its employees, contractors, customers, port users, visitors and members of the public.

PON operates within an Environmental Management System based on the principles of ISO 14001:2015 and EcoPorts SLC. PON has identified a number of key environmental priorities, including biodiversity, energy and fuel usage and associated emissions, stormwater and historical land contamination. These priorities are linked to port development in sensitive areas, operation of the port and the vehicle and vessel fleet, and projects and development that involve ground penetration works.

PON is committed to driving active and sustainable environmental management through:

#### ***Managing its environmental footprint***

- fostering sustainability awareness and encouraging a genuine respect for environmental protection in all its employees through the provision of training and information.
- considering environmental, social and economic aspects when procuring goods and services
- ensuring responsible consumption and disposal of resources
- investing in infrastructure to prevent environmental impacts

#### ***Delivering beyond its boundaries***

- proactively supporting initiatives that go beyond compliance obligations
- exhibiting leadership in environmental practices and sustainability whilst encouraging port tenants and licensees to adopt similar standards
- actively contributing to local environment and sustainability initiatives

#### ***Having in place robust systems and support***

- enabling commerciality and efficiency within a culture of mutual respect
- ensure compliance with all relevant legislation, regulations and other requirements to which PON subscribes
- Supporting PON employee health and wellbeing
- continually improving and innovating to enhance environmental performance
- identifying and managing environmental risks and impacts
- setting objectives and management programs based on key environmental aspects
- developing and maintaining an effective Environmental Management System
- communicating its policies and systems to employees, tenants and contractors
- ensuring contractors engaged by PON meet minimum environmental standards and demonstrate a commitment to sustainable practices
- working in partnership with stakeholders to drive active and sustainable environmental management

#### ***Being a committed steward***

- Complying with all applicable legal and other requirements
- Sustainable management of its heritage assets
- Incorporating sustainable design principles into new developments
- Measuring, understanding and minimising environmental impacts
- Ensuring effective environmental management clauses are included in all new leases and licenses

#### ***City-Port Relations***

- Having a framework for stakeholder communication that will include communications on its environmental program
- Working to maintain a social license to operate
- Preparing and making publicly available an Environment and Sustainability report
- Contributing to a sustainable city and community

PON will ensure it has the people, the assets, the know-how and the culture to deliver a consistently high standard of service to current and future customers in a sustainable manner and to ensure that this policy can be implemented.

This policy will be reviewed every two years and is approved by the Chief Executive Officer.

### 1.1.2 Policy Action Plan

Initiative	Goal	Benefit
<b>2018</b>		
Installation of electricity smart meters	Installation of 26 smart meters	Transparency of data to understand and manage emissions
Corporate sponsorship	Contribution of sponsorship budget to local initiatives	Community support Social licence
Annual Litter Pick	Litter reduction in port environment	Healthy environment Social licence
Newcastle Bulk Terminal (NBT) hopper replacement	Purchase new hoppers with dust extraction	Improved air quality
Community engagement	Hold no less than four CLG meetings each year	Transparency Social licence
<b>2019</b>		
Emissions baseline	Completion of Energetics project to detail PON Scope 1 and 2 emissions	Baseline data to understand and manage emissions
Electric Vehicle (EV) fleet Transition Stage 1	Replace five PON vehicles with EV alternatives	Decarbonisation
Corporate sponsorship	Contribution of sponsorship budget to local initiatives	Community support Social licence
Annual Litter Pick	Litter reduction in port environment	Healthy environment Social licence
Sustainability Reporting	Produce an annual sustainability report	Transparency Social licence
Community engagement	Hold no less than four CLG meetings	Transparency Social licence
<b>2020</b>		
EV fleet transition Stage 2	Replace five PON vehicles with EV alternatives	Decarbonisation

Annual Litter Pick	Litter reduction in port environment	Healthy environment Social licence
NBT gantry replacement	Replace aged bulk handling equipment	Improved air and stormwater quality
Community engagement	Hold no less than four CLG meetings	Transparency Social licence
Corporate sponsorship	Contribution of sponsorship budget to local initiatives	Community support Social licence
Sustainability Reporting	Produce an annual sustainability report	Transparency Social licence
Biodiversity Monitoring	Partner with the Island Wide Green and Golden Bell Frog survey group	Biodiversity protection

Table 1: PON Environment & Sustainability Policy Action Plan

## 1.2 Environmental Aspects and Legal Requirements

The content of this chapter and the self-diagnosis method has been discussed and confirmed jointly by the PON Executive Leadership Team, comprising of Chief Executive Officer, Chief Commercial Officer, Chief Financial Officer, Executive Manager Marine and Operations, Executive Manager Projects and Infrastructure, Executive Manager Corporate Services and the Executive Manager of Corporate Affairs as well as the Environment Sustainability and Planning Manager.

All records and related documents of the PERS report are maintained by the PON Environment Sustainability and Planning Manager. Partial chapter content is jointly maintained by the relevant departments.

The content of Chapter 1.2 “Environmental Aspects and Legal Requirements” in this PERS report will be reviewed and updated every two years or when any content modification is required.

In this chapter, PON identifies the activities and services (including those associated with businesses such as tenants and contractors in the port area) that may cause environmental impacts in the Port, compiles the environmental regulations and mitigation measures for each identified environmental aspect.

### 1.2.1 Environmental Regulations

Vessels visiting the Port are regulated by international conventions and norms, such as the *International Convention for the Prevention of Pollution from Ships (MARPOL73/78)*, *London Dumping Convention* and the *International Convention on the Control of Harmful Anti-Fouling Systems to Ships*. Activity at the Port is largely governed by domestic regulations. PON holds a range of approvals and licences under environmental legislation, and these set a range of requirements,

including reporting to regulators such as the NSW Environment Protection Authority (NSW EPA) and the NSW Department of Planning and Environment. A key international convention that applies to port activity includes the *2016 Paris Agreement* commitment to tackle climate change.

As described above, legal and other requirements are considered when assessing risk and when setting actions to manage risk. A series of monitoring programs are in place to ensure compliance with legislative requirements.

PON has a firm commitment to meeting relevant environmental legislation and regulations (as described in the Environment & Sustainability Policy) and meeting other voluntary or contractual environmental obligations to which it subscribes, including the requirements of the Lease between PON and the NSW State Government.

PON has set out the procedure for identifying and tracking its environmental obligations in [Procedure EMS 004 Identification of Legal and Other Requirements](#).

PON tracks legal requirements within environmental legislation through a sophisticated third-party database, EnviroLaw. This [Legal Register](#) is available to all PON employees via an external website. The Legal Register covers NSW and Federal legislation and is updated continuously by the service provider.

Key domestic regulations that are applicable to PON are presented in Table 2.

	Legislation	Overview
Ref.	State	
L1	<i>Protection of the Environment Operations Act 1997</i>	Air, Water, Noise, Pollution, Waste
L2	<i>Local Land Services Act 2013</i>	Biodiversity
L3	<i>State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017</i>	Biodiversity
L4	<i>Heritage Act 1977</i>	Heritage
L5	<i>National Parks &amp; Wildlife Act 1974</i>	Heritage
L6	<i>Fisheries Management Act 1994</i>	Marine
L7	<i>Contaminated Land Management Act 1997</i>	Contamination
L8	<i>Electricity Supply Act 1995</i>	Energy
L9	<i>Hunter Water Act 1991</i>	Water, Sewer, Trade Waste
L10	<i>Water Management (General) Regulation 2018</i>	Water, Sewer

L11	<i>Work Health &amp; Safety Act 2011</i>	Hazardous Materials, Dangerous Goods
L12	<i>Work Health &amp; Safety Amendment (Dangerous Goods at Ports) Regulation 2012</i>	Dangerous Goods
L13	<i>Dangerous Goods (General) Regulation 1999</i>	Dangerous Goods
L14	<i>Planning &amp; Environment Assessment Act 1979</i>	Development
	<b>Commonwealth</b>	
L15	<i>Modern Slavery Act 2018</i>	Procurement, supply chain
L16	<i>Marine Pollution Act 1981</i>	Federal
L17	<i>Biosecurity Act 2015</i>	Marine, Land
L18	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Biodiversity, Threatened Species
L19	<i>Hazardous Waste (Regulation of Exports and Imports) Act 1989</i>	Waste
L20	<i>Sea Dumping Act 1981</i>	Dredging
L21	<i>National Environmental Protection Measures</i>	Emissions

Table 2: Key domestic regulations applicable to the Port

### 1.2.2 Environmental Aspects Related to Each Division

PON identifies and prioritises management of environmental impacts associated with activities it undertakes through the PON Risk Register as discussed above.

ISO 14001 uses terminology to describe the identification of risk (“environmental aspects and impacts”) and this is used in the procedure housed within PON’s EMS. For simplicity, the term “environmental risk” is used in this chapter.

PON has set out the procedure for developing and updating environmental risk and the process for identifying the issues that are significant within the context of the Port in *Procedure EMS 003 Identification of Environmental Aspects and Impacts*. The environmental risk assessment process includes consideration of the probability of an event and its consequences, as per *AS/NZS ISO 31000 Risk Management*. Based on likelihood and consequence, the environmental risks are ranked in the register as extreme, high, significant, moderate or low.

PON’s aspect and impact risk register is provided in Table 2 below.

### 1.2.3 Environmental Performance Indicators

PON has identified the following environmental performance indicators that relate to its significant environmental aspects, policy and key environmental objectives:

- Annual number of regulatory non-compliances that are the obligation of PON
- Annual environmental incidents arising from PON operations
- Annual number of community complaints per annum arising from PON operations
- Annual amount of port recyclable waste by recycled type
- Total annual fuel consumption and associated CO2e emissions
- Annual quantity of dredged sand used for local beach renourishment

Ref.	Aspect	Impact	Responsible Party	International Regulation	Domestic Legal & Other Requirements	Legal Requirements	Comment
<b>Marine &amp; Operations Division</b>							
MO1	<b>Dredging - maintenance</b>	Biodiversity, contamination waste, hydrocarbon pollution	Dredging Manager	N	L1, L20, L21,	Material suitability for offshore disposal Placement in designated spoil ground Annual volume reporting No unlawful pollution of waters Appropriate waste management Reporting of incidents EPL required for beneficial reuse volumes >30,000 m3	Sea Dumping Permit Long Term Monitoring and management Plan Sea Dumping Permit Training PON Technical Advisory Consultative Committee for Maintenance Dredging EMS 008 Maintenance Dredging EMS 002 Fuels Oils and Hazardous Substances EMS 020 Environmental Training & Awareness EMS 026 Biofouling & Marine Pests
MO2	<b>Vessel Fleet</b>	Hydrocarbon pollution, emissions	Dredging Manager	Y	L16, L21	Emissions reporting No unlawful pollution of waters	Emissions & fuel usage monitoring and reporting Monthly environmental inspections EMS 002 Fuels Oils and Hazardous Substances

							ENVRG 007 PON Emissions Inventory EMS 031 National Pollutant Inventory Reporting
MO3	<b>Stevedoring - loose bulk cargo</b>	Stormwater; air quality; noise, biosecurity	Stevedores <sup>1</sup>	N	L1, L17	No unlawful pollution of waters  No material to leave licenced area (via air or ground) where there are licences in place.  Site specific noise criteria to be met  Site specific air quality monitoring to be completed  Site specific stormwater monitoring and associated criteria  Reporting of incidents	Onsite supervision and inspections  Environment Protection Licences  Annual noise monitoring and reporting  Monthly stormwater monitoring and reporting  Stevedore Licence  Weekly wharf inspections  Biosecurity incident response kits  EMSWI 106 Bulk & General Cargo Handling Guidelines  EMS 041 Biosecurity Incident Response
MO4	<b>Handling dangerous goods</b>	Fire, emissions, spills and leaks	Stevedores, PON	Y	L1, L11, L13	Storage requirements Placarding	PON Emergency Response Procedures

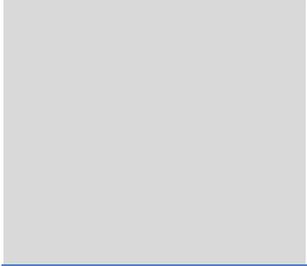
<sup>1</sup> Stevedores include Newcastle Stevedores, Linx and Qube

		to waterways, health				Auditing No unlawful pollution of waters Reporting of incidents	Hazard Audit for designated facilities Port Authority NSW Regulation requirements
MO5	<b>International Vessels</b>	Biosecurity, emissions, ballast water	Stevedores, PON, Vessel Owners/agents	Y	L16, L17	No vectors within 400m of waterline  Biosecurity response kits to be maintained on FPOE sites  Biosecurity Response Management Plans to be developed  Biosecurity training	Biosecurity incident response kits  Annual vector surveying Weekly wharf inspections  EMS 026 Biofouling & Marine Pests  EMS 041 Biosecurity Incident Response  PON website information
<b>Commercial Division</b>							
C1	<b>Tenants – operations</b>	Stormwater; air quality; noise; land contamination	Property Manager	N	L1, L7, L14	No unlawful pollution of waters  No unlawful pollution to land  No material to leave licenced area (via air or ground) where there are licences in place.  Site specific noise criteria to be met	Property Inspections Lease and licence agreements Development approvals Environment Protection Licences Contaminated Site Management Plans

						Site specific air quality monitoring to be completed	
						Site specific stormwater monitoring and associated criteria	
						Reporting of incidents	
C2	<b>Development customers/ tenants</b>	Exacerbation of existing contamination , disturbance to heritage items, stormwater, biodiversity, visual amenity, climate change	Environment Planning & Sustainability Manager	N	L1, L7, L14, L18	Approvals relevant to development to be sought	Lease and licence agreements Development approvals Contaminated land data base Heritage asset register Landscaping guidelines Contaminated Site Management Plans Construction EPL for scheduled development
C3	<b>Impact of climate change on trade throughput</b>	Increased bush fire risk, drought conditions, sea level rise, increase server weather impact	Senior Manager Commercial	Y	N		Trade forecasting DHI Model developed for the Port channel with the ability to run scenarios for climate change impact on port infrastructure
<b>Projects &amp; Infrastructure Division</b>							

PI1	<b>Routine or reactive maintenance – landside &amp; waterside</b>	Disturbance to heritage items; biodiversity; noise; disturbance of contaminated land; erosion; land pollution; waste	Asset Manager	N	L1, L4,	<ul style="list-style-type: none"> <li>Risk Assessments</li> <li>Contractor management system</li> <li>Contaminated Site Management Plans</li> <li>Contaminated land data base</li> <li>Asbestos Register</li> <li>EMS 002 Fuels Oils and Hazardous Substances</li> <li>EMS 015 Heritage Management</li> <li>EMS 040 Integrated Pest Management</li> </ul>
PI2	<b>Impact of climate change on PON infrastructure</b>	Implications of sea level rise on PON infrastructure	Executive Manager P&I	Y	N	<ul style="list-style-type: none"> <li>DHI Model developed for the Port channel with the ability to run scenarios for climate change impact</li> <li>Project Lifecycle process to ensure climate change impacts are considered</li> </ul>
<b>Finance Division</b>						
F1	<b>Procurement</b>	Modern Slavery; emissions; waste generation	Deputy Financial Officer	Y	L15	Procurement Policy – encourages sustainable procurement and identifies obligations under Modern Slavery Act

							Flight offset program
<b>Corporate Services Division</b>							
CS1	<b>IT infrastructure</b>	Waste, energy usage	IT Administrator	N	L1	Licensed waste contractor requirements for disposal	EMS 007 Waste Management Procedure Waste separation and recycling/refurbishment
CS2	<b>Vehicle Fleet</b>	Emissions	Executive Manager Corporate Services	Y	L21	Annual NPI Reporting	Regular maintenance and renewal program Emissions & fuel usage monitoring and reporting EMS 031 National Pollutant Inventory Reporting ENVRG 007 PON Emissions Inventory
<b>Corporate Affairs Division</b>							
CA 1	<b>Community engagement</b>	Complaints arising from port operations	Communications & Community Relations Manager	N	L1	Noise criteria for specific sites/operations	Community Liaison Group EMS 012 External Communication - Complaints Handling
<b>Work Health &amp; Safety Division</b>							
WHS 1	<b>Health and Wellness</b>	Mental health, physical wellbeing	WHS Advisor	N	N		Green office design principles adopted Corporate fitness program for PON employees



Dedicated end of trip facilities to encourage riding/walking to work

Development of a health and well-being program for 2020

---

*Table 3: Aspects and Impacts as they relate to each Division of PON and operations of tenants with important impact on the environment*

## **1.3 Responsibilities & Resources**

The content of this chapter and the self-diagnosis method has been discussed and confirmed jointly by the PON Executive Leadership Team, comprising of Chief Executive Officer, Chief Commercial Officer, Chief Financial Officer, Executive Manager Marine and Operations, Executive Manager Projects and Infrastructure, Executive Manager Corporate Services and the Executive Manager of Corporate Affairs as well as the Environment Sustainability and Planning Manager.

All records and related documents of the PERS report are maintained by the PON Environment Sustainability and Planning Manager. Partial chapter content is jointly maintained by the relevant departments.

The content of Chapter 1.3 “Responsibilities & Resources” in this PERS report will be reviewed and updated every two years or when any content modification is required.

This chapter is to confirm that PON has a suitable organisational structure and competent professionals to achieve the goals specified in our ESG policies. The divisions (or sections of divisions) mainly in charge of the environmental aspects concerning PON are clarified and listed in the sections below.

### **1.3.1 PON Environmental Responsibility**

Environment is part of the general process of port management and is incorporated into each functional area of the business. The overall organisational structure is provided in Figure 2.

PON has identified environmental responsibilities across the organisation and employs a team of specialists dealing with environment, social and governance (ESG) matters. Environmental responsibilities of PON employees are set through position descriptions developed by the PON People and Culture team together with the Executive Leadership Team. At PON, the ESG lead is the Environment, Sustainability and Planning Manager.

All PON employees have a general obligation to comply with environmental legislation as described in all position descriptions. PON ensures that its employees are equipped to fulfil their obligations through the provision of adequate training, communication and information.

In addition to the general responsibilities above, certain individuals have ESG responsibilities. These are set out in position descriptions and are also described in PON procedures and work instructions referenced throughout this document.

### **1.3.2 Environmental Responsibility Within the Port Area**

PON is not responsible for all the environmental issues and aspects connected to the use of the port and port area. In Table 3 below, an overview is provided of other relevant stakeholders and their main responsibilities regarding the environment.

<b>National</b>	Federal regulators, national policy makers, implementation of IMO legislation
<b>Regional</b>	State regulators, regional and local policy makers, implementation of national legislation, issuing and enforcement of licences, approvals and permits Port Authority of New South Wales, Harbour Master, regulator for the <i>Marine Pollution Act 1981</i>
<b>Port tenants and users</b>	Individual organisations applying for and operating in accordance with relevant permits, approvals and licences. Compliance with relevant legislation

Table 4: Key responsibilities of other organisations within the port area

### 1.3.3 Environment & Social Resource Allocation

#### *Environmental & Social Investments and Costs*

The costs that have been invested by PON in the environmental aspects are mainly divided into the following categories: staff, environmental maintenance and management, environmental monitoring, emergency responses and communication. The purpose of these investments is to improve the environmental awareness among staff, environmental maintenance, environmental quality, emergency response abilities and public understanding of the Port.

The total amount invested in environmental management in 2018 was \$4,447,557. Detailed information is provided in Table 4 below

Category	Item	2018 Amount (\$AUD)	2019 Amount (\$AUD)
<b>Environmental Monitoring</b>	Sediments, water quality, air quality, noise, biodiversity, soil, groundwater, audits and inspections	\$225,197	TBC
<b>Environmental Maintenance</b>	Stormwater, plant & equipment	\$50,000	TBC
<b>Plant &amp; Equipment</b>	Smart meters water and electricity, hoppers – dust recovery	\$2,800,000	TBC
<b>Emergency Response</b>	Biosecurity response management kits, development of plans	\$1300	TBC

<b>Communication &amp; Social</b>	Employee engagement survey, community grants sponsorship and donations, Newcastle Port Community Contribution Fund	\$1,371,060	TBC
-----------------------------------	--	-------------	-----

*Table 5: PON 2018 investments in environment and social aspect*

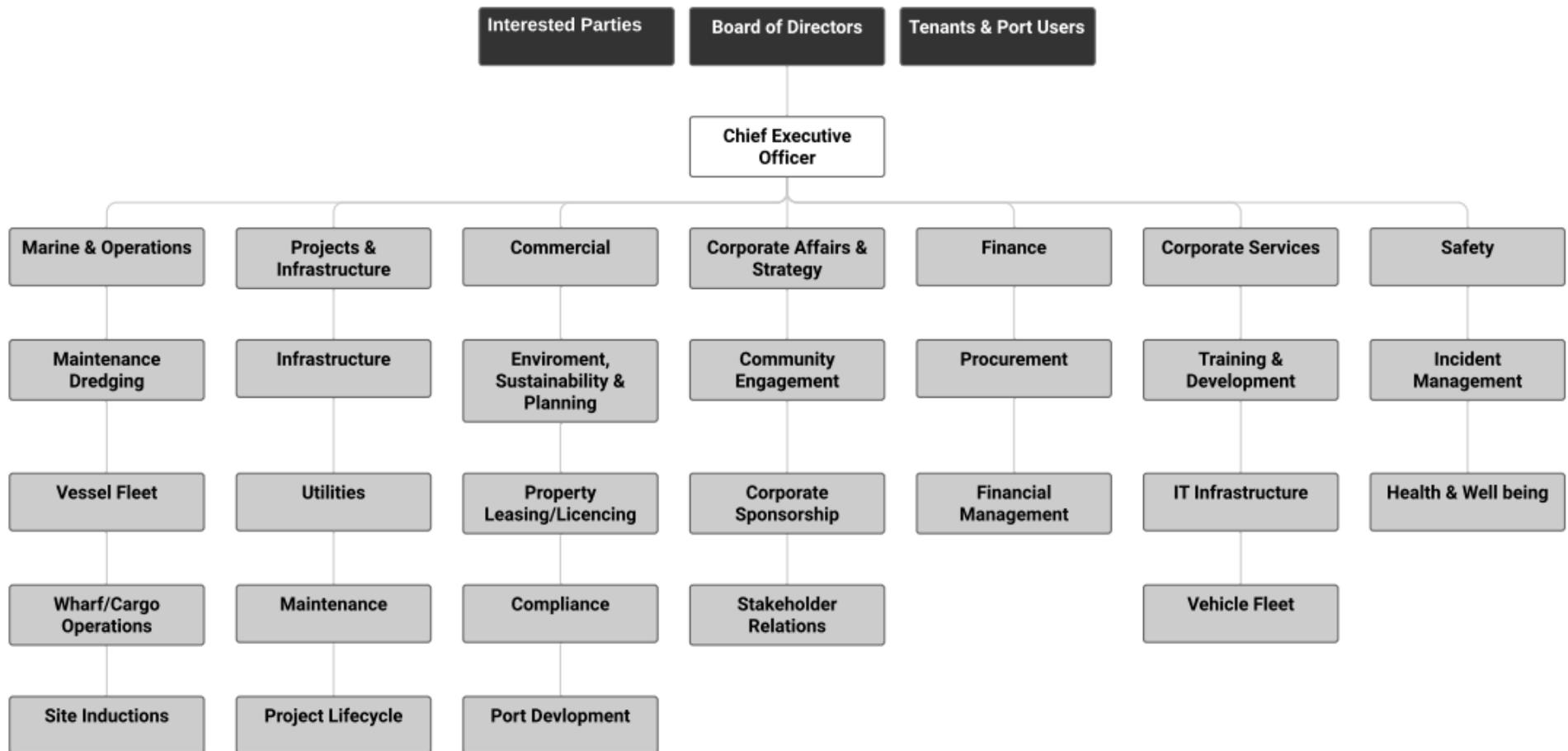


Figure 1: PON organisation chart showing functional areas

## Environmental Responsibilities of Key Personnel

For those areas for which PON has responsibility the following personnel are responsible for the following functions

<b>Port Operations (Dredging)</b>	Dredge Manager	Marine & Operations
<b>Port Operations (Shipping)</b>	Senior Operations Manager	Marine & Operations
<b>Port Operations (Terminals)</b>	Senior Operations Manager	Marine & Operations
<b>Cargo Handling Operations</b>	Senior Operations Manager	Marine & Operations
<b>Licensing and Permits</b>	Environment, Sustainability & Planning Manager	Commercial
<b>Strategic Planning</b>	Environment, Sustainability & Planning Manager	Commercial
<b>Maintenance</b>	Asset Manager	Projects and Infrastructure
<b>Onsite Contractor Management</b>	Asset Manager	Projects and Infrastructure
<b>Emergency Planning</b>	Security Manager	Marine & Operations
<b>Waste Management</b>	Asset Manager	Projects and Infrastructure
<b>Environmental Document Management</b>	Environment, Sustainability & Planning Manager	Commercial
<b>Environmental Data Management</b>	Environment, Sustainability & Planning Manager	Commercial
<b>Soil Pollution Assessment</b>	Environment, Sustainability & Planning Manager	Commercial
<b>Air Quality Monitoring</b>	Environment, Sustainability & Planning Manager	Commercial
<b>Energy &amp; Carbon Footprint Monitoring</b>	Environment, Sustainability & Planning Manager	Commercial
<b>Water Quality Monitoring</b>	Environment, Sustainability & Planning Manager	Commercial
<b>Noise Management</b>	Environment, Sustainability & Planning Manager	Commercial
<b>Vehicular Management of Terminal Traffic</b>	Senior Operations Manager	Marine & Operations
<b>Tenant Management</b>	Property Manager	Commercial
<b>Community Management (complaints)</b>	Communications & Community Relations Manager	Corporate Affairs
<b>Procurement</b>	Deputy Chief Finance Officer	Finance

Table 6: Responsibilities of those persons responsible for critical activities that interact with the environment

## 1.4 Conformity Review

The content of this chapter and the self-diagnosis method has been discussed and confirmed jointly by the PON Executive Leadership Team, comprising of Chief Executive Officer, Chief Commercial Officer, Chief Financial Officer, Executive Manager Marine and Operations, Executive Manager Projects and Infrastructure, Executive Manager Corporate Services and the Executive Manager of Corporate Affairs as well as the Environment Sustainability and Planning Manager.

All records and related documents of the PERS report are maintained by the PON Environment Sustainability and Planning Manager. Partial chapter content is jointly maintained by the relevant departments.

The content of Chapter 1.4 “Conformity Review” in this PERS report will be reviewed and updated every two years or when any content modification is required.

### 1.4.1 Conformity Review on Legal Requirements and Policy

#### 1.4.1.1 Policy

PON’s Environment Policy was first established voluntarily in 2010. In 2018 the policy was expanded to incorporate sustainability. The Environment & Sustainability Policy is reviewed periodically. As mentioned in section 2.0 of this document, the policy includes a commitment to safe, efficient and sustainable operations. The policy outlines how this will be achieved through management, training, implementation, revision and publication of results of the actions the Port performs in environmental matters.

The following sections provide a conformity review of the objectives described in the Environment & Sustainability Policy and how PON maintains compliance with its legal requirements.

Initiative	Status Update
<b>2018</b>	
Installation of electricity smart meters	Completed
Corporate sponsorship	Complete throughout 2018
Annual Litter Pick	Completed April 2018
Newcastle Bulk Terminal (NBT) hopper replacement	Completed January 2018
Community engagement	Completed quarterly throughout 2018
<b>2019</b>	
Emissions baseline	Pending project will commence in Q4 2019
Electric Vehicle (EV) fleet Transition Stage 1	Pending vehicles will be ordered in Q4 2019
Corporate sponsorship	Partially complete
Annual Litter Pick	Complete April 2019
Sustainability Reporting	Pending Q1 2020 for publication

<b>Community engagement</b>	One remaining CLG meeting scheduled for Q4
<b>2020</b>	
<b>EV fleet Transition Stage 2</b>	Pending mid 2020
<b>Annual Litter Pick</b>	Pending April 2020
<b>NBT gantry replacement</b>	Pending April 2020
<b>Community engagement</b>	Pending 2020
<b>Corporate sponsorship</b>	Pending 2020
<b>Sustainability reporting</b>	Pending 2020

*Table 7: Details of conformity review progress against objectives detailed in the PON Environment & Sustainability Policy Action Plan*

#### **1.4.1.2 Managing Our Carbon Emissions**

In support of the provisions described in the 2016 Paris Agreement, PON is committed to understanding and reducing its carbon footprint. In addition to its commitment to reduce its carbon footprint PON maintains compliance with the National Pollutant Inventory (NPI) NEPM through monitoring and reporting those emissions arising from the use of its vessel and vehicle fleet. PON reports these NPI emissions annually.

PON has 26 smart meters installed across the Port to monitor energy consumption. The meters also provide transparent usage data to both PON for its operations and tenants to assist in understanding and managing usage.

PON has committed to preparing a baseline assessment of carbon emissions for its operations. This baseline will provide detailed information on the Port's Scope 1 and 2 emissions profile and enable it to prioritise decarbonisation projects that will have the greatest impact.

#### **1.4.1.3 Managing Air Quality**

In 2018 PON invested \$3.5 million in state-of-the-art hoppers with dust extraction to minimise the environmental effects associated with the handling of loose bulk cargo. In addition to these improvements at the Newcastle Bulk Terminal, PON has also committed \$35 million for new bulk handling equipment that will significantly improve efficiencies, safety and wellbeing, and lead to improved environmental outcomes.

PON undertakes air quality monitoring to demonstrate compliance with the applicable approvals. Monitoring currently includes PM10 and TSP for the Mayfield 4 Berth terminal. Air quality monitoring is undertaken continuously and collected and measured on a six-day cycle using High Volume Air Sampling (HVAS) units. PON reports air quality monitoring results to the Department of Planning and Environment on an annual basis.

There are several port tenants that also have in place approvals that require air quality monitoring to be undertaken. These entities have in place reporting requirements that are consistent with their relevant approvals.

#### **1.4.1.4 Reducing Port Waste**

PON is committed to managing the cleanliness of the port environment and in turn the quality of life for the residents of Newcastle.

In 2018 PON had in place waste separation and recycling for eight separate waste streams for its own operations. Details on the volumes recovered and recycled are provided in Table 4 below. PON has recently introduced an additional waste separation stream for soft plastics in collaboration with the Plastic Police.

In 2018 PON launched the Port Wide Litter Pick, an initiative that involves active engagement with port users. The objective is for port users to pick litter within the footprint of their own site and in any communal port areas adjacent to their site. Twenty teams participated in 2018 with total of 254 kilograms of litter being removed from the port environment. In 2019, the teams removed 1640 kilograms.

PON has in place a waste management procedure to ensure that its employees have a framework to dispose of waste sustainably and in accordance with the relevant legislation. For example, ensuring that the receiving facilities and transport providers have in place the relevant permits and approvals to handle the specific types of waste we are seeking to dispose and retaining evidence of waste disposal records

There are suitable facilities located within the port for the receipt of ships waste. The details of these facilities are available to ship owners and agents via the Australian Maritime Safety Authority (AMSA) website. AMSA is the lead agency at the International Maritime Organization (IMO).

#### **1.4.1.5 Managing Biodiversity in the Port**

The Hunter Wetlands National Park (formerly the Kooragang Nature Reserve) is a large area of protected wetlands that includes much of the northern half of Kooragang Island as well as Fullerton Cove to the east, the Tomago Wetlands to the north, and a wetland area to the west. The boundary of the National Park extends to the PON Kooragang Precinct boundary.

Future development of the Kooragang Precinct would consider impacts on listed species and ecological communities, the Hunter Wetlands National Park and Ramsar wetland. Most development projects would require consent from regulators and would be subject to a range of project-specific requirements.

To support the conservation of the threatened Green and Golden Bell Frog (GGBF) population on PON land, there is an island-wide survey program that is managed by the University of Newcastle and financially supported by a group of port users and tenants. Any development in this area that has the potential to have an impact of the GGBF population must ensure that it is compliant with the federal legislation and lodge EPBC referrals as necessary to determine what specific management requirements are to be implemented for the project.

Non-native marine pests can be introduced to Australian shores within ship ballast water and on ship and boat hulls (biofouling). Marine pests can detrimentally affect marine ecology, fisheries and tourism and so present both a biodiversity and economic risk to NSW.

It is extremely difficult, if not impossible, to eliminate introduced marine pests once they have established.

To help manage the risks, PON is a member of the NSW Marine Pests Working Group with representatives from Biosecurity NSW (Department of Primary Industries), NSW Office of Environment & Heritage, Roads & Maritime Services, Port Authority of NSW and the private port organisation, NSW Ports.

#### **1.4.1.6 Managing Contractors, Port Tenants and Operators**

In early 2018 PON launched a new contractor management system. This system requires all contractors engaged by PON to meet minimum standards relating to safety, environment, sustainability and industrial relations. PON trains contractors and port visitors through inductions and toolbox talks. Environmental awareness training is provided to contractors and port visitors through a tiered induction system. Toolbox training is delivered to contractors working on site prior to any works commencing.

Conducting a risk assessment on an individual activity or project basis enables PON to ensure that environmental control measures are implemented prior to any works commencing. Depending on whether the risk assessment is prepared for a specific project or day-to-day routine activities, the control measures identified will be incorporated into either a project EMP or EMS procedures.

PON manages 790 hectares of land, including operational areas, vacant land and tenanted sites.

PON maintains a standard lease document for its tenants. Section 17 of the lease document defines the environmental obligations that the tenant is required to comply with, including requirements for base condition reporting at entry, environmental audits, contamination reports, end of lease clean up, indemnities, compliance with all relevant environmental legislation, and requirement for notification and clean-up of pollution incidents.

Operators in and adjacent to the port are responsible for undertaking and reporting monitoring as part the regulatory conditions for their facilities. These monitoring programmes are extensive and include air quality, noise, water management and ecological impact. The regulator is responsible for determining when monitoring results that exceed licence limits require a response from the tenant.

#### **1.4.1.7 Supporting the Health and Wellbeing of PON Employees**

PON supports the health and wellbeing of its employees by having safety as one of its core values.

PON employees have a voice through the annual organisation-wide Workplace Engagement Program to closely examine, understand and improve work culture. The Workforce Engagement Strategy flows from the priorities established by the Employee Engagement Forum. The success of this is measured through regular surveys to strive for continual improvement.

PON has a strong commitment to the health, safety and wellbeing of its employees and provides an Employee Assistance Program (EAP) that assists employees and their families to resolves problems whether work related or of a personal nature. The EAP provides a confidential and voluntary counselling, psychotherapy and referral service for all PON employees and immediate family members to achieve maximum life and job satisfaction. PON also has an employee fitness program. In 2018, 33

employees out of 100 were subscribed to the corporate fitness program. Of those 33 memberships, 21 were family memberships. PON recognise the importance of the workplace and how it influences health and wellbeing. PON provide its office-based employees with a working environment that has:

- Interior landscaping;
- plenty of natural light;
- sit/stand desk stations;
- ergonomic chairs;
- informal collaboration spaces; and
- end of trip facilities

#### **1.4.1.8 Strengthen Relationships with Local Communities**

The Port Community Liaison Group (CLG) was formed in 2014 and is an opportunity for the community to engage with the port, learn about its operations and provide feedback. The group has been meeting regularly since this time. The CLG is made up of representatives of the local community, industry, council and regulatory bodies.

PON partners with the University of Newcastle (UoN) to provide opportunities for students studying a range of disciplines. PON has awarded numerous internship opportunities in collaboration with UoN and has been recognised as the 'Most Valued Partner' during the university's Student Engagement Awards.

#### **1.4.1.9 Ensure Appropriate Training and Awareness for Our Employees**

PON has in place a Training and Development Policy. This policy identifies the process used for identifying training needs. Within the EMS, PON maintain an Environmental Training Procedure (EMS 020). EMS 020 outlines the process of bringing a PON employee to an agreed standard of proficiency in environmental management by practise and instruction. All employees are required to complete:

- Port inductions
- EMS and EMP training
- Sustainability awareness training

To ensure compliance with its regulatory obligations, PON also provides the following role specific training to its employees:

- Sea Dumping Permit training
- Handling dangerous and hazardous goods training
- Biosecurity training

To further develop sustainability awareness, PON also provides 'lunch-and-learn' sessions for its employees.

#### **1.4.1.10 Managing Contamination in the Port**

With a historical legacy of land contamination from heavy industry, PON has undertaken a comprehensive port-wide baseline study to understand the impacts of this legacy issue on its sites.

All new tenant, under lease arrangements with PON, are required to undertake a base condition report at the time of entry. The base condition report includes a land contamination assessment.

PON will ensure that location specific assessments are undertaken for any ground penetrating works to ensure that materials are managed to prevent harm to human and/or ecological health and further exacerbation of any existing contamination.

Land contamination in NSW is managed under the *Contaminated Land Management Act 1997*. Upon identification of exceedances of contamination criteria for either human or ecological health, a Section 60 notification will be lodged with the NSW EPA.

Several sites that have significant contamination *in situ* have been remediated and are managed under a site-specific Contaminated Site Management Plan to ensure the integrity of the remediation.

#### **1.4.1.11 Maintaining Heritage Assets**

The Port has a multi-faceted and extraordinarily rich history, which includes 220 years of commercial shipping.

Within the Port there are several individual and groups of heritage items that have been recognised as having heritage value, including buildings, navigations structures, trees and relics.

Section 170 of the *Heritage Act 1977* requires government agencies to prepare a Heritage and Conservation Register.

PON has prepared a Heritage and Conservation Register on behalf of the New South Wales Government, in compliance with its obligations under the 98-year Port Lease.

The register has been endorsed by the State Heritage Register Committee of the Heritage Council of NSW and will assist PON in caring for heritage assets and their future conservation and development.

The Heritage and Conservation Register comprises three parts:

- Part I is a thematic history of the Port
- Part II sets out the organisation's strategies to manage its heritage assets
- Part III is the list of heritage assets, together with an assessment of their heritage significance

#### **1.4.1.12 Managing Maintenance Dredging**

PON works in collaboration with City of Newcastle (formerly Newcastle City Council) and the Office of Environment and Heritage to actively contribute to sand renourishment at Stockton Beach. This helps restore sand that is lost through erosion. On average PON takes approximately 25,500m<sup>3</sup> of clean sand from the entrance to the Port and relocates it to a designated area off Stockton Beach to support City of Newcastle's beach renourishment efforts.

#### **1.4.1.13 Managing Impacts on Stormwater**

The quality of the port's water reflects PON's commitment to sustainability and the environment. PON actively monitors the physical and chemical composition of water quality in the port area to inform positive stormwater management decisions. By working with port tenants and EPA NSW, the Port can help drive improved outcomes that contribute towards a sustainable port environment.

#### **1.4.1.14 Ensuring compliance**

PON has a firm commitment to meeting relevant environmental legislation and regulations (as described in the Environmental and Sustainability Policy) and meeting other voluntary or contractual environmental obligations to which it subscribes, including the requirements of the Lease between PON and the NSW Government.

PON has set out the procedure for identifying and tracking its environmental obligations in *Procedure EMS 004 Identification of Legal and Other Requirements*. PON tracks legal requirements within environmental legislation through a sophisticated third-party database. This Legal Register is available to all PON employees via an external website. The Legal Register covers NSW and Federal legislation and is updated continuously by the service provider. PON holds a range of approvals and licences under environmental legislation, and these set a range of requirements including reporting to regulators such as the NSW EPA and the NSW Department of Planning and Environment.

Legal and other requirements are considered when assessing risk and when setting actions to manage risk. Various monitoring programmes are in place to ensure compliance with legislative requirements. Overall conformity with legal and other requirements is assessed in the audit programs.

### **1.5 Environmental Report**

The content of this chapter and the self-diagnosis method has been discussed and confirmed jointly by the PON Executive Leadership Team, comprising of Chief Executive Officer, Chief Commercial Officer, Chief Financial Officer, Executive Manager Marine and Operations, Executive Manager Projects and Infrastructure, Executive Manager Corporate Services and the Executive Manager of Corporate Affairs as well as the Environment Sustainability and Planning Manager.

All records and related documents of the PERS report are maintained by the PON Environment Sustainability and Planning Manager. Partial chapter content is jointly maintained by the relevant departments.

The content of Chapter 1.5 “Environmental Report” in this PERS report will be reviewed and updated every two years or when any content modification is required.

The aim of the environment report is to provide environmental information to senior port management, the public and other interested parties regarding the environmental impact and performance of the port’s significant environmental aspects.

DON does not currently have a specific environment report. This information is incorporated into various other communication methods such as internal management reports and the public website.

A copy of this environmental report will be made available on the PON public website at [www.portofnewcastle.com.au](http://www.portofnewcastle.com.au)

PON’s environmental performance to date is summarised in Table 8 and further detailed in the sections below.

Performance Indicator	Performance 2018	Performance 2019	Procedures
<b>Compliance</b>	Stevedore 1 x regulatory non-compliance	Zero PON regulatory compliance to date	Operational Environmental Management Plans
	Tenants 1 x regulatory non-compliance	Tenants regulatory non-compliance	
	Noise monitoring 100% compliant	Noise monitoring pending	Lease Agreements
	Tri-annual external EMS audit zero non-compliances, 17 system upgrade recommendations to align with 2015 version of the standard.	No external EMS audit for this reporting period	Environmental Management System
<b>Energy</b>	Saving of 8.75t CO <sup>2</sup> e from lighting efficiency initiatives	Data pending	EMS Procedure 027 Energy
<b>Emissions</b>	Scope 1: 2044.2t CO <sup>2</sup> e	Data pending	ENVRG 007 Emissions Inventory EMS Procedure 031 National Pollutant Inventory Reporting
	Scope 2: 379.54t CO <sup>2</sup> e		
<b>Maintenance Dredging</b>	25,542m <sup>3</sup> of clean sand diverted from spoil ground for beneficial reuse at Stockton Beach	Data pending	Long Term Monitoring & Maintenance Plan EMS Procedure 008 Maintenance Dredging
<b>Waste</b>	Eight streams separated see Table 5.	Eight streams separated data pending	EMS Procedure 007 Waste Handling and Disposal
			WHS Procedure 0617 PON Asbestos Management Plan
<b>Heritage</b>	\$1.2 million has been committed to the restoration of Carrington Engine House	Completion of community plaza	PON Heritage & Conservation Register EMS Procedure 015 Heritage Management
<b>Biodiversity Management</b>	28 ha saltmarsh restored	Biosecurity First Points of Entry Determination approved	EMS 041 Biosecurity Incident Response Procedure
<b>Community Engagement</b>	\$1.37 million in sponsorship and donations 4 x CLG meetings	\$1.06 million in sponsorship and donations to date	EMS 012 External Communication – Complaints Handling
		3 x CLG meetings to date	
<b>Employee Training</b>	3 x lunch and learn sessions	3 x lunch and learn sessions	EMS 020 Environmental Awareness and Training
	Introduction of compulsory Sustainability training		

Table 8: Overview of PON environmental performance

### 1.5.1 Compliance

In 2018 there was one regulatory non-compliance resulting from stevedore operations at a PON licenced site. For PON tenants there was one regulatory non-compliance observed: A tenant storing fertilisers received a penalty notice for the contravention of a condition in its Environment Protection License 5430. In 2018 PON achieved compliance for all its noise monitoring obligations

PON has in place an EMS that is aligned with the ISO 14001:2004 standard. All PON employees are briefed on the PON EMS as part of employee onboarding. In 2018 an external audit of the PON EMS was completed against the ISO14001 standard. Concurrently a review of the existing EMS was completed to transition the system from the ISO 14001:2004 to ISO 14001:2015. The audit identified zero non-compliances. The review to transition the system to ISO 14001:20015 identified 17 system upgrade recommendations, these translated into eight actions for PON to implement new processes.

### 1.5.2 Energy Management

PON has in place ongoing monitoring of energy and water to enable it to better understand and manage its consumption. This monitoring also provides PON with a baseline to be able to understand the effectiveness of any improvement projects. Following on from a Stage 2 energy audit of PON managed assets, PON is currently rolling out a staged port-wide lighting upgrade. In 2018 PON fitted:

- new LED fittings on the port entrance Carrington gatehouse 20-metre light tower replacing two old Sylvania fittings. This upgrade resulted in a saving of 7.85t CO<sub>2</sub>e (based on 12 hrs use per day, 365 days per annum);
- internal downlights in the Carrington Gatehouse toilets replaced with LED alternatives;
- Internal shed roof hi bay lighting in the Basin Warehouse replaced with LED lighting. This upgrade resulted in a saving of 909.3kg CO<sub>2</sub>e (based on 12 hrs use per day, 260 days per annum).

### 1.5.3 Emissions Management

PON measured CO<sub>2</sub>e, CH<sub>4</sub> and N<sub>2</sub>O for its vessel and vehicle fleets. For the 2018 period there was a total amount of 2044.2 t CO<sub>2</sub>e scope 1 emissions. Most PON Scope 1 emissions are attributed to maintenance dredging activities. The reason for the decrease in emissions between 2017 and 2018 is due to the dredger being unavailable for a period in 2018 to enable scheduled maintenance works.

Total PON Scope 1 Emissions			
Year	CO <sub>2</sub> -e	CH <sub>4</sub>	N <sub>2</sub> O
2016	2422.708	0.06814	6.91057
2017	2603.669	0.063462	7.441851
2018	2044.195	0.071513	5.860852

Table 9: PON Historical Scope 1 Emissions Data

For Scope 2 emissions PON has calculated those emissions arising from electricity consumed at the head office location. For 2018 a total of 379.54t CO<sub>2</sub>e scope 2 emissions were produced.

PON is responsible for 792ha of landholdings, made up of tenanted, operational and vacant areas. There are four separate private networks that support these areas. PON is committed to further understanding its Scope 2 emissions as they relate to operational aspects of the business. To

achieve this, PON has installed a series of smart meters that will assist in better understanding those additional Scope 2 emissions for which it is directly responsible. Once a baseline has been developed for this data, PON will commence annual reporting.

#### 1.5.4 Maintenance Dredging

In 2018 PON removed a total of 415,292m<sup>3</sup> of dredge spoil material for the purposes of maintenance dredging. Of this total, 389,750m<sup>3</sup> was taken to the approved offshore spoil ground and 25,542m<sup>3</sup> of clean sand was placed onto Stockton Beach in support of beach renourishment efforts managed by the local Council and supported by the Office of Environment and Heritage.

Dredge Material for Beach Renourishment at Stockton Beach	
Year	Cubic meters sand placed at Stockton
2016	27,945
2017	25,839
2018	25,542

Table 10: PON historical volumes for maintenance dredge material redirected for beach renourishment for Stockton Beach

Dredge Material for offshore spoil ground	
Year	Cubic meters sand placed at offshore spoil ground
2016	509,250
2017	437,500
2018	389,750

Table 11: PON historical volumes for maintenance dredge material taken to designated offshore spoil ground

#### 1.5.5 Waste Management

In 2018 PON had in place eight recycling streams.

Waste Stream Recycling	2019 Volume	2018 Volume	2017 Volume	2016 Volume
Batteries (kg)	TBC	9.4	0	38
Coffee Pods (no.)	TBC	1900	2600	300
e-waste (kg)	TBC	775	0	0
Hard Hats (no.)	TBC	104	0	103
Mobile phones (no.)	TBC	59	22	0
Toner Cartridges (no.)	TBC	48	90	81
Waste Oil (litres)	TBC	13,500	46,300	22,500

Co-mingled (m <sup>3</sup> )	TBC	106.6	106.6	106.6
------------------------------	-----	-------	-------	-------

Table 12: PON Waste Stream Separation and Volumes

### 1.5.6 Heritage Management

As committed stewards of the port, for the 2018 period, the PON Board approved \$700,000 for restoration works on the state heritage listed items. Together with funding from the NSW Government \$1.2 million contribution, PON has committed to the restoration of Carrington Hydraulic Engine House.

### 1.5.6 Biodiversity Management

In June 2018 a collaborative shorebird rehabilitation project, led by PON tenant Newcastle Coal Infrastructure Group, was awarded the PIANC Working with Nature Certificate. The project saw the restoration of 28ha of saltmarsh.

### 1.5.7 Community Engagement

PON contributes at least \$1 million annually to the Newcastle Port Community Contribution (NPCC) Fund, which was established by the NSW Government in 2014. The NSW Government also administers the NPCC Fund. The NPCC Fund supports suitable projects which enhance or maintain landside infrastructure and community amenity around the Port.

In addition to the NPCC contribution, PON also has in place a community sponsorship program that underwent a review in 2019 to align with the principles of PON's ESG Strategy. The new model sponsorship and donations program will be rolled out in 2020

During 2018 PON contributed \$371,000 in sponsorship and donations. Projects ranged from contributions to:

- Charities, including the Salvation Army, Variety Children's Charity, CanTeen, Bikers for Kids, Chuck Duck Breakfast Program, Equal Futures, Headspace, In 2 Life, Mission Australia, Westpac Rescue Helicopter, Harry's House, Melanoma Institute of Australia and the Soul café, which provides support to the homeless;
- Innovation and science, including support for the University of Newcastle electric vehicle initiatives and science and engineering challenge, and providing solar panels for a local sailing club
- Biodiversity, including the installation of a walking trail for the Ash Island arboretum and for arborist support at the Hunter Region Botanic Gardens
- Other community social initiatives, including the University of Newcastle's China Week, the Rotary Club of Newcastle Stockton bridge mural, Newcastle Writers Festival, funding for a new shed set up for the Newcastle Men's Shed, funding to host the Hunter Hurricanes Water Polo Club Harbour games, Curious Legends outdoor performances, Newcastle Regional Show, Nobbys Surf Life Saving Club, Newcastle Rowing Club, and the Newcastle Music Festival.

### 1.5.8 Employee Training

To further develop sustainability awareness, PON has provided the following lunch and learn sessions in 2018 for its employees:

- Take 3 for the Sea, marine litter prevention initiative;

- Innovation in Organic Solar; and
- Movie screening of the Light Bulb Conspiracy;
- Innovation in ballast water management using hydro cavitation
- Soft plastic recycling education.

## 1.6 Best Practices

The content of this chapter and the self-diagnosis method has been discussed and confirmed jointly by the PON Executive Leadership Team, comprising of Chief Executive Officer, Chief Commercial Officer, Chief Financial Officer, Executive Manager Marine and Operations, Executive Manager Projects and Infrastructure, Executive Manager Corporate Services and the Executive Manager of Corporate Affairs as well as the Environment Sustainability and Planning Manager.

All records and related documents of the PERS report are maintained by the PON Environment Sustainability and Planning Manager. Partial chapter content is jointly maintained by the relevant departments.

The content of Chapter 1.6 “Best Practices” in this PERS report will be reviewed and updated every two years or when any content modification is required.

This chapter details two examples of environmental projects undertaken by the PON to improve environmental conditions.

<b>Port of Newcastle</b>	Australia
<b>Contact:</b>	Jackie Spiteri
<b>Position:</b>	Environment, Sustainability and Planning Manager
<b>Email:</b>	<a href="mailto:Jackie.spiteri@portofnewcastle.com.au">Jackie.spiteri@portofnewcastle.com.au</a>
<b>Environmental Issue:</b> Garbage, Port Waste	
<b>Relevance to ESPO 5 E's framework:</b> Encourage, Engage	
<b>Port Wide Litter Pick</b>	
<p>The second annual Port Litter Pick saw everything from cigarette butts, plastic bags and soft drink cans through to old tyres, scrap metal and an ironing board cleaned up and properly discarded.</p> <p>The PON initiative attracted 87 people from 13 port-related businesses, including Australian Rail Track Corporation (ARTC), Port Authority of NSW, Cargill Australia, Linx Cargo Care, Newcastle Coal Infrastructure Group, Kooragang Bulk Facilities/ Tomago Aluminium, Impact Fertiliser, Sims Group Australia, PON, Koppers, Newcastle Stevedores, Custom Transportable Buildings and Newcastle Yacht Club. The ARTC team took home the 'Litter Legends' trophy, having collected 400 kilograms of rubbish from the rail corridor, the largest haul from all participating teams. PON Environment, Sustainability and Planning Manager, Jackie Spiteri said the Port Litter Pick was an important annual event that formed a part of the Port's overall environmental management and sustainability program.</p> <p>"It is a collaborative effort that is only possible due to the enthusiasm and service of the many</p>	

port business that have a mutual commitment to protecting our environment and the overall health of the Port," Ms Spiteri said.

"We set a new record this year, easily eclipsing the 300 kg collected last year.

"It is concerning that there is such a large amount of rubbish needlessly being dumped on and around Newcastle Harbour and port land. It is a reminder to everyone in the community to take responsibility for their own rubbish and dispose of it safely and responsibly."

All rubbish was collected using biodegradable bags and gloves and will be sorted for proper disposal and recycling where possible.



<https://www.portofnewcastle.com.au/news/port-community-members-roll-up-their-sleeves-for-the-environment/>

<b>Port of Newcastle</b>	Australia
<b>Contact:</b>	Jackie Spiteri
<b>Position:</b>	Environment, Sustainability and Planning Manager
<b>Email:</b>	<a href="mailto:Jackie.spiteri@portofnewcastle.com.au">Jackie.spiteri@portofnewcastle.com.au</a>
<b>Environmental Issue:</b> Soil Contamination	
<b>Relevance to ESPO 5 E's framework:</b> Engaging, Enforcing, Exemplifying	
<b>Managing and industrial legacy</b>	
<p>The Port has seen over 200 years of heavy industry including steelworks, shipbuilding, chemical manufacturing, minerals and metal handling and transportation.</p> <p>To be able to manage existing operations and develop the Port in a way to prevent further exacerbation of existing contamination legacy it is essential to understand the extent type and distribution of land contamination.</p>	

PON has invested \$640,000 in conducting a port-wide study to better understand the condition of its vacant and operational land. As part of the study, 257 test pits, 425 soil bores, 59 new groundwater wells and 145 existing ground water wells were sampled. The project took two years to complete and provides the business with a comprehensive baseline data set.

PON works closely with tenants and government agencies to develop management strategies that address the port's industrial legacy. Additionally, PON are using the data set to inform the development of a strategic land use plan. This information will enable us to ensure the contamination pathways are understood and managed in a way so as not to cause harm to our people or the environment



Pictured: a ground water test pit.

<https://www.portofnewcastle.com.au/wp-content/uploads/2019/09/E-brochure-2018-rebrand-low-res.pdf>