



EnergyAustralia
LIGHT THE WAY

EnergyAustralia Yallourn
**Social and Environmental
Performance Summary 2022**



A Message from the Head of Yallourn

The following report provides the detail to the social and environmental performance of EnergyAustralia Yallourn operations for 2022. 2022 has been a tough year for all of us at the Yallourn Power Station and Mine. The reliability of the power station has been a challenge as we dealt with multiple forced outages which led to a reliability factor of only 67%. But we have a plan to rectify this with the Board granting us a budget for 2023 and 2024 in excess of \$400m, to enable us to undertake an overhaul of each of the units to get a degree of reliability back.

Safe, Reliable, Predictable Capacity is our goal.

Investment in both the power station and the mine has continued with the completion of a minor outage on Yallourn Unit W4 – which engaged up to 400 people on site to complete the work, while at the same time keeping people safe. We remained committed to our procedures in regard to COVID and remaining vigilant minimised the exposure at Yallourn. Over \$85m has been invested in understanding and rectifying the stability of the Morwell River Diversion, and in 2022 that work has been completed to ensure that the structure will continue to remain stable for the balance of life, and meet the requirements and expectations of the business, the community and the regulators. Ongoing maintenance of the Morwell River Diversion is part of our work program this year and beyond.

Progressive rehabilitation of the mine has continued and future plans developed to support the activity required for the mine to be ready for final rehabilitation when mining ceases in line with the closure of Yallourn. This has included establishing a new work stream within our organisational structure to manage the future rehabilitation of the site, to create value for the community and future generations. At Yallourn we continue to employ new roles and maintain our current workforce.

Our Health, Wellbeing and Safety Improvement Plan was active during 2022 and safety remains our primary focus for supporting our workers, their families, our contractors and visitors, with a multitude of improvements recognised and implemented over the year, and a new plan to go forward with in 2023.

Our Community Grants and Sponsorship programs continued to support many good causes throughout the district and our Workplace Giving program realised significant funding for the People's Kitchen (a community service run by Morwell Neighbourhood House) during 2022, including our team members volunteering at the Kitchen on numerous occasions during the year. We also provided support for numerous clubs and events during the year and continue to do so now and into the future.

I trust that the full information on these activities and others that is contained in this report will continue to provide you with insight into our business, our management of our environmental obligations, and our continued support of the community and our workforce. All of which makes a positive impact, given the dedication and diligence of the team at EnergyAustralia to assure a responsible transition to the future.



Greg McIntyre
Head of Yallourn



Our Performance at a Glance

In 2022, our safety and environment systems performance at a glance shows:

| DESCRIPTION | RATING | COMMENTS | MEASURED AGAINST |
|--|--------|--|------------------|
| How we do business | | | |
| All Planned Audits Completed | ★★★ | Target not achieved | Internal |
| External Environmental Management System Audit | ★★★★★ | Certification maintained to ISO 14001 | External |
| External Safety Management System Audit | ★★★★★ | Certification maintained for OHSAS 18001 | External |
| Our Operations | | | |
| Coal Rate | ★★★★★ | Target achieved | Internal |
| Coal Supply Reliability | ★★★★★ | Target achieved | Internal |
| Electricity Sent Out | ★★★ | Target not achieved | Internal |
| Our Employees | | | |
| Training – Safety, Health and Environment | ★★★ | >90% Target not achieved | Internal |
| Employee Availability | ★★★ | Target achieved | Internal |
| Our Safety and Health | | | |
| Prosecutions Safety | ★★★★★ | No prosecutions received for safety | External |
| Prosecutions Environment | ★★★★★ | No prosecutions received for environment | External |
| Emergency Response Exercises | ★★★★★ | 100% completion to plan | Internal |
| Safe Work Observations | ★★★★★ | Target not met for June or September | Internal |
| Hazardous Material and Storage Assessments | ★★★ | >80% Target not achieved | Internal |
| Lost Time Injuries | ★★★ | Zero target not achieved | Internal |
| Total Injury Frequency Rate | ★★ | Target not achieved | Internal |
| WorkSafe Improvement Notice (PIN) | ★★ | 4 WorkSafe improvement notices received | External |
| Our Environment | | | |
| Wastewater Volume and Quality Discharge | ★★★★★ | Exceeded target and met EPA licence | External |
| Net Water Consumed | ★★★ | Met External Requirements | Internal |
| Land Rehabilitated | ★★★★★ | Met internal performance target | Internal |
| Topsoil Stockpiled | ★★★★★ | Met internal performance target | Internal |
| Greenhouse Gas Emissions Intensity | ★★★★★ | Met internal performance target | Internal |
| Sulphur Dioxide Emissions To Air | ★★★★★ | Met internal performance target | External |
| Oxides of Nitrogen Emissions To Air | ★★★★★ | Improved performance trend | External |
| Carbon Monoxide Emissions To Air | ★★★★★ | Improved performance trend | External |
| PM<10um Dust Emissions To Air | ★★★★★ | Met internal performance target | Internal |
| EPA Licence Breach | ★★ | 2 Licence Breaches | External |
| Public Enquiries | ★★★★★ | 4 enquiries received | Internal |

- ★★★★★ Exceed Internal Performance Indicator or Improved Performance
- ★★★★ Achieved Internal Performance Indicator or Improving Performance Trend
- ★★★ Met External Requirements or Worsening Performance Trend
- ★★ Not Met External Requirements or Internal Performance Indicator
- ★ Infringement Notice, Prosecution, Penalty or Contractual Breach



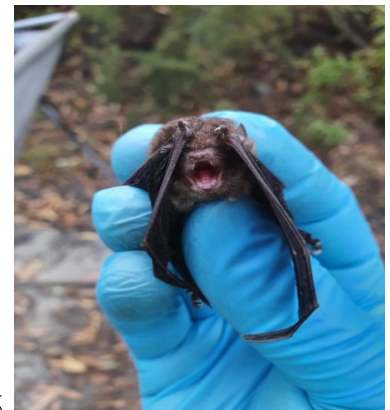
Sustainable Business Operation

Production

- Yallourn production targets met.

Water

- Rainfall across the region in 2022 (794 mm) slightly decreased by 2.8% from 2021 levels.
- Latrobe River water consumption of 25,791 ML is 70% of the annual Bulk Water Entitlement of 36,500 ML which is a 8% increase compared with 2021.
- The water consumption rate was 3.04 megaliters/giga watt hour (ML/GWh) generated, which was above the internal business target for water use of <2.7 (ML/GWh).
- Wastewater quality was compliant with EPA Licence conditions (including: colour, suspended solids, total dissolved solids, electrical conductivity, turbidity and pH).
- Treated wastewater discharged to the Morwell River was 16,792 ML and represented 57% of the EPA Licence wastewater volume limit of 29,383 ML.
- Wastewater discharged to Morwell River at an average daily rate of 43 ML/day over the financial year were below the annual daily mean licence limit of 80.5 ML/day and maximum daily rate of 91 ML/day.



Chocolate Wattled Bat—caught by harp trapping during a fauna survey

Land

- Completed 34.8 hectares of mine rehabilitation, exceeding the planned rate of 30 hectares for the year.
- Achieved target to rehabilitate more land than disturbed by mining.
- Throughout 2022 the active exposed coal face was reduced for the sixth consecutive year to decrease the risk of dust and fires occurring.

Air

- Average particle emissions of 0.08 g/m³ is consistent with 2021. It remains below the annual business target of 0.1 g/m³ and well below the EPA license limit of 0.22 g/m³.

EPA Licence Compliance

- EPA are transitioning Environmental Protection Licences administered under the old Act to Operating Licences. EPA are currently developing the platform for reporting under the Permission Information and Performance Statements (PIPS) which has replaced the Annual Performance Statements (APS). While this transition is occurring, the reporting method for compliance data will be requested by the EPA and made publicly available on the EPA website.

During 2022, there were two events assessed as being non-compliant with the EnergyAustralia Yallourn Operating Licence:

- On July 21st there was a minor exceedance of the sulphur dioxide (SO₂) bubble limit of 100,000 g/min. SO₂ emissions are directly linked to coal quality and during this incident, coal containing higher concentration of sulphur had been mined and fed to the station with all four units operating.
- On December 7th there was a minor exceedance of the dust concentration limit of 0.22 g/m³ for a short 30 minute duration caused by abnormal adverse operating conditions and a dust control unit being out of service for maintenance. During the event, the total particle mass emissions rate of 9,326 g/min was well below the maximum permitted bubble limit of 24,100 g/min.

Community Engagement

- The Environmental Review Committee (agencies and community stakeholder group) met three times - in February, May and November - to review environmental performance. A planned meeting in August was cancelled due to critical activities being undertaken in the mine, with information on environmental performance provided to all ERC members.
- Sponsorship was provided to Latrobe Landcare Network for community-based conservation projects. This involved funding for the protection of Platypus habitat in Narracan Creek and Morwell River.

Power Station Asset Program 2022



Look out on the 17th Floor from the station to the mine

Each of the four Yallourn operating units has a planned major outage every four years and also integrity outages to inspect and manage critical items between one and two years prior to a major outage. There are also nominally two minor outages per unit per year. There was one integrity outage on Unit 4 planned for calendar year 2022, and essential maintenance was conducted during a number of minor outages on all units.

During normal operation, much of the plant associated with running the units is operating continuously 24 hours per day, seven days per week and, as would be expected, these plant items slowly wear or degrade. This can mean, for example, steel ductwork through an erosion process becomes thinner to the point where holes can appear. Mechanical rotating items wear, causing clearances between components to become larger, potentially reducing the efficiency of these machines. Heat exchangers can become less efficient due to a build-up of solids on the heat conducting surfaces. During a major outage many of these issues are addressed. Outages also present an opportunity for modification or retrofitting works that can further increase the performance and efficiency of the plant beyond the original design levels.

Key works completed during minor outages:

- Rotary air heater pack inspections;
- Boiler outlet ductwork inspection/repair including expansion joint replacement;
- Combustion plant inspections and repairs;
- Inspection and overhaul of pumps and valves across the plant;
- Electrostatic Dust Precipitators (EDP) checked to ensure that the electrodes and collecting plates were correctly aligned to help ensure optimum efficiency;
- Boiler tubes inspection and replacement program;
- Boiler internal cleaning to restore boiler efficiency;
- Generator and generator transformer inspections.

2022 Integrity Outage

An outage or plant shutdown is an opportunity to carry out inspections, repairs and modifications to the operating units that cannot be done under normal operating conditions.

Work carried out during the 2022 Unit 4 integrity outage included:

- Rectifying air ingress issues into the condenser so that the turbine efficiency was improved;
- Rectifying many leaks in ducts associated with the main firing plant so that the combustion process would be improved and induced draft fans could operate at a lower load, saving electricity used in the power station;
- On many pumps, the clearances between rotating parts were brought back to design values making these pumps operate more efficiently;
- Turbine safety valves are stripped, inspected and rebuilt to ensure the main turbine protection regime is fully operational;
- Electrostatic Dust Precipitators (EDP) were checked to ensure that the electrodes and collecting plates were correctly aligned to help ensure optimum efficiency;
- Many different types of heat exchangers were inspected, cleaned and tested to ensure they would operate at the required efficiency;
- Insulation and cladding was replaced in places to minimise heat loss;
- The boiler and associated tubes were inspected and where necessary sections were repaired or replaced;
- The boiler was thoroughly cleaned to ensure heat exchange processes would occur as required, maximising efficiency.

Climate Change

The Yallourn Power Station generates enough electricity every day to supply 2 million Australian homes. More than 500 people work at the plant and it spends millions of dollars every year with local businesses.

The Yallourn Power Station's efficiency is the highest recorded for the last ten years and annual greenhouse gas emissions are the lowest on record since 1990.

We have committed to Australia's transition to net zero emissions with cleaner, reliable and affordable energy for our customers. On 23rd September 2021 EnergyAustralia launched an update to our Climate Change Statement with three main targets:

- To reach net zero greenhouse gas emissions by 2050;
- To reduce our direct carbon dioxide emissions by over 60% on 2019-2020 levels in 2028-2029; and
- To transition out of coal assets by 2040.

EnergyAustralia remains dedicated to the sustainable operation of Yallourn Power Station prior to the closure in 2028.

For financial year 2022, there was a 2.8% reduction of Scope 1 direct emissions compared with financial year 2021 and corresponds with a decrease in coal consumption and power generation.



Mantis Orchid (Photo by W Doherty)

Mine Development

Development of Yallourn Mine continued in a south-easterly direction into Maryvale Field for all coal operations and overburden removal activities. Coal supply to the power station was maintained via the two-level coal system, with two feeder breakers operating on each coal level.

Overburden operations have continued via Dredger 13 and the fixed overburden system, supported by the overheight truck and shovel operation during the summer period. Approximately 2.1 million cubic meters was removed by the truck and shovel operation and 3.0 million cubic meters removed by dredger in 2022 with the majority being conveyed to the East Field Overburden Dump and Maryvale Field Floor. A significant amount of overburden is used annually to support the mine's geotechnical stability and environmental programs for activities including buttressing and weight balance, coal coverage for fire prevention and dust control, and progressive rehabilitation in accordance with the approved the Rehabilitation and Closure Plan.



D13 and S95 link conveyor removing overburden in Maryvale Field



Strategic overheight dumping in Maryvale Field for coal coverage, weight balance against groundwater pressures, and buttressing coal batter adjacent Morwell River

Mine Closure & Rehabilitation Planning

Best practice internationally and nationally for mine closure is to undertake closure planning and progressive implementation during mine operations. As such, Yallourn is actively reviewing its mine closure planning and implementation throughout its operational mine life.

The development of a conceptual Rehabilitation and Closure Plan (RCP) was completed in 2018. It presented a flooded mine concept as the preferred final landform. The RCP was submitted and approved by Earth Resources Regulation (ERR) as part of the 2018 Work Plan Variation.

In 2022, EnergyAustralia Yallourn progressed a number of technical studies in order to demonstrate that the mine will be “safe, stable, non-polluting and sustainable” in the long term, and provide information to enable the development of defensible closure designs. These include:

- Preliminary closure water balance study, to assist in understanding water flows, storages and deficits over the long term.
- Geotechnical batter stability modelling under a variety of end land conditions:
 - Empty void;
 - Partial pit lake;
 - Full pit lake.
- Hydrogeological modelling to provide an understanding of:
 - Floor heave/ weight balance over the long term;
 - Long term groundwater flow conditions;
 - Inputs into the batter stability project;
 - Inputs into lake quality studies.
- Investigation into the geochemical qualities of material placed within the Township Field and East Field overburden dumps and ash deposits, which will provide an understanding of:

- Inputs into the lake quality studies;
- Define the requirement, or not, for an engineered cover for the material in the Township Field Overburden Dump.

- Pit Lake Water Quality Modelling that will eventually provide an indication of water quality over time for a pit lake rehabilitation scenario.
- Review of the Surface Water Management Plan, which aims to link site operational surface water management with closure planning and long-term management needs.
- Self-heating assessments of the Yallourn Mine coal to better understand future fire risk following cessation of operations.
- Preliminary erosion assessment to inform slope angles and batter stability as part of the final landform design.

Additionally, EnergyAustralia Yallourn commenced works to develop a Geotechnical Management Strategy for Mine Rehabilitation considering the key principal inputs:

- Risk Exposure & Management
- Local Geological & Hydrogeological features
- Historical & Current Stability performance
- Potential/Intended future land use

Throughout 2022, EnergyAustralia Yallourn continued to work closely with the Mine Land Rehabilitation Authority (MLRA) and the other Latrobe Valley Coal Mines with regard to mine closure and rehabilitation planning.

Furthermore, EnergyAustralia Yallourn submitted feedback on the proposed updates to the Declared Mine Regulations, which were finalized and published in Q4 2022 as well as commenced drafting the Yallourn Declared Mine Rehabilitation Plan, which is due in 2025.

Mine Progressive Rehabilitation

The progressive rehabilitation program continued in compliance with the Mineral Resources Sustainable Development Act 1990, Work Plan, Risk Assessment Management Plan and internal business requirements, completing 34.5 hectares of new rehabilitation against a disturbance of 7.8 hectares. This is the 18th consecutive year in which the Yallourn Mine has rehabilitated more land than the annual disturbance. Refer to the figure on page 8 for the historical annual disturbance and rehabilitation trends.

Progressive rehabilitation is an environmental key performance indicator as works primarily reduce the coal footprint, limiting exposure to fire and dust. Once coal is covered by site overburden material, vegetation is essential to protect the cover from washing or eroding away. Vegetation profiles differ depending on where the rehabilitation is taking place. In some cases, normally on steep areas, we spread topsoil to allow successful vegetation growth. However, on flatter areas native vegetation or grassy profiles can be established directly on overburden. The sum of progressive rehabilitation environmental benefits includes lower fire risk, reduced dust emissions, improved water quality, increased habitat area, and a more visually appealing landform.

We are continually exploring ways to integrate the operational mine development with the final rehabilitation flooded lake plan. During 2022, further progressive rehabilitation improvements were made to the mine design and operation with strategic overburden dumping for mine stability and coal coverage the major focus.

Summaries of the individual progressive rehabilitation projects completed during 2022 are found on page 9.

Mine Progressive Rehabilitation Continued

2022 Rehab Area 1: Interim stabilisation of the East Field Overburden Dump

The East Field Overburden (EFOB) Dump is a storage for the largely sandy material which is mined out above the coal. The EFOB Dump provides approximately 32 metres of vertical coal coverage and is growing at approximately 30 hectares of surface area each year. This significantly lowers risk from coal fire and, if planned correctly, can make the post mining landform more stable. During 2022, progressive rehabilitation of the EFOB Dump included a 25.5 hectare section of native while also providing water quality benefits by primarily limiting erosion.

2022 Rehab Area 2: East Field Extension Southern Batter

There is a large truck and shovel overhead dump located in the south-east corner of East Field Extension which has been built up over the last four years. A flat section to the east of this dump has recently been completed so it was essential to stabilise the material. In 2022, 3.3 hectares was shaped and rehabilitated with grass which has successfully stopped this landform from eroding. As more overhead dump becomes available in future years it can be progressively rehabilitated and stabilised.



East Field Overburden Dump



East Field Extension Southern Batter

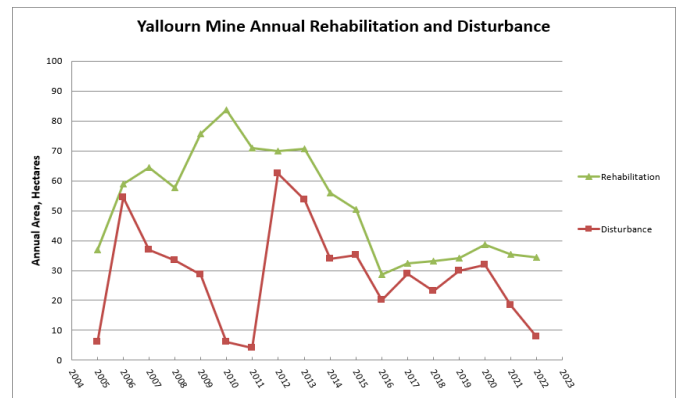
Rehabilitation Performance

Landscape Function Analysis (LFA) surveys continued this year with surveys conducted across 27 transects within rehabilitated areas of the mine including 11 transects in the Northern Overburden Dump, 8 transects in the Southern Overburden Dump and the remaining transects in rehabilitated batters around the mine.

The assessed transects in the established areas of the Northern and Southern Overburden Dumps show that the average patch size of the transects have increased slightly with improvements observed in landscape function. Landscape function improvements have been observed in the stability, infiltration and nutrient cycling indices with general increases observed in litter cover, cryptogam cover and soil surface resistance. The Southern Overburden Dump direct seeding transects continue to record improvement in landscape function with significant increases observed in patch size with corresponding improvement observed in soil cover and cryptogam cover, and these transects remain comparable to results observed for Northern Overburden Dump direct seeding transects at the same point in time.

The assessed transects on the rehabilitated batters of the East Field Extension Batters and Yallourn North Open Cut Batters recorded increases in patch size. This increase in patch size has translated into improvements observed in the landscape function indices of stability, infiltration and nutrient cycling through observed increases in soil cover and litter cover.

The landscape function results for the entire site have recorded improvements on last years and the average weighted soil surface assessment results for rehabilitated land have increased slightly to remain above the peak observed in 2015-2016.



Mine Progressive Rehabilitation Continued

Shown below is a Geographical Information System (GIS) representation of the key Yallourn Mine rehabilitation and disturbance areas including:

- Total Area Worked;
- Total Area Rehabilitated;
- Annual Rehabilitation for 2022;
- Total Area Water Bodies.

Environmental conditions within the mine are vastly improved through the progressive rehabilitation program. The program has continually diminished the coal footprint which assists in reducing key environmental risks such as dust and fire.

Further to minimising the area of exposed coal, stabilising areas disturbed by mining prevents erosion and sediment from entering the drainage network and storage ponds. Through progressive rehabilitation, the quality of runoff water has significantly improved. Turbidity, a measure of water cloudiness, has continually decreased at the main water collection point of Yallourn Mine, the Fire Service Pond. This shows the water quality benefits of progressive rehabilitation.



Mine Rehabilitation and Disturbance Areas

Yallourn Morwell River Diversion

The Yallourn Mine Morwell River Diversion (YMRD) suffered damage and cracking following a significant flood event on 9 June 2021. The YMRD Recovery Project was then commenced to construct water diversions to enable the mitigation of risks of any further floods and investigation and repair of the YMRD. Since July 2021, the project has progressed approval and construction of a total of 9.5GL/d of flood diversion capacity including a 3GL/d upstream diversion at Engie Hazelwood mine. The key diversion at Yallourn is a cofferdam and pumps and pipes with the capability to pump the normal flow of the Morwell River bypassing the YMRD to the Latrobe River. In mid-January 2022, dewatering of the YMRD was achieved for geotechnical inspection and commencement of necessary repairs. Repairs to the YMRD have now been completed involving low flow and high flow channel re-lining and re-compaction works. Since then, the cofferdam has been removed in a section to allow flood flows to pass through. This therefore means that the Morwell River flows no longer require physical bypass using pumps, pipes and other diversions however the remaining infrastructure will remain in place to safeguard any future event from impacting the operation.



Engie diversion completed and activated 4 March 2022



Cofferdam and Bypass Pump System construction continues

Ash Management

Ash is a solid by-product of the coal combustion process in which Yallourn typically produces over 200,000 cubic metres of material each year. This ash material is mixed with water and pumped from the Yallourn Power Station to the Twin Ash Pond storage facility where it is drained, excavated and placed in the Yallourn Ash Landfill. The Yallourn Ash Landfill, Twin Ash Ponds and return water basin are all located within the previously mined void of the Yallourn North Open Cut. Ash activities can pose environmental risk if mismanaged, therefore ashing activities are subject to strict EPA regulation, licence conditions and external environmental audit requirements.

The Twin Ash Ponds are ash storage facilities that allow wet ash to drain, dry, and ultimately be removed through mobile plant excavation and haulage. Due to groundwater contamination risks, the Twin Ash Ponds are fully lined with HDPE plastic, a layer of sand and various operational controls to maintain liner integrity.

The Yallourn Ash Landfill receives dry ash from the Twin Ash Ponds. If unmanaged, environmental hazards from the Ash Landfill may include dust and contamination of surface and groundwater. Interim capping, rehabilitation and revegetation works minimize the dust footprint, while a sophisticated network of groundwater bores allow monitoring and control of any water contamination.

During 2022, 253,430 cubic metres of ash material was managed without licence breach or increased environmental risk.

As required by the EPA Licence, EPA appointed external auditors have reviewed the ash facility management since 2011. The latest audit was completed in October 2020, with the overall environmental risk deemed low and eight recommendations for improvement made by the EPA appointed auditor. Currently, seven of these recommendations have been completed with one remaining recommendations to be completed in the future.

Once operations cease at the Yallourn Power Station, ash will no longer be produced and the site will be rehabilitated to minimize ongoing environmental risk. EnergyAustralia Yallourn submitted an Ash Landfill Rehabilitation and Closure Plan to the EPA in December 2021 to demonstrate how short and long-term environmental risks will be controlled.

Brown Coal and Ash Developments

The Latrobe Valley, including Yallourn Power Station and Mine, is home to a very large resource of brown coal. While high in moisture, brown coal is well suited to a variety of non-power station uses, for example, the manufacture of fuels and chemicals, including hydrogen. In addition, a by-product of coal-fired power generation is ash, which in the case of Yallourn is high in minerals such as magnesium and iron and has the potential to produce high value products.

EnergyAustralia continues to work with a number of companies that are investigating these non-power station uses of brown coal and ash, using efficient technologies that have the potential to deliver environmentally sustainable projects that would underpin significant investment and jobs for the Latrobe Valley.

EnergyAustralia is supporting a project being developed by Latrobe Magnesium to recycle fly ash from Yallourn to initially manufacture 1000 tonnes per annum of magnesium plus other saleable by-products such as a supplementary cementitious material (SCM), with plans to substantially increase production to 10,000 tonnes of magnesium following the successful operation of the initial plant.

Magnesium is a light and strong metal that has a variety of applications, including use in the car industry to make cars lighter and more fuel efficient, thereby reducing carbon emissions.

Latrobe Magnesium commenced construction of the initial \$40 million plant in 2022, which is expected to be operational late 2023 and will create up to 50 on-going direct jobs.

In addition, EnergyAustralia is providing coal to Environmental Clean Technologies' (ECT) demonstration drying plant (Coldry). ECT has developed and is developing a number of technologies for low-energy, net zero emissions drying of coal and subsequent processing into high value products, including hydrogen.



Eastern Whipbirds recorded in block 28



Short-beaked Echidna recorded in block G

Conservation Management

The Yallourn Conservation Management Plan (CMP) incorporates the offsetting of native vegetation losses caused by mining and protection of native vegetation within the Mining Licence area. There are three major approvals within the CMP which include the:

- Yallourn Mine Conservation Management Plan (2005);
- Offset Plan – Yallourn Coal Field Development Maryvale Field Eastern Extension (2009); and
- Environment Protection and Biodiversity Conservation Act (EPBC) Approval 2008/4454 and accompanying Offset Management Plan (2011).

As a subset of the EPBC approval, EnergyAustralia Yallourn gained various additional approvals including three Land Owner Agreements and one Crown Land Licence with the Department of Environment, Land, Water and Planning (DELWP). These approvals allow protected Strzelecki Gum habitat to be managed in accordance with Federal and State native vegetation requirements.

Whilst the CMP encompasses various approvals and licences, the primary aim is to improve the quality and size of native vegetation by protection, revegetation and enhanced management. Furthermore, the 2022 program included significant campaigns of weed control maintenance and improvement and Pest Management.

Yallourn Mine planted a total of 11,650 seedlings in 2022 of which the majority were placed within offset conservation zones and habitat improvement areas.

Yallourn Mine Conservation Plantings completed for 2022

| BOTANICAL NAME | COMMON NAME | TOTALS | BOTANICAL NAME | COMMON NAME | TOTALS |
|-------------------------------|------------------------|--------|----------------------------------|--------------------|---------------|
| <i>Acacia dealbata</i> | Silver Wattle | 590 | <i>Eucalyptus viminalis</i> | Manna Gum | 365 |
| <i>Acacia mearnsil</i> | Black Wattle | 175 | <i>Goodenia ovata</i> | Hop Goodenia | 220 |
| <i>Acacia melanoxylon</i> | Blackwood | 325 | <i>Grevillea juniperina</i> | Prostate Grevillea | 10 |
| <i>Acacia paradoxa</i> | Hedge Wattle | 485 | <i>Gynatrix pulchella</i> | Hemp Bush | 450 |
| <i>Acacia stricta</i> | Hop Wattle | 150 | <i>Hardenbergia violacea</i> | Purple Coral Pea | 5 |
| <i>Acacia verticillata</i> | Prickly Moses | 960 | <i>Juncus gregiflorus</i> | Green Rush | 600 |
| <i>Banksia marginata</i> | Silver Banksia | 175 | <i>Juncus pallidus</i> | Pale Rush | 600 |
| <i>Carex appressa</i> | Tall Sedge | 600 | <i>Kunzea ericoides</i> | Burgan | 925 |
| <i>Cassinia aculeata</i> | Common Cassinia | 625 | <i>Leptospermum continentale</i> | Prickly Tea-tree | 1450 |
| <i>Cassinia longifolia</i> | Shiny Cassinia | 60 | <i>Ozothamnus ferrugineus</i> | Tree Everlasting | 340 |
| <i>Eucalyptus obliqua</i> | Messmate | 345 | <i>Pomaderris aspera</i> | Hazel Pomaderris | 570 |
| <i>Eucalyptus radiata</i> | Narrow-leaf Peppermint | 200 | <i>Pultenea gunnii</i> | Golden Bush-Pea | 335 |
| <i>Eucalyptus Rubida</i> | Candlebark | 150 | <i>Solanum aviculare</i> | Kangaroo Apple | 405 |
| <i>Eucalyptus strzeleckii</i> | Strzelecki Gum | 535 | | | |
| Total | | | | | 11,650 |

On the 10th June 2021, a sudden and significant high-flow event impacted EnergyAustralia's Yallourn Morwell River Diversion (YMRD). Investigations were subsequently carried out whereby cracking in the MRD was discovered. Following a geotechnical investigation assessing the scope of the damage, EnergyAustralia proposed a temporary cofferdam upstream of the Morwell River and connection of pipeline to divert water flows around this short, damaged section of the MRD so that the repairs could be affected. These works are known as the MRD Onsite Diversion project.

The works are planned to occur within areas that were providing offsets for an EPBC Act approval. Because of this impact, a revision to the approved EPBC Offset Plan has been completed. This revision is approved by the Department of Agriculture Water and the Environment which ensure no net loss of EPBC listed species.

Fauna Monitoring

Fauna monitoring programs continued throughout 2022 with vertebrate surveys and bird surveys completed across the mine and perimeter areas.

Land survey

Surveys of vertebrate fauna of CMP blocks 4, 5 & 34 (Witt's Gully) were conducted in late February 2022. Seventy-six vertebrate species were recorded comprising 19 mammals, 51 birds, three reptiles and three amphibians. One threatened species, Lewin's Rail, was recorded in Witt's Gully.

Koala, Large-billed Scrubwren, Satin Bowerbird, Blue-winged Parrot, Rufous Fantail and Rainbow Lorikeet were recorded for the first time in Witt's Gully since intensive



Eastern Yellow Robin observed during a fauna survey

surveys began in April 2008. Superb Lyrebird was recorded in Witt's Gully for only the second time since 2008. Musk Lorikeet, Redbrowed Finch and Tree Martin were recorded for the first time in block 5 since intensive surveys began in March 2007.

Black Rock Skink was recorded in Witt's Gully for the first time since the bush fire in February 2014. Six species of insectivorous bats were recorded by harp trapping in Witt's Gully. Four species of insectivorous bats were recorded in block 4 for the first time. Two species of Dasyurid marsupials, Agile Antechinus and Mainland Dusky Antechinus, were recorded in Witt's Gully. Breeding records were obtained for Eastern Grey Kangaroo and Black Wallaby (both with pouched young) in block 5.

The recording of Koala, Black Rock Skink and numerous species of birds during these current surveys adds significantly to the importance of these CMP blocks in the conservation of biodiversity in the Latrobe Valley.

Bird survey

The Yallourn Morwell River Wetlands were constructed in the early 2000's. The project consisted of over 100,000 plantings which have revegetated the area from grazing land to a quality habitat site. The Latrobe Valley Field Naturalists (LVFN) conducted five bird surveys of the wetlands during 2022. In total, over 160 bird species have been spotted at the Wetlands which accounts for over 70% of the local area within Mt Baw Baw, Holey Plains State Park, Mt Worth State Park and Mirboo North the species being consistently sighted since 2018.

Environmental Community Projects

EnergyAustralia stands behind our community and is proud to have continued support of the Latrobe Catchment Landcare Network (LCLN) for community-based conservation projects in 2022. This involved funding for the protection of platypus habitat within the Narracan Creek and Morwell River. Throughout 2022 the LCLN onboarded landowners to fence off sections of their property that are located close to water frontage to revegetate the riparian zone and eliminate stock access to protect platypus burrows in the area.

For 2023, two local primary schools have been secured to be involved in a Platypus Conservation Program to be facilitated by the Platypus Education Group. The intent of this program is to educate students about the importance of waterway management and what can be done to help preserve the species habitat.

EnergyAustralia sponsor programs run by LCLN involving our community members, private land owners, primary schools, high schools and other organisations such as the Rail Trial Networks. These programs serve to educate land owners and community, as well as to work actively on the ground to manage and remediate land. Below is a summary of the key programs undertaken over 2022 for National Tree Day that the LCLN had helped plan and coordinate with schools and volunteer organisations:

- 800 trees were planted at the Traralgon railway reserve site by St Michaels and Grey St Primary Schools;
- For a 5th year running Glengarry Primary School students volunteered their time to plant a small area at Eaglehawk Creek along the Gippsland Plains Rail Trail;
- Approximately 300 trees were planted along the Yallourn end of the Moe Rail Trail by volunteers from the Moe Yallourn Rail Trail Committee who were helped by a small group of Baringa School students; and
- The Cowwarr Primary School planted behind the Arts Space along the Gippsland Plains Rail Trail.

Mine Water Management

Water management was a key focus in 2022 due to the flooding of the Morwell River in August, post the 2021 June event that had caused damage to the Morwell River Diversion. Repairs to the Morwell River Diversion had been completed prior to the August flooding, however with diversion systems such as the cofferdam and syphon pipes still in play, the Mine had to spill approximately 1.8GL of flood water into the mine to control the water. The EPA granted a 530A Emergency Discharge Licence for up to 232 ML per day to be discharged to the Latrobe River as a result of the flood water that discharged into the mine. The emergency discharge allowed the mine to draw down the water to reduce the risk of any further flood events flooding out permanent dewatering infrastructure. The emergency discharge licence was utilised in August through to November, averaging 78ML/day across 52 operating days, until water storages were reduced to an appropriate level.

A summary of the EPA Licence water discharge compliance limits and actual performance results are shown in the table below.

| INDICATOR | LIMIT TYPE | UNIT | LICENCE LIMIT | RESULTS FOR 2022 CALENDAR YEAR |
|--------------------------------|-----------------|--------|---------------|--------------------------------|
| <i>Flow Rate</i> | Mean Daily Flow | ML/day | 80.5 | 46.0 |
| <i>Colour</i> | Annual Median | Pt-Co | 44 | 25 |
| | Maximum | Pt-Co | 70 | 55 |
| <i>Electrical conductivity</i> | Annual Median | uS/cm | 790 | 620 |
| | Maximum | uS/cm | 940 | 710 |
| <i>Turbidity</i> | Annual Median | NTU | 24 | 23 |
| | Maximum | NTU | 53 | 37 |
| <i>pH</i> | Maximum | pH | 8.5 | 7.6 |
| | Minimum | pH | 6 | 6.1 |

Summary of our EPA Licence water discharge.

Surrounding Lands

Morwell West Drain Diversion Walking Track

In 2012, the Morwell West Drain Diversion was constructed to divert Morwell's West Catchment surface waters to the Morwell River. During this construction a 1.9km walking track was installed to join Latrobe Road to Toners Lane. Additionally in 2018 this walking track was extended by 2km to bring access closer to Morwell, travelling further south along the old briquette railway line onto the beginning of Toners Lane. EnergyAustralia has been progressively planting out this walking track with much success. The first section between Latrobe Road and Toners Lane are offset commitments associated with mining and were planted out in 2012. Similar plantings have since been extended through the drain and along the newest section of walking track with the vision of creating wildlife corridors around the Mine from the Wetlands. 2022 saw an additional 3,500 native tubestock being planted through this corridor. These plantings also form an important part of the overall Strezelkecki-Alpine Biolink to provide wildlife passages to migrate around the East of the Mine and future pit lake.

Morwell Gun Club

Due to the progression of the Maryvale Field Mine to the south, the Morwell Gun Club has been undertaking a relocation from Old Melbourne Road to a new home to the south-east of the mine off Marretts Road. EnergyAustralia has been working closely with the club to help facilitate its relocation. Construction has begun with hope the club could begin operating in 2023.

Farming Lessee

In 2021 EnergyAustralia Yallourn awarded the lease of its surrounding 1500Ha (approx.) of agricultural land to Rural Operations Group (ROG), a locally owned and operated business. The new lease seeks to focus on improving the visual amenity and functioning of these farmlands to achieve better environmental outcomes for these lands and neighboring lands. The first year of the lease has seen a wide array of improvements across the Leasehold involving 44km of electric fence installation, construction of 7 sets of stockyards and broad acre weed spraying across the entire lease with spot spraying focusing on Blackberry and Bracken.

Community Partnership and Engagement

COVID has continued to have an impact on our sponsorship and grant programs, but we still managed to provide a significant amount of financial support to our local community throughout 2022.

We started the year on a positive note with another successful EnergyAustralia Classic Singles lawn bowls tournament held at the Newborough Bowling Club during the first week of January. This event continues to attract top class bowlers to the Latrobe Valley, and we are proud to have been the major sponsor of the Classic Singles since 2008.

This was followed by the Australian Junior Masters water ski tournament held at Halls Bay in Lake Narracan – a new event on our sponsorship calendar which we have agreed to support for 2022, 2023 and 2024.

Our final 'major sponsorship' event for 2022 was the Moe Dance Eisteddfod, held in April at the Lowanna College Auditorium in Newborough, another local event that continues to go from strength to strength. This year the eisteddfod welcomed 281 competitors with 1,322 performances throughout the duration of the event.



Tap Championship award winners with adjudicator Christopher Favaloro and EnergyAustralia's Meredith Bowden

One of the activities that we are very proud of, is our involvement with the People's Kitchen in Morwell – which is run through the Morwell Neighbourhood House. Financial support is provided through our Workplace Giving Program which assists with the purchase of food, while employees are also encouraged to volunteer with food preparation. During 2022 around 40 Yallourn personnel produced 1,000 meals which were distributed to community members in need across the Latrobe Valley. It was becoming quite a competition between our teams to see who could produce the most meals during their volunteering opportunity!

Employees at Yallourn also stepped up to again pack Easter bags for distribution to children in the care of Quantum Support Services, and to donate toys to the annual Gippsland Motorcyclists Christmas Toy Run. Our toy collection for the Toy Run was one of the biggest we have had thanks to the generosity of our people – which included those from EnergyAustralia, our Alliance partners and our on site contractors.

Throughout the year funds from our sponsorship program (up to \$1,000) were distributed to:

- Moe Bowls Club,
- Rotary Club of Moe,

- Hill End Community Inc,
- Gippsland Sports Academy,
- Morwell Cricket Club,
- Moe Yallourn Rail Trail Committee of Management,
- Moe Art Show,
- Latrobe Community Concert Band,
- Baringa Special School,
- Gippsland Antique Bottles & Collectables Club,
- Latrobe Valley & District Cricket League Umpires, and
- Moe Cricket Club.

Our grant program (up to \$10,000) was again run over two rounds during 2022, with funds allocated as follows:

- Moe Traders Association - \$5,000 – for the Moe Community Christmas Carols event, an opportunity for the people of Moe and the surrounding district to get together as a community in a safe and inclusive environment.
- Gippsland Employment Skills Training - \$7,171.95 – GEST provides training, education and employment services to the disadvantaged within the Gippsland region. They had to relocate their training and work placement centre and we provided funding for the purchase of new office furniture.
- Latrobe Valley Beekeepers Association - \$6,442.12 – funding for the creation of raised garden beds and purchase of safety equipment for the recently launched LVBA Community Pollinator Garden.
- 1st Morwell Scout Group - \$7,000 – installation of heating/cooling unit to increase usage of the scout hall for both youth members and the local community who also use it for weekly programs and events.
- Thorpdale Primary School - \$3,717 – funding for Sound Write resources, which is a structured phonics program which is used to teach students to read, write and spell.
- Moe Old Gippsdown Men's Shed - \$8,200 – to purchase a dust extraction and filtration system to reduce/eliminate dust particles while members operate woodworking machinery.
- Gippsland Asbestos Related Diseases Support/Victorian Asbestos Council - \$5,000 – for the purchase of a portable oxygen concentrator for asbestos and silica sufferers to be able to borrow free of charge, providing them with the freedom to leave the confines of their home.
- Cowwarr Football Netball Club - \$10,000 – to purchase/construct a children's playground. Cowwarr is a small local town with limited facilities, so this playground would be a community asset.
- Hill End Community Inc - \$6,000 – to purchase playground equipment suitable for younger children to be installed at the Hill End Community Centre, an important hub for this small rural community.

Another successful year supporting our local community, and we look forward to a bigger and better effort in 2023!

Community Partnership and Engagement

Engagement Activities

Regular stakeholder meetings were conducted during the year with stakeholders including the Gunaikurnai Land and Waters Aboriginal Corporation, Latrobe City Council and local parliamentarians.

Community group engagement included monthly attendance at the Yallourn North Action Group and Advance Morwell meetings.

Saline Water Basin Noise

During 2021 an issue was raised regarding a loud noise heard in Yallourn North, emanating from the Yallourn site. The source of the noise was investigated and originated from recently installed equipment at the new saline water basin. During 2022, a technical solution was developed, tested and installed which has reduced the noise to an acceptable level. The Yallourn North community was provided with updates through local letterboxing during February and December of 2022.



Morwell River Diversion

Regular community updates were provided on the Morwell River Diversion works during 2022.

Updates in closure planning activities have been provided through our Facebook page and through local media outlets.

Environmental Advice

During 2022 an "Environmental Advice" approach was adopted to inform the local community of environmental events that could, or potentially impact the local community. Events reported on included excessive noise and visual emissions.

Local residents are encouraged to contact the Yallourn site via a 24 hour 1800 number or via email should they have any concerns regarding our operations.

ZING! Insights

The bi-annual ZING! Community and Stakeholder insights survey was conducted with results being made available during 2022. The key insights for EnergyAustralia for the future included:

- Provide further information regarding EA's plans for workforce transition.
- Provide further context around EA's plans in the Latrobe Valley including the legacy it seeks to leave other closure.
- Continue community consultation and communication in the leadup to closure.
- Consult on rehabilitation.



Community Partnership and Engagement

Wooreen Energy Storage System Project

EnergyAustralia is progressing its commitment to build Australia's first four-hour utility-scale battery of 350 MW capacity in the Latrobe Valley. The Wooreen Energy Storage System will be located at Hazelwood North, alongside EnergyAustralia's existing Jeeralang gas-fired power station.

When Wooreen is completed in 2026, the Wooreen Energy Storage System will be one of the largest battery storage systems in the world. The project continues the Latrobe Valley's proud history in electricity infrastructure that spans over 100 years and began with Yallourn power station. Wooreen will be able to power the equivalent of more than 230,000 Victorian households for four hours before being recharged. Its ability to rapidly supply energy during times of high energy demand will be vital in keeping the lights on and the costs down for our customers.

The Wooreen project, and others like it, will be critical as the clean energy transition takes place, seeing baseload coal-fired power stations retire and replaced with variable renewable energy, as well as flexible generation and storage technologies.

In August, EnergyAustralia Submitted a planning application to the Department of Environment, Land, Water and Planning. We anticipate receiving advice from the Victorian Government early in 2023.

The application can be found on the www.planning.vic.gov.au site.

Search for Application Number: PA2201792

Meanwhile there's still plenty of work happening including procurement, design, and grid connection works.



Safety

The health and safety performance for Yallourn during 2022 continued to improve, with targets met in most areas of reporting.

The continued challenges of the pandemic were ever present, but well controlled during 2022 at Yallourn Power Station.

In total, the site worked 970,614 hours during 2022. This is a reduction on the previous year, due to Yallourn not conducting a major outage in 2022.

In 2022 there was one Lost Time Injury (LTI) which was a decrease from 2021 (4). The 12-month rolling average record of Total Injury Frequency Rate (TIFR) is tabled below, and the rate for 2022 was 2.78 against a target of 2.83 and an improvement on 2021 (3.97). Recordable injuries also decreased from 7 to 4. This is made up of 1 LTI (Lost Time Injury), 2 MTI (Medically Treated Injury) and 1 RWI (Restricted Workplace Injury).

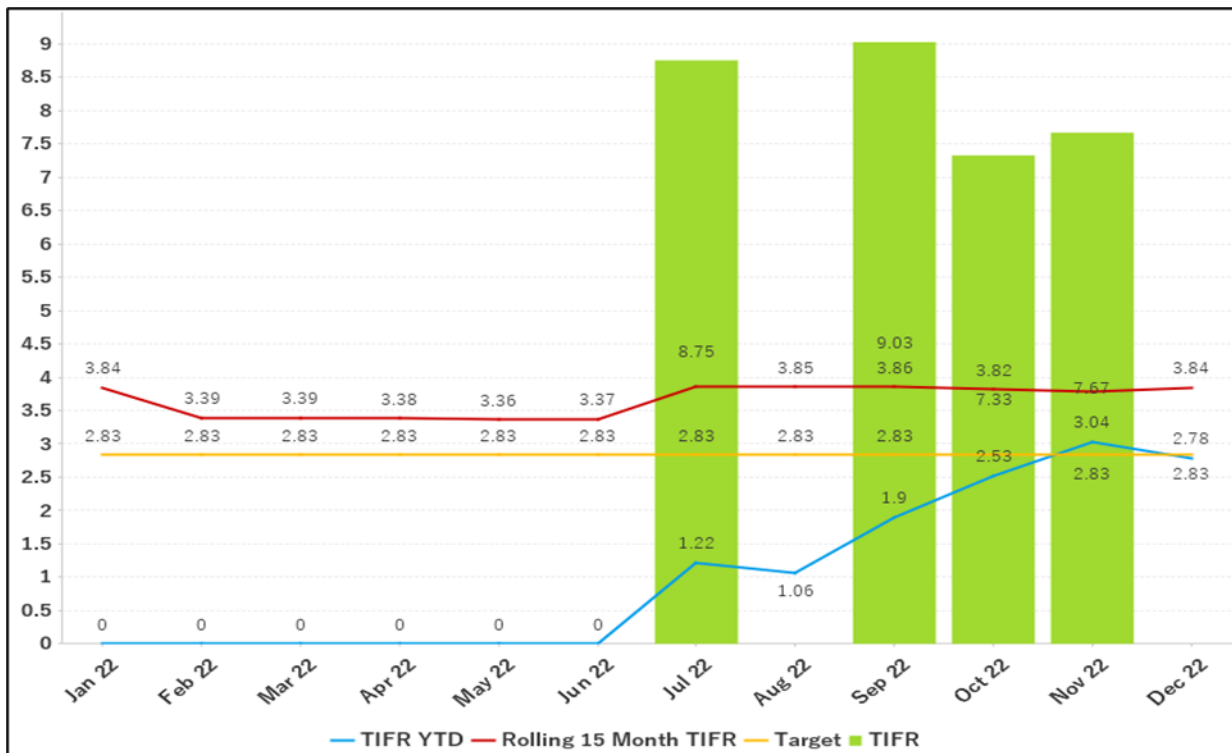
One of the major changes to the Health & Safety team was the commencement of a new Coal Assets Safety Leader in July 2022. Along with this restructure came a change and improvement in strategy, planning, initiatives and working relationship with external regulators. The 2022 Health, Safety & Wellbeing Improvement Plan was restructured and rolled out in August and had a completion rate of 79%, a good effort by all personnel.

A major achievement is that Yallourn Power Station cleared all WorkSafe Victoria Improvement Notices by the end of 2022.

Another highlight was the RUOK? Day event. The entire site paused work and came together to enjoy lunch provided by a variety of food trucks. This event was very well received by all those who attended and received rave reviews.



To assist in the ongoing control of Covid-19 & other potential viruses, air purifiers were introduced to many rooms across site



Total Injury Frequency Rate

Achievement Program

EnergyAustralia Yallourn has committed to the ongoing health and wellbeing of its employees by joining the Achievement Program—a Cancer Council Australia and Victorian Government initiative which encourages participating companies to create healthier workplaces and achieve best practice health and wellbeing benchmarks.

The program focuses on five areas of health and wellbeing:

- Smoking;
- Alcohol and Other Drug Use;
- Mental Health and Wellbeing;
- Physical Activity – achievement met;
- Healthy Eating- achievement met for catering.

While we did make progress, the constant challenges of COVID-19 and program led vacancies at LCHS (our program provider) limited what we could achieve. However, we anticipate meeting the overall healthy eating benchmark in the first quarter of 2023. The canteen was originally assessed by a nutritionist from LCHS in 2019 and they found the canteen had 47% of items in the red category, 37% in the amber category and 16% in the green category. The aim is to get to 50% of the foods and drinks available at the canteen into the green category, no more than 20% of the foods and drinks available in the red category. In October 2021 we had our catering menu reassessed and were deemed to have successfully

completed the healthy eating benchmark for our catering menu. The reassessment showed that 52% of the catering menu options are now in the green category, 44% in the amber and only 4 percent in the red category. In 2022 the canteen received two large air fryers to assist in meeting the achievement programs healthy eating standard with many previous deep-fried items now being air fired as a healthier alternative.

We had also started the Mental Health and Wellbeing Benchmark, with three two-day Mental Health First Aid Workshops with Lifeline Gippsland planned for 2021. Unfortunately, due to ongoing COVID-19 restrictions these workshops have been postponed for the past two years. To ensure we were still active in this space and making progress towards achieving our goals for Mental Health and Wellbeing in 2022, EnergyAustralia Yallourn engaged a mental health awareness speaker, Matt Runnalls. Matt conducted 6 mental health awareness education sessions which were attended by approximately 100 employees across the site.

In 2022 we undertook research and development focused on creating a program that will be rolled out throughout 2023 as we move towards our goal of being “smoke free 2023” on site at Yallourn.

Wellbeing Events

In 2022 the nurses ran basic health assessment days to encourage employees and contractors to participate in a basic health review. Unfortunately, the uptake on these assessment days was not at the levels we would like with only approximately 20 people participating. Increasing participation in our basic health assessment days will be an area of focus for 2023.

In September 2022, the Yallourn site held a food truck lunch for all employees and contractors on site to encourage people to check in with each other and meet/catch up with people from other areas across the site that they otherwise would not often see. This initiative proved to be very successful and the feedback from all who attended was overwhelmingly positive.



Employees enjoying the food truck lunch



R U OK cupcakes made by "Sweet Treats by Jamie-Lee"

Targeted Programs

The influenza vaccination program was again conducted with 350 employees immunised against influenza in 2022 using a 'walk through' vaccination program. The adaptation to a "walk through" clinic proved again to be very successful and is now widely accepted onsite as an improvement to our vaccination program and all future vaccination programs will continue to follow this "walk through" structure indefinitely.

Health awareness topics covered this year were Attention Deficit Hyperactive Disorder (ADHD), Lung Cancer Awareness and Men Health, Asthma, World Blood Donor Day 2022, Mould and Health, Tradies National Health Month, World Immunisation Week.

In February 2021, we introduced Rapid Antigen Tests (RAT) on-site to screen employees and prevent COVID-19 entering our site. While testing processes have changed and evolved extensively over the past 2 years, we are still receiving very positive feedback regarding our RAT program, and it is proving to be a valuable asset in our ongoing management of COVID-19. We have paired the RAT program with a COVID-19 advice hotline that is available to all employees and contractors and is answered by one of our nurses who ensure they are always across any new developments in the COVID-19 space. This hotline has received continued positive feedback and appreciation from all employees and contractors from the EnergyAustralia Yallourn site.

In 2022 the health and wellbeing team ran a very successful skin check program, which saw approximately 80 employees undergo skin checks by qualified skin cancer doctors. We initially engaged the doctors for two days, but due to the overwhelming interest in the program we have a further two days scheduled in early 2023, with Jeeralang employees opting to also participate in our Yallourn skin check program. The initial report on findings reported that of the 37 employees seen, 17 or 46% required further follow up and investigation/removal of a suspicious, potentially cancerous skin spots. Due to the success of this program the EnergyAustralia Yallourn site will run this program biennially.

Health and Wellbeing

Good health benefits everyone. By implementing robust health programs and strengthening employee engagement, EnergyAustralia will create a happier workforce which, in turn, will lead to increased productivity and potentially decrease employee absences.

At EnergyAustralia, we understand that the individual needs of employees requires a broad range of health and wellbeing initiatives.

People have different requirements in terms of their health and wellbeing at various stages and phases of life, changing day-to-day and year to year. The Yallourn site has the additional challenge of ensuring our health and wellbeing program considers the additional support EnergyAustralia employees will need our programs to provide to ensure a safe and successful transition to site closure.

The diversity of people at our site means we need to try to facilitate and deliver a board range of activities and resources to help improve the health and wellbeing of every employee.

EnergyAustralia takes an integrated approach to health combined with occupational safety and injury prevention, all encompassed in our health and wellbeing initiatives to enhance worker health and prevent work-related injuries and illness.

This year was another challenging year largely due to the ongoing and ever evolving threat COVID-19 places on employees, employers, and the overall business. 2022 brought with it many new challenges for health teams within businesses, including ever changing COVID-19

Government rules and regulations, increased case numbers, long covid generally moving to a new "COVID normal" way of life. In 2022 we had to frequently change the way we did many things, while maintaining the high standard of care given at the Occupational Health Centre and throughout the entire site.



EnergyAustralia and Quantum employees packing Easter bags

Occupation Health Centre

2022 saw a total of 383 presentations to the Occupational Health Centre, a 43% increase in overall visits when compared to 2021. Despite a significant rise in presentations overall, we continued to experience intermittent restrictions caused by COVID-19 risk levels which impacted the number of non-urgent presentations for basic health assessments such as regular blood pressure and blood glucose checks. There was a decrease in new occupational health injuries at work by 30%, however in 2022 we only had a minor outage which may have contributed to our decrease in new occupational health injuries as we had less personnel onsite.

Foreign bodies in eyes continue to be the most common presentation to the Occupational Health Centre with 40 presentations in 2022, a decrease of 40% when compared to 2021. This was followed by "other" injuries which include medical conditions such as dehydration, etc. Sprains and strains accounted for 16 presentations; cuts, bruises, and abrasions with 14 presentations; and struck by objects with 4 presentations.

32 employees were referred off site for further treatment to various facilities such as the emergency departments of local hospitals, GP clinics and optometrists. This is a < 5% increase from 2021.

The nurses who have completed the Immunisation Course can give immunisations, including influenza and pre overseas vaccination requirements. Other services are removal of sutures, wound management and education for surgical wounds or wounds obtained at home, diabetic management and blood sugar testing, non-fasting cholesterol checks, CO monitoring, spirometry testing, blood pressure checks and a variety of other preventative health measures.

There was an increase in overall visits for the year, which is the result of catch-up hearing tests that were missed in 2021 when the site was under substantial COVID-19 restriction and the hearing test program was suspended. There was a decrease in presentations for home injuries or non-work-related injuries for the third year in a row, with presentations for home injuries decreasing by 42%. Again, this is likely due to the COVID-19 pandemic, as 2022 saw a slow transition of employees returning to work on site. Since the beginning of the COVID-19 pandemic in 2020 the Yallourn EnergyAustralia site has seen many non-site essential employees working from home, effectively reducing the number of employees on-site for a large portion of the year. The site has also, like many workplaces, maintained their support for flexible working arrangements, further reducing personnel physically on site.

Despite seeing a consistent decline in the number of home injury presentations to the occupational health centre over the past 3 years, site feedback indicates employees are more aware of the services available at the Occupational Health Centre. Whilst presentations for non-work related injuries (home injuries) continue to be low when compared to pre-pandemic levels, one of the Yallourn Health and Wellbeing Team's core goals for 2023 will be to continue to provide increased education to work groups across the site, promoting the capabilities and services available and offered to all employees by the Occupational Health nurses.

We hope to see further decreases in work related injuries and an increase in the number of preventative health attendances in 2023, as the Occupational Health Team strive to be proactive in the promotion and education of preventive health and to maintain the mental and physical health of all employees in the coming year.

Fire Preparedness

Fire preparedness activities have continued to be a key focus for Yallourn Mine to manage the risk of an external fire entering the mine or a fire igniting within the mine boundary and travelling offsite. A key aspect of the fire preparedness program is the Bushfire Mitigation Committee which includes representatives of Fire Rescue Victoria, Latrobe City Council, DEECA and other external agencies. The committee meet monthly and consider such items as long term weather forecasts with respect to fire conditions, surrounding vegetation and fuel hazards including roadside slashing and fire response capabilities.

For 2022, the Yallourn Mine Fire Service network has been extended in the Maryvale Field operating area in line with mine progress and a further 1.5km's of 300mm sprayline has been constructed in township field. The mine rehabilitation program has further reduced the area of exposed coal which in turn continues to reduce the inherent fire risk.

A new agricultural lessee began in November 2021. Yallourn mine personnel worked closely with the lessee through 2022 to ensure all fire breaks, slashing and grazing activities were undertaken to reduce fire risk where needed.



Fire Service sprays wetting down exposed coal in Eastfield extension batters

Yallourn Transition

Following on from the initial planning works completed in 2021, the planning, consultation and design of the Transition Support Program has continued throughout 2022.

As part of the consultation phase of designing the Transition Program, 516 employees from across Yallourn participated in Kick Start Workshops where they were able to express their desired areas of support they wanted from the transition program. In doing so, each employee completed a career and skills questionnaire where they identified their current skills, future desires and overall wellbeing check in.



Following on from the workshops, all employees were invited to attend a 1:1 confidential career and coaching session to further discuss their personal circumstances, to which we had 358 employees participate.

The information collected through the workshops helped guide the decision making on the design of the Transition Program, which launched to employees in November 2022. The key areas employees wanted included in the program included training, reskilling, and accreditation of current skills, as well as financial advice and job search skills.

The Transition Program has been designed to focus on making a range of services and training available for employees to choose from based on their individual circumstances and desires. It sees EnergyAustralia & Alliance Partners permanent and fixed term employees, including regular casuals access three tiers of support from all inclusive supporting, training & reskilling and specialist support.

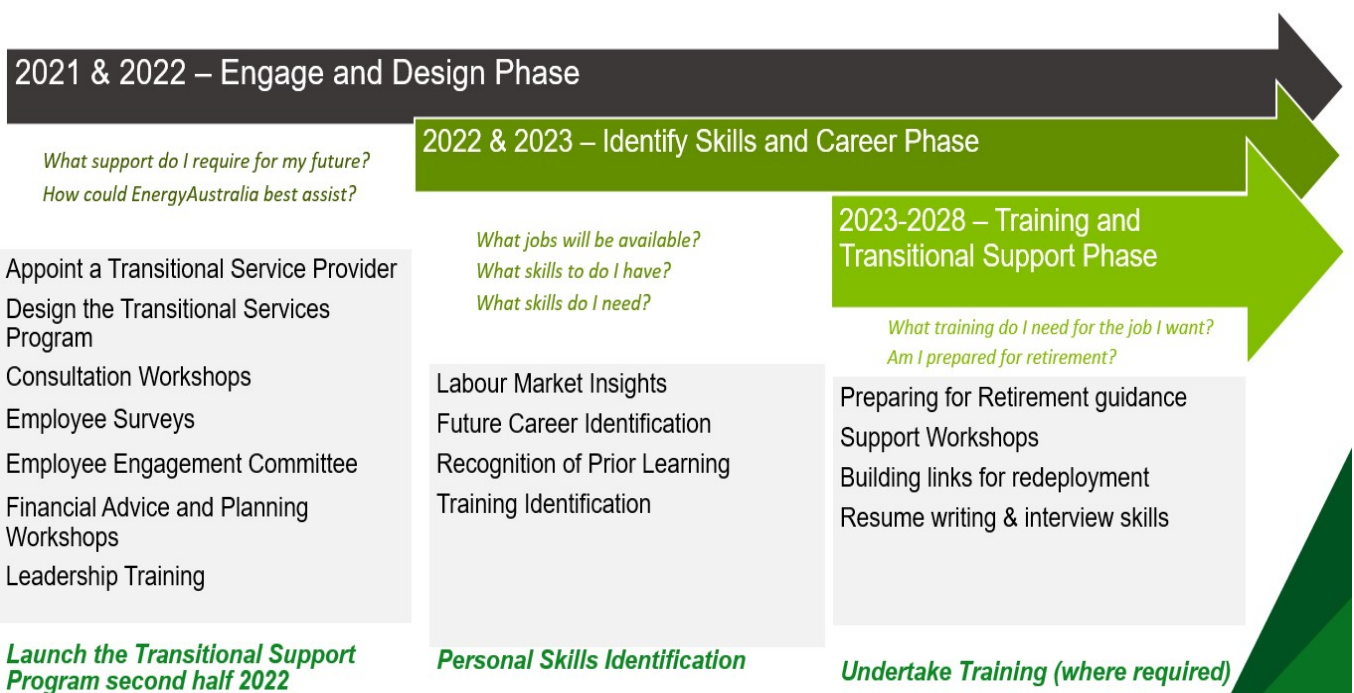
With the launch of the program, each employee was given a 44 page handbook that outlines the program in detail as well as access to a purpose built website, which will continue to be updated and provide information, updates and the ability to book in for services as the years progress.

EnergyAustralia is committed to assisting and supporting employees on their transition pathways over the coming years.

Work has also continued on determining the future uses of the Yallourn site. Yallourn rests on a large 5,500ha site that presents opportunities to provide sources of commerce, recreation, environment services and employment to the region. EnergyAustralia is working to identify the potential opportunities for the future use of the Yallourn site and this will include discussion with the community about the site's potential.

EnergyAustralia is determined to demonstrate that coal-fired power can exit the market in a way that supports our people and ensures customers continue to receive reliable energy.

Transitional Services Timeline



EnergyAustralia Environment Review Committee (ERC) Report of Independent Chairman 2022 Year

The EnergyAustralia Yallourn Environment Review Committee met three times during 2022, twice remotely and, after a tour of the mining operations, met in person in November. The meeting scheduled for August was abandoned due to a weather event causing the Morwell River to once again flood. COVID continued to impact the ability of the ERC to meet in person and EnergyAustralia Yallourn had major restrictions in place to ensure the protection of essential service personnel. The Environment Review Committee have updated the previous Terms of Reference.

EnergyAustralia Yallourn had significant challenges with the impact flood impacts of the Morwell River in August. With the completion of the Morwell River Diversion Project in the latter half of 2022, the significant works undertaken are designed to reduce the previous extreme risk of the Morwell River flooding and impacting on the mine.

Through the ERC, EnergyAustralia Yallourn considered; environmental performance, complaints, exceedances and remedial action, mine rehabilitation progress and performance, environment improvement plans, Morwell River diversion project, EnergyAustralia Yallourn transition, community engagement and other special presentations.

Environmental Performance

Environmental performance results focused on dust emissions, water consumption, volume and salinity of wastewater discharges, community complaints and licence compliance. One non-compliance was recorded against dust concentrations through the reporting period, while station bubble limits remained below the EPA licence limit. Water consumption reported in February and May was below the internal business target but was above the 2022 internal business target but was compliant. EnergyAustralia Yallourn are seeking to review water consumption with tighter monitoring controls. EA have met wastewater quality licence limits 100% of the time and was well below licence limits throughout the year. Salinity wastewater remained below the EPA median and maximum licence limit throughout 2022.

There have been four public complaints received during 2022 regarding dust particle fall out and noise. All complaints have been investigated.

During the latter end of 2021, the Continuous Emissions Monitoring Systems (CEMS) for stage 2 was procured, installed and commissioned to meet new EPA licence conditions. As best practice, EnergyAustralia Yallourn invested in the procurement and installation of continuous emission monitoring for the stage 1 chimney which was commissioned in December 2022. Under the EPA licence, EnergyAustralia was required to complete two air emission monitoring studies for Class 3 Indicators and Particulate Matter, with the monitoring program reports uploaded to the Yallourn Website.

During 2022, there were two EPA notifiable incidents, one relating to an exceedance of the station sulphur dioxide bubble limit attributable to high sulphur concentrations in the layer of coal being mined in which EnergyAustralia Yallourn have introduced additional alarms in their control system to ensure rapid response. The second incident related to a minor exceedance of dust concentration from W4 due to abnormal adverse operating conditions and dust control unit being out of service for maintenance.

In August, EPA granted EnergyAustralia Yallourn an Authorisation of Discharge and Disposal for 90 days at a maximum rate of 232 ML/day discharge into Latrobe River to remove water from the Fire Services Ponds as part of the August flooding and Morwell River diversion work.

Mine Rehabilitation

In the earlier part of 2021, EnergyAustralia Yallourn undertook recruitment to the Mine Rehabilitation team in preparation for the final mine rehabilitation project. Rhonda Hastie has been appointed as the EnergyAustralia Yallourn Rehabilitation Lead.

EnergyAustralia Yallourn had planned for 36.7 ha of rehabilitation works in the mine to undertaken but due to flood impacts were able to complete 34.4 ha. EA continues to rehabilitate the dump as it becomes available. Through 2022, rehabilitation works continued including trial plots to reduce erosion, dust lift off and provide stabilisation. Native seeding is propagating well and will reduce erosion. Reshaping and stabilisation of batters with overburden seeding was undertaken. EA continues to rehabilitate more land than EA disturbs each year.

The Yallourn Mine final rehabilitation project aims to identify and implement a safe, stable, and sustainable landform for the 5,500 ha of land in the licence boundary. The project will engage with stakeholders, obtain relevant government approvals and achieve compliance throughout the rehabilitation journey and overall achieving mine licence relinquishment. A study is needed to know what the coal and overburden does to the mine pit water and how does the weather effect the quality of water over time.

As part of EnergyAustralia Yallourn's commitment to community engagement, through their membership on the ERC, Landcare are supportive of the mine rehabilitation process that is adopted and have no issues with the techniques that the company is adopting.

There was no pH treatment required for wastewater management and the total discharge in January 2022 was 1500ML to the Morwell River. Turbidity remained favourable and compliant with the EPA licence.

The total waste water discharge in April 2022 was 1353ML to the Morwell River and turbidity has been favourable and compliant with the EPA licence and no pH treatment was required. There was an EPA/Earth Resource Regulation Rehabilitation Audit undertaken late April. The fire services pond water quality has been impacted by Morwell River flooding in August but the water quality has improved with turbidity.

There has been two dust deposition reading spikes around a couple of the monitors during 2022 but it has been difficult to find the issue. EA will be moving to real time monitoring which should improve identification of issues and determine the best method of resolution.

Environmental Improvement Plan

The Yallourn Landfills Rehabilitation Plan was submitted to EPA on 23 December 2021 and looks at the final closure, rehabilitation and aftercare at the end of life at the landfills. As part of the Yallourn North Ash Landfill Rehabilitation Plan, a Lysimeter trial was required to prove the suitability of the proposed design of the final cap. In November, a concept plan for the Lysimeter Trial had been completed and was awaiting EPA auditor review.

In February, the new saline return basin was reported as being in service and the disposal of ash to the eastern landfill has commenced. This is a significant improvement from an environmental and operational perspective and enables EA to decommission the old return water basin and allows more space to dispose of ash in the eastern area of the ash landfill.

EA has entered into an agreement to supply fly ash to Latrobe Magnesium for a small demonstration plant.

Mine operations

Since the early closure announcement, EA commenced a pivot operation in the mine. Following the Morwell River flood in June 2021, a square mining operation has recommenced. The benefit for square operations includes 10% more efficient operations, improved coal supply reliability, and trunk conveyors will become available. This operation provides geotechnical stability of Mine batters and better management of Morwell River Diversion. The square operation allows EA to maintain the Old Melbourne Road perimeter access and the buffer distance to Morwell.

Despite the fluctuation in weather conditions, the mine has achieved 100% coal supply reliability with over 10.8 tonnes delivered from the mine to the power station YTD and over height material has been strategically placed in the Maryvale Field as it improves geotechnical stability and improves environment performance. The overburden system outage was completed to schedule and the new ash landfill has been designed to match 2028 forecast quantities.

Morwell River Diversion Recovery Project

By November 2022, the Morwell River Diversion (MRD) Recovery Project has been completed after a mammoth undertaking by EA. The MRD risk setting is extreme and as works progressed the risk rating reduced. The onsite diversion of the Morwell River works include; cofferdams, MRD bypass pipes, multi siphons, valve pipes to low flow channel and spillway to Township. The MRD is designed to be able to divert flood water to Hazelwood mine through a weir in Morwell River to take an increase in the height of water, offtake through levee and down an old flow path of the Morwell River, then down an open channel into Hazelwood Mine. Diesel pumps were installed to commence the Morwell River bypass to Latrobe River to allow for investigation repair works in main MRD structure allowing EA to get into the bottom of the MRD to establish locations of any cracks in the low flow channel and carry out further geotechnical investigations. These pumps have now been taken out of service but are available for an emergency back-up.

Yallourn transition

Since the announcement of the early closure in 2028, EAY's workforce is front and centre for the transition. EA want this to be a smooth and positive experience and instil a sense of pride. Key objectives include support and guidance to the workforce as they embark on the next part of their career, provide safe, reliable operations at Yallourn, whilst being an active participant in the community. As part of the key commitments for the transition a \$10 Million support fund has been established and the transition support program has commenced.

Community engagement

EnergyAustralia's "Workplace Giving" program has raised over \$1 Million towards various charities and 35 staff volunteers actively support the Peoples Kitchen providing over 1000 meals to people in need. The company provides community grants, sponsorships, Federation University scholarships and actively supports the Moe Rail Trail in in-kind contributions in erosion and drainage repairs.

EA provides funding to the Latrobe Catchment Landcare for the protection of Platypus habitat in Narracan Creek and Morwell River. In 2023 two primary schools will be involved in a Platypus Conservation Program facilitated by the Platypus Education Group. The students will learn about the importance of waterway management and what they can do to preserve habitat in the local area.

To acknowledge the 100 years of Yallourn, EA planted a tree and had planned other events which, due to COVID these could not occur. In May, EA illuminated the cooling towers and held a vigil to stand against domestic violence.



Susan Lloyd FAICD, MOrgLeadership, BAppSci, GradDipEd
Chair EnergyAustralia Yallourn Environment Review Committee

EnergyAustralia Yallourn Performance

- Brown coal-fired power station and captive mine
- 1,480MW (2 x 360MW, 2 x 380MW)
- Plant commissioned between 1974 and 1982
- Shareholding of 100% acquired in 2003 with operational control by CLP

| PARAMETER | UNIT | 2022 | 2021 | 2020 |
|--|-------------------------|----------|----------|-----------|
| 1. Operation | | | | |
| Electricity sent out ⁽¹⁾ | GWh | 7,961 | 7,969 | 8,378 |
| Coal consumed | TJ | 115,553 | 118,275 | 124,417 |
| Oil consumed | TJ | 527 | 464 | 444 |
| Thermal efficiency | % | 24.0 | 24.4 | 24.1 |
| Equivalent availability factor (EAF) ⁽²⁾ | % | 66.7 | 73.8 | 72.00 |
| 2. Air Emissions | | | | |
| CO ₂ e (Scopes 1 & 2) | kT | 11,029 | 11,246 | 11,799 |
| SO ₂ ⁽³⁾ | kT | 14.7 | 14.7 | 15.5 |
| NO _x ⁽³⁾ | kT | 9.7 | 10.1 | 11.4 |
| Particulate (Total) ⁽⁵⁾ | kT | 4.9 | 5.3 | 5.5 |
| 3. Water | | | | |
| Water Withdrawal | Mm ³ | 28.7 | 25.8 | 25.6 |
| from marine water resources | Mm ³ | 0 | 0 | 0 |
| from freshwater resources | Mm ³ | 26.93 | 24.45 | 24.4.36 |
| from municipal sources | Mm ³ | 1.78 | 1.34 | 1.245 |
| Water Discharged | Mm ³ | 22.073 | 13.707 | 14.991 |
| treated wastewater discharged to sea | Mm ³ | 0 | 0 | 0 |
| treated wastewater discharged to freshwater bodies | Mm ³ | 20.879 | 11.848 | 13.525 |
| wastewater discharged to sewerage | Mm ³ | 1.19 | 1.86 | 1.5 |
| Water Reused / Recycled | Mm ³ | 0.54 | 0.2 | 0.5 |
| 4. Environmental Compliance | | | | |
| Regulatory non-compliance resulting in fines or prosecutions | No. | 0 | 0 | 0 |
| Licence limit exceedance & other non-compliance | No. | 2 | 1 | 0 |
| 5. By-products & Waste Management | | | | |
| Ash produced | kT | 207 | 223 | 229 |
| Ash recycled / sold | kT | 0 | 0 | 0 |
| Hazardous waste ⁽⁶⁾ | | | | |
| produced | T (solid) / kl (liquid) | 58 /177 | 417 /214 | 645 / 196 |
| recycled | T (solid) / kl (liquid) | 1 / 175 | 1 / 204 | 1 / 192 |
| disposed | T (solid) / kl (liquid) | 58 /2 | 415 /10 | 644 / 3 |
| Non-hazardous waste ⁽⁶⁾ | | | | |
| produced | T (solid) / kl (liquid) | 3401 /0 | 3729 /0 | 4441 / 1 |
| recycled | T (solid) / kl (liquid) | 1058 /0 | 1554 /0 | 1803 / 1 |
| disposed | T (solid) / kl (liquid) | 2346 / 0 | 2175 / 0 | 2638 / 0 |
| 6. Safety | | | | |
| Employee - Fatalities | No. | 0 | 0 | 0 |
| Employee - Days lost / charged | No. | 0 | 0 | 46 |
| Employee - Lost Time Injuries | No. | 0 | 0 | 4 |
| Employee - Total Work Hours | No. | 400666 | 469022 | 792145 |
| Contractor - Fatalities | No. | 0 | 0 | 0 |
| Contractor - Lost time Injuries | No. | 1 | 3 | 0 |
| Contractor - Total Work Hours | No. | 1036796 | 1246347 | 1140778 |
| 7. Employee Development | | | | |
| Employees ⁽⁷⁾ | No. | 306 | 228 | 216 |
| Safety, health and environment training ⁽⁸⁾ | Hours | 3145 | 4989 | 5966 |

Notes:

- (1) Sent out, with mine.
(2) Data aligned with local regulatory reporting requirements.
(3) SO₂ and NO_x data estimated using emission factors derived from plant emissions monitoring conducted every six months.
(5) Particulate emissions from power generation and mine sources from 2014. Prior to this from Power Station only.

- (6) Waste categorised in accordance with local regulations. Contractor waste has been included.
(7) Full time equivalent.
(8) Includes employees and contractors safety, health and environment training.

Air emissions data has been independently verified by Environmental Resources Management Australia PTY Limited. Verification statement is available upon written request.



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More Information

For more information on EnergyAustralia's Social and Environmental principles and practices please visit www.energyaustralia.com.au or call (03) 5128 2000

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