

COMMITMENTS IMPROVEMENTS UNDERSTANDING

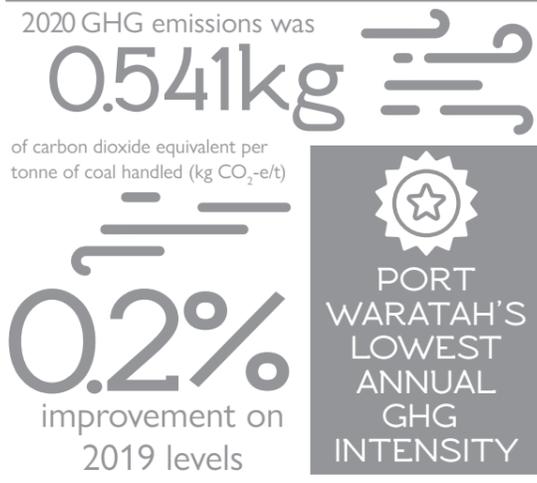
Our environmental footprint describes the demand on the capacity of the natural resources and environment in which we operate. We reduce this demand through identifying and implementing improvements to use electricity and potable water more efficiently, generating less waste and diverting more from landfill, as well as enhancing onsite biodiversity and improving land use practices.

Energy and emissions

Almost 99% of the total energy consumed at Port Waratah is from grid purchased electricity, which is required to operate our plant and equipment. In 2020, we made the switch to an electricity provider that generates 95% of their energy from renewable sources. Improving our energy and emissions performance requires us to reduce the amount of electricity required to move each tonne of coal handled at our terminals. Our target for 2020 was to improve upon our 2019 electricity efficiency (our best year recorded). Unfortunately, our electricity efficiency was 0.4% behind our 2019 performance. Pleasingly however, our all-time top four months for electricity efficiency were recorded in 2020.

Our energy consumption and greenhouse gas (GHG) emissions are reported each financial year to the Australian Federal Government through the National Greenhouse and Energy Reporting (NGER) Scheme.

Our overall Scope 2 emissions reduced by more than 8,900 tonnes of Carbon Dioxide equivalent (CO₂-e) an improvement of 4.3% compared to 2019. Adjusted for total coal handled, we saw an improvement of 0.2% to 0.541kg CO₂-e per tonne handled, which is our lowest annual GHG intensity. GHG emissions calculations are based on our Scope 2 GHG emissions resulting from the electricity consumed, which includes carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Our data is publicly available via the Clean Energy Regulator's website and is used to meet international reporting obligations, inform government policy and provide information for government programmes and activities.



REDUCING OUR ENVIRONMENTAL FOOTPRINT

We're committed to reducing our demand on the environment in which we operate

Land use and biodiversity

Both of our terminals are situated in areas of rich industrial history and adjacent to areas of significant ecological importance. Immediately adjacent to the 2.1km² Kooragang Terminal is the Hunter Wetlands National Park and the internationally recognised Hunter Estuary Wetlands Ramsar site. The wetland supports 45 species of migratory birds listed under international agreements and more than 110 species of waterbirds.

Our Land Management Strategy encompasses all managed sites, with a focus on enhancing areas of biodiversity value within our property boundaries. Weed management is a primary focus, targeting regional strategic weed species, such as Pampas grass, Groundsel bush and Lantana.

Throughout 2020, it was pleasing to note that several work activities at the Kooragang Terminal successfully implemented our Green and Golden Bell Frog (GGBF) Management Plan ensuring our activities do not impact upon the welfare of the local GGBF population. One of these projects managed to relocate more than 30 GGBF in a single pre-clearance survey, with the assistance of a specialist ecologist.

Potable water consumption

The use of water at Port Waratah is a key component in nearly all aspects of our operations. Stored water is used preferentially for operational activities, such as dust suppression, with potable water, purchased from Hunter Water, used for amenities and to top up supplies when there is insufficient water available onsite. We aim to improve our potable water efficiency and reduce the overall volume of potable water used for operational purposes.

At the start of 2020, severe dry conditions continued across the Region, with Level 1 escalating to Level 2 water restrictions in January. We worked with Hunter Water in refining and implementing Water Efficiency Management Plans for our terminals. Thankfully for the Region, regular rainfall returned from February, replenishing supplies and easing demand pressures for households and industry.

Our target was to reduce our potable water consumption compared to the previous three-year average (2017-2019). With the return of regular rainfall, this target was easily achieved with potable consumption reducing 40% to 1.96ML per day, or by 476ML for the year. For the Kooragang Terminal, potable consumption in 2020 was the lowest recorded with its fully expanded capacity (since 2013), and the Carrington Terminal recorded its second lowest annual consumption in 12 years.

In 2020, we reviewed several aspects of our water management system operating philosophies and adjusted how and when water is stored and transferred in the system. This has significantly increased the efficient reuse of water at the Carrington Terminal.

ENERGY



CONSUMED
0.6686
KILOWATT HOURS
per tonne of coal handled (kWh/t)

2nd best annual performance for electricity efficiency



141,716 MWh consumed in 2020 is our **lowest annual consumption since 2011**

ELECTRICITY EFFICIENCY

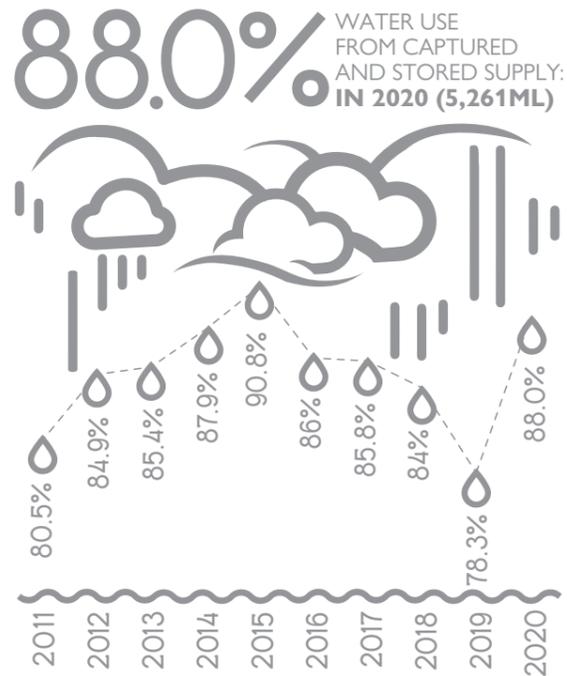


7.3%
IMPROVEMENT
over the past 10 years

Equivalent to saving **9,984,896 kWh** compared to 2010. That's enough electricity to power more than 1900 Newcastle households for a year*



*Based on Ausgrid average electricity use 2018/2019
<https://www.ausgrid.com.au/Common/About-us/Corporate-information/Data-to-share/Average-electricity-use.aspx>



Effluents and waste

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

Our target to reduce the amount of waste sent to landfill compared to the previous year was achieved, with a 3.5% reduction against 2019 totals. We also managed to improve our landfill diversion and recycling rate by 0.8%.

We managed to secure a sustainable solution to a problematic waste item, steel cord conveyor belts. Through a locally based agent, we found a sustainable end use for used conveyor belts in regional agriculture markets and in small quarry operations in India.

Waste effluent pumped from the Carrington Terminal Sewage Treatment Plant generates the largest proportion of waste at our sites. In 2020 it totalled 2,434t, or 54.6% of the total waste generated by Port Waratah. Effluent collected is transported to and treated at local Hunter Water treatment plants. Following the treatment process, water is re-used for irrigation and industrial use, with the remaining volume returned to the environment. The biosolids produced from the treatment process are reused for mine site rehabilitation.

During 2020, no waste materials were received at our terminals or licenced waste facilities. We did record two hydrocarbon related spills of oil from our Shiploaders at the Kooragang Terminal in March and December (see pages 26 and 27).

Material tracking

We recorded three events where sediment material from our site was tracked onto public roads from vehicles leaving site. On each occasion we endeavoured to remove as much material as possible from the events, using appropriate tools or street sweepers. We have undertaken employee and contractor education to highlight the need for personnel to check their vehicles for material prior to leaving site and are in the process of establishing more wash bays around site to increase vehicle cleaning opportunities.

Plastic Police Programme

Our War on Waste Team introduced the Plastic Police programme across the organisation in June 2020, encouraging an active waste culture at work and home. Soft plastic waste is collected throughout the business, with employees investigating ways to reduce soft plastic packaging and other sources in the workplace.

Since that time, 157 kilograms of soft plastics has been collected and diverted from landfill. This is equivalent to 39,175 plastic shopping bags and if you lined them up, they would stretch more than 12 kilometres.

The next stage of the process is to buy back some items that have been made from our plastic waste. This could include a park bench, wheel stops for our car parks, bollards, signs or road base.

Our actions are helping to stem the tide of plastic pollution and unnecessary use of soft plastics.

CASE STUDY

93% LANDFILL DIVERSION

Waste diverted from landfill for recycling or treatment at licenced facilities



1,319 tonnes of hazardous waste



391 tonnes of non-hazardous waste

TOTAL DIVERTED OF

4,144 TONNES



2,434 TONNES

of waste effluent pumped from the Carrington Terminal

WASTE DISPOSED INTO LICENCED LANDFILL FACILITIES

298 tonnes of non-hazardous waste

11 tonnes of hazardous waste



TOTAL OF **309 TONNES**

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.