



PORT OF BURNIE ENVIRONMENTAL MANAGEMENT PLAN

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INTRODUCTION

Tasmanian Ports Corporation Pty Ltd (TasPorts) is a state-owned company and is the owner and operator of a number of ports in Tasmania, including the Port of Burnie and the Devonport Airport.

TasPorts was established pursuant to the *Tasmanian Ports Corporation Act 2005* (the Act), which states that TasPorts' principal objectives are to:

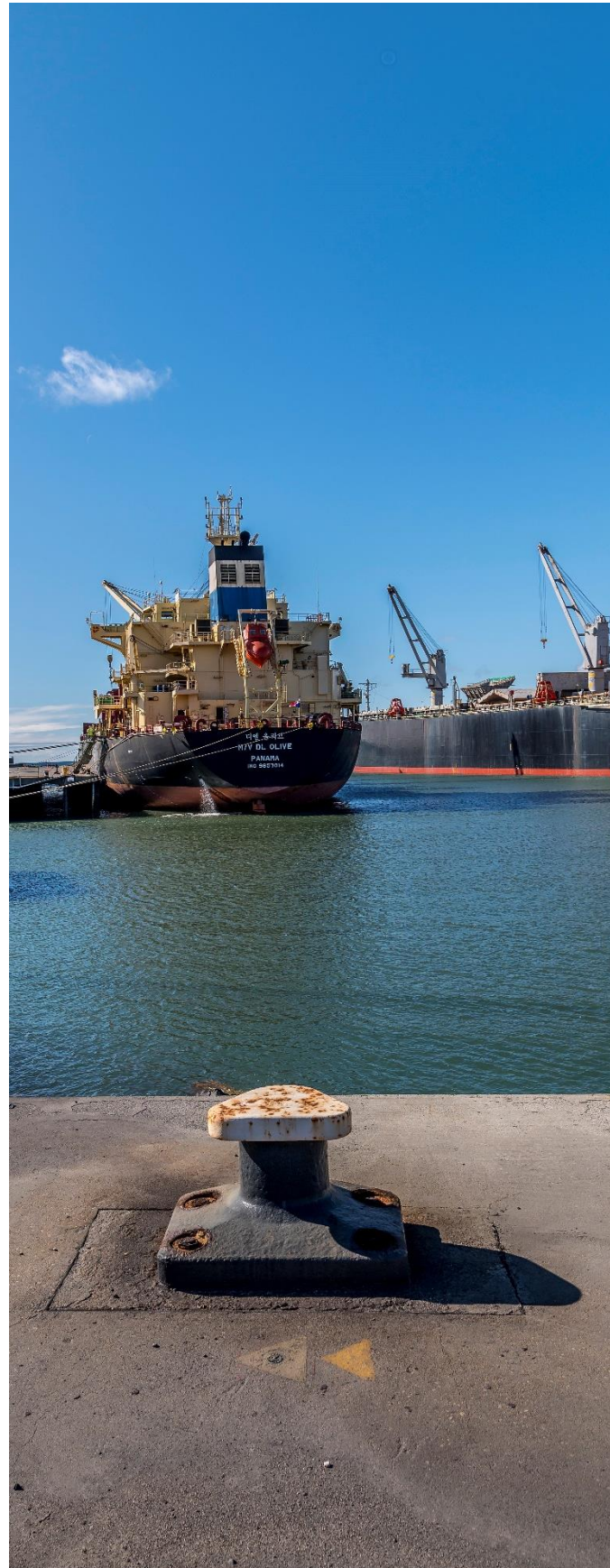
- facilitate trade for the benefit of Tasmanians; and
- operate its activities in accordance with sound commercial practice.

The Port of Burnie is one of Tasmania's primary ports. Each year approximately five million tonnes of freight transit the port.

The Port is also home to the Burnie Chip Export Terminal (BCET) and Strait Link operates a daily freight service to and from Melbourne.

In addition, Burnie is becoming a favoured port of call for local and international cruise vessels.

TasPorts acknowledges the traditional owners of the land, sea and waterways of the Port of Burnie, the plairhekehillerplue people. We pay our respects to elders past and present and to the aboriginal community that continues to care for country.



ENVIRONMENTAL MANAGEMENT SYSTEM

TasPorts is committed to continual improvement of environmental performance through the implementation of an Environmental Management System.

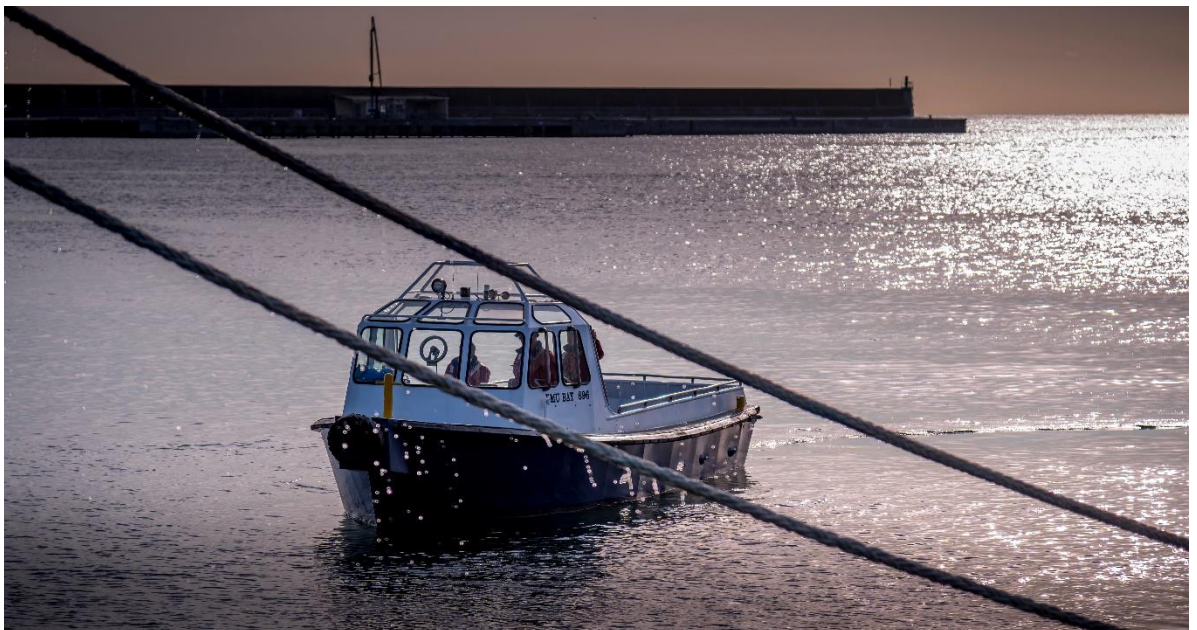
The objectives of the TasPorts Environmental Management System (EMS) are to:

- outline how TasPorts identifies and manages the risks and opportunities associated with delivering its services and activities to minimise impacts to the surrounding environment and cultural heritage assets of its ports;
- provide an overview of the significant environmental aspects, risks and outline the key treatment plans that will address these risks;
- outline TasPorts environmental objectives and improvement planning processes;
- outline how TasPorts identifies, fulfils and reports on its legal and other environmental requirements; and
- provide a framework for ensuring TasPorts environmental performance is continually and systematically improved.

This document includes information needed to manage environmental risks at the Port of Burnie and outlines performance objectives and plans for improvement.

This document also addresses the **EcoPorts** Port Environmental Review System (PERS) and EcoPorts Environmental Report requirements and is published every two years. EcoPorts is an international port specific environmental management standard that enables benchmarking with other ports around the world (**EcoPorts 2022 Report**).

The EcoPorts PERS assists ports with developing and implementing an environmental management program that aligns with European Sea Ports Organisation (ESPO) and ISO 14001, the international standard for Environmental Management System.



POLICY STATEMENT AND OBJECTIVES

The Port of Burnie operates under TasPorts Health Safety and Environment (HSE) Policy, which expresses our commitment to continuous improvement in environmental performance.

The HSE policy is available to [view and download](#) and applies to all TasPorts' employees, contractors, tenants and visitors.

TasPorts is committed to consulting with the community and its stakeholders and making information on its environmental programs available to the public through published reports.

Port of Burnie's environmental objectives are aligned to the HSE policy and with those identified in *TasPorts Corporate Environmental Management Plan* (TasPorts EMP).

The objectives and targeted initiatives for improvement at the Port of Burnie are documented in the [Environmental Improvement Plan FY24 – FY2](#) (page 23).



PORT PROFILE

PORT LOCATION AND PORT AREA

The Port of Burnie is one of four commercial ports in Tasmania and is situated on the western shore of Emu Bay on the north coast.

The port encompasses 33 hectares of land and 45 hectares of port water, licenced by the

Crown, and is protected by two breakwaters. The port is serviced by Tug and Pilot boats berthed at the port.

The principal danger to vessel movement near the port is Blackman Reef, with shallow water extending one mile seaward from the western shore of the Bay.

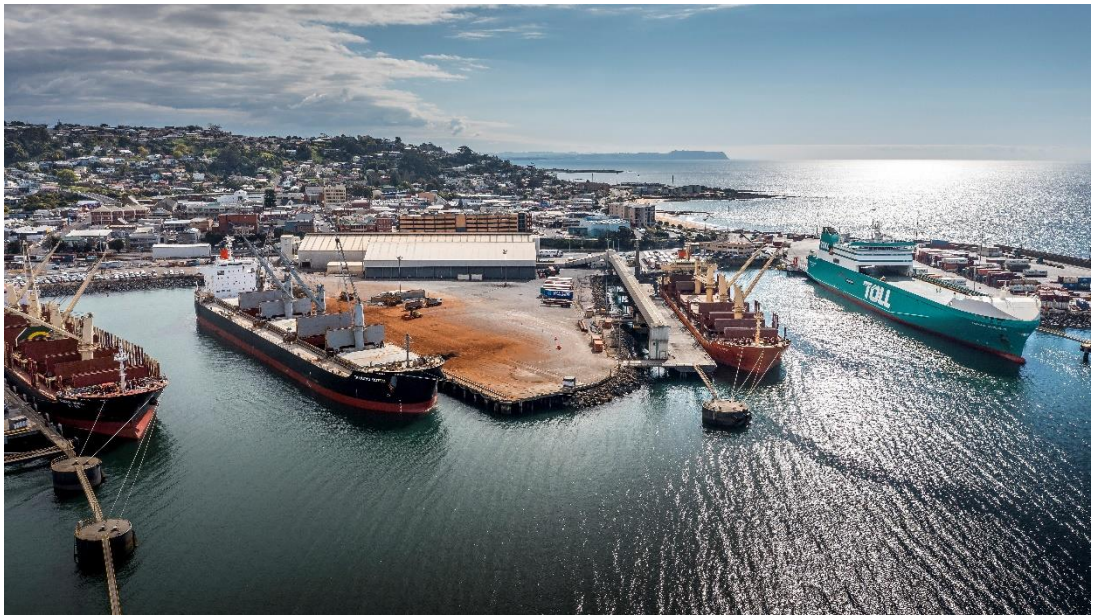


Figure 1 - Aerial view of the Port of Burnie

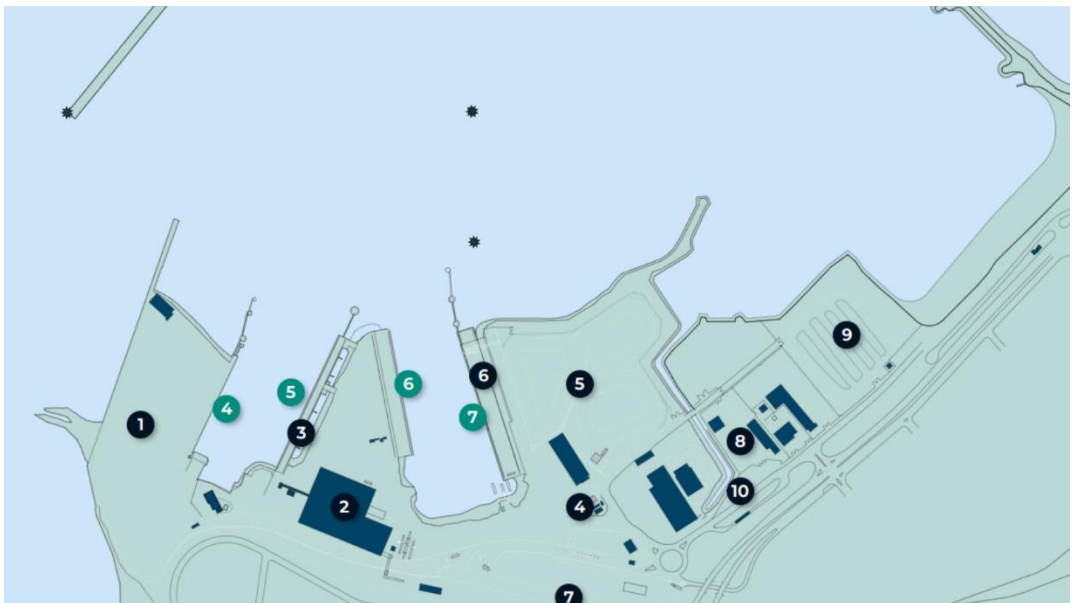


Figure 2 - Port of Burnie layout of berth and infrastructure. The Burnie Chip Export Terminal (BCET) is represented by numbers 5 and 6.

PORT MASTER PLAN

In 2018 TasPorts released its [Port Master Plan](#) to guide a coordinated, state-wide vision for the future of Tasmania’s multi-port system.

BURNIE GATEWAY

The Burnie Gateway port infrastructure plan will enable TasPorts to deliver infrastructure based on staged capacity triggers that align with volume growth, to ensure a sustainable and optimised vision that evolves proportionally to commercial demand. To support this work, in February 2023, TasPorts undertook a comprehensive drilling program at the Port of Burnie to confirm the underlying geological conditions within Burnie’s port zone. This represents the largest geotechnical investigation at the Port of Burnie in TasPorts’ history. This data will provide valuable input to the infrastructure plan, as well as the organisation’s capital dredging program. To further inform the development of the Burnie Gateway infrastructure plan, TasPorts has also undertaken marine sediment testing, 3D surveying of Berth 7, alongside concept design and planning works.

MAIN COMMERCIAL ACTIVITIES

TasPorts has a level of environmental responsibility and control for activities where a commercial arrangement exists as well as activities under direct operational control of TasPorts.

The Port of Burnie is Tasmania’s largest general cargo port and one of Australia’s most important deepwater ports. The port currently operates as a container port with a separate terminal for the exportation of woodchips. There are four (4) main working berths within the port precinct, with exports and imports in containers, metal concentrates fuel and woodchips.

Cruise vessels frequently visit Burnie during the cruise season.

[Table 1](#) has a list of berth operations.

[Table 2](#) contains a list of activities undertaken within the port.

Table 1 - Summary of berth operations at the Port of Burnie

Berth	Operation
No. 4 Berth	Berth and terminal facilities leased to Strait Link
No. 5 Berth	Bulk ore loading and bulk fuel
No. 6 Berth	General user
No. 7 Berth	Bulk woodchip loading, cruise ship

Table 2 - Activities undertaken at the Port of Burnie

Activities under TasPorts operational control	Activities at the port (commercial arrangements)
Landside operations	Hydrocarbon unloading
Woodchip operation - Burnie Chip Export Terminal (BCET)	Diesel refuelling facility
Tug, pilotage services and the Harbour Master	Log loading and storage yard
Port Services and Marine Regulatory Services	Woodchip storage and loading
Maintaining infrastructure and berths	TasRail concentrate loading and storage
Operating a maintenance workshop and storage yard	TasRail railway yard
Managing berthing arrangements	Bulk cargo handling
	Commercial fishing unloading
	Cruise ship visitation
	Strait Link freight
	Strait Link livestock transport
	Mission to Seafarers

COMMUNITY AND STAKEHOLDERS

The township of Burnie has a population of 20 441¹, and is located on the north west coast of Tasmania. The Port of Burnie is located to the east of the city's central business district (CBD), and further to the south the land is zoned for commercial use. Generally residential land is located inland of the CBD.

Recreational stakeholders range from those that directly interact with the marine environment of the port, such as recreational fishers and yachters, through to those that use the coastal amenities, such as the walk/cycleways along the foreshore, including tourists, tourism volunteers, walkers and cyclists. The improved condition of the marine environment and improved coastal amenities, especially

dual boat ramps, has corresponded with increased recreational use of the port area.

A Burnie Port Users Working Group has been established to facilitate internal communications for landside port users. This working group meets monthly and is a forum to address safety and environmental issues and opportunities for improvement. In addition, the TasPorts Technical Advisory and Consultative Committee (TACC) has been established for dredging projects to strengthen relationships with stakeholders across all sectors and ensure stakeholder needs are considered in all dredging projects.

Key port stakeholders and methods of engagement are summarised in [Table 3 - Port stakeholders](#). The specific needs and expectations of TasPorts key stakeholders are detailed in TasPorts' EMS Framework.

Table 3 - Port stakeholders

Stakeholder groups	Key stakeholders	Engagement methodology
Port Users	Strait Link, TasRail, Qube, Burnie Woodchip Export Terminal (BCET), ISO Marshalling and Mission to SeaFarers	Port Users Working Group meetings Via shipping agents Public website
Recreational Water users	Burnie Yacht Club, Burnie Surf Life Saving Club, Cradle Coast Outrigger Canoe Club	TACC meetings Public website
Commercial Fishing	Scalefish Fishery	TACC meetings Public website
Recreational Fishing	Inland Fisheries, Anglers Alliance Tasmania	TACC meetings Public website
General Public /residents	Burnie City Council, Tasmanian Heritage Council, Tasmanian Aboriginal Heritage Tasmania	Public website
Nearby businesses	Marine Terrace, Burnie CBD and South Burnie commercial areas	TACC meetings Public website
Wildlife and Environmental values	NRE Tas, Parks & Wildlife, EPA, Cradle Coast NRM.	Annual reporting Public website Meetings, site visits, audits TACC meetings

¹ 2021 Census

PORT HISTORY

Established in 1827, the Port of Burnie in Tasmania's north-west is located on the western shore of Emu Bay. The port has an industrial history, with strong links to the mining and forestry sectors. On arrival, European settlers named the area Blackman Reef due to the large midden located at the site.

From 1830, small sailing ships anchored in Emu Bay. Vessels used the bay until suitable weather allowed them to approach a flat rock, now covered by McGaw Pier, to unload their cargo. Passengers were put ashore in a basket or small boats.

The first jetty was building 1883, and Burnie quickly became the main port for the west coast mines after the opening of the Emu Bay Railway in 1897. Most industry in Burnie was based around the railway, including the port. The marine area around Burnie was deeply impacted by industrial activity for half a century.

Most prominent was the Burnie Pulp Mill, along with the nearby Tioxide and acid plants that discharge effluent into Emu Bay. The closure of these industries has been associated with the improvement of conditions in the marine environment over the past 20 years.

The port has experienced development and expansion since its inception. The port land is almost entirely reclaimed, with a low probability of any aboriginal heritage being present. Tasmanian Heritage Register sites are located along Marine Terrace, within the Burnie City area and south of the port area. There are no listed heritage sites exist inside the port boundary². There are no registered aboriginal heritage listings for the Port of Burnie³.

By the late 1990s, the Marine Boards of Tasmania had been replaced by Port Authorities. In January 2006, the Port Authorities were amalgamated to form TasPorts. Today, the Port of Burnie is owned and operated by TasPorts, it is one of the State's key deep-water ports and Tasmania's largest general cargo port. Each year more than five million tonnes of general freight and more than 50% of Tasmania's containerised freight are transited from the port.



² Tasmanian Heritage Register checked 14 Dec 2022 [Search the Tasmanian Heritage Register | Heritage Tasmania](#)

³ Tasmanian Aboriginal Heritage Register checked 14 Dec 2022 [Aboriginal Heritage Register | Aboriginal Heritage Tasmania](#)

PORT STATISTICS

Freight resources and waste statistics for the Port of Burnie landside operations from FY23 are presented in *Table 4 –Port of Burnie Freight, Resource and Waste Statistics*.

Table 4 –Port of Burnie Freight, Resource and Waste Statistics

Attribute	Burnie total	% of TasPorts total
Import Freight (tonnes)	1,578,347 ⁵	28%
Export Freight (tonnes)	3,534,596 ⁵	40%
No. Vessel Visits	470 ⁵	18%
Water Use (kL)	25,735 ⁴	13%
Diesel Use (L)	9,540 ⁵	6%
Electricity Use (kWh)	3,303,097 ⁵	26%
Greenhouse Gas Emissions (t CO2e-)	518 ⁵	7%
Waste to Landfill (tonnes) <i>calendar year</i>	65 ⁶	15%
Waste Recovery (tonnes) ⁵ <i>calendar year</i>	2.66	9%



⁴ Data sourced from NPI reporting 2022-2023 data sources DOC/23/18956
⁵ 2022/2023 TasPorts Annual Report

⁶ Veolia EcoLogic reporting for calendar year 2022-23

ENVIRONMENTAL CONDITIONS AND VALUES

A summary of Port of Burnie site environmental conditions and environmental values is provided below.

The Emu River provides the main freshwater input into the bay. The flora and fauna habitats and water quality of the port environment have been affected over the years by a range of human activities along the coast and inland. These have included industrial processing, urban living, shipping and runoff from agriculture, mining and other catchment activities. The improved condition of the marine environment since industrial closures has resulted in a gradual return of conspicuous marine animals such as seals, birds and fish.

WATER QUALITY

The condition of the marine waters around the Port of Burnie are generally typical of coastal areas in Northern Tasmania. The waters have received contaminants from industries over the past half-century, including pulp mill emissions, mercury, iron and titanium dioxide. In addition, because the surrounding land-use is varied, the waters receive inputs from the Central Business District, the rail network, industrial areas, commercial precincts and residential zones.

Key influences on the environmental condition of the port include:

- Sewage treatment plants - effluent entering marine environment can contain elevated organic and inorganic compounds, pathogens, toxins and heavy metals.
- Storm water - possible contaminants include sediments, litter, dissolved and particulate nutrients, heavy metals, hydrocarbons and pathogens.
- River inputs - upper catchment of three major river systems are used predominantly for plantations and production forestry, with land in the lower catchment used mainly for agriculture. Buffers of riparian vegetation exist along most of the length of all three rivers, providing natural filtering and lowering the likelihood of problems with sedimentation. The water from these rivers may influence salinity, sedimentation, organic material, contaminants, and nutrient levels within the port area, particularly during and after heavy rainfall in the catchment.

FISHING AND RECREATION

The Emu Bay region is not a significant commercial dive or abalone fishery area, and the region offshore Burnie has amongst the lowest catches of the Tasmanian commercial scalefish fishery, except for southern calamari (*Sepioteuthis australis*) and Gould's squid (*Nototodarus gouldi*). Additionally, no marine farms are in the vicinity of the Port of Burnie.

Marine recreational fishing, diving, and spearfishing, and possibly the collection of bivalve mollusc or worm bait from beaches, is likely to be a frequent activity in the area and there are boat launching facilities in Emu Bay.

Areas of recreational fishing activity include Burnie Jetty with potentially some game fishing in Bass Strait.

Blackman Reef is known for fishing and invertebrate life that is popular with recreational fishing and divers.

The only established marine-based tourism activity is the Little Penguin Observation Centre at Parsonage Point, approximately 1.5 kilometres west of the port. This is centred around dusk foraging returns and nesting between September and March.

MARINE HABITAT

Giant kelp (*Macrocystis pyrifera*) has been described as occurring offshore from Round Hill Point (~3.5 kilometres east of the port) and at Blackman Reef (at the western margin of the port), occurring in 0–5 metre water depth at both locations (Lucieer et al. 2007). As the kelp is in relatively shallow water, both locations do not qualify as a threatened ecological community under the *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act).

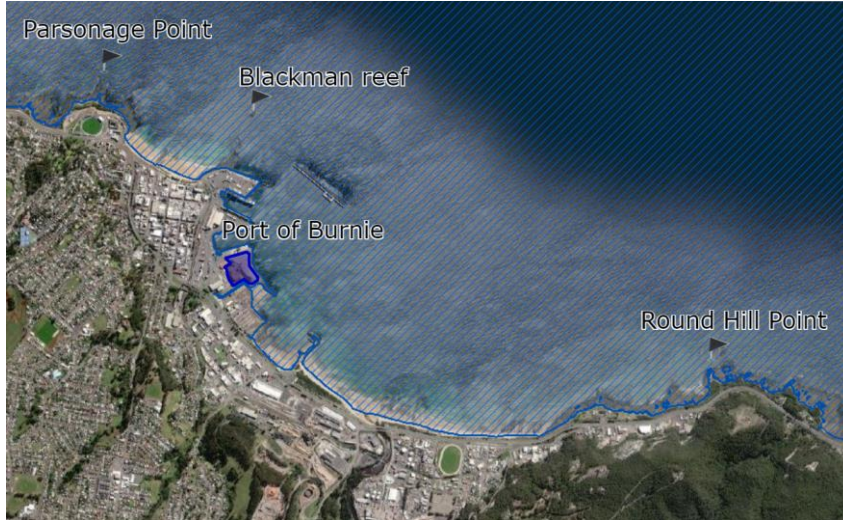


Figure 5: Aquatic areas of interest near the Port of Burnie. The Blue square represents BCET woodchip stockpile (Source NRE ListMap 14/06/2023).



Figure 6: Giant kelp reaching the water surface at Parsonage Point in October 2018 (Source Marine Solutions June 2019).

Seagrass beds provide habitat and nursery areas for many marine species and along with epiphytes, represent good quality marine habitat and are a priority to be protected. Previous habitat mapping indicated the presence of two small patches of seagrass approximately 3 kilometres to the east of the port.

An Australia-wide map of seagrass distribution additionally suggests a band of seagrass offshore between 5 and 25 metres water depth, extending across much of the coast between Devonport and East Wynyard, with a gap in the bed around Emu Bay and extending ~3 kilometres further west. There was no seagrass observed in or within close proximity to the port during the 2019 survey.

The nearest seagrass population, *Amphibolis antarctica*, are reported to occur to the east and west of the Port of Burnie and along with epiphytes were surveyed in 2015 and 2016 (Figure 7).

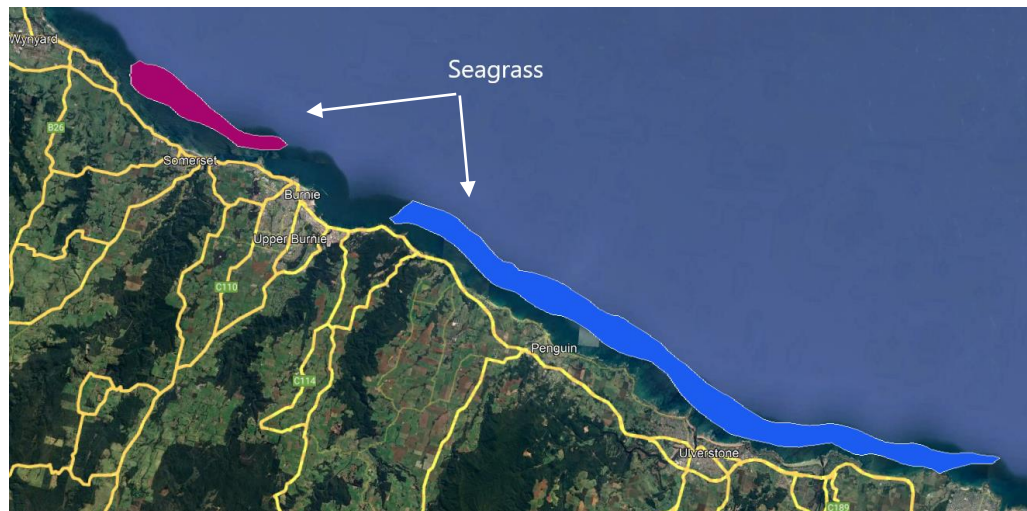


Figure 7: Pink and blue areas represent the approximate location of seagrass beds in 2015 (as mapped by CEE 2015).

MARINE SEDIMENT

TasPorts undertakes baseline assessments of marine sediments every 3-5 years. Sedimentation within the Port of Burnie is influenced primarily by coastal sediment movements driven by waves and currents, transporting sand from the North, this is reflective of the long shore drift in the area. Rates of sediment accumulation vary across the port and are generally slow.

Previous surveys show that sediments around the port are contaminated by metals and metalloids, with many exceeding screening levels of the National Assessment Guidelines for Dredging (NADG 2009), and some (e.g. lead and zinc) exceeding the high-threshold levels of the NAGD. In the 2023 sampling program, no other contaminants exceeded the NAGD screening levels in any samples. Subsequent elutriate testing showed that concentrations of most metals released from the sediment were below the default guideline values for marine waters according to ANZG (2018), with the exception of arsenic and copper. Concentrations of total arsenic in elutriate samples were orders of magnitude (10 to 100) greater than the interim, low-reliability default guideline values for arsenite - As(III) and arsenate - As(V) in marine water.

Berth areas are generally more contaminated than other parts of the inner port, with the area between Berths 4 and 5 exhibiting the highest concentrations of most metals and metalloids. The metal contamination of the sediments has been attributed to activities within the port, particularly loading of metal ore concentrate. The sediment has been determined to be non-toxic with respect to organic, radionuclide and dioxin contaminants. Both diatoms and dinoflagellate cysts have been detected within the Port of Burnie, however no biosecurity risk was identified. The sediments have a low probability of generating acid sulfate soils.

MARINE WILDLIFE

Observations of marine wildlife in the port are common and in 2023 TasPorts created an internal wildlife observation reporting system to track these.

The primary potential impact on marine mammals, such as seals, dolphins or whales is injury from direct contact or underwater noise from vessels.

The commercially important species Blacklip Abalone (*Haliotis rubra*) has been recorded in reasonable numbers at Blackman Reef, Parsonage Point, Emu Bay and Round Hill. Greenlip Abalone (*Haliotis laevigata*) has also been recorded as reasonably common at Parsonage Point. Gunn's Screw Shell (*Gazameda gunii*) listed on the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and *Threatened Species Protection Act 1995* (TSP Act) has been documented within 5 kilometres of the Burnie area, but targeted surveys have provided no evidence of their presence.

Southern Right Whales, *Eubalaena australis*, Humpback Whales, *Megaptera novaeangliae*, and Blue Whales, *Balaenoptera musculus*, listed in EPBC Act and *Threatened Species Protection Act 1995* have the potential to be present within five kilometres of the port. There have been sightings of humpback whales within five kilometres, but no confirmed sightings of blue whales.

Fur seals have been observed in the port waters and around berths. Bottlenose dolphins have also been recorded in the area but are expected to just be transiting through the region. Little penguins (*Eudyptula minor*) are known to nest around Parsonage Point.

The primary potential impact on marine mammals such as seals, dolphins or whales is injury from direct contact or underwater noise from vessels.



Figure 8: Fur seals are commonly observed in Tasmanian waters.

INTRODUCED MARINE SPECIES

The Port of Burnie has been colonised by several invasive marine pests, likely introduced via hull fouling or ballast water discharges from cargo and passenger ships arriving from other parts of Tasmania, mainland Australia and international ports.

Biosecurity Tasmania currently recognises 26 different marine pest species present within the Port of Burnie limits.

In 2004, 14 introduced species were identified in the Port of Burnie.

The Asian Samele (*Theora lubrica*) is in a localised area between Berths 6 and 7 (Figure 7). This population may not be self sustaining, because there are frequent shipping movements from other areas known to have populations, and at a subsequent survey in 2019 the population had not spread.

In 2019, the Pacific Oyster (*Crassostrea gigas*) was observed in sheltered areas of port infrastructure (Figure 8). This includes inside the breakwall, on pylons around the breakwall and in the tug berths. Pacific oysters are widespread in Tasmania.

No other introduced marine species were observed in the port from underwater video or diver surveys during the 2019 survey.



Figure 9::Asian Samele (*Theora lubrica*)

(photo: [Asian samele \(*Theora lubrica*\) - Google Search](#))



Figure 10: Pacific oysters (*Crassostrea gigas*)

(photo: [Pacific oysters \(*Crassostrea gigas*\) - Google Search](#))

LANDSIDE SOIL AND GROUNDWATER

All excavations and movement of soil are managed in accordance with TasPorts *Environmental Guideline Managing contaminated material during ground penetration and excavation*.

There are a number of potential sources of soil and groundwater contamination in the Port of Burnie.

These include:

- Historical accumulated concentrate deposition from various mines likely to have used the port over the last ~100 years, and associated incidental leaks and spills.
- Imported fill.
- Pollutants transported via groundwater from local industry.

Previous studies have shown elevated total metal levels (e.g., arsenic, cadmium, lead, zinc and copper) consistent with ore concentration being moved through sites, but that these are contained within the rail corridor.

Leachate extraction showed that the metals were bound tightly to the soils and not readily bioavailable.

LANDSIDE WILDLIFE

There is very little natural habitat for terrestrial wildlife within the port land zone. Many areas of the port however are flat and protected and so provide suitable habitat bird species.

Major issues with nuisance bird species include:

- Starlings (*Sturnus vulgaris*) perching and roosting within No. 5, 6 and 7 Berths, particularly container cranes and the No. 6 open shed.
- Silver Gulls (*Chroicocephalus novaehollandiae*) nesting around foreshore and in the woodchip storage area.
- Pigeons (*Columbidae*) roosting and nesting in open sheds.
- Cormorants (*Phalacrocoracidae*) nesting, loafing and roosting on the breakwater.

Little Penguins (*Eudyptula minor*) have been observed within the port area of Burnie.

Blackberry (*Rubus fruticosus*) is the only declared weed that has been observed within the Port of Burnie and is subject to weed control.

Several common non-declared species of weeds have also been observed, including Sea Spurge (*Euphorbia paralias*) which is a highly competitive and invasive weed of coastal areas, and treatment of this species is considered of high importance, despite not being a declared weed.

NOISE

TasPorts applies a [Noise Management Standard](#) to all port operations. As the Port of Burnie is close to the city of Burnie, noise management is important.

Vessel noise is managed as a priority with shore power being installed and used by the ports' most frequent user.

The most recent environmental noise assessment of operations at the Port of Burnie was done in 2023, resulting in no recommendations for noise reduction. Noise emission levels from the port appeared to be largely unchanged from the levels measured in 2018 and 2020.

A Burnie Wood Chip Export (BCET) – Noise Management Plan was developed and implemented to minimise the potential for environmental nuisance generated by acoustic emissions from BCET operations.

LIGHT

TasPorts applies a [Light Pollution Management Standard](#) to all Ports.

In the last five years, TasPorts has not received any community complaints relating to nuisance light in the Port of Burnie.



Figure 11: loading bulk bags on the wharf

ENVIRONMENTAL ASPECTS, IMPACTS AND RISKS

An environmental aspect is a TasPorts activity, product or service that can interact with the environment.

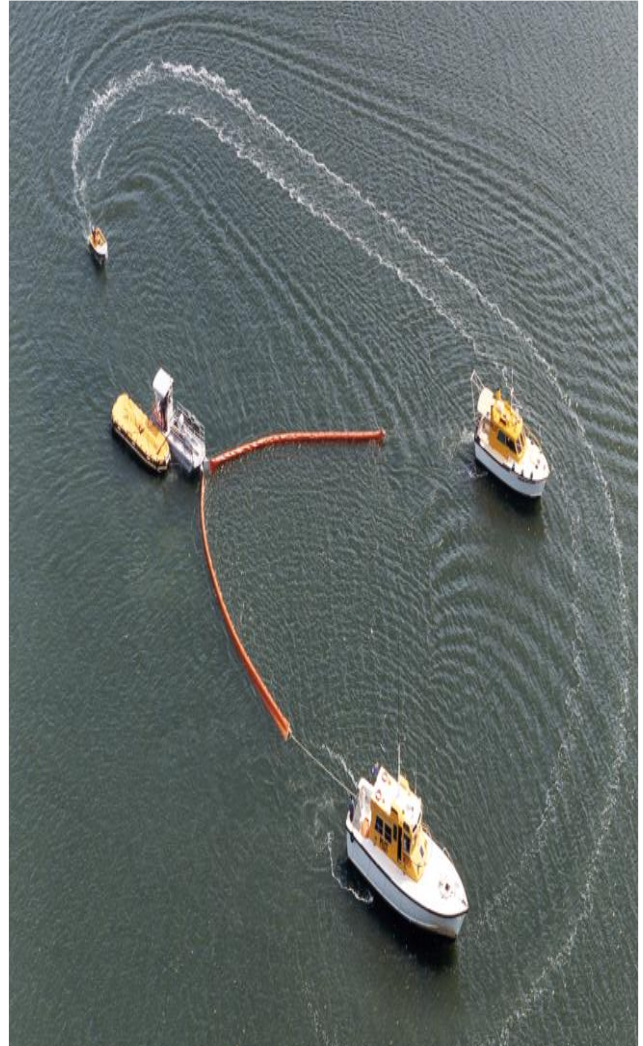
Significant environmental aspects are defined as activities at the Port of Burnie that have potential for extreme or major environmental impact (maximum foreseeable impact of major or extreme).

This First Strike Plan is an addendum to the Tasmanian Ports Corporation Oil Spill Contingency Plan.

This Plan interfaces with the Tasmanian Marine Oil and Chemical Spill Contingency Plan (TasPlan) and the Deed of Agreement between TasPorts and the Crown (EPA).

The Plan is to be utilised when a Level 1 marine oil spill occurs in waters within the defined area of this Plan, those waters defined as Primary Port Pilotage areas.

A Level 1 oil spill is one that can be managed by TasPorts resources, from a personnel and equipment perspective.



An overview of the Port of Burnie significant environmental aspects is provided in [Table 5 - Overview of Port of Burnie significant environmental aspects](#).

Table 5 - Overview of Port of Burnie significant environmental aspects

Significant environmental aspects	Description
Spills – hydrocarbons, hazardous materials	Spills from vessel accidents, fires, bunkering and bulk hydrocarbon transfer accidents or failures. Underground hydrocarbon pipeline spills. Cargo, wastewater and livestock effluent spillage.
Air emissions	Dust or odour emissions, visible nuisance air emissions (e.g. smoke), greenhouse emissions (CO ₂ e), generation of air pollutants such as particulates, Volatile Organic Compounds (VOCs), sulphur dioxide or nitrous oxides and odour.
Energy and climate	Carbon emissions from fuel use (diesel, gas, petrol etc) and electricity use. Management of port infrastructure and operations to be prepared for increased flooding, sea level rise, increased high tides and to predicted changes in supply chains. This may include planning, design and maintenance.
Habitat disturbance	Activities that protect or disturb terrestrial or marine habitat
Invasive species	Marine pests, terrestrial pests, weeds. Management practices including discharges, inspections, washdown and fumigation which may influence the introduction of terrestrial or marine pests.
Marine discharges	Wastewater (sewer or greywater) discharges, bilge water, ballast water, livestock effluent discharges, open loop scrubber discharges, cleaning water, washdown water.
Noise emissions	Excessive night noise, noisy construction works, underwater noise from dredging, noise from changes in operations or operations without adequate noise control.
Regulatory compliance	Regulatory approvals, monitoring, reporting or other environmental regulatory requirements.
Release of contaminants	Dredging and seabed levelling, land soil disturbance (legacy contamination).
Sediment disturbance	Excavation of soils, dredging and seabed levelling of marine sediments.
Stormwater runoff	Surface runoff during rainfall events resulting in deposition of chemicals, hydrocarbons, dust, sediment and litter into waterways.
Waste management	Identification and segregation of wastes, use of licenced transporters, authorised storage, disposal to licenced facilities etc. landfill, recycling, litter, marine litter, effluent and septic tank waste.
Wildlife interactions	Disturbance to marine wildlife, death or injury to protected species, habitat and animal welfare.

ENVIRONMENTAL RESOURCING AND RESPONSIBILITY

TasPorts staff, contractors and other positions under the control of TasPorts have a general duty of care to take all steps to prevent and minimise environmental harm.

Environment and Sustainability Manager and the Environment Team, provide specialist support, communications and advice to the Port of Burnie. Environmental responsibilities and accountabilities of TasPorts staff are documented in position descriptions and shown below in [Table 6 - Key Personnel Environmental Roles and Responsibilities](#)

Table 6 - Key Personnel Environmental Roles and Responsibilities.

Role	Responsibility
Board of Directors	TasPorts HSE Policy endorsement and Risk accountability.
CEO and Executive Team	Leadership and accountability to implement TasPorts' Environmental Management System (EMS) and Sustainability Strategy
Harbour Master	Implementing Harbour Master Directions and Port Procedures primary accountability for TasPorts Oil Spill Response.
Environment and Sustainability Manager	Continual improvement of and performance reporting of the EMS and regulatory compliance. Facilitating identification and management of significant environmental aspects, risks and their controls, resourcing and budgets. Liaison with Environmental regulatory authorities. Planning and specialist advice for environmental incidents and, oil spill response.
Environment Team	Developing and implementing the EMS. Maintaining environmental compliance obligations and records. Providing support and specialist advice for environmental incidents including oil spill response and environmental monitoring.
General Manager Operations	Undertake Operations in accordance with TasPorts EMS. Responsible for ensuring operational environmental incidents are managed, investigated and closed out.
Operations Management	Ensure landside operations within their area are undertaken with minimal environmental impact and in compliance with the EMS. Budgeting and resource allocation in consultation with the Environment Team. Responsible for maintaining TasPorts Oil Spill Response Equipment.
General Manager Marine and Marine Team	Ensure safe and efficient operation of pilot and tug fleets in port with minimal environmental impact and in compliance with the EMS.
Property Management Team	Ensure tenants and licences are operating in compliance with agreements, environmental legislation and to ensure environmental impacts are being managed through the requirement for tenant EMPs.
Major Projects Environment and Sustainability Manager	Responsibility for coordinating environmental approvals, environmental compliance, and sustainability in design, procurement and implementation of major projects.

Role	Responsibility
Project Managers	Environmental planning and approvals are undertaken and that projects are implemented with minimal environmental impact. Compliance with TasPorts Project Management Methodology (PMM) and Contractor Management systems including the requirement for project EMPs.
Risk Manager and Emergency Response Specialist	Coordination of emergency response, incident management and crises management systems including coordination of oil spill response training.
All TasPorts staff	To adhere to TasPorts HSE policy and the EMS requirements and exercise general environmental duty of care

ENVIRONMENTAL RESOURCE ALLOCATION

Table 7 - Environmental financial resource allocation FY23 to 25. outlines the environmental resourcing allocations for the Port of Burnie for FY24 and FY25.

Table 7 - Environmental financial resource allocation FY23 to 25.

Category	Project	Description
Environmental monitoring	Air – Dust Stormwater Trade-waste	Fugitive woodfibre monitoring of BCET operations Assessment of stormwater quality in minerals handling area Monitoring of tradewaste
Environmental equipment and maintenance	Whole of port	BCET tradewaste flow meter & wind anemometers Tenants EMPs Maintenance of upgraded of oil spill equipment
Emergency response	Whole of port	Development of First Strike plan Biosecurity marine pest posters
Environmental training	Landside operations	Oil spill response and equipment operator Contaminated material during ground penetration and excavation
	Marine operations	Marine mammal observations Pile driving
Stakeholder engagement	Maintenance dredging	TACC meetings Port user group meetings

PERFORMANCE EVALUATION

MONITORING, MEASURING AND EVALUATION

TasPorts Environmental Team defines organisational wide monitoring requirements including port environmental baseline assessments.

The environmental monitoring requirements for the Port of Burnie includes:

- whole of port noise assessment every five years
- marine ecology, habitat, water quality and marine pest surveys every five years
- marine sediments less than three years prior to dredging activity
- initial baseline light assessment repeated after significant change to port development / lighting
- site contamination assessment of areas suspected to be contaminated.

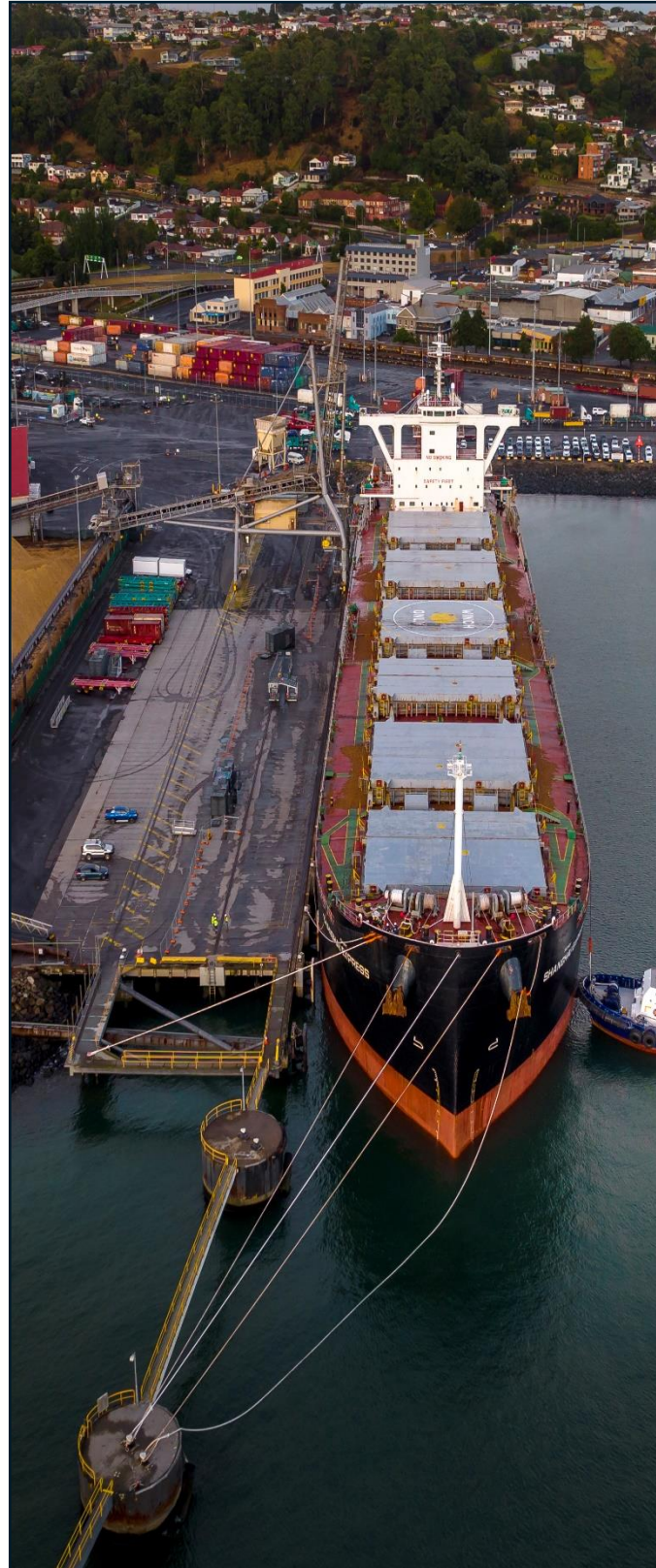
Additional project specific monitoring for dust, noise, water quality or marine mammal observations may be required if the project activity is deemed as being high risk. This is identified in each project EMP.

COMPLIANCE EVALUATION

TasPorts does a verification of compliance against environmental legislation at scheduled intervals.

Compliance with environmental legislation is monitored and assured by:

- reviewing and approving contractor EMPs to ensure permit conditions and other requirements are met
- auditing activities in the port against permits issued by EPA and approved contractor EMPs
- risk assessments for all new activities.



ENVIRONMENTAL PERFORMANCE INDICATORS














Environmental performance indicators for the Port of Burnie and performance for FY23 are shown in [Table 8 - FY23 Port of Burnie Environmental Performance](#).












Table 8 - FY23 Port of Burnie Environmental Performance Indicators

Performance indicator	Performance FY23
Completion progress of Port Environmental Improvement Plan	Refer <i>Environmental Improvement Plan</i> FY24 – FY2 status
Annual number of environmental incidents	3 (0.01 per vessel movement)
Annual number of environmental complaints	3
Annual scope 1 and 2 greenhouse gas emissions (tonnes CO2e-/per number of vessel movements per year	1.1 tonnes per vessel movement
Annual amount of recycled waste as a % of waste to landfill (tonnes)	4%
Percentage of beneficial use of dredging material	N/A for FY23



ENVIRONMENTAL IMPROVEMENT PLAN FY24 – FY26

Objective / Target	Completion date / status	
Review EMPs for major port tenants	FY24 Q4 – in progress FY25 – in planning	
Port of Burnie EMP and EcoPorts Certification	FY24 Q3 – in progress	
Review BCET EMP	FY24 Q1 – completed	
Identify additional wood-fibre dust control improvements	FY24 Q3 – in progress	
Undertake an assessment of woodfibre dust monitoring	FY24 Q3– on track	
Review customer compliance with TasPorts <u>Bulk Handling Standard</u>	FY24 Q4 – on track	
Improve awareness and competency relating to marine pest biosecurity <ul style="list-style-type: none"> • Port staff education • Baseline survey • Updated Harbour master instructions 	FY24 Q3– in progress	
	FY25 Q3/Q4 in planning	
	FY24 Q1 – completed	
Publicly communicate Port of Burnie environmental and sustainability performance	FY24 Q3 – in progress	
Share information internally and externally on Port of Burnie history and project plans	FY24 Q1 – completed	
	FY25 Q4 – in progress	
Undertake light pollution and noise impact assessments for proposed port development changes	FY25 Q3 - in planning	
Identify port specific climate change risks and opportunities	FY25 Q1 – in progress	
Identify carbon reduction opportunities for Port of Burnie in alignment with TasPorts corporate carbon reduction target	FY24 & FY25 – in planning	
	FY24 & FY25 – in planning	
	FY 25 Q2 – in planning	
Continue to identify and investigate options for further noise control reduction	FY25 Q2 – in planning	

Objective / Target	Completion date / status
Undertake noise assessments	FY 25 – in planning 
Implement improved stormwater management controls	FY25 – in planning 
	FY24 Q4 – in progress 
Reduction in marine plastics in port waters	FY24 Q4 – in planning 
	FY25 – in progress 
Review bird management plan	Q2 annually – in progress 
Internally share knowledge of port marine wildlife and environmental values	FY24 – in progress 
Develop a port waste management plan	FY23 Q4 – completed 
Improve waste recycling & litter prevention	FY24 Q2 – in progress 
Remove legacy contaminated soil materials	FY25 Q1 – in planning 
Participate in Clean up Australia Day and Take 3 for the Sea	FY23 & FY24 – in progress 

ENVIRONMENTAL AND SUSTAINABILITY INITIATIVES

TasPorts has a sustainability strategy which seeks primarily to embed sustainability management at all levels of the organisation through three objectives.

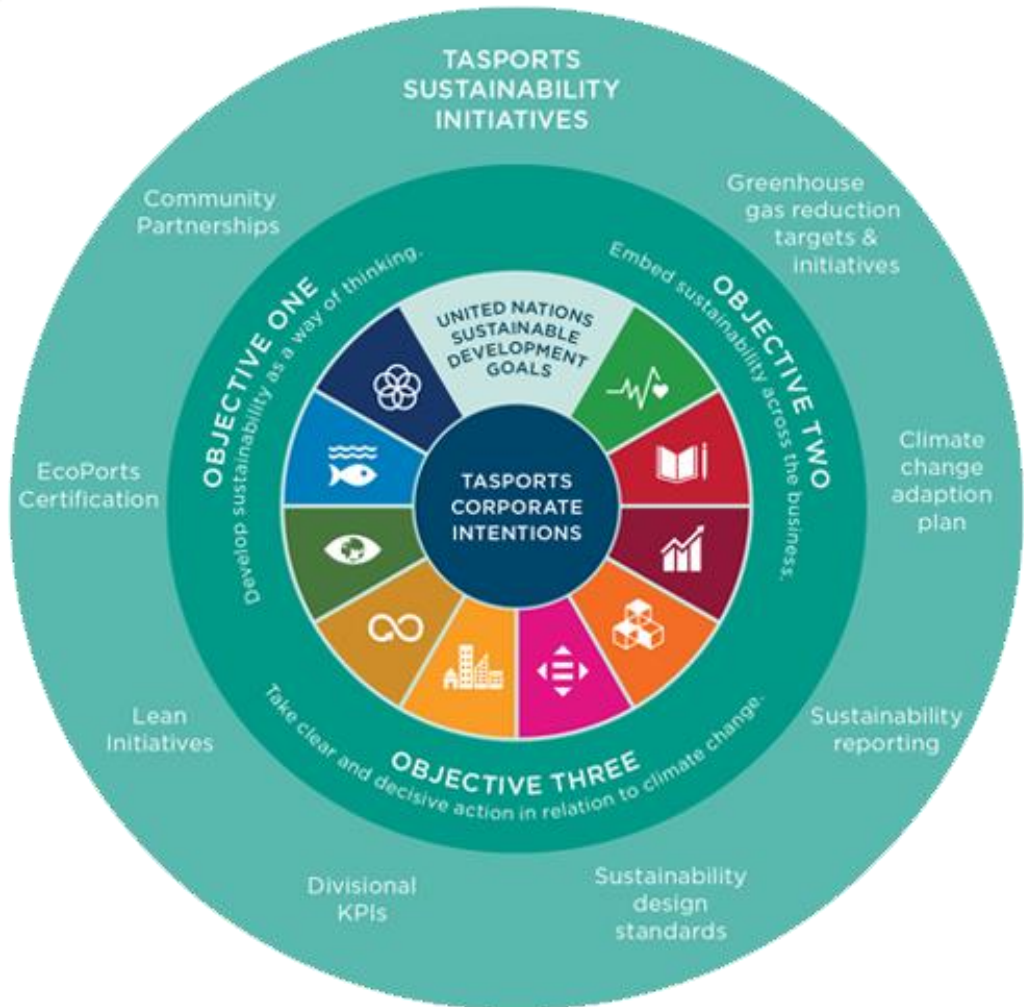


Figure 12 - TasPorts Sustainability Strategy

At TasPorts, Sustainability means:
Conducting business in a manner that enhances future economic, social and environmental value and does not compromise it.

CASE STUDY ONE

Below provides details on three examples of environmental projects undertaken by TasPorts to improve environmental conditions and sustainable development at the Port of Burnie.



Burnie Chip Export Terminal

Contact Susan McLeod
Position Manager Environment and Sustainability
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Port of Burnie | Tasmania

TasPorts aims to leave a positive legacy for residents and businesses of Burnie, especially those living near the port.

The port is a critical gateway for the movement of forestry products from northern Tasmania and is home to the Burnie Chip Export Terminal (BCET).

TasPorts is committed to facilitating proactive and authentic engagement with stakeholders and the community. A Port of Burnie user group and BCET operations working group meet regularly to discuss safety and environmental matters.

TasPorts have been reviewing BCET operational data and air quality results since 2017. BCET keeps abreast of dust and noise management techniques and monitoring technologies, adopting improvements where suitable. Despite dry summers, heavy rain, and increased easterly weather events, there has been a reduction in wood-fibre dust concentrations in the city of Burnie resulting in a decrease of nuisance dust and noise complaints.

Environmental issue
 Relationship with community
 Air quality
 Noise
 Water quality
 Climate change

Relevance to ESPO 5 E's Framework
 Exemplify Enable
 Encourage Enforce

In 2023 the Environmental Permit (EPN) for BCET was reviewed to accommodate the latest air quality monitoring and reporting methods. This update further ensures stockpiling and shiploading occurs in the optimal environmental conditions, therefore generating the least amount of dust. This means that when the wind is within a critical arc, air monitoring commences at multiple locations in the city of Burnie. Operations cease when wood-fibre dust exceedances occur. Resumption of stockpiling or shiploading only occurs when the air quality alert status permits. Meteorological and fugitive wood-fibre monitoring stations are used, and continuous dust management controls are adopted to ensure all operations are undertaken according to criteria in the EPN and the Environmental Management Plan.



The BCET air monitoring program has been acknowledged by the Environment Protection Authority (EPA) Tasmania, as being unique, site specific and effective at managing nuisance dust from the Port of Burnie.



CASE STUDY TWO



The Port of Burnie Noise standard

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Environmental issue
Relationship with community
Noise

Relevance to ESPO
5 E's Framework

Exemplify **Enable**
Encourage **Enforce**

Port of Burnie | Tasmania

Key features of noise management in the Port of Burnie have included regular baseline monitoring, impact assessment, modelling, adoption of shore-power and the development of an agency wide Environmental Noise standard. More recently TasPorts have contributed to the development of a Ports Australia Noise Good Practice Guide.

The purpose of the Noise Standard is to define the minimum noise and vibration that is accepted by TasPorts. The Standard aims to prevent noise and vibration related environmental harm, identify environmental nuisance and be compliant with legislation. The Standard applies to all TasPorts' staff, contractors, tenants, port users and the public while at TasPorts Facilities.

TasPorts is committed to facilitating proactive and authentic engagement with stakeholders and the community. A Port of Burnie Technical Advisory Consultative Committee has been established to provide an interface between TasPorts and the community regarding dredging. In addition, monthly Port user group meetings provide a forum for sharing information on noise mitigation and controls.

Potential noise issues are reviewed during project planning via a risk assessment workshop, which may identify noise issues and recommend a noise assessment be undertaken. Noise assessments are done in the early stages of works to better understand when and how noise is being generated, allowing for additional controls to be implemented if required. For example: planning noise generating works to be done during business hours and using smaller battery operated equipment

Noise assessments from 2018, 2009 and 2023, a noise model and the identification of noise management benchmarks will ensure nuisance noise does not increase over time.



Shore power

Shore power was commissioned by Strait Link in 2020 to avoid running of diesel powered generators while vessels are in port. A noticeable reduction in nuisance noise has been observed with shore power in use.



Example of noise modelling from the Port of Burnie over the urban and marine areas

CASE STUDY THREE



Caring for our People Supporting our Seafarers

Contact Natasha Wardale
Position Community Engagement and Partnerships Officer

Environmental issue
Relationship with community

Relevance to ESPO
5 E's Framework

Exemplify Enable
Encourage Enforce

Mission to Seafarers Tasmania

As Tasmania's port operators, we recognise the invaluable contribution seafarers make to international trade and the world economy, often at great personal cost to themselves and their families.

The Mission to Seafarers charity works hard across Tasmania to actively respond with loving care to the many challenges and dangers faced by seafarers.

The Mission to Seafarers provides seafarers with a chance to connect with their loved ones and children, and to mentally and spiritually recharge for the next leg of their voyage.

TasPorts partners with the Mission's goals through financial and in-kind support, as well as promotion of their welfare services to all visiting vessels.



The TasPorts Operations and Marine teams see first-hand vessel crew members in need of compassion and care. These teams have facilitated medical assistance and welfare checks for visiting seafarers on many occasions.