

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.

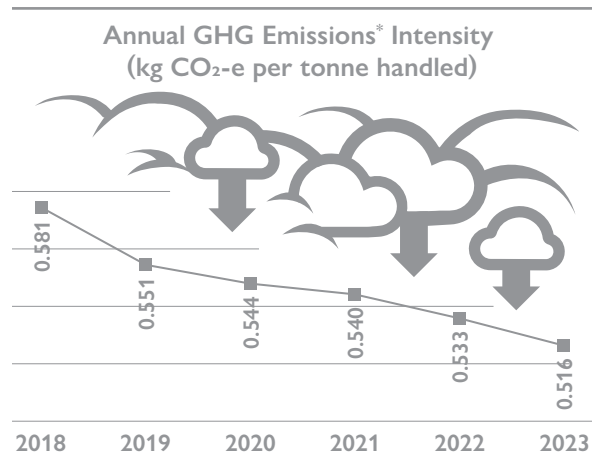
Our electricity efficiency target for 2023 was to improve upon the previous three-year average (2020-2022). This year was the second consecutive year during which annual tonnes exported through our terminals fell below forecast levels. This means a much higher proportion of electricity was consumed for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