



Your ref A1031137

Our ref A55702547

Enquiries

Mrs L.M, O'Malley MLA
Chair
Public Accounts Committee

Email: lapac@parliament.wa.gov.au

Dear Mrs O'Malley

REQUEST FOR SUBMISSION TO INQUIRY

Thank you for your letter dated 28 June 2023, inviting the Department of Mines, Industry Regulation and Safety (DMIRS) to make a written submission to the Public Accounts Committee inquiry on how the Western Australian Government's progress towards achieving Environmental, Social and Governance (ESG) outcomes is assisting to secure international investment.

This letter will provide an overview of DMIRS' responsibilities and address the following terms of reference:

1. *How the State Government's commitment to net zero emissions by 2050 will help improve ESG outcomes.*
2. *The financial implications of doing nothing.*
3. *Milestones in place for achieving ESG outcomes including any monitoring and reporting requirements.*
4. *How DMIRS is actively engaging Aboriginal and young people in decision-making.*

DMIRS was formed on 1 July 2017 when the Department of Commerce and Department of Mines and Petroleum were merged and is the lead regulator for the resources sector in Western Australia. Its mission is to support a safe, fair and responsible future for the Western Australian community, industry, energy and resources sector.

DMIRS' activities are delivered via five groups, reflecting its varied operations:

- **Resource and Environmental Regulation Group (RER)** is responsible for the regulation of one of Western Australia's largest industry sectors, playing a critical role in building the State's economy and ensuring resources are developed in a sustainable and responsible manner. It:
 - manages a system of leases, licences, permits and other approvals, which ensure the exploration and development of mineral and petroleum resources is done in a secure and orderly manner;
 - regulates resource development activities to ensure compliance, resource management and environmental legislation; and

- collects royalties on minerals and petroleum produced.
- **Energy Policy WA (EPWA)** is responsible for the delivery of energy policy advice to the Minister for Energy to assist government in making well-informed decisions that contribute to the supply of secure, reliable, sustainable and affordable energy services to Western Australian households and businesses. EPWA plays a pivotal role in the transitioning of the electricity systems in Western Australia to a low-emissions energy future.
- **Corporate Services and Labour Relations** offers specialist advice, effective business systems and internal controls to assist the department in achieving its strategic and operational objectives. This includes financial services, human resources, corporate information, corporate communications, assets services, ministerial liaison and office of the Director General.
- **Industry Regulation and Consumer Protection Group (IRCP)** works towards ensuring that there is a fair trading environment for Western Australian consumers and traders and that building, plumbing, gas and electricity services are safe. IRCP ensures there is a fair, safe and equitable marketplace by applying the Australian Consumer Law and other trading and occupational legislation, as well as setting and enforcing the licensing and technical safety requirements, standards and legislation for the building, plumbing, gas and electrical industries.
- **WorkSafe Group** oversees the regulatory and policy requirements of workers' health and safety in the resources and general industries sectors, and safety legislation for dangerous goods, including the State's major hazard facilities, and petroleum operations.

DMIRS works closely with a range of other State and Federal Government agencies involved in regulation of the industry, such as those providing environmental approvals or protecting Aboriginal heritage sites. DMIRS also facilitates native title agreements between companies and Aboriginal representative bodies.

Western Australia's Electricity Sector

Western Australia has two main electricity grids, the South West Interconnected System (SWIS) and the North West Interconnected System (NWIS). Western Australia also has a substantial off-grid generation, located at mining and industrial operations as well as various micro-grids at remote towns managed by Horizon Power.

Wind and solar generation volumes have been increasing rapidly in the SWIS. Since 2009-10, renewable energy resources have gone from around four per cent of total generation to around 34 per cent in 2022-23. In contrast, coal and gas have been declining, going from producing 96 per cent of total generation to 65 per cent of total generation over the same period. The remainder is produced by distillate (fuel oil) generators.

The SWIS Demand Assessment considered a number of demand scenarios to support the future growth in electricity demand from the electrification of industry and the establishment of new low emissions industries. Under the Future Ready scenario, 7.2 gigawatts (GW) of new industrial load was added to the SWIS over the period to 2042, resulting in around 40GW of new renewable energy generation; 5.5GW of new long duration energy storage capacity; and more than 4,000km of new high capacity (330/500 kilovolt) transmission lines. Similar modelling is underway in the Pilbara, which is also indicating the need for a step change in electricity transmission, generation and storage infrastructure.

Western Australia's Resources Sector

Western Australia is home to one of the most diverse and successful resource sectors in the world, producing \$246 billion worth of minerals and petroleum in 2022. It is the global leader in the production of iron ore and lithium, the third largest exporter of LNG, and amongst the top five producers of gold, nickel, alumina, cobalt and rare earths. Western Australia is also a major supplier of mineral sands.

Demand for Western Australia's resources is expected to continue to grow, driven by factors including the global transition to a low carbon future. Western Australia is a key supplier of the world's critical minerals, including the world's largest supplier of lithium, with 47 per cent of international lithium production in 2022.

1. How the State Government's commitment to net zero emissions by 2050 will help improve ESG outcomes.

In August 2019, the State Government made a commitment to achieve net zero emissions by 2050. This was followed by the launch of Western Australian Climate Policy in November 2020, bringing together all related policies and ensuring governance for delivery across portfolios through the Ministerial Taskforce on Climate Action.¹

To meet the net zero by 2050 target, the State Government launched the Sectoral Emissions Reduction Strategies (SERS) to develop robust and credible pathways to net zero.

It has also made interim commitments to address major sources of power system reliability and carbon emissions in Western Australia, including reducing government activities emissions by 80 per cent by 2030, using 2020 emissions as the baseline. These commitments will improve ESG outcomes by reducing emissions and ensuring a just transition to a net zero emissions economy.

Multiple initiatives have been commenced to enable these commitments to be met. Examples include:

- Energy Transformation Strategy: Evolving energy sector legislative and policy settings to support reliable electricity supply in a distributed and highly renewable generation environment, including evolving the ways in which consumers are involved and protected.
- Synergy decarbonisation: Phasing out State-owned coal fired power generation by 2030, which will remove Synergy's most carbon intensive electricity generation from the grid. Coal-fired generators are planned to be replaced with wind generation and battery storage, in a staged plan that ensures the reliability of electricity supply.
- SWIS Demand Assessment: Planning for a future electricity grid that can support increased volumes of renewable generation to meeting increasing industry demand arising from decarbonisation commitments.
- High Emissions Penalties: The introduction of a High Emissions Carbon Penalty through the Reserve Capacity Mechanism in the Wholesale Electricity Market, to provide incentives for low emissions generation.
- Renewable Hydrogen: Promoting innovations in alternative fuel and energy storage solutions, through the implementation of the Renewable Hydrogen Target and Horizon Power's Denham hydrogen demonstration plant.
- Standalone Power Systems: Replacing traditional poles and wires infrastructure vulnerable to climate events in regional and isolated areas with off-grid renewables based energy supply, to improve reliability of supply at lower cost.
- Distributed Energy Resources (DER) Roadmap: Integrating small scale renewables into the power system to support the transition to renewable energy and ongoing system security and reliability.
- Remote Communities Photovoltaics: Installing solar farms and battery energy storage in remote Aboriginal communities to reduce reliance on diesel generated power. The cost savings from projects will be re-invested in the community for further renewable energy initiatives.

¹ Western Australian Climate Policy

<https://www.wa.gov.au/government/publications/western-australian-climate-policy>

- **Advanced Metering Infrastructure:** Installing Advanced Metering Infrastructure for all households and businesses by 2027 to enable usage of emerging technologies, such as community batteries, microgrids, embedded networks and electric vehicles.
- **LED Streetlights Replacement:** Replacing all standard streetlights in the southwest of Western Australia with LED lights by 2029 to save energy and remove mercury from the environment.
- **Carbon Dioxide Geological Storage Atlas:** Updating the Western Australia Carbon Dioxide Geological Storage Atlas, which will provide industry a list of sites that are best suited for carbon storage and their characteristics.
- **Petroleum Legislation Amendment Bill 2023:** Progressing the Petroleum Legislation Amendment Bill 2023, which seeks to amend the State's petroleum legislation² that will providing a legislative framework for the transport and geological storage of greenhouse gases in Western Australia (as well as enabling exploration for naturally occurring hydrogen).

In addition to these initiatives, the State Government recognises that an efficient and effective regulatory framework is essential for providing industry with the certainty required to make investment decisions. Hence, the State Government is committed to support measures to streamline regulation while not compromising on environmental and social standards.

The overarching governance framework for the resources sector also involves other regulatory agencies across government, including the Department of Water and Environment Regulation and the Environmental Protection Authority. All agencies are focused on ensuring a high level of transparency in the way the legislation is administered as well as industry's compliance with the legislative requirements.

For example, the RER Group's Resource and Environmental Compliance (REC) Division has an outcomes-focused regulatory system that requires robust compliance monitoring, reporting and data management to evaluate the performance of industry in achieving environmental outcomes. This is delivered through a risk-based, outcomes-focused assessment and compliance system with prioritisation of resources to manage compliance assurance, inspections and enforcement.

Most environmental approvals for mining and petroleum exploration and development activities are processed by the REC Division.

A particular focus for the mining industry is the requirement to have approved mine closure plans as part of the mining proposal application process. Designed to allow for progressive closure and whole of mine life planning, closure plans are progressively refined during the term of each mining operation. Similarly, the petroleum industry is required to have approved Field Management Plans which must detail a decommissioning program.

Financial security to ensure all mines in the State will be rehabilitated is required in the form of annual contributions to the Mining Rehabilitation Fund (MRF)³:

- In Western Australia, all tenement holders that conduct mining or exploration operations on tenements granted under the *Mining Act 1978* are required to provide disturbance and rehabilitation information annually for the purposes of calculating a mining rehabilitation levy.
- Each year, the REC Division publishes the MRF Data Release which includes disturbance and rehabilitation data, which is considered the most comprehensive publicly available dataset of mine-site activities in Australia and is available for download through the DMIRS website.

² The *Petroleum and Geothermal Energy Resources Act 1967*, the *Petroleum (Submerged Lands) Act 1982* and the *Petroleum Pipelines Act 1969*

³ The MRF is featured in the WATC document [Supporting Continuous Improvement in ESG Outcomes for Western Australia \(www.wa.gov.au\)](#)

- By 30 June 2022, the net balance of the fund reached nearly \$254 million, and \$12.5 million in interest had been earned since July 2014. The fund is unique in that the interest earned provides funds for the rehabilitation of legacy abandoned mines.

The RER Group's Abandoned Mines team has commenced works on priority abandoned mines, that include activities such as conducting geotechnical assessments and remediation works on several sites including the Bulong Nickel tailings storage facility, abandoned shafts near Donnybrook and the Ellendale diamond mine. A remediation program, in conjunction with an Aboriginal-owned and managed contractor, for abandoned shaft features in close proximity to regional communities is also progressing. More details are provided in the MRF's yearly report for 2021-22.

2. The financial implications of doing nothing.

According to the Department of Water and Environmental Regulation's Climate Adaptation Strategy report published in July 2023,⁴ climate change is expected to cost Australia \$1 trillion by 2050, \$120 billion of which can be avoided via adaptation and \$260 billion of which can be avoided through mitigation. Hence, there is a strong financial imperative to meet the State's net-zero target.

The Climate Adaptation Strategy report was developed in consultation with Aboriginal people, local governments, business peak bodies, community organisations and researchers. The report produced a comprehensive approach to building climate resilience across Western Australia and compiled the State Government's initiatives to support and accelerate climate adaptation under four directions:

- Produce and communicate credible climate information and resources.
- Build public sector climate capability and strengthen accountability.
- Enhance sector-wide and community partnerships to unite and coordinate action.
- Empower and support the climate resilience of Aboriginal people.

The main financial implications of doing nothing are likely to be attributed the following:

- Continued reliance on financially challenged coal mines to supply Western Australia's ageing coal power plants, thereby increasing the cost of electricity in the long run and putting electricity system security at risk.
- Loss of industry potential resulting from an inability to meet decarbonisation commitments, and loss of potential new industry investment due to ongoing high carbon intensity of electricity supplies.
- Loss of initiative to facilitate the development of new green manufacturing and electricity generation industries in the State.
- Increased reliance on offsets by companies that would've otherwise benefitted from a cheaper and less carbon intensive grid, leading to increased costs for businesses.
- Loss of major natural carbon sinks, such as native forests and wetlands, which will reduce biodiversity and increase the future cost required to decarbonise.
- Potentially higher cost of financing for public investments as investors place a premium on ESG credentials.

⁴ Climate Adaptation Strategy (2023)

<https://www.wa.gov.au/service/environment-information-services/climate-adaptation-strategy#:~:text=The%20strategy%20ensures%20our%20communities,credible%20climate%20information%20and%20resources.>

3. Milestones in place for achieving ESG outcomes including any monitoring and reporting requirements.

Initiatives developed in the energy sector to support emissions reductions are associated with reporting frameworks and delivery monitoring. For example, progress under the Distributed Energy Resources Roadmap, a key pillar of the Energy Transformation Strategy, is reported on annually.

Delivery of investments to decarbonise government's electricity supply are monitored and reported on through the State Budget process and internal government governance.

Critical milestones associated with the transition include the retirement of the State-owned coal fired generators, which are operated by Synergy. The 340 megawatt (MW) Collie Power Station is scheduled to retire in 2027, and the final 400MW of coal generation at the Muja Power Station is scheduled to be retired by 2030.

Managing those retirements as part of an orderly transition requires replacement of that capacity with new renewable generation and storage. Specific milestones for delivery are initially subject to individual investment proposals, however once announced, are subject to corporate, market and internal government oversight, and subject to public scrutiny.

To further reinforce the credibility of the monitoring and reporting arrangements in place, many of these initiatives are captured under the Western Australian Treasury Corporation (WATC), Social and Sustainability (GSS) Bonds. The WATC has set out a Sustainability Bond Framework that has been verified by Sustainalytics⁵, which requires these projects to be subject to robust public reporting requirements and independent verification. EPWA continues to work closely with WATC to support green bond releases given the importance of the electricity sector to reaching net zero.

Around \$2.94 billion worth of projects are planned to be funded by Green Bonds with specific milestones for each individual project reflecting the different metrics used to measure decarbonisation progress in different sectors.

One example of a major electricity project funded by Green Bonds is the Synergy Big Battery Project, which involved the installation, testing and operation of a 100MW/200MWh battery at Synergy's Kwinana Power Station. As of August 2023, Synergy is conducting daily tests on battery's charging and discharging capabilities and ability to respond to peak demand.

Further plans for battery storage include the addition of a further 200MW/800MWh battery at the Kwinana site, to be delivered by late 2024, and the 2025 operation of a 500MW/2000MWh battery in Collie.

Synergy's development of the King Rocks windfarm in the Wheatbelt (around 150MW) and the Water Corporation's estimated 100MW wind generation facility in the Great Southern region, both for estimated completion in 2025.

Other major electricity infrastructure projects include the installation of Advanced Metering Infrastructure for all households and businesses by 2027, replacement of traditional poles and wires infrastructure with off-grid renewables in regional and isolated areas and replacement of all standard street lights within southwest WA with LEDs by 2029. These projects also support the community in reducing emissions. For example, the Remote Communities Photovoltaics project supports the installation of solar farms and batteries in remote Aboriginal communities to reduce diesel reliance, and the Solar Schools Program delivers solar panels to regional and remote schools to promote STEM learning and reduce electricity costs.

⁵ Western Australian Treasury Corporation Sustainability Bond Framework Second-Party Opinion (2023) [https://www.sustainalytics.com/corporate-solutions/sustainable-finance-and-lending/published-projects/project/western-australian-treasury-corporation/western-australian-treasury-corporation-sustainability-bond-framework-second-party-opinion-\(2023\)/western-australian-treasury-corporation-sustainability-bond-framework-second-party-opinion-\(2023\)](https://www.sustainalytics.com/corporate-solutions/sustainable-finance-and-lending/published-projects/project/western-australian-treasury-corporation/western-australian-treasury-corporation-sustainability-bond-framework-second-party-opinion-(2023)/western-australian-treasury-corporation-sustainability-bond-framework-second-party-opinion-(2023))

In addition to working with the WATC, EPWA also works closely with the Australian Market Energy Operator to ensure up to date and comprehensive information on the transition to renewable energy is available to the public. This includes quarterly and annual information on the share of renewable energy in the electricity system.

Under SERS, EPWA has been modelling the transition of the electricity sector to net zero by 2050, This modelling will be complete in late 2023, and will support the consideration of interim emissions targets by Government.

4. How DMIRS is actively engaging Aboriginal and young people in decision-making.

The State Government is currently pursuing initiatives specific to the energy needs of First Nations communities in Western Australia. These initiatives aim to improve energy and water service delivery to First Nations communities and find opportunities to facilitate capability building for effective First Nations' participation in clean energy project developments and related land access negotiations.

In addition to these initiatives, the State Government is also participating in the Commonwealth's First Nations Clean Energy Strategy⁶. The Australian Government has committed \$5.5 million to the strategy, which will be co-designed with First Nations communities and organisations to ensure First Nations people have a say in energy policies and programs in the transition to net-zero. The strategy will also help identify priority reforms and areas for future investment.

Remote Essential Services Transfer

Deficient energy services contribute to poor health and wellbeing outcomes in First Nations communities, hindering Western Australia's commitments under the National Closing the Gap Agreement. The Remote Essential Services Transfer aims to remedy these deficiencies by ensuring power delivery to First Nations communities meet the same standard of service as for other households across the State.

To achieve this goal, the State Government transferred the responsibility for the delivery of power services in 117 remote Aboriginal communities from the Department of Communities to Horizon Power. The transfer allows Horizon Power to work directly with First Nations communities to upgrade their power delivery systems.

The Kalumburu solar project is an example of possible initiatives under this program. The project saw Horizon Power act on the guidance and leadership of the Kalaumburu community to design a 929kW solar farm and 1.78MWh battery energy solution for the settlement, meeting 64 per cent of Kalumburu's electricity needs. The cost savings from the project will be re-invested in the Community Energy Fund, through which Horizon Power can give back \$15,000 per year for 10 years or \$150,000 upfront for the community to invest in its own renewable energy projects.

Energy Minister's Pilbara Industry Roundtable

The Pilbara Industry Roundtable (Roundtable) was established to discuss future electricity infrastructure needs in the Pilbara region, and to explore the opportunities and challenges of common use infrastructure to support increased renewable energy consumption. The Minister for Energy (Hon. Bill Johnston MLA) convened the first meeting of the Roundtable on 29 August 2022 and a communique from the group was released on 2 August 2023⁷.

⁶ The Australian Government has committed \$5.5 million to develop the First Nations Clean Energy Strategy, which aims to involve First Nations peoples and energy agencies in the energy transformation process.

<https://www.energy.gov.au/government-priorities/energy-and-climate-change-ministerial-council/working-groups/national-energy-transformation-partnership/first-nations-clean-energy-strategy#:~:text=It%20will%20be%20co%2Ddesigned,and%20areas%20for%20future%20investment>.

⁷ <https://www.wa.gov.au/government/announcements/landmark-agreement-pilbara-decarbonisation>

One of the four workstreams established under the Roundtable is the Social Licence workstream. A central purpose of the workstream is to ensure Traditional Owners, Aboriginal people and local communities, are informed, engaged and empowered in the planning of the future Pilbara electricity sector.

Through this workstream, EPWA has been engaging with Prescribed Body Corporates and other Aboriginal organisations to better understand how they are experiencing the shift to a renewable energy future, and what is needed to support their continued, self-determined involvement.

All stakeholders have agreed that any electricity infrastructure development should support rights to self-determination and empower Aboriginal people to realise opportunities from the clean energy transformation.

Aboriginal Empowerment Unit

Following development of the State Government's Aboriginal Empowerment Strategy 2021-2029, an Aboriginal Empowerment Unit was established within the RER Group. Its role is to ensure mining and resources projects and policies are developed in a culturally respectful way, and to seek to develop formal pathways for Aboriginal people to contribute to the way that resource development is regulated.

Progress to date includes:

- engaging Aboriginal providers who deliver on Country learning, to increase cultural understanding within the organisation of the lands on which DMIRS works;
- completion of a review of the RER Group's systems and processes to identify areas for reshaping, to support culturally appropriate content and user friendly access to information;
- data collation on common Aboriginal stakeholder enquiries;
- Aboriginal stakeholder mapping to assist visibility of contacts and opportunities in engaging Aboriginal communities and businesses across the State; and
- Increasing employment of Aboriginal people in RER to undertake the objectives of the Aboriginal Empowerment Strategy.

Yours sincerely



Richard Sellers
DIRECTOR GENERAL

18 August 2023