

EnergyAustralia Yallourn
Social and Environmental
Performance Summary 2023



A Message from the Head of Yallourn



The following report provides the detail to the social and environmental performance of EnergyAustralia Yallourn operations for 2023. During 2023 we have seen improvement in the reliability of the power station as an intense focus has been placed on Maintenance Excellence and completing the 1st of 4 major overhauls that were approved for the 2023 and 2024 business plan. This resulted in a 5% improvement in reliability and predictability of the plant during the 2023 campaign – achieving 72% Availability Factor.

Safe, Reliable, Predictable Capacity remains our goal., as we further progress improvements to enable the safe operation of the plant through to the planned closure in 2028.

Investment in both the power station and the mine will continue throughout 2024 with overhauls of the remainder of the Units. These major works will employ over 600 people during the execution. Rectifying the stability of the Morwell River Diversion remains a key focus for the Yallourn Mine and works continue in gaining a clear understanding of the geotechnical condition of this

very important structure, whilst meeting the requirements and expectations of the business, the community and the regulator. This will enable ongoing mining and future capability as the Morwell River Diversion will be an important aspect of the planned remediation of the site. 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 in 2028. Our Rehabilitation team are now fully established within the Yallourn organisational structure and plans are being developed 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 actively pursued during 2023 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. This annual safety uplift plan is now embedded within our business and during coming years is a key focus for EnergyAustralia and our people.

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 2023, including our Executive team from Melbourne volunteering at the Kitchen 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. Our future grants and sponsorship program will continue to focus on community benefit with a keen eye on the ability to support education within the district.

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.

A handwritten signature in blue ink, appearing to read 'G. McIntyre'.

Greg McIntyre
Head of Yallourn



Black Swan with cygnets (phot C Boase)

Our Performance at a Glance

In 2023, 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	★	1 prosecution	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	★ ★ ★ ★	Target was met	Internal
Total Injury Frequency Rate	★ ★ ★ ★	Target was met	Internal
WorkSafe Improvement Notice (PIN)	★ ★ ★ ★	No improvement notices	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	★ ★ ★ ★	No Licence Breaches	External
Public Enquiries	★ ★ ★ ★	5 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 2023 (818 mm) slightly increased by 3% from 2022 levels;
- Latrobe River water consumption of 22,929 ML is 63% of the annual Bulk Water Entitlement of 36,500 ML which is a 11% decrease compared with 2022;
- The water consumption rate was 2.7 megalitres/giga watt hour (ML/GWh) generated, which met 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 19,608 ML and represented 67% of the EPA Licence wastewater volume limit of 29,383 ML;
- Wastewater discharged to Morwell River at an average daily rate of 52 ML/day over the calendar year were below the annual daily mean licence limit of 80.5 ML/day and maximum daily rate of 123 ML/day.

Land

- Completed 46.4 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 2023 the active exposed coal face was reduced for the seventh consecutive year to decrease the risk of dust and fires occurring.

Air

- Average particle emissions in 2023 (0.095 g/m^3) increased by 19% from 2022 level (0.08 g/m^3). It remains below the annual business target of 0.1 g/m^3 and well below the EPA licence limit of 0.22 g/m^3 .

Environment Compliance

- During 2023, EnergyAustralia Yallourn (EAY) complied with all aspects of the sites' operating licence. However, EPA Victoria issued an Environment Improvement Notice (EIN) on 1 June 2023 relating to particle fallout from EA Yallourn's stack emissions, which they assessed as not meeting the General Environmental Duty. The EIN was revoked on the 17th of August after EAY updated the relevant components of the sites environmental management system.

Power Station Asset Program 2023

There were two major outages for calendar year 2023 (Units 2 & 3), and essential maintenance was conducted during a number of minor outages on all units. Targeted investment at Yallourn for 2023 improved asset efficiency and reliability, and also achieved a 50% reduction in unplanned outages for the year compared to 2022.

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.



Burners Refurbished

Power Station Asset Program 2023

Key works completed during minor outages:

- Rotary Air Heater Pack inspections and cleaning;
- 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.

2023 Major Outages

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 2023 Unit 2 & 3 outages included:

- Rectifying air ingress issues into the condenser so that the turbine efficiency was improved;
- Cleaning of condenser tubes to improve heat transfer;
- Blast cleaning of Turbine rotors and diaphragms and closing up of gland clearances to improve turbine efficiency;
- Stack internal and external inspections;
- Cooling tower internal and external inspections;
- Boiler Outlet ductwork inspection/repair including expansion joint replacement;
- Rotary Air Heater pack and seal replacements;
- Rectifying mill recirculation dampers so that the combustion 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. This was completed mainly through expansion joint replacements, duct realignment and sealing to the furnace walls;
- Hopper air ductwork replacement to improve boiler combustion efficiency;
- Rectifying oil burners and air supply ductwork improving combustion efficiency;
- On many pumps, the clearances between rotating parts were brought back to design clearances making these pumps operate more efficiently;
- Turbine safety valves are stripped, inspected, rebuild and tested 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 and insulators in good condition 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.



New Oil Burner Tubes

Climate Transition Action 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. EnergyAustralia launched an update to our Climate Transition Action Plan Statement with main targets:

- To reach net zero greenhouse gas emissions across Scopes 1 and 2 by 2050, and it is our ambition for this commitment to extend to Scope 3;
- To reduce our direct carbon dioxide emissions by over 60% on 2019-2020 levels in 2028-2029;
- To transition out of coal assets by 2040;
- To develop and invest in new electricity generation and storage assets;
- To identify a decarbonisation pathway for Scope 3 emissions, including customer energy-use emissions by December 2024.

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

For financial year 2023, there was a 6.7% increase of Scope 1 direct emissions compared with financial year 2022 and corresponds with an increase in coal consumption and power generation.

Mine Development

Development of Yallourn Mine continued in a south-easterly direction through 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 3.2 million cubic meters was removed by the truck and shovel operation and 4.2 million cubic meters removed by dredger in 2023 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.



Maryvale Field
August 2023

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 2023, EnergyAustralia Yallourn completed 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:

- Development of Closure Objectives;
- Vision of Safe, Stable and Sustainable;
- Investigation into Groundwater Dependent Ecosystems to understand how a full pit lake will impact groundwater levels and the ecological systems that are influenced by them;
- Baseline Land Use and Capability Mapping;
- Preliminary Geotechnical Rehabilitation Strategy;
- Geotechnical Stability modelling for:
 - ◊ Maryvale Southern Batters;
 - ◊ Maryvale Eastern Batters;
 - ◊ Yallourn Township Field Western Batters.
- Morwell River Diversion Geotechnical Assessment and Feasibility for Mine Rehabilitation;
- Geotechnical Weight balance assessment to understand current and future floor heave risks and deep aquifer pumping requirements;
- Development of a conceptual Hydrogeological Model;
- Risk Based Surface Water Design Criteria for Closure;

- Conceptual Surface Water Options Evaluation for Rehabilitation;
- Continuation of Pit Lake Water Quality Model by progression of the sampling and analysis plan;
- Landform Design for Final Pit Shape;
- Suitable Materials Investigation to determine Borrow Areas to be utilized for Rehabilitation;
- Materials Balance for the Mine to quantify available clays and topsoil for Rehabilitation;
- Faunal Diversity Desktop Review;
- Assessment of Potential for Self-Heating Combustion to understand if Yallourn coal can self-ignite;
- Surface Water Catchment and River Hydrology assessment for the Morwell and Latrobe River;
- Declared Mine Rehabilitation Plan chapter scoping and associated management documents.

A range of technical studies were also begun in 2023 that will continue into 2024. These include:

- Lake Seismicity Study to determine whether the filling of the pit as part of closure will lead to any seismic risk;
- Evapotranspiration/Lysimeter Trial to test the feasibility and effectiveness of different capping designs for the Ash Landfill;
- Yallourn northern overburden dump geochemical modeling to understand the acid generating potential of the northern overburden dump through closure and rehabilitation;
- Evaporation Pan Evaluation of Data to understand local evaporation rates;
- Fire Management/ Vadose Capillary Rise Assessment to understand how a full pit lake will influence the coals fire risk;
- Erosion Assessment and Landform Modelling ;
- Morwell River Diversion Sensitivity Analysis of Upgrade Design Options and Final Detailed Design.

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 46.4 hectares of new rehabilitation against a disturbance of 17.5 hectares. This is the 19th consecutive year in which the Yallourn Mine has rehabilitated more land than the annual disturbance. Refer to the figure on page 11 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 2023, 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 2023 are found on page 9.

Mine Progressive Rehabilitation Continued



East Field Overburden Dump

2023 Rehab Area 1: Interim stabilization of the East Field Overburden Dump

The East Field Overburden Dump (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 15 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 2023, progressive rehabilitation of the EFOB Dump included a 13.5 hectare section of native habitat. This vegetation provides the erosion protection needed to control dust emissions whilst also providing water quality benefits by primarily limiting erosion.

2023 Rehab Area 2: Maryvale Field Overheight Dump 4 North

There is a large truck and shovel overheight dump located in the western worked out section of Maryvale Field which has been built up over the last eight years. A flat section of this dump has recently been completed after being raised to a second level in response to the 2021 MRD instability incident so it was essential to stabilize the material. In 2023, 4.7 hectares was shaped and rehabilitated with grass which has successfully stopped this landform from eroding. As more overheight dump becomes available in future years it can be progressively rehabilitated and stabilised.

2023 Rehab Area 3: Maryvale Field Eastern Batter

As mining progressed in a southerly direction a batter has been cut into the overburden on the Eastern Side of Maryvale Field. This batter was formed by the truck and shovel operation and borders our Protected Conservation Area at the top of the batter. To stabilise the batter, topsoil was spread at an average thickness of 150mm and native vegetation seed was spread along with a nurse crop of rye corn. As mining progresses, this batter will expand in area to the south and will progressively be rehabilitated to ensure the landform is stabilised.

2023 Rehab Area 4: Morwell West Drain Diversion

In 2012, the Morwell West Drain Diversion was constructed to divert Morwell's West Catchment surface waters to the Morwell River Wetlands. EnergyAustralia has been progressively planting out this walking track with much success. Planting of the site commenced in 2012, with 44,926 plants installed up till 2022 to complete the total amount of plantings. 234 hours of plant maintenance and weed control was completed within the block this year over four visits. Now that the plantings have been completed the 27.2 Ha of rehabilitation can now be claimed and the conservation will continue to be maintained into the future.



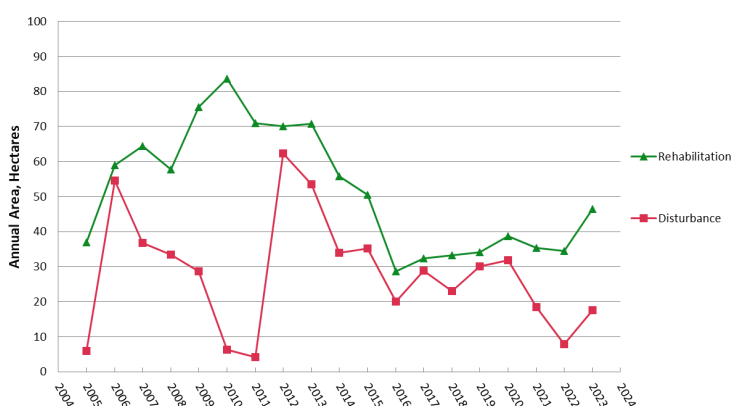
Morwell West Drain Diversion

Rehabilitation Performance

Landscape Function Analysis (LFA) surveys continued this year with surveys conducted across 10 transects within undisturbed and rehabilitated areas of the mine including 6 transects in undisturbed (remnant and vegetated analogue sites) comprised of 4 transects in Conservation Management Plan (CMP) blocks and 2 transects in the Old Ash Ponds (OAP). The remaining 4 transects continued the assessments of recently rehabilitated (2020) sites on the Perimeter Batters (PB) and in the Southern Overburden Dump (SOB).

The assessed transects in the undisturbed sites areas of the CMP and OAP maintained 1.00 Landscape Organisation Index (LOI) indicating a full patch with no inter-patches, which is expected of transects in Gippsland (based on the areas rainfall). The Soil Surface Assessments (SSA) showed little change in stability, but upward changes to infiltration and nutrient cycling reflecting favourable climatic conditions with rainfall higher than the median in the preceding 12 months. The SSA results for undisturbed sites sit at the far-right hand side of the sigmoidal trend and are considered stable. The SSA results are within the range of variability seen in these transects in the past with SSA results more likely to be influenced by climatic and site-specific factors such as animal browsing, tree fall, local flooding, etc. than by the trend of the soil surface in response to rehabilitation variables.

Yallourn Mine Annual Rehabilitation and Disturbance



Mine Progressive Rehabilitation Continued

The assessed transects on the recently rehabilitated PB and direct seeded area of the SOB showed some variability. The mean LOI and SSA results for the SOB transects slightly decreased due to 1 transect however the trend shows that direct seeding areas of the SOB have established more rapidly than those rehabilitated with tube stock planting which will reduce the period of time in which the area needs to be actively managed. The SSA results for the PB are still reasonably high, though the indices for both transects decreased. While many batters across the site have been shown to drop slightly shortly after the first assessment, monitoring should be continued for the PB.

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.

Shown on page 11 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 2023;
- 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

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, whilst a sophisticated network of groundwater bores allow monitoring and control of any water contamination.

During 2023, 254,481 cubic metres of ash material was managed without licence breach or increased environmental risk.

As required by the EPA Operating Licence, EPA appointed external auditors have reviewed the ash facility management since 2011. The latest audit was completed in December 2023 and overall, the Auditor is of the opinion that the monitoring program and management practices are in general compliance with the licence conditions.

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. The Rehabilitation and Closure Plan was verified by an Environmental Auditor as meeting the requirements of the EPA Licence.

Brown Coal and Ash Developments

In August 2023, EnergyAustralia released its inaugural Climate Transition Action Plan which outlined its ambition and approach to decarbonisation. This included a commitment to close the Yallourn coal-fired power station and mine in mid-2028.

While the site will cease to operate as a coal-fired power station, EnergyAustralia is exploring how the site may evolve to support new economic uses. We are working with companies investing in projects that are environmentally sustainable and create economic and social benefits for the region.

For example, EnergyAustralia is supporting a project under development by Latrobe Magnesium to recycle fly ash from Yallourn. This ash is a by-product of coal-fired power generation, which in the case of Yallourn, is high in minerals such as magnesium and iron and has the potential to produce high value products.

Latrobe Magnesium intend initially to 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.



Magnesium project

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 9595 seedlings in 2023 of which the majority were placed within offset conservation zones and habitat improvement areas.

Yallourn Mine Conservation Plantings completed for 2023

BOTANICAL NAME	COMMON NAME	TOTALS	BOTANICAL NAME	COMMON NAME	TOTALS
<i>Acacia dealbata</i>	Silver Wattle	965	<i>Eucalyptus Rubida</i>	Candlebark	100
<i>Acacia mearnsil</i>	Black Wattle	350	<i>Eucalyptus strzeleckii</i>	Strzelecki Gum	1500
<i>Acacia melanoxylon</i>	Blackwood	375	<i>Goodenia ovata</i>	Hop Goodenia	100
<i>Acacia paradoxa</i>	Hedge Wattle	285	<i>Gynatrix pulchella</i>	Hemp Bush	300
<i>Acacia stricta</i>	Hop Wattle	110	<i>Kunzea ericoides</i>	Burgan	680
<i>Acacia verticillata</i>	Prickly Moses	475	<i>Leptospermum continentale</i>	Prickly Tea-tree	1040
<i>Bursaria spinosa</i>	Sweet Bursaria	465	<i>Melaleuca ericifolia</i>	Swamp paperback	1090
<i>Cassinia aculeata</i>	Common Cassinia	565	<i>Ozothamnus ferrugineus</i>	Tree Everlasting	280
<i>Eucalyptus obliqua</i>	Messmate	400	<i>Poa labillardierei</i>	Common Tussock	50
<i>Eucalyptus radiata</i>	Narrow-leaf Peppermint	150	<i>Pomaderris aspera</i>	Hazel Pomaderris	315
Total					9595



At the Fuel distribution house, a magpie family with three baby maggies still in their nest

Fauna Monitoring

Fauna monitoring programs continued throughout 2023 with vertebrate surveys and bird surveys completed across the mine and perimeter areas.

Land survey

A survey of vertebrate fauna of CMP Blocks g, h and 28 was conducted in mid-February 2023. Ninety-five vertebrate species were recorded comprising 24 mammals, 61 birds, seven reptiles and three amphibians. Rare and threatened species recorded were Lewin's Rail, Hardhead and Spotless Crake. Spotless Crake, which is rarely seen, was recorded in block g for the time since intensive surveys began in 2007. Breeding was recorded for Black Swan.

Agile Antechinus was recorded in each block for the first time since intensive surveys began. Nine species of insectivorous bats were recorded, the highest number recorded since surveys began. Krefft's Glider was recorded in both old-growth areas and revegetation areas. Several species of woodland birds were recorded in revegetation areas in blocks g and h for the first time. Several species including bats, terrestrial mammals and woodland birds were recorded in remnant old-growth vegetation for the first time since intensive surveys began in 2007.

The results of these surveys show the value of properly structured revegetation projects, the importance of retaining old-growth habitat and the importance of on-going monitoring.

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 2023. 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.



Yellow Robin captured on trail camera
(Courtesy P. Homan)

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 2023.

This involved funding for the protection of platypus habitat within the Narracan Creek and Morwell River. Over 2023 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.

The project which was scheduled to be completed in December 2023 will be extended to December 2024, with a possibility of additional trees planted in April 2025.

EnergyAustralia also contributed funding towards continued creation and expansion of existing shade and shelterbelts on farms from Willow Grove, Glengarry Boolarra and Shady creek. This particular project is tracking towards the restoration of areas where clear fell logging happened over the past 100 years. The tangible benefits of this project have been echoed by many Landholders, increased animal welfare, creek rehabilitation, wetland protection, soil health improvement and habitat creation for native species.

First year of the 3 year project saw 4 landholders from east of Glengarry and 1 landholder from Boolarra install:

- 2,450m of fencing, and
- 4,100 trees planted.

With funding confirmed for the second year of Shade and Shelterbelts, there are 3 new landholders from the Willow Grove/Shady Creek area and the continuation of projects on farms in Glengarry and Boolarra which will see a further:

- 2,150m of fencing, and
- 3,910 trees planted.



Mine Water Management

During 2023 a major geotechnical project was begun to buttress the toe of the Fire Service Pond Batters to improve the current stability and prepare the batters for closure. To buttress the toe with overburden material the fire services pond water level had to be lowered by 5 meters in order to expose the floor of the Mine. This meant the more water was required to be treated and discharged from the Mine. The Fire Service Pumping infrastructure also needed to be modified so that the pumps could continue to operate at the lower levels. This batter surcharging project is continuing into 2024 therefore the Fire Service Ponds operational level will remain at the low levels.

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 2023 CALENDAR YEAR
<i>Flow Rate</i>	Mean Daily Flow	ML/day	80.5	53.7
<i>Colour</i>	Annual Median	Pt-Co	44	20
	Maximum	Pt-Co	70	50
<i>Electrical conductivity</i>	Annual Median	uS/cm	790	580
	Maximum	uS/cm	940	610
<i>Turbidity</i>	Annual Median	NTU	24	16
	Maximum	NTU	53	53
<i>pH</i>	Maximum	pH	8.5	7.4
	Minimum	pH	6	6.2

Summary of our EPA Licence water discharge.

Community Partnership and Engagement



Steve Vella , Alf Vella from Gippsland Motorcycle together with staff at Yallourn Chad Hosking, David Burt, Meredith Bowden, Jeff Redman, Luke Easter, Matt Demczuk, Mick Arnold

EnergyAustralia has also agreed to support this event until closure.

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. Employees at Yallourn also stepped up to again 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.

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. EnergyAustralia has agreed to support this event until closure in 2028.

This was followed by the Australian Junior Masters water ski tournament held at Halls Bay in Lake Narracan.

Our final 'major sponsorship' event for 2023 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. Ener-



Chris Kyriacou & Anton Devent at Peoples Kitchen

Community Partnership and Engagement Cont.

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

- Gippsland Children's Choir;
- Rotary Club of Moe;
- Knitted Knockers;
- Moe Bowls Club;
- Yallourn North Senior Citizens;
- Moe Art Society;
- Baw Baw Latrobe Local Learning & Employment Network;
- Hill End Community Art Show;
- Gippsland Sports Academy;
- Gippsland Heritage Park (Old Gippstown);
- Baringa Special School;
- Moartz;
- Moe Art Society;
- Gippsland Antique Bottles & Collectables Club;
- Moe Cricket Club;
- Moe Lions Junior Football Club;
- Latrobe Valley University of the Third Age;
- Moe Amateur Swimming Club;
- Morwell Cricket Club;
- Variety;
- The Lions Club of Willow Grove and District;
- Morwell Catholic Parish; and
- The Apex Club of Moe.

Our grant program (up to \$10,000) was again run over two rounds during 2023, with funds allocated as follows:

- Morwell Neighbourhood House—\$9,519.40 – for the purchase and installation of a new oven at the Kinder Cup Café which operates the peoples Kitchen where meals are prepared and cooked to supply the food bank.
- Gippstown Reserve Committee of Management (Old Gippstown) - \$8,000.00—Towards the installation of a self-guided audio tour system using QR code technology.
- Newborough Urban Fire Brigade—\$3,200.00—To update the brigade's community education capacity with the purchase of an interactive TV and iPads.
- Yallourn North Fire Brigade—\$1,178.10—To replace the brigade's aging petrol-powered demolition saw which is used to allow entry for rescue operations.
- Berry Street Victoria—\$9,000.00— Towards the L2P program helping local disadvantaged youth gain the required driving experience to successfully gain their licence.

- Morwell Men's Shed— \$3,443.00—To purchase a shipping container to provide additional space at their workshop, encouraging increased membership and providing additional storage.
- Moe Neighbourhood House—\$6,000.00— To support Community Carols event to be hosted at Apex Park in Moe in December.
- Baw Baw Latrobe Local Learning & Employment Network— \$5,490.00—To purchase 10x iPads for Project Ready which is being delivered to students in Years 10-12 at a number of schools in the area. The intention of Project Ready is to increase school retention by delivering an alternative educational approach.
- Traralgon Men's Shed & Woodworking—\$8,000.00—To cover costs of materials to create items that are then donated to the Latrobe Valley CFA brigades such as honour boards, outdoor tables and benches, and storage shelves for equipment.

Another successful year supporting our local community, and we look forward to a bigger and better effort in 2024!



Yallourn Grant Recipients.

Self-Guided Tour Start

Proudly sponsored by
EnergyAustralia
LIGHT THE WAY



*Mobile Data Charges May Apply

Old Gippstown—Installation of QR Codes for Self Guided Tours..

Surrounding Lands

Morwell West Drain Diversion Walking Track

In 2018 the Morwell West Drain Diversion 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 which extends on from the current conservation areas. 2023 saw an additional 3,500 native tubestock being planted through this corridor. These plantings also form an important part of the overall Strzelecki-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 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 Southeast of the Mine off Marretts Road. EnergyAustralia has been working closely with the club to help facilitate its relocation through the setup of a new lease, perimeter fencing, planting out a vegetation screen, building a carpark and conducting extensive earth works to build up the land to accommodate the trap layouts. The Morwell Gun club were also fortunate to secure two rounds of State Government funding to help build new clubrooms and fit out the shooting range. The club is a Down the Line Clay shooting facility and now has four trap layouts that can accommodate 20 shooters at a time. The club has now proudly opened its doors to their patient members with a very impressive opening shoot with over 120 competitive shooters

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.

Moe-Yallourn Rail Trail

EnergyAustralia Yallourn owns a 1.2km section of the Moe-Yallourn Rail Trail which provides a connection from Moe to the EnergyAustralia Graeme-Edwards Memorial garden at the foot of the Yallourn W cooling towers. In 2023 extensive drainage rectification works were completed in sections along the track as well as resurfacing and reprofiling. EnergyAustralia Yallourn worked with the Friends of Yallourn Moe Rail Trail Committee to deliver on these maintenance works to ensure the Rail Trail can continue to operate into the future, providing the community with a wonderful location to walk, run or ride while enjoying view across Lake Narracan .



Morwell River Diversion Flood levee repair

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 Advance Morwell meetings.

During 2023, EnergyAustralia Yallourn representatives were actively involved with the Latrobe Valley Authority in the development of the Gippsland Transition Plan. The plan which is being coordinated and prepared by the Latrobe Valley Authority seeks to develop a regional roadmap for the region.

A Community Newsletter was distributed to the Yallourn North township which provided information on:

The “Screaming Dragon” noise issue at the Saline water basin area of the Yallourn site, leading to an innovative silencer solution being developed by Yallourn team members. The newsletter also provided information on contacting EA, and the Community Grants program.

Community partnership Videos were been produced to highlight the benefits of Community Grants for recipient organisations. The videos were produced for:

- Moe – Yallourn Rail Trail;
- LV Beekeepers;
- Newborough East Primary school;
- Yallourn North Bowling Club;
- Haunted Hills Mountain bike park.

EnergyAustralia released their revised Reconciliation Action plan during 2023.

During February, 26 EA staff from Yallourn, Jeeralang and the Wooreen project took part in a Cultural Awareness Day with the Gunaikurnai Land and waters Aboriginal Corporation who are recognised as the Traditional Owners of the lands we operate on. The program included a visit to The Krowathunkooloong Keeping Place in Bairnsdale. The Keeping Place holds displays of traditional hunting and fighting weapons, bark canoes, baskets, fishing spears, boomerangs and contemporary Gunaikurnai artwork.

In February, the Yallourn Mine team completed drainage works on the Moe-Yallourn Rail trail. A large section of the rail trail runs through EA Yallourn land. Over recent years, large rain events have led to significant erosion issues.

The Yallourn Mine team and RTL staff have worked to reinstate the drainage system by removing blockages and debris.

Grading of the trail and the placement of materials will also improve water runoff on the trail near the power station end of the trail.

Environmental Advice

During 2023 “Environmental Advice” continued to be used through the EnergyAustralia Yallourn Facebook page. The aim of the advices was to inform the local community of environmental events that could, or potentially impact the local community.

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

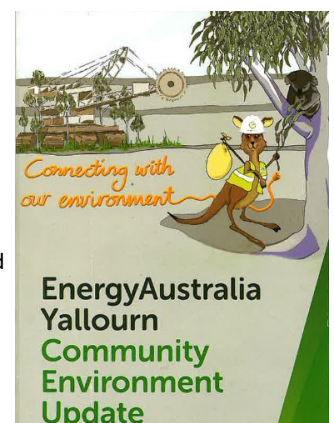
New Energy Technology Program

During 2023 EnergyAustralia supported a local education program, “New Energy Technology program” which was run by the Baw Baw Latrobe Lenn, and involved students from local secondary schools.

EnergyAustralia participated along with other local organisations, and worked with Year 8 and Year 9 students from Warragul Regional College and Drouin Secondary College, whereby the students researched and developed a model in lego blocks that depicted a rehabilitated Yallourn Mine lake with various recreational pursuits identified.

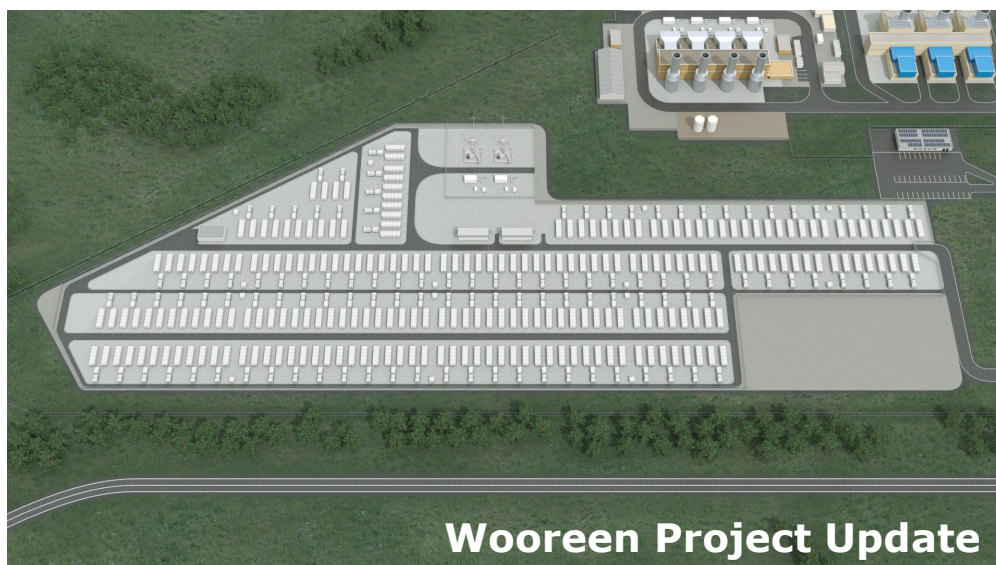
May David Burt presented on how EnergyAustralia is supporting the energy transition in the Latrobe Valley, as part of an evening with Mark Wakeham (ex ACTU, Environment Victoria) who undertook a Churchill Fellowship tour of European countries earlier this year.

During May Yallourn hosted a visit by local careers Teachers who all have an interest in providing young people with information about potential career options in the region. Yallourn welcomed this opportunity to show that career and educational opportunities are still present despite our planned closure in 2028, and that closure and rehabilitation will provide other opportunities for the Latrobe Valley community.



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 February, EnergyAustralia received planning approval from the Department of Environment, Land, Water and Planning.

Activities	Proposed timeframe
Planning Approval	Completed (Feb 2023)
Announcement of Preferred Supplier	Q3-4 2023
Commence construction	Q2 – 2024
Commissioning	Q4 – 2025
Commercial Operation	Q2 2026

Safety

The health and safety performance for Yallourn 2023 was incomparable to previous years due to 2 major outages being conducted. The outages were a huge undertaking and whilst every measure was taken to prevent incidents / injury, there was an unacceptable number of recordable injuries; 6 Lost Time Injuries (LTI), 2 Restricted Work Injuries (RWI), 6 Medical Treatment Injuries (MTI).

In total, the site worked 1,470,692 hours during 2023, this is an increase on the previous year (970,614).

The 2023 Health, Safety & Wellbeing Improvement Plan was rolled out in January and had a completion rate of 84% compared to 79% in 2022, an excellent effort by all personnel.

The Health & Safety team was bolstered by the recruitment of a H&S Lead and Safety Advisor and the return of Lee Pearson

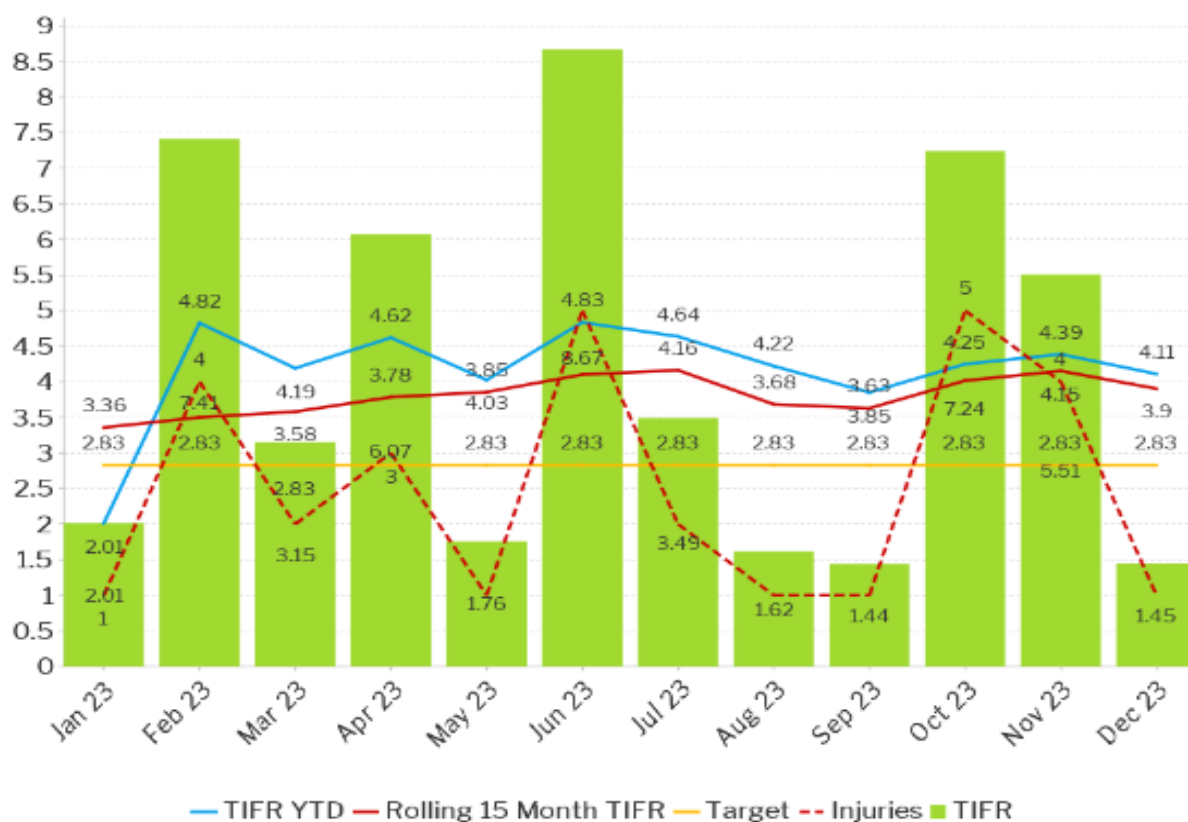
12-month rolling average record of Total Injury Frequency Rate (TIFR) is tabled below, and the rate for 2023 was 4.11 against a target of 2.83, this is an increase compared to 2022 (2.78).

A major incident in 2023 was the fall of a Spring Hangar. No one was injured in this incident however it led to the Crisis Management Process being activated and along with our workers the incident was controlled effectively.

Consultation and communication with regulators, HSRs and workers at all levels was improved greatly during this time and has continued along this path.

The improved working relationship with external regulators in 2022 continued to further improve in 2023.

Another highlight was RUOK Day program which was supported by the Leadership team and a local service club, cooking and serving bacon & egg rolls to all employees.



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.

Whilst we did make progress, due to circumstances outside of our control we were unable to meet the healthy eating benchmark. However, we anticipate meeting the overall healthy eating benchmark in the first quarter of 2024. 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 fried as a healthier alternative. 2023 was set to see the completion of this achievement unfortunately due to the transition of ownership of the canteen on site plans to complete this achievement were delayed.



Employees enjoying the end of year BBQ

Wellbeing Events

In 2023 the nurses ran basic health assessment days and offered basic health checks by appointment 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 approx. 20 people participating. Increasing participation in our basic health assessment days will be an area of focus for 2024 and towards the end of 2023 we developed a plan with alliance partner RTL with the aim to get more people participating in basic health assessments regularly.



In September 2023 for “RUOK” day, the Yallourn site put on breakfast 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. EnergyAustralia Yallourn puts a lot of effort into making everyone feel included and supported and initiatives like “R U OK” day and our Christmas BBQ clearly demonstrate the wonderful supportive community we have developed within the workplace .

Lions Club Members cooking the R U OK bacon and eggs.

Targeted Programs

The influenza vaccination program was again conducted with 242 employees immunised against influenza in 2023 using a 'walk through' vaccination program. A few years ago, at Yallourn we changed our vaccination program to a "walk through" clinic which continued in 2023. We have found that having a walk-through clinic provides another opportunity for employees across the site to interact and catch up with each other while they are waiting out their mandatory post vaccination observation period. In 2024 we intend to provide some simple games to help increase this level of interaction with each other during their observation period.

Health awareness topics covered this year were Dental Care, Hearing Awareness Week, Men's Health Week, National Safe Work Month, Nutrition Week, Priority Primary Care Clinic local opening, Post Traumatic Stress Disorder, Respiratory Care Week, Sepsis Awareness, World No Tobacco Day, Heart Health Awareness, Thyroid Awareness Month and Asthma Awareness.

In February 2021, we introduced Rapid Antigen Tests (RAT) on-site to screen employees and prevent COVID-19 entering our site. Whilst testing processes have changed and evolved extensively over the past 3 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. This year was a much more controlled year in terms of COVID-19. While we still had cases on site our procedures are robust, we still off a constant supply of rapid antigen tests and we have not seen covid cause the disruptions to site it has in previous years.

In 2023 the health and wellbeing team ran a very successful safety glasses fit testing program, which saw many power station employees undergo safety glasses fit testing to ensure employees are wearing the most appropriate safety glasses for them individually. This initiative has been well received and in 2024 we will be looking to expand this practice to RTL and the Mine.

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.

Some significant upgrades of the mine fire service network were completed during 2023. The key projects included the completion of 3km of 300mm diameter sprayline around the western batters of township field and construction of 1.8km of 750mm fire service main pipeline in Maryvale 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 2023 to ensure all fire breaks, slashing and grazing activities were undertaken to reduce fire risk where needed.

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.

Occupation Health Centre

2023 saw a total of 560 presentations to the Occupational Health Centre, a 46% increase in overall visits when compared to 2022 (383 presentations). There was an increase in new occupational health injuries at work by 55% however in 2023 we had several minor/major outages which saw site employee numbers well above normal, this is a major contributor to the increase in new occupational injuries at work as we had more personnel onsite.

Foreign bodies in eyes continue to be the most common presentation to the Occupational Health Centre with 78 presentations in 2023, an increase of 95% when compared to 2022. This was followed by 'other' injuries which include medical conditions such as dehydration etc. Sprains and strains accounted for 13 presentations; cuts, bruises, and abrasions with 30 presentations; and burns and trips and falls with 9 presentations each.

42 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 30% increase from 2022 and is also attributed to the increased personnel onsite due to the minor/major outages.

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 presentations for home injuries or non-work-related injuries of close to 50% for the first time in 4 years, this is a testament to the value the employees hold to services we provide. Site feedback indicates employees are more aware of the services available at that the Occupational Health Centre, increasing the awareness and use of occupational health centre services for home injuries or non-work related injuries was one of the Yallourn Health and Wellbeing Team's core goals for 2023 and the rise in presentations by 50% is testament to the team of nurses we have who strive hard to promote onsite service capabilities.

We hope to see decreases in work related injuries and an increase in the number of preventative health attendances in 2024, 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.

Emergency Services

Estate Services responded 292 times to Incidents on the Yallourn site during 2023. These consisted of 40 Fires, 235 Fire Detection alarms, 15 Medical episodes, 1 Rescue and 1 offsite response.

With new Fire Rescue Victoria requirements for response, we have seen an increase in the involvement of the combat authority at Yallourn.

Estate Services have facilitated First aid and Fire training for both the Station and Mine personnel and organized Level 2 incident controller courses for employees to assist them in managing incidents and contributing to a positive outcome during the 2023 Part 7A exercise which was undertaken in November.

In 2022 Estate Services employed 4 new Provisional Emergency Services Officers as secession planning for the future. During 2023 Estate Services have embarked on a training schedule that has given the Provisional ESO's the skills and knowledge to actively respond to all emergencies on site at Yallourn Power Station. They have also recently completed their Certificate 2 in Public Safety.

As part of the training schedule for 2023, Estate Services completed 7 Emergency exercises with the Power Station and Mine. These exercises covered confined space, first aid, high angle rope rescue, site evacuation and fires in the Mine scenarios. With the emphasis on safety and learning, valuable outcomes have been achieved from task planning, site familiarisation, the purchase of new and more job specific equipment.

Estate Services sent a team to the Victorian Mineral Mines Rescue Competition in Stawell. The team comprising a Captain and 6 members competed in various rescue, first aid and fire scenarios over the weekend. Only the Team Captain Russel Masters (10 years) had participated in an event like this before with all other members competing for the first time.

Fire preparedness as always is a focus in and around the EnergyAustralia Yallourn site and adjacent properties. With an expected long hot summer predicted, preparations are well established and works being completed.

Yallourn Transition

EnergyAustralia is determined to demonstrate that coal-fired power can exit the market in a way that supports our people, the community and customers. This update outlines steps we are taking to support our employees and look for opportunities for the site to support the community.

Supporting the Yallourn workforce reach their goals

With the launch of the Yallourn Transition Program in November 2022, the program has now moved to the implementation phase where employees are engaging in the program and commencing various training activities and accessing support.

In 2023 employees have been encouraged to create Individual Transition Plans setting out an employee's transition goals including identifying potential future employment, training or other support needed for a successful future. We have seen over half of the workforce participate in creating a plan so far.

In addition to developing a Transition Plan, all Yallourn based employees were again invited to attend a 1:1 career and coaching session with a qualified coach. In 2023, 222 Yallourn employees attended a 1:1 session with a career coach to discuss how to implement their Individual Transition Plan and reach their goals.

The Yallourn Transition Program provides employees with the opportunity to undertake any training in accordance with the program guidelines. Employees can elect to do more than one course and are provided with up to 10 days study leave to assist in attending training. In 2023, 44 employees across the power station and mine upgraded their skills and undertook some form of training. Training ranged across short courses to multi-year degrees. Some of the course's staff have commenced include Cert IV in Project Management, Airbrushing short course, Auslan beginner course, various Bachelor degrees across Education, Environmental Science and Nursing, Masters across Neuroscience, Arts and Engineering.

Securing employment will be central to a successful transition for many Yallourn workers post closure, however for others a secure financial future will be just as important, especially for those considering retirement. Unique to the Yallourn Transition Program is the opportunity for employees to obtain financial advice or develop a Statement of Advice from a licenced financial service provider. Since the program has launched, 36 employees have taken up financial services helping them budget for the future.

Recognition of Prior Learning is a key plank for employees to be able to certify to a new employer the skills and expertise they have gained while at Yallourn. EnergyAustralia has supported 38 power station operators to receive a nationally recognised certificate in Electricity Supply Industry (ESI) Generation for the training they have completed.

For the first time, EnergyAustralia launched an Adult Apprenticeship program at Yallourn to provide existing employees with the opportunity to re-train in a new trade. In 2024 we are proud to see four employees begin an Electrical and Instrumentation Apprenticeship a highly demanded trade across the power sector.

The offshore wind industry provides the promise of new employment for Gippsland residents and EnergyAustralia is working with sector to develop employment and training pathways for Yallourn employees this new industry. In 2023 EnergyAustralia announced a partnership with Elanora Offshore for the Job Upskilling and Matching Program (JUMP) to match interested Yallourn workers to roles in the Elanora Offshore wind project and provide the necessary training to upskill for a successful future career in offshore wind. The program is subject to Elanora Offshore securing a feasibility licence which would see the project create 3000 direct jobs in construction and 320 direct jobs during operation.

EnergyAustralia continues to engage with other local projects and industries about potential employment opportunities for employees post closure, as well as support for our suppliers to pivot their businesses based on the future demand of the region.

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



Adult Apprentices
Back L-R—Luke Claney & Brendon Marcou
Front L-R—Lachlan McDonald & David O'Dowd

Yallourn Transition Cont.

Re-imagining the future of Yallourn

As we prepare to close the Yallourn power station in mid-2028, EnergyAustralia are committed to honouring Yallourn's legacy and want the future of the site to be part of supporting the region's transition to new economic opportunities, creating jobs, as well as providing recreational and environmental amenity.

Fundamental to the realisation of any future opportunities is ensuring all land is safe and stable, which can only be achieved with the creation of a lake. In addition, the rate at which the lake is filled will determine the timing of land becoming available for future uses.

EnergyAustralia is open to exploring all credible opportunities to best utilise the land to deliver outcomes for the region for generations to come. In 2024 we intend to expand these conversations including sharing information with the community about the science and engineering associated with future options for Yallourn.

Yallourn Transition Program Services Available



All Inclusive Support	Training Support	Specialist Services
Available to all Regular Yallourn employees	Available to EnergyAustralia & Alliance Partner employees, including Regular Casual employees	
<ul style="list-style-type: none">• 1:1 Career planning session to build your Individual Transition Plan• Workshops including:<ul style="list-style-type: none">◦ Job application support (<i>resume, interview preparation, networking</i>)◦ Self-employment◦ Retirement planning• 1:1 financial advice & capped support for a Financial Plan*• Financial Wellbeing and Superannuation information sessions• Transition website• Employment information sessions & career fairs• Redeployment linking/network support• EAP services• Family/ community support sessions• Referral to government support services	<ul style="list-style-type: none">• Training information sessions (Gippsland Tafe, Federation Uni, Thomson Bridge)• Licences & tickets• Recognition of Prior Learning (RPL)• Adult apprenticeships• Short courses, micro-credentials & certificate courses• Tertiary training, degrees, masters• On-the-job training & development• Mentoring• LinkedIn Learning (subject to parent company licencing)	<ul style="list-style-type: none">• 1:1 career coaching sessions• 1:1 retirement planning support• 1:1 job seeker support• 1:1 self-employment support• 1:1 redeployment support <div>Additional services available to EnergyAustralia employees<ul style="list-style-type: none">• 1:1 financial planning*• Small business seed funding</div>

EnergyAustralia Environment Review Committee (ERC)

Report of Independent Chairman 2023 Year

The EnergyAustralia Yallourn (EAY) Environment Review Committee met four times during 2023, including a tour of the Mine operations and see the mobile dust monitoring unit, located on an external site providing real time dust monitoring.

While EnergyAustralia Yallourn had a relatively below average rainfall during winter, which proved beneficial for mining operations, there was concern about an increased fire risk for the approaching summer period. However, following major rainfall in October, mitigation works on the Morwell River Diversion performed well and prevented damage, previously experienced in August 2022.

Environmental Performance

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

During 2023, EnergyAustralia Yallourn announced the closure of operations bought forward 4 years from 2032 to 2028.

Environmental performance results focused on dust emissions, water consumption, volume and salinity of wastewater discharges, community complaints and licence compliance.

Regarding dust emission trend reports, all particle emissions were below the annual business target and well below EPA licence nominal limits. The Environment Review Committee inspected the dust monitoring units installed in the EAY operations surrounds which provide dust monitoring enabling a higher degree of accuracy and real time issue identification.

There have been fewer operation outages for 2023 compared to 2022 which has contributed to a reduced water consumption. Waste water discharge have met licence limits 100% of the time and were well below the licence limit. The electrical conductivity of waste water discharge (salinity levels) were well below business and licence limits and thanks to the mining crew was noted by the Committee.

There was only one complaint received during 2023 for noise in June which EAY had investigated by a noise consultant to undertake noise study. In August there were two public enquiries into possible particle fallout which was followed up by the company who engaged with the resident as follow up and use the real time portable dust monitors to assess and identify the type of operations which may have caused the particle fallout.

There have been no notifiable incidents or licence exceedances identified during 2023. In October there was a flooding event which had the potential for exceedances, but with monitoring in place, it was confirmed that it was well managed at the time and notifications to EPA was not required.

Mine Rehabilitation

EnergyAustralia Yallourn remains committed to the internal target of rehabilitating more land than is disturbed in operations. Mine Rehabilitation reporting focuses on Eastfield Overburden dump, Maryvale Field over height dump, Maryvale Field Eastern Batter, Morwell West Drain Diversion and the Yallourn North Open cut return water basis batter. Additional areas rehabilitated but not included in claims include the Morwell River diversion surcharge, the Morwell River diversion surcharge barrow pit, Morwell West drain diversion and Township field shoreline areas. In 2023 there was a plan for 46.2 hectares to be rehabilitated compared to 2022 34.4 hectares.

The Morwell West Drain Diversion, which was a new area added to rehabilitation to create an environmental corridor for wildlife. The community is encouraged to visit the site which is publically accessible from Latrobe Road or Toners Land and provides a quality walking track where mine rehabilitation progress can be viewed.

The project to lower the Fire Services pond was completed and water levels have successfully been maintained with the quality of the water has been maintained. Despite the record level of rainfall in October, the highest recorded since 1932, the mine batters held up and most of the water entered the mine but was pumped out as quickly as possible ensuring the geotechnical buttressing project was not held up.

EnergyAustralia Yallourn submitted a work plan variation to Earth Resources Regulation to address a slight change to the mine plan foot print accounting for the 2028 earlier closure and implement the recommendation from the Morwell River Diversion investigation. Recent discussions with the regulator have focused on the stability of the southern batter of Maryvale and is hoping to have the application approved soon. The new Declared Mine Rehabilitation Plan is due to be submitted by 30 September 2025 and key stakeholders across the EnergyAustralia Yallourn site, including the Environment Review Committee have been engaged with rehabilitation visioning workshops to develop and understanding of *"What does good rehabilitation and closure look like for Yallourn?"*

Following consultation with EPA, EnergyAustralia Yallourn is seeking EPA approval to include a Latrobe River emergency discharge point into the operating licence following the identification that the exemption against a development licence was appropriate.

Yallourn Transition

EnergyAustralia Yallourn is committed to delivering a leading employment transition experience for its workforce with the transformation of the Yallourn site to enable prosperity and amenity to be derived for the generations to come. The company secured \$10 Million package to support workers and provide career counselling options.

EnergyAustralia Environment Review Committee (ERC)

Report of Independent Chairman 2023 Year Cont.

Community Engagement

EnergyAustralia Yallourn has developed the internal branding of Heart of EA to reflect the social investment initiatives including workplace giving, volunteering, grants, sponsorships and the reconciliation action plan. The Heart of EA grants contributed to funding a new oven for the People's Kitchen program run by the Morwell Neighbourhood House, supporting the Old Gipps town Reserve Committee of Management and the Newborough urban fire brigade.

EnergyAustralia Yallourn has invested \$100 Million into the large scale 350 megawatt battery storage at Woreen since the company's investment in the Jeeralang Turbine Station. The major investment in reliability and spare parts aim to improve safety performance and reliability to ensure Jeeralang is fit for future purpose in renewables.

To assist the community, EnergyAustralia Yallourn has undertaken a large scale social media alert and a 5000 home letter box drop to provide guidance as to how the community can directly contact EnergyAustralia Yallourn if community members believe an incident is linked to the company's operations.

To invest in reconciliation, EnergyAustralia Yallourn has partnered with the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) to develop a Reconciliation Action Plan to focus on innovation to;

- Increase Aboriginal and Torres Strait Islander supplier diversity to support improved economic and social outcomes.
- Establish and maintain mutually beneficial relationships with Aboriginal and Torres Strait Islander stakeholders and organisations (e.g., GLaWAC).
- Demonstrate respect for Aboriginal and Torres Strait Islander peoples by observing and exercising of cultural protocols.
- Build relationships by celebrating National Reconciliation Week.
- Build respect for Aboriginal and Torres Strait Islander cultures and history by celebrating NAIDOC Week.

EnergyAustralia Yallourn acknowledges the depth of talent and commitment of their staff to the last five years of energy provision before its closure in 2028. The company's considered approach to their employee investment and transition reflects on EnergyAustralia's commitment to its broader community.



Susan Lloyd (FAICD, MOrGL'ship, BAppSci, GradDipEd)
Independent Chair EnergyAustralia Yallourn Environment Review Committee
December 2023

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	2023	2022	2021
1. Operation				
Electricity sent out ⁽¹⁾	GWh	7,687	7,961	7,969
Coal consumed	TJ	118,275	115,553	118,275
Oil consumed	TJ	464	527	464
Thermal efficiency	%	24.1	24.0	24.4
Equivalent availability factor (EAF) ⁽²⁾	%	67.9	66.7	73.8
2. Air Emissions				
CO ₂ e (Scopes 1 & 2)	kT	10,997	11,029	11,246
SO ₂ ⁽³⁾	kT	14.6	14.7	14.7
NO _x ⁽³⁾	kT	9.6	9.7	10.1
Particulate (Total) ⁽⁵⁾	kT	5.3	4.9	5.3
3. Water				
Water Withdrawal	Mm ³	28.6	28.7	25.8
from marine water resources	Mm ³	0	0	0
from freshwater resources	Mm ³	26.87	26.93	24.45
from municipal sources	Mm ³	1.73	1.78	1.34
Water Discharged	Mm ³	21.337	22.073	13.707
treated wastewater discharged to sea	Mm ³	0	0	0
treated wastewater discharged to freshwater bodies	Mm ³	20.119	20.879	11.848
wastewater discharged to sewerage	Mm ³	1.22	1.19	1.86
Water Reused / Recycled	Mm ³	0.47	0.54	0.2
4. Environmental Compliance				
Regulatory non-compliance resulting in fines or prosecutions	No.	0	0	0
Licence limit exceedance & other non-compliance	No.	1	2	1
5. By-products & Waste Management				
Ash produced	kT	206	207	223
Ash recycled / sold	kT	0	0	0
Hazardous waste ⁽⁶⁾				
produced	T (solid) / kl (liquid)	58 / 177	58 / 177	417 / 214
recycled	T (solid) / kl (liquid)	1 / 175	1 / 175	1 / 204
disposed	T (solid) / kl (liquid)	58 / 2	58 / 2	415 / 10
Non-hazardous waste ⁽⁶⁾				
produced	T (solid) / kl (liquid)	3401 / 0	3401 / 0	3729 / 0
recycled	T (solid) / kl (liquid)	1058 / 0	1058 / 0	1554 / 0
disposed	T (solid) / kl (liquid)	2346 / 0	2346 / 0	2175 / 0
6. Safety				
Employee - Fatalities	No.	0	0	0
Employee - Days lost / charged	No.	0	0	0
Employee - Lost Time Injuries	No.	0	0	0
Employee - Total Work Hours	No.	401624	400666	469022
Contractor - Fatalities	No.	0	0	0
Contractor - Lost time Injuries	No.	1	1	3
Contractor - Total Work Hours	No.	1086677	1036796	1246347
7. Employee Development				
Employees ⁽⁷⁾	No.	771	306	228
Safety, health and environment training ⁽⁸⁾	Hours	7084	3145	4989

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.



EnergyAustralia
LIGHT THE WAY

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

Follow us on our Facebook page:
[Facebook.com/EnergyAustraliaYallourn](https://www.facebook.com/EnergyAustraliaYallourn)