



WE PROACTIVELY MANAGE OUR IMPACTS AND RELATIONSHIPS

*Our operational practices
strive towards environmental
stewardship and sustainability.
We build genuine relationships
that support our community*

The Licence to Operate (LTO) Framework is now in its eighth year delivering a portfolio of projects designed to continuously improve the management of our social, economic and environmental impacts. Each focus area has a range of management strategies, including investment to maintain and improve the environmental performance of our terminals, effective engagement with our regulators and local community, and support for local social and economic outcomes, to help meet stakeholder expectations.

During the year, Port Waratah undertook 40 LTO improvement projects, seven of which were projects carried over from 2022 due to delays in resourcing from the previous year. We completed 30 of the projects, with one project placed on hold requiring further investigation for reassessment in later years. Nine were rescheduled for completion next year, projecting a target of 46 projects to be undertaken in 2024.

Environment

Our Environmental Management System (EMS), certified to ISO 14001:2015, provides a systematic approach to managing our potential environmental impacts and responds to changing environmental conditions in line with stakeholder expectations. This approach contributes to our sustainability by managing our key areas of operational risk – air quality and dust emissions, potential noise impacts, the management of site water systems to avoid pollution incidents and reducing our environmental footprint and greenhouse gas emissions.

We assess environmental performance by regularly reviewing, at least monthly, our annual objectives and targets and the LTO Framework. We use this data to assess the potential environmental impacts of our operations and identify improvement opportunities. Port Waratah also incorporates an annual programme of internal audits to review the various elements of the EMS and verify how the system's requirements are implemented within operational activities.

Performance

Port Waratah did not meet incident performance expectations in 2023, having recorded four reportable incidents. Three of these occurred at the Kooragang Terminal and one at the Carrington Terminal, which was the first reportable incident to occur at the Carrington Terminal since 2018. This result means we did not achieve our target to record no more than three reportable environmental incidents across our operations within the year.

The incidents that occurred in 2023 are summarised below:

March 2023 – A connection dislodged from a site water supply line at the Kooragang Terminal wharf, resulting in process water spraying across an open section of the wharf ballast rocks and onto the maintenance bay. Port Waratah estimates that approximately 12.6kL of recycled site water may have landed on the wharf ballast rocks and potentially in the harbour. There were no visible impacts observed in the receiving waters.

June 2023 – During an operational inspection, a thin layer of coal dust was discovered on the wharf surface adjacent to the conveyor take up point at the Carrington Terminal wharf. Due to the proximity to the wharf edge, it was likely some material may have also entered the harbour. The maximum quantity of coal material that may have entered the harbour has been calculated as approximately 10.9kg. No visible impacts were observed in the receiving waters.

July 2023 – Following machine washdown, a front-end loader returning from the wharf to the Kooragang Terminal deposited a small amount of coal fines and water onto public roads, which were recovered resulting in no impact to the environment.

December 2023 – Following a light rain recorded at the Kooragang Terminal wharf, some coal material and pooled rainwater material began spilling over the side of the wharf conveyor belt at the commencement of vessel loading. The strong winds experienced at the time carried some of the spilt coal material and rainwater across the wharf road and onto the harbour ballast rock. The estimated quantity of coal material that potentially entered the harbour has been calculated to be less than 1kg, with no significant impact to the receiving waters.

Port Waratah self-reports incidents to the EPA, takes immediate action to minimise the potential environmental impacts, and for each of these incidents, recovered all residual material. Additional measures were implemented to prevent the recurrence of similar incidents. The EPA issued Port Waratah a Penalty Notice of \$15,000 for the June incident and a Formal Warning for the December incident.

Additionally, two technical non-compliances occurred in April and December 2023 due to failure to collect water samples. Port Waratah is required to collect a weekly water quality sample from the Carrington Controlled Discharge Filtration System during discharge. The April non-compliance was reported in the 2022-23 Annual Return and the December

non-compliance will be reported in the 2023-2024 Annual Return in accordance with environment protection licence requirements.

To reflect our aim for continuous improvement, our performance targets for 2024 again specify no more than three reportable environmental incidents. The target is supported by focused risk-based management strategies and implementation of improvement projects.



TOTAL # OF PROJECTS 40
 COMPLETED 30 ONGOING 9 ON HOLD 1

OF PROJECTS

CATEGORY



6

GOVERNANCE



3

AIR QUALITY



3

NOISE



12

WATER



5

ENVIRONMENTAL FOOTPRINT



2

CLIMATE ACTION



9

RELATIONSHIPS, SOCIAL IMPACTS & CONTRIBUTIONS



HOW PORT WARATAH MANAGES DUST

Where possible we enclose and install dust suppression sprays in our:

- ✓ Rail receipt stations
- ✓ Transfer points
- ✓ Conveyors

We also design our equipment for 'soft flow' transfers and minimal drop heights.

OUR INTELLIGENT DUST MANAGEMENT SYSTEM

Continually assesses onsite conditions and uses detailed weather forecasts and onsite real-time weather station data



Calculates the moisture level on coal stockpile surfaces using the Global Evapotranspiration Algorithm



It then calculates



TIMING OF AUTOMATED SPRAY CYCLES REQUIRED TO MAINTAIN STOCKPILE MOISTURE AND PREVENT LIFT-OFF

We have other **dust management strategies** in our toolbox



- Utilising mobile water carts
- Wetting down hardstand areas
- Delaying, restricting or stopping coal movement
- Sealing, revegetating or rehabilitating disturbed areas
- and more.

All of these systems work together to make sure that we **manage dust before it becomes an issue**



Air quality

Monitoring air quality and acting responsibly is critical to our operations. We understand that if not managed appropriately, the nature and scale of our operations have the potential to generate dust and negatively impact our community. Our control techniques, processes and systems are world class, designed to minimise the potential for dust creation, and where possible, eliminate negative impacts. Port Waratah is committed to delaying, or if required, ceasing operations in adverse conditions. Find out more about our management controls at pwcs.com.au/environment/air-quality.

Seasonal region-based air quality monitoring reports for 2022-23, which are collated by the NSW Department of Climate Change, Energy, the Environment and Water, indicate that air quality in the Newcastle region reported particulate levels within the national benchmarks for the majority of the year. Particulate levels were at times higher in summer, particularly at the monitor located in Stockton where results are heavily influenced by onshore winds and sea salt due to its proximity to the coast.

In addition to the government-operated monitoring stations, Port Waratah maintain a series of air quality monitors in residential areas surrounding the terminals that are operated and maintained in accordance with the requirements of our Air Quality Management Plan. This year, Port Waratah's air quality monitoring results were all within compliance limits and consistent with the results from the government monitoring network.

Dust management improvements

We are committed to the continuous improvement of our dust management capabilities, including evaluating our Intelligent Dust Management System (IDMS) throughout the year and introducing refinements, wherever possible.

In 2023, we continued to review the operational performance of dust management infrastructure across both terminals by auditing our conveyor and stockyard machine spray systems to optimise dust suppression capabilities. We identified several opportunities to enhance the belt cleaning efficiency and dust management by fine tuning maintenance regimes and the operating philosophy for some locations. Implementing these changes will become a focus for improvement of our IDMS in 2024.

A staged programme of drainage improvements and additional sealing of unsealed surfaces at the Kooragang Terminal continued during the year. Approximately 4,500m² of previously unsealed surface was converted

to asphalt at a total investment cost of \$460,000. The effects of this improvement were immediate with increased capabilities in surface drainage, housekeeping and dust prevention. The key challenge in implementing this work was the flat terrain of the site, which is difficult to provide sufficient fall to install working drainage and make surface water flow where required. Significant time was spent grading and preparing the ground pre-asphalting to successfully direct water flow with very small margin for error.

Noise management

To effectively manage noise and ensure we continuously improve our noise emissions over time, we consider potential sources of noise across our operations and apply a long-term strategic focus. We implement effective plant maintenance, conduct ongoing reviews, improve noise control processes, and trial and adopt advancing technologies. A key driver in prioritising noise improvement opportunities is focusing on the areas of site that offer the best noise reduction outcomes for our neighbouring communities and developing an effective plan that delivers sustainable noise improvement over the long term.

Our employees and contractors are integral to our effective noise management. We invest in ongoing workforce training and education to ensure the awareness and management of potential noise impacts remains front of mind during operational activities. Ongoing regulatory compliance is demonstrated through our routine noise monitoring programme, this includes regular assessments of our performance by external consultants, against noise criteria and long-term goals. Throughout 2023, regulatory compliance was maintained in accordance with the noise related conditions specified in our project approvals.

Where regulatory criteria are absent, Port Waratah has developed stringent internal noise goals to measure and monitor our performance. Performance against our internal noise goals continued to improve in 2023, with only one minor elevated result recorded at the Carrington Terminal's closest residential monitoring location. The elevated noise level was recorded at our Tighes Hill receiver over the night period in May 2023, and was influenced by several factors, including proximity to our site and weather that produced conditions that increased noise levels at the Tighes Hill location.

Noise management improvements

Low-noise roller trials have been ongoing at both Kooragang and Carrington terminals. More than 60 rollers have been replaced on a conveyor at the Kooragang Terminal wharf as part of the trial. In early

2023, the ongoing trial was assessed and after 16 months of use, the low-noise rollers demonstrated a sustained 2.7dB reduction in sound power. Following these results, the Kooragang trial will continue to be monitored and assessed for sustained noise reduction and operational performance.

Similar to Kooragang, the Carrington low-noise roller trial has continued to demonstrate sustained reduction in sound power. These results, combined with durability and ergonomic assessment outcomes, will be used to determine long term suitability for implementation at other locations across our operations.

In mid-2023, Port Waratah commenced working collaboratively with a noise specialist to develop and trial a real-time operational noise model aimed to quantify our current and forecast noise levels based on what is or what will be operating onsite, where it is operating, and how weather conditions will impact those noise levels. The trial will determine if the technology will support our teams to proactively manage our operations.

Throughout 2023, Port Waratah developed a new business wide five-year Noise Improvement Strategy. The early focus of the strategy is embedding expanded internal capabilities, new technologies, and re-baselining noise performance at both Carrington and Kooragang terminals.



CASE STUDY

Performance dashboard for community available online

Each quarter, Port Waratah publishes a Community Dashboard on our website to provide regular updates to the community about our operational and environmental performance.

The dashboard highlights a three-month snapshot that focuses on air quality, noise performance and water management. It also includes year-to-date results for water reuse, electricity efficiency, the number of trains and vessels received, and tonnes loaded for export.

Our Community Meeting Group members worked collaboratively with us to develop the dashboard to include information relevant for local residents and of high interest to stakeholders.

The dashboard is published on the website in February, May, August and November each year.



HOW PORT WARATAH MANAGES NOISE

At Port Waratah we work to identify and continually reduce potential noise impacts



TO REDUCE CONVEYOR NOISE WE UTILISE:

- ✓ Low-noise conveyor drives
- ✓ Regular roller changeouts



TO REDUCE COAL-FLOW NOISE OUR TRANSFER POINTS:

- ✓ Utilise soft-flow chutes
- ✓ Minimise drop heights
- ✓ Are fully enclosed, where possible



All these systems **work together** to make sure that we manage noise **before it becomes an issue.**



OUR TECHNOLOGY UTILISES:

- ✓ Site-specific noise models for each terminal
- ✓ Detailed sound library of all plant and equipment
- ✓ Measured onsite weather conditions
- ✓ Local geographic simulations
- ✓ Recorded operational noise levels in the community



OUR PEOPLE:

- ✓ Proactively assess noise levels in neighbouring suburbs
- ✓ Design and implement continuous improvement projects
- ✓ Are empowered to make decisions and respond immediately to reduce noise

Water management

Water is critical for day-to-day operational purposes at Port Waratah. Captured water is managed in a way that ensures water quality is suitable for site reuse. We use water for operational purposes, such as dust suppression, wash downs and firefighting systems.

Responsible water management is a careful balance between storing adequate levels for operational reuse, while ensuring we maintain stormwater catchment capacity for wet weather events and meet compliance obligations.

Our water management systems operate by capturing surface water runoff from rain events together with returned water that has been used in terminal operations. The water is then channelled into a series of drains and sumps that replenish our ponds and lagoons for settling and clarification prior to recirculation back to the plant for reuse.

The water management systems across both terminals performed exceptionally well with no wet weather overflows recorded at Carrington or Kooragang. We achieved our 2023 performance target to reduce the amount of sediment contained within excess water released to the Hunter River with the consistent use of the Controlled Discharge Filtration System (CDFS) at our Carrington Terminal and no discharges at Kooragang Terminal.

Following one of the wettest years recorded at Port Waratah in 2022, total rainfall received in 2023 was lower than average, recording just 817mm at our Carrington Terminal compared to 1,467mm the previous year. The lower than average rainfall received throughout 2023 and high water use demand due to the drier weather experienced, placed additional pressure on our water management system and water harvesting efficiency, which has been a primary focus for us in 2023.

During low rainfall years, the operational demand for water is generally higher. This means there are higher volumes of water used, however the recapture rate is lower due to higher evaporation and an increased volume of potable water is needed to meet demand.

Water management system performance was reliable throughout the year. Design capacity at the Kooragang Terminal was temporarily reduced in consultation with the EPA to facilitate emergency embankment repairs on Detention Pond D. Following engineering design, repairs were successfully completed in December 2023.

Water management improvements

Improvements at the Carrington Terminal focused on further optimising stormwater treatment and reuse via our Controlled Discharge Filtration System (CDFS). The CDFS removes entrained sediment from site water and allows us to either transfer and reuse onsite or discharge to the harbour within EPA licence criteria, allowing us to maintain storm surge capacity. This capability enables flexibility to increase water harvesting and reuse onsite as well as reduce the sediment load of water discharged.

Installation of additional water quality monitoring technology and embedding the use of flocculation products formed the primary focus at the Kooragang Terminal resulting in significant improvements to the water quality stored onsite. An upgrade to the Kooragang Terminal Shiploader 7.08 launder system was completed, providing additional secondary containment and improvement to housekeeping.



CASE STUDY

New flocculant capabilities – transition to business as usual

Water quality improvement trials continued in 2023 with the commissioning of a flocculation dosing system at the Kooragang Terminal. Flocculation dosing assists the sedimentation process by clumping fine particles together. The mobile dosing system is mounted on a trailer and allows flexibility in trialling different locations for treatment within our water management system. Optimising flocculation rates, in particular following storm events, will be a focus in 2024.



CASE STUDY

Detention Pond D repair

Routine condition monitoring last year identified cracking on the northeastern corner of one of our major storm water holding facilities, Detention Pond D. As a conservative asset protection measure, we minimised the stored water levels in Detention Pond D while geotechnical modelling and detailed design for corrective repairs were undertaken. Civil repairs were completed, returning Detention Pond D to full capacity of 44ML.





Kooragang Terminal 5,604ML Carrington Terminal 224ML

= 5,828ML

WATER USE FROM CAPTURED AND STORED SUPPLY IN 2023 (80.9%)



19.1% WATER USE FROM POTABLE WATER (1,379ML)

Kooragang Terminal

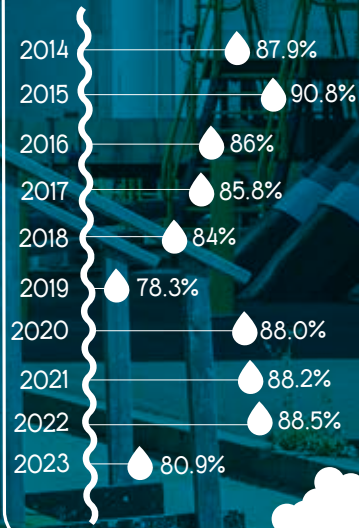
1,130ML

Carrington Terminal

249ML



YEARLY RESULTS



Environmental footprint

We describe our environmental footprint as our demand on the capacity of natural resources and the environment in which we operate. This demand, or impact, is reduced through identifying and implementing opportunities to use potable water more efficiently, producing less waste and diverting more from landfill, as well as enhancing onsite biodiversity and improving land use practices.

Potable water consumption

Water use at Port Waratah is a critical aspect in nearly all areas of our operations. Recycled site water is used preferentially for operational activities, with potable water purchased from Hunter Water being used for amenities, and if required, to top up supplies during periods of insufficient water availability onsite. We aim to be conservative with the amount of potable water used for operational purposes, and continually strive to improve our onsite water efficiency and reuse opportunities. We also reduce our potable water consumption by reusing our onsite water resources regardless of regional weather conditions.

Although rainfall across the region was much lower than that experienced in 2022, there were no water restrictions in place and no areas of water stress. Hunter Water catchment storage capacity reduced slightly throughout 2023, ending the year with storage volumes at more than 83 per cent. Our water management system capacity did not change throughout 2023, however there was a short period of reduced capacity at Kooragang Terminal as Detention Pond D underwent repairs, which were managed without impact. In addition, the implementation of new flocculation assets at the Kooragang Terminal enabled the ability to improve site water quality and reuse potential.

Despite a reduction in regional rainfall and 150.6ML reduction of inflows to the Carrington Terminal's CDFS compared to 2022, the system retained 485.5ML of filtered water, an increase of 35.9ML for onsite operational reuse. This demonstrates Port Waratah is utilising available tools to reduce reliance on the region's potable water supply, particularly in drier weather.

In 2023, we established a target to reduce our potable water consumption compared to the previous five-year average (2018-2022). Due to lower levels of harvestable rainfall, and periods with elevated sediment levels in our site water storages, there was an increase in potable water consumption to meet operational demands. Our total potable water consumption was 1,379ML, an increase of 46 per cent compared to the five-year average.

Land use and biodiversity

Our Kooragang and Carrington terminals are nestled amongst areas rich in industrial history and border areas with great ecological significance. This is especially true for Kooragang, with the 2.1km² terminal being situated immediately adjacent to the Hunter Wetlands National Park and the internationally recognised Hunter Estuary Wetlands Ramsar site. These wetlands are of significant ecological value, supporting 45 species of migratory birds listed under international agreements and more than 110 species of waterbirds.

Port Waratah also manages two non-operational land holdings adjacent to Kooragang Terminal. These sites are established seasonal habitats of the Green and Golden Bell Frog (*Litoria aurea*), a species listed Vulnerable on the IUCN Red List. Since 2010, Port Waratah has collaborated with the University of Newcastle in conducting a research programme on the Green and Golden Bell Frog population on Kooragang Island. The programme involves rigorous monitoring during the breeding season, which is typically between November to March each year. Research continued during 2023 and aims to provide insight into population dynamics as well as other factors that may contribute to the persistence of the species on the island.

Our land management activities across our sites and land holdings focus on maintaining native biodiversity through effective weed management. Port Waratah conducts regular site inspections to identify and prioritise weed treatment as required and in accordance with the *Biosecurity Act 2015*.



CASE STUDY

LTO Hazard Guide

This year we launched our LTO Hazard Guide, with the aim of providing all workers with an easily accessible and simplified summary of the behavioural controls concerning seven critical LTO Hazards. These include material tracking, intrusive noise, offsite spills and discharges, dust generation, impacts to biodiversity, waste generation and hydrocarbons and chemicals.

While Port Waratah has a suite of physical and automated controls in place to minimise harm to the environment, the LTO Hazard Guide provides a checklist for workers about the behavioural controls that can be implemented to reduce risks, as well as high-risk settings for each of the hazards. The guide was designed to fit inside shirt pockets and Port Waratah's Take 5 booklet. It is also available online and features in work area signage onsite.



TOTAL WASTE 4,490t



CARRINGTON TERMINAL WASTEWATER: 2,486t

LANDFILL: 211t

Hazardous: 1t

Non-hazardous: 210t

Oily rags & absorbents: 1t

Bulk (skip) mixed waste: 136t

Other mixed waste: 74t

DIVERTED FROM LANDFILL: 1,793t

Hazardous: 1,208t

Oil, oily water & grease: 100t

Liquid waste: 1,104t

Solid hazardous wastes: 4t

Non-hazardous: 585t

Commingled, paper & cardboard: 12t

Metals: 569t

Timber/ greenwaste: 1t

Other: 3t

95.3% LANDFILL DIVERSION BEST EVER

annual diversion rate recorded by Port Waratah



For reporting purposes, one litre of liquid waste (for example, effluent, oil, chemicals) is taken to be one kilogram. All waste is diverted to local treatment facilities. Due to rounding numbers may not add up precisely to the totals and percentages provided. We monitor our waste-related data monthly. Carrington Terminal wastewater is classified as a hazardous material diverted for treatment and beneficial reuse.

Waste

Port Waratah's objectives of improved resource efficiency through waste segregation, waste minimisation, landfill diversion and recycling opportunities are core to improving our environmental footprint.

We engage with licenced waste management contractors to collect, safely manage and transport offsite waste materials generated in accordance with local legislative requirements. Our waste management contractors provide detailed feedback on the waste materials collected, including quantities and the treatment and disposal locations. These are regularly reviewed and verified through internal auditing.

In 2023, our waste target was to maintain our landfill diversion rate over 90 per cent. Pleasingly we achieved this target, recording a landfill diversion rate of 95.3 per cent, which is our best ever annual performance. We have now achieved a diversion rate of over 90 per cent for the past seven years. Supporting this landfill diversion rate was a 47.4 tonne (18.3 per cent) annual reduction in our waste disposed to landfill, which was 211.4 tonnes.

Wastewater removed from the Carrington Terminal generates the largest proportion of waste across our operations at 55 per cent of the total waste generated by Port Waratah. Wastewater collected is transported to and treated at local treatment facilities. Following the treatment process, water is reused for irrigation and industrial use, with remaining volumes returned to the environment. The biosolids produced from the treatment process are reused for mine site rehabilitation.

This year, no waste materials were received for disposal at our terminals or licenced waste facilities.

Climate action

This year marked the publication and first year of implementation of our Climate Action Plan 2023-2030. We have established a goal to reduce our net Scope 1 and Scope 2 (market-based) emissions by at least 50 per cent by 2030. The Port Waratah Climate Action Plan has four key themes, all with a set of actions that will contribute to continuous emissions reduction and achieving our 2030 goal.

We also developed a new corporate Climate Action Policy and revised our Energy and Emissions Management Plan in the documented framework to support the Climate Action Plan. A new dedicated webpage was launched as part of the Port Waratah website, where regular updates will be posted on our Climate Action Plan progress.

An Energy Efficiency Working Group was established to assess current and new opportunities to reduce electricity consumption, refine operational efficiencies and to improve system reliability. See case study on page 28.

A low-emission Light Vehicle Transition Strategy was also developed this year following a review of site vehicle requirements. The strategy provides the basis for Port Waratah to sustainably transition a proportion of our current vehicle fleet with low-emission or electric vehicles upon replacement. It also involves matching necessary EV charging infrastructure with electric vehicle numbers and where they will be utilised across the business.

This year we also announced a new electricity contract commencing in January 2024, which will boost efforts to reduce greenhouse gas emissions towards our 2030 goals. The new contract progressively increases our procurement of renewable electricity in the form of Large-scale Generation Certificates (LGC's), attributable to actual renewable energy delivered to the national grid.



CASE STUDY

Soft plastic recycling

Port Waratah made its first significant purchase of products manufactured from recycled soft plastics collected from our soft plastics recycling programme. We purchased 56 wheel stops, offsetting 1,290kg of soft plastic. The majority of these have been installed at the Carrington main entrance parking bay, with others installed at our Kooragang Terminal wharf.





CASE STUDY

Climate Action Working Group

One of the four key themes in Port Waratah's 2023-2030 Climate Action Plan is Continuous Improvement in Electricity Efficiency. To enable progress under this theme, we have convened an Energy Efficiency Working Group, championed by a member of our Senior Leadership Team. The group has commenced implementation on several small and large-scale electricity reduction initiatives, from adjustments to electrical room air conditioning and instant hot water taps to de-energising redundant equipment. A key enabling initiative for the working group is the development of a new energy dashboard, which will simplify existing site data providing a means to identify new improvement opportunities for the duration of the Climate Action Plan and beyond.

Energy and greenhouse gas (GHG) emissions

Grid purchased electricity comprises 98.7 per cent of the total energy consumed at Port Waratah and is primarily used to operate our site plant and equipment. A key performance metric used to measure our energy and emissions performance is the amount of electricity required to move each tonne of coal handled at our terminals.

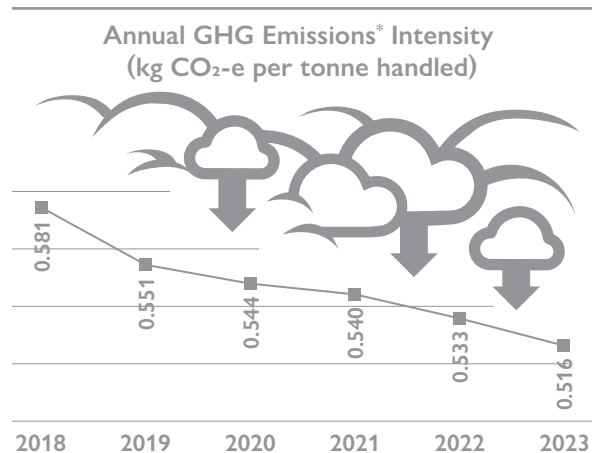
Our electricity efficiency target for 2023 was to improve upon the previous three-year average (2020-2022). This year was the second consecutive year during which annual tonnes exported through our terminals fell below forecast levels. This means a much higher proportion of electricity was consumed for ancillary purposes (the baseline consumption of electricity consumed irrespective of volumes), which adversely impacts overall electricity efficiency.

In 2023, our electricity efficiency of 0.6819 kilowatt hours per tonne of coal handled (kWh/t) exceeded our target by 1.23 per cent. This tonnes-driven decline in efficiency was equivalent to a 1.7 million kilowatt hour (kWh) increase in electricity consumption relative to the 2020-2022 average. Despite this outcome, when comparing annual electricity efficiency to the most recent year of similar throughput (2010), electricity efficiency at Port Waratah has improved by 5.42 per cent, or an equivalent reduction of 7.6 million kWh in electricity consumption.

Port Waratah's Scope 1 GHG emissions for 2023 were 433 tonnes of carbon dioxide equivalent (tCO₂-e), a 19.6 per cent (71 tCO₂-e) increase compared to 2018, which is our baseline year identified in our Climate Action Plan. The increase is attributable to an increase in site vehicle movements. Despite the increase in Scope 1 emissions, they contributed less than 0.5 per cent of our emissions total (Scope 1 and market-based Scope 2).

Scope 2 emissions contributed more than 99.5 per cent of Port Waratah's emissions profile in 2023. Market-based Scope 2 emissions, which we use to measure progress against our climate action goal, were 98,030 tCO₂-e, which is a 21 per cent reduction compared to the 2018 baseline year. Our location-based Scope 2 emissions were 98,741 tCO₂-e.

Emissions intensity, specifically our combined Scope 1 and market-based Scope 2 emissions per tonne of coal handled, was 0.516kg CO₂-e per tonne handled. This is an 11 per cent reduction compared to the 2018 baseline, and Port Waratah's lowest annual emissions intensity recorded to date. This was achieved through improved reliability and management of our assets and operational performance efficiencies, as well as an overall reduction in the emissions intensity of the electricity grid. Scope 1 emissions contributed just 0.002kg CO₂-e per tonne handled, with market-based Scope 2 emissions contributing 0.513kg CO₂-e per tonne handled.



2023 IS OUR LOWEST GHG EMISSIONS INTENSITY RECORDED

*Based on Port Waratah's calendar year Scope 1 and Scope 2 (market-based) greenhouse gas emissions data.

EMISSIONS

GHG Emissions (Scope 1 and market-based Scope 2) in 2023

98,463t

tonnes of carbon dioxide equivalent (tCO₂-e)

21% REDUCTION

IMPROVEMENT
COMPARED TO
2018 BASELINE

Reduction reflects combined Scope 1 and market-based Scope 2 GHG emissions.

ENERGY

Electricity consumption in 2023 was 130 million kWh
= 98.7% of Port Waratah's energy requirements

ELECTRICITY EFFICIENCY

0.6819 KILOWATT HOURS per tonne of coal handled (kWh/t)



EXCEEDED
THE 2020-2022
THREE-YEAR AVERAGE
TARGET BY 1.23%

HOWEVER THIS
PERFORMANCE IS
5.42% BETTER
THAN 2010,
WHICH IS THE MOST RECENT YEAR
WITH SIMILAR OPERATIONAL VOLUMES