

Research into policy and legislation governing the reuse of mining lands and coal- and gas-fired power stations in Australia

Case Studies

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Report Number Final Case Studies v01

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Acknowledgement of Country

Urbis acknowledges the Traditional Custodians of the lands we operate on.

We recognise that First Nations sovereignty was never ceded and respect First Nations peoples continuing connection to these lands, waterways and ecosystems for over 60,000 years.

We pay our respects to First Nations Elders, past and present.

Urbis is committed to incorporating our respect for First Nations cultures, peoples and storytelling in our work across the Country. We are proud to have partnered with Darug Nation artist, **Hayley Pigram**, and to profile her artwork – **Sacred River Dreaming**.



The river is the symbol of the Dreaming and the journey of life. The circles and lines represent people meeting and connections across time and space. When we are working in different places, we can still be connected and work towards the same goal.

All information supplied to Urbis in order to conduct this research has been treated in the strictest confidence. It shall only be used in this context and shall not be made available to third parties without client authorisation. Confidential information has been stored securely and data provided by respondents, as well as their identity, has been treated in the strictest confidence and all assurance given to respondents have been and shall be fulfilled.

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Introduction

As Australia transitions to a net zero economy, the retirement and transition from fossil-fuel based energy infrastructure and mining lands offers opportunities to drive economic diversification and job creation in impacted regions.

To support this shift, this project identifies existing policy, legislation, and regulations governing the planning and reuse of mining lands and coal- and gas-fired power stations. The project focuses on identifying the barriers and opportunities to increase the beneficial and productive reuse of these mining lands and power stations at a jurisdictional level.

This multi-phase project seeks to understand and examine how policy, legislation and regulation at both Commonwealth and state levels interact, enable, and hinder, the rehabilitation and reuse of former mining and energy infrastructure sites. Current policy, legislation and non-enforceable guidelines across six jurisdictions – Commonwealth, Western Australia, South Australia, Victoria, New South Wales and Queensland – have been mapped, with the identification and analysis of the interactions of these different pieces of legislation, regulation and policy undertaken.

To maximise the opportunities for future beneficial and productive reuse, the Net Zero Economy Authority is seeking a comprehensive assessment of existing legislation and policy, an analysis of the current state through stakeholder consultation, and an examination by case studies – to understand the policy and legislation governing the planning and beneficial reuse of mining lands, and coal- and gas-fired power stations.

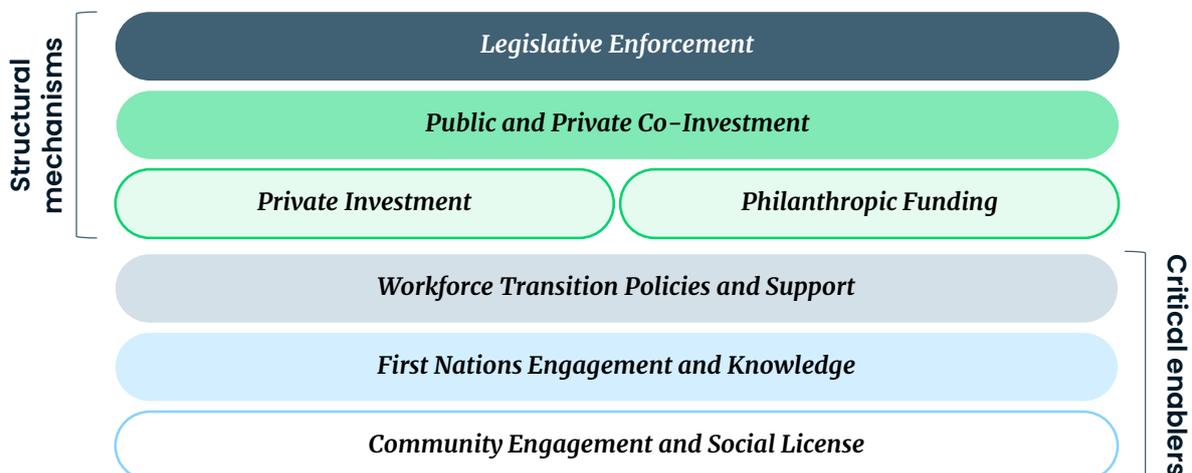
The planned closures and transition of mining lands, and coal- and gas-fired power stations presents complex challenges across the regional and local communities, environments, and future jobs and skills requirements. Stakeholders impacted by these changes are diverse, with government agencies, industry, energy generators, environmental regulators, First Nations organisations, research institutions, unions, and investor groups all crucial to this discussion.

The latency inherent in the planning and redevelopment of the productive reuse of mining lands and former coal- and gas-fired power stations means that the full range of social, environmental and economic benefits will in most cases not be realised immediately. While these projects are aimed at delivering substantial long-term benefits in line with energy transition objectives, impacts of progress will be realised gradually and sequentially.

Benefits within the gradual development and improvement of approaches to rehabilitation and reuse also play an important role in supporting these longer-term outcomes, such as strengthened community engagement practices, advocacy efforts, greater sector transparency and enhanced structural frameworks to drive long-term outcomes and governance for multi-decade energy transition and reuse projects.

The following Case Studies report is a companion report to the *Research into Policy and Legislation Governing the Reuse of Mining Lands and Coal- and Gas-Fired Power Stations in Australia: Final Report*.

Structural Mechanisms and Critical Enablers to Increasing the Beneficial and Productive Reuse of Mining Lands and Coal- and Gas-fired Power Stations



Case Studies

Methodology

The case studies were selected in close collaboration with the Net Zero Economy Authority (the Authority) to ensure that the themes chosen reflect diverse issues and jurisdictions, and provide practical insights and learnings into the productive and beneficial rehabilitation and reuse of mining lands and coal- and gas-fired power stations.

Purpose of this Case Study Report

This case study report focuses on the beneficial and productive reuse of mining lands, and coal- and gas-fired power stations, with six key case studies providing key insights and learnings at the thematic, jurisdictional and sector level. Missed opportunities, government funding to drive change, global examples, leading Australian examples, and legislative levers to drive change, are some of the key themes covered in the case study report. Critically, a First Nations lens is provided for all six case studies.

This case study report can may be read in conjunction with its companion document *Research into Policy and Legislation Governing the Reuse of Mining Lands and Coal- and Gas-Fired Power Stations in Australia: Final Report*.

To capture the key stakeholders' views, stakeholder consultation interviews were carried out, with 30 stakeholders selected based on their sectoral relevance, regional presence, and ability to contribute unique insights and commentary into mining land reuse and coal- and gas-fired power stations reuse.

Case Study Selection Methodology

The process of selection was guided by several principles, including; the need to capture legislative and regulatory significance, the need to highlight both opportunities and barriers for productive and beneficial rehabilitation and reuse of mining lands and coal- and gas-fired power stations; and to ensure that lessons learned are transferable across contexts.

Four case studies were explored at a high level, with two deep dive case studies explored to capture more detailed learnings and stakeholder perspectives. The case studies were undertaken as desktop analyses, drawing primarily on publicly available sources and research, supplemented by direct stakeholder interviews and site visits.

Stakeholder engagement approaches were tailored, with methods ranging from one-on-one interviews to facilitated group discussions with relevant stakeholders involved directly in each case study. All consultations were led by senior team members to ensure credibility, supported by additional staff to manage logistics and documentation. Interviews sought to capture critical stakeholder insights to strengthen existing desktop research undertaken, helping to identify patterns, divergences, and lessons of broader applicability.

Justification of Case Study Focus

Each case was chosen for its ability to demonstrate the role of policy, legislation, and regulation in shaping rehabilitation outcomes, to address assets at the centre of Australia's energy transition, and to highlight either opportunities, strategic approaches or consistent challenges.

The case studies were purposefully constructed around the leading themes to allow insights to be drawn that are not only relevant within their jurisdiction but transferable to other regions in Australia and, in some instances, from international learnings. All case studies are situated in contexts where community, workforce and First Nations perspectives are incorporated into the analysis.

The key six thematic areas were confirmed with the Authority as the basis for the case study program and are highlighted on the following page of this report.

Case Studies

Methodology (continued)

This section provides an overview of the rationale for selection of each case study, key research questions and stakeholders consulted.

	Case Study	Rationale for Selection	Focus / Key Questions	Research/ Consults / Site Visits
1.	<p>Legislation as an enabler to unlocking productive reuse and rehabilitation – learnings from Queensland</p> <p><i>(2019 PRCP framework Legislative reform)</i></p>	<ul style="list-style-type: none"> A structured legislative reform focused on progressive rehabilitation as a strategic lever to drive productive post-mining land re-use, with potential for key learnings for other jurisdictions. 	<ul style="list-style-type: none"> What measures were included/excluded? Were apportionment of liability, tenure, asset sales, or constraints under existing mining leases addressed? In the lead-up reform, what deficiencies were identified? How closely did the reforms align with those deficiencies? Could other Australian jurisdictions benefit from similar reforms? 	<ul style="list-style-type: none"> CRC TiME Legal experts Desktop research QLD Mine Rehabilitation Commissioner
2.	<p>Repurpose investment to drive transformative change – learnings from Lithgow NSW</p> <p><i>(Wallerawang Power Station, NSW)</i></p>	<ul style="list-style-type: none"> The strategic, focused and progressed reuse planning of an existing power station by a repurpose investor, with high levels of community consultation, economic diversification and multi-reuse typologies currently in planning. 	<ul style="list-style-type: none"> Challenges Greenspot has faced on the reuse development, and how these have been overcome? Site Advisory Group and level of NSW Govt support? Planning pathways, enterprise rezoning, SSRP, feasibility of different types of reuse. Could other owners/investors learn from a similar approach? 	<ul style="list-style-type: none"> Greenspot Site visit Desktop research
3.	<p>Missed opportunities: the cost of getting it wrong – learnings from Victoria</p> <p><i>(Hazelwood Power Station, VIC)</i></p>	<ul style="list-style-type: none"> A failed transition, highlighting the risks of inadequate planning, sudden closure with lack of workforce or community consultation, demonstrating that successful post-use redevelopment requires early stakeholder engagement, workforce transition support, and clear pathways for land repurposing. 	<ul style="list-style-type: none"> How could the closure of Hazelwood have been handled better? What is the perception of the MLRA and the LVRRS – are these perceived as successful efforts? What key learnings can be implemented for Yallourn and other Power Stations to prevent similar mistakes? What was the impact on the community and workforce, is it ongoing? 	<ul style="list-style-type: none"> Latrobe City Council Desktop research
4.	<p>Government funding to generate impact at scale – learnings from Western Australia</p> <p><i>(Collie, WA)</i></p>	<ul style="list-style-type: none"> A proactive and inclusive approach to transition, emphasised by state government support, providing insights for other regions across community involvement and worker support. 	<ul style="list-style-type: none"> To what degree was govt financial support the driving catalyst? Would the reuse and redevelopment have gone ahead and been feasible without govt financial support? Could other mining and power station sites learn from this? 	<ul style="list-style-type: none"> Desktop research
5.	<p>The role of incentives in driving productive reuse – learnings from the USA</p> <p><i>(USA)</i></p>	<ul style="list-style-type: none"> International example of a federal incentive program targeting reuse of brownfield sites that can provide key learnings to Australian jurisdictions. 	<ul style="list-style-type: none"> What impact did the new federal laws have on the reuse of mining lands and brownfields? How did a federal approach interact with the regulatory challenges of state programs? 	<ul style="list-style-type: none"> Desktop research
6.	<p>Public-private collaboration as a critical enabler – learnings from the Hunter, NSW</p> <p><i>(Hunter, NSW)</i></p>	<ul style="list-style-type: none"> A transformative project of national significance in context of it being in the heartland of previous mining land, and with ambitions of becoming a net zero leading site. 	<ul style="list-style-type: none"> What govt support was/is being provided? Complexities of the regulatory frameworks and the impact of a site advisory committee? Feasibility of reuse typologies in the region. 	<ul style="list-style-type: none"> Desktop research Site visit

The Case Studies

themes

01

Legislative mechanisms to unlock productive reuse and progressive rehabilitation – learnings from Queensland

Effective legislative and regulatory frameworks are essential to enable and guide the progressive rehabilitation and productive reuse of former mining and power generation sites. Clear policies, planning instruments, and statutory obligations provide certainty and accountability for both public and private stakeholders.

03

Missed opportunities: the cost of getting it wrong – learnings from Victoria

Unsuccessful or missed reuse initiatives can generate significant financial, environmental, and social costs that can last decades. Documenting failures and extracting lessons from these is crucial for improving future planning, risk assessment, and policy frameworks.

05

The role of incentives in driving a productive reuse agenda – learnings from the United States

Financial and regulatory incentives are key tools in promoting and enabling productive reuse. International experience, such as the Ohio Valley in the United States, demonstrates that well-designed incentive structures encourage early action, reduce barriers, and align private interests with public policy objectives.

02

Repurpose investment to drive productive reuse and innovation – learnings from NSW

Private sector capital plays a critical role in driving the rehabilitation and adaptive reuse of former mining and energy infrastructure sites. Leveraging investment can accelerate redevelopment, introduce innovative approaches, and share the financial and operational risks of large-scale projects.

04

Government funding to generate impact at scale – learnings from Western Australia

Strategic deployment of public funding can catalyse large-scale rehabilitation outcomes. Experiences from Western Australia demonstrate how government investment can be structured to maximise impact, attract co-investment, and achieve sustainable land-use outcomes.

06

Public-private collaboration as a critical enabler – learnings from the Hunter, NSW

Effective rehabilitation and reuse often relies on collaborative approaches between government agencies and private operators. The Hunter illustrates how partnerships can combine resources, expertise, and shared responsibility to achieve better economic, environmental and social outcomes.

First Nations

Insights and Themes

A total of six (6) case studies have been analysed with considerations for First Nations outcomes. A summary of four (4) key insights, and six (6) recommendations from each of the case studies that have been considered are detailed below..

Themes

- **Generational Infrastructure** – Reinforce that the purpose of infrastructure and its decommissioning is to play a role in delivering self-determined generational outcomes. This purpose is particularly important for remote and regional communities.
- **Generational Relationships** – Engage community early in the decommissioning process to establish long term reciprocal relationships that capture missed opportunities and deliver social and economic change well after decommissioning is complete.
- **Economic Empowerment** – Leverage decommissioning investment to deliver economic empowerment, through community-controlled economic ventures aligned to cultural values.
- **Social Remediation** – Repair impacts to Country and community, and recover lost opportunity, by creating community-owned pathways to social and economic advancement, building First Nations wellbeing and prosperity.
- **Representation and Continuity** – Capture the diversity of community voices, not just a few individuals, and build structures that protect relationships and knowledge through staff changes to sustain continuity across generations.

Insights

- **Insight 1:** Resource First Nations capacity building to enable rightsholders to meaningfully participate in decommissioning activities, including defining, developing, and delivering their communities' benefits.
- **Insight 2:** Prioritise developing long-term, meaningful partnerships with First Nations groups, ensuring that decommissioning and rehabilitation form a part, but are not the sole, basis for these relationships. Meaningful, and ongoing relationships with the people operating on their land is an outcome in itself for many First Nations people, and is a primary means to communities realising self-determined and generational outcomes.
- **Insight 3:** Decommissioning rehabilitation and/or reuse should repair damage done to First Nations people and communities by coal and gas activities and assets. This includes supporting the recovery of opportunities lost over the life of these assets due to exclusion and poor engagement.
- **Insight 4:** Ensure that new energy systems developed on old energy sites acknowledge historical practices and leverage decommissioning activities/investment, to deliver generational outcomes determined by community.
- **Insight 5:** Foster economic empowerment by supporting First Nations communities to define and control their financial transition from coal and other assets, enabling them to determine how their economic interests translate into new culturally aligned economic opportunities.
- **Insight 6:** Where public funds are being provided for the decommissioning and repurposing of coal and gas assets, mandate and incentivise best practice engagement of First Nations.

First Nations contributions and perspectives have been prepared by Indigenous Energy Australia (IEA) on behalf of Urbis

The social, environmental, and economic potential of decommissioning for First Nations communities

As Australia decarbonises, former industrial and mining lands present an opportunity for ‘social rehabilitation’, and an opportunity to regenerate – both for the environment and for people. Decommissioning and rehabilitation are a complex discussion with Australia’s First Peoples – whose connection to Country means that environmental impacts span culture, identity, and sense of self.

A culturally informed approach to decommissioning must recognise this complex relationship and create opportunities for First Nations knowledges to guide project planning, and manage impacts to First Nations communities, while welcoming the rich knowledge that many Traditional Owners hold.

Ultimately, a selection of the case studies within this document show that early engagement, with meaningful decision-making and influence, can unlock the social and environmental potential of adaptive reuse, decommissioning, and transition projects.

By establishing an approach that integrates Free, Prior, and Informed Consent, a respect for cultural heritage, Traditional Owners rights to land (established, and emerging – via incorporating and understanding Native Title, Indigenous Land Use Agreements, and complexities of cultural and corporate governance), alongside Connection to Country for all of Australia’s First Peoples, the Authority can raise the standard of decommissioning activities and maximise the potential for social, environmental returns.

Through this approach, it is possible to establish a clear connection between decommissioning, and delivering self-determined generational outcomes, improving quality of life and prosperity for future generations by ensuring projects that are designed and delivered maximise opportunities for economic empowerment for community – and Close the Gap.

“Decommissioning is not just about restoring land, it’s about creating opportunities that last generations. If communities aren’t involved from the start, the benefits are lost.” – Kabi Kabi Traditional Owner (Authority project interview via IEA, 2025)

The purpose of infrastructure fundamentally is to serve community, not just in terms of employment and contributions to the local economy, but broader social outcomes also. The decommissioning of mine sites enables opportunities for asset owners to reset relationships with First Nations people and find new ways to leverage the decommissioning and rehabilitation process to advance community-led priorities, enabling generational outcomes.

Historically, asset owners have excluded First Nations people from the design, implementation, and benefits of infrastructure on Country. Decommissioning of mining operations, however, offers the opportunity to reverse this pattern. Thoughtful rehabilitation can foster meaningful relationships with First Nations communities, enabling the sharing of knowledge, the creation of generational infrastructure, and the development of enduring partnerships, lasting over generations.

The social, environmental, and economic potential of decommissioning for First Nations communities

Without meaningful relationships and two-way engagement, the closure and rehabilitation of sites poses a significant risk of disempowerment, where communities are asked to react to decisions already made rather than being supported to shape outcomes. Traditional Owners have emphasised the need for “our own time with government”, highlighting that consultation must occur on community-led timelines, allowing discussion, cultural decision-making, and meaningful participation.

“We don’t just want to be asked what we think after everything is decided. Engagement needs to be on our terms, and in our time.” – Kabi Kabi Traditional Owner (Authority project interview via IEA, 2025)

When handled well, decommissioning can unlock generational outcomes, providing pathways for cultural preservation, community innovation, local employment, environmental stewardship, and sustainable economic development that endure long after the asset itself is decommissioned.

Asset owners and regulators can maximise these outcomes by developing long-term relationships with communities, moving at a pace set by relationships and cultural protocols, not corporate timelines, and resourcing Traditional Owners to participate fully in decisions about post-closure land use, governance, and benefit sharing. Best practice approaches show that early, transparent engagement, coupled with investment in capacity and cultural leadership, transforms decommissioning from a technical requirement into a generational social, cultural, and economic opportunity.

“Decommissioning is not just about restoring land, it’s about creating opportunities that last generations. If communities aren’t involved from the start, the benefits are lost.”

– Kabi Kabi Traditional Owner (NZEA project interview via IEA, 2025)



Case Study 1
Deep dive

Legislation as an enabler

to unlocking productive reuse and progressive rehabilitation – learnings from Queensland

Legislation as an enabler to unlocking productive reuse and rehabilitation

Progressive rehabilitation, underpinned by legislative frameworks, is a critical mechanism to ensure mining lands and coal- and gas-fired power stations across Australia are restored and repurposed in a manner that supports environmental, social, and economic outcomes for operators, communities and governments.

Legislative frameworks can serve as a key enabler for government by establishing clear obligations and standards that drive accountability, proactive investment, and long-term sustainability.

What impact can legislative frameworks have in supporting productive reuse and progressive rehabilitation?

<p>Generates accountability for owners and operators</p>	<p>The implementation of a legislative framework establishes a binding obligation on site owners and operators, ensuring that they are held accountable for their responsibilities to progressively remediate and rehabilitate mining and power station lands. Unlike measures or actions that are only triggered at the time of closure, this approach requires proactive compliance throughout the operational lifecycle of the mine. By making accountability mandatory, it strengthens governance, reduces risk of negligence, protects the regional community, and promotes long-term responsibility in managing productive reuse and rehabilitation outcomes.</p>
<p>Embeds early integration of rehabilitation activities into planning</p>	<p>A legislative framework can compel operators to incorporate rehabilitation strategies at the very beginning of project planning and continue integrating them throughout operations. This ensures that rehabilitation is not treated as an afterthought but as a core part of the lifecycle, leading to more sustainable and cost-effective outcomes for site remediation and investment.</p>
<p>Provides clear authority and standard setting from government</p>	<p>By setting minimum requirements and consistent standards at a state government level, legislation creates equitable conditions for operators. This eliminates uncertainty, ensures fairness across the sector, and provides regulatory clarity that supports compliance and long-term planning. This approach also signifies to industry the importance of productive reuse and rehabilitation in achieving broader energy transition objectives.</p> <p>Progressive rehabilitation supports operators by spreading rehabilitation costs across the life of a project rather than deferring them to closure, reducing financial risk and avoiding large liabilities post-closure. It also provides greater regulatory certainty, helping operators plan with confidence while demonstrating compliance with community and government expectations. In turn, this enhances reputation, strengthens investor confidence and productive reuse outcomes.</p>
<p>Reduces risk for investment, and unlocks land for productive reuse earlier</p>	<p>Progressive rehabilitation requirements allow operators to address land use in manageable stages, avoiding the heavy financial burden of undertaking rehabilitation only at closure. This staged approach enhances financial sustainability, attracts smaller investors and partnerships to deliver early and productive reuses, and makes post-mining land use projects more viable and appealing for investment, helping unlock a variety of uses (i.e. community, recreation, tourism, industry).</p>
<p>Shifts industry focus towards more progressive action, building public trust</p>	<p>Enforcement encourages proactive site rehabilitation during operations, reducing the likelihood of large, unmanageable sites being abandoned at closure. Demonstrating government and industry commitment to rehabilitation fosters public confidence, strengthens social license to operate, and reduces the risk of stranded assets that negatively impact local communities. It also opens opportunities for community-focused projects and sustainable redevelopment.</p>

Progressive rehabilitation in closure plans for mining lands in Queensland

In recent years, the Queensland Government has strengthened its focus in shaping policy to ensure land disturbed by mining is progressively rehabilitated into safe and stable conditions to avoid environmental harm and unlock land potential for post-mining uses to drive positive benefits for communities, investors and government.

Background and Policy Drivers

For decades, Queensland grappled with significant challenges in managing mine closures and rehabilitation. Weak regulatory incentives and underfunded closure liabilities resulted in sites often left with uncertain or degraded lands post-mining use, resulting in significant environmental impacts, costs to government and risks for communities.

Prior to 2019, the Queensland Audit Office had identified deficiencies in mine rehabilitation regulations and key limitations of the financial assurance frameworks surrounding rehabilitation of mining lands across the state.¹ Key findings at the time revealed several challenges in relation to enforcement and financial assurance of mine rehabilitation across the state, including:

1. **Rehabilitation of mine sites was often not occurring despite the ceasing of approved resources activities**, with some operators unable to meet rehabilitation requirements of their sites. As a result, many sites would go into care and maintenance, with some forfeiting financial assurance to the State.
2. **Financial assurances held by the State were frequently insufficient to cover estimated rehabilitation costs**, resulting in an increased number of 'legacy sites' left unrehabilitated.
3. **An increasing number of sites across the state were remaining in long-term 'care and maintenance'**, often without clear responsibility or timelines for rehabilitation. Definitions and protocols for "care and maintenance" sites were also largely unclear, resulting in departmental disputes over administrative and regulatory responsibilities for the site's rehabilitation.

4. **Clear records of financial assurances held by the state were fragmented across departments**, with limited reconciliation of records and communication amongst departments against funds being held. This meant that at times, understanding of the status of financial assurance required from environmental authority holders was unclear.
5. **Historically, financial assurance held by the state was insufficient** to cover the estimated costs of rehabilitating mining lands.
6. **In some cases, assurance amounts requested by environmental authority holders was not always aligned with actual rehabilitation cost estimates**, meaning some sites remained with insufficient financial assurance, leaving the state exposed if operators were to default.

As a result of these findings, it was recommended by the Queensland Audit Office that the State improve its data collection and communication on compliance and financial assurance of mine rehabilitation activities, that it pursue more enforceable actions to recover debts owed from operators, that it improve its supervision of non-compliance across the sector, and strengthen protocols and definitions for dealing with ongoing 'care and maintenance' requirements. The Queensland Audit Office also articulated the need for improved financial assurance frameworks to protect the State from exposure and risk of operator defaults.

From these findings, the Queensland Treasury Corporation recommended that the Government should adopt a risk-based financial provisioning model to better address liabilities. The scheme was intended to reduce the State's financial risk if a resource authority holder or small-scale mining tenure (holder) failed to meet their environmental and rehabilitation responsibilities.²

These policy recommendations laid the foundation for the Mineral and Energy Resources (Financial Provisioning) Act 2018 (MERFP Act), which amended the Environmental Protection Act 1994, creating the statutory basis for the Progressive Rehabilitation and Closure Plan (PRCP) regime to mandate implementation of key components of Queensland's Mined Land Rehabilitation Policy.³

Progressive rehabilitation in closure plans for mining lands in Queensland

What changed in 2019 – and why was it significant?

As previously highlighted, several deficiencies were evident in the state's approach to mine rehabilitation.⁴ Progressive rehabilitation requirements were considered insufficiently robust, particularly regarding mine voids and in setting out clear milestones to achieving rehabilitation outcomes. Stakeholder consultation findings undertaken as part of this review also revealed the challenge that at the time prior to these reforms, the uniform treatment of large, financially secure operators and smaller, higher-risk companies failed to reflect differing risk profiles for rehabilitation and financial assurances.

On 1 November 2019, the Progressive Rehabilitation and Closure Plan (PRCP) regime formally commenced. Mining proponents applying for new or site-specific Environmental Authorities were required to submit a PRC plan incorporating an enforceable PRCP schedule. This schedule mandated mapping of post-mining land uses (PMLUs), identification of non-use management areas (NUMAs) and time-bound milestones. Distinct from Environmental Authorities, PRCP schedules were legally binding, creating a compliance mechanism throughout the project lifecycle for owners and operators.⁵

Importantly, the framework introduced statutory public consultation and the requirement for Public Interest Evaluations (PIEs) for any NUMAs, with additional restrictions to reduce any detrimental impacts on the environment or community. Subordinate regulations, including the Environmental Protection (Rehabilitation Reform) Amendment Regulation 2019, operationalised these provisions, while departmental guidelines clarified expectations around Environmental Impact Statements (EIS), rehabilitation detail, and audit processes.

Institutional supports were later enhanced through the establishment of the Queensland Mine Rehabilitation Commissioner in 2021 and the parallel Financial Provisioning Scheme (FPS), administered by Queensland Treasury, which introduced risk-weighted funding contributions for closure liabilities.⁶

Together, these measures created a more targeted legislative framework to manage rehabilitation obligations, mitigate legacy risks, and reduce the state's potential exposure to future environmental liabilities.

What measures were excluded from the reforms?

During consultation and research, it was found that some stakeholders noted several measures that were not included as part of the 2019 reforms. Early discussion papers and submissions to government prior to 2019 identified the need for clearer pathways and management of environmental risks within 'care and maintenance', however, the inclusion of clear phasing with the PRCP regime for this particular area was not clearly defined, and without rationale as to why it was excluded.

Discussions at the time identified the potential for establishment of a dedicated 'rehabilitation tenure' to enable third-party operators to assume responsibility for site rehabilitation commercially, being paid to take over the land and mining lease from operators to successfully rehabilitate the land for leasing. Whilst an innovative approach, stakeholders interviewed noted that this approach required a strengthened legislative approach and risk management for it to be operationalised.

Stakeholders also highlighted that, despite early policy debates, the reforms ultimately did not extend to major industrial sites such as power stations, leaving a broader regulatory gap outside of the mining sector.

4. Queensland Audit Office. (2017). Follow-up of report 15: 2013-14 environmental regulation of the resources and waste industries. .
5. Business Queensland. (2025). Progressive rehabilitation and closure plans. Queensland Government
6. HSF Kramer. (2024). Queensland amends environmental legislation to strengthen regulatory responses.
7. Queensland Treasury. (2025). Improving rehabilitation and financial assurance outcomes in the resources sector.

Key features of the progressive rehabilitation closure plans (PRCP) regime

Queensland’s mine rehabilitation framework has been designed to deliver earlier, more certain rehabilitation of mined land and former power station sites, through the Progressive Rehabilitation and Closure Plan (PRCP) regime. This framework aligns regulatory enforcement, financial assurance and independent oversight to drive more consistent and proactive rehabilitation outcomes to reduce long-term environmental risks and create pathways for future post-mining uses.

To operationalise progressive rehabilitation, the Environmental Protection Act 1994 gives effect to PRCPs, supported by the Mineral and Energy Resources (Financial Provisioning) Act 2018 and Mined Land Rehabilitation Policy to set binding, time-based milestones, reducing the risk that work is deferred until project closure.

Regulatory oversight

The Department of Environment, Tourism, Science and Innovation (DETSI) provides regulatory oversight for PRCPs and is responsible for approving milestones and enforcing compliance.

Advisory

The independent Queensland Mine Rehabilitation Commissioner, appointed under the Environmental Protection Act 1994, provides expert advice, research and guidance to ensure PRCPs reflect best practice, and raises awareness of rehabilitation management in collaboration with key stakeholder groups.

Funding

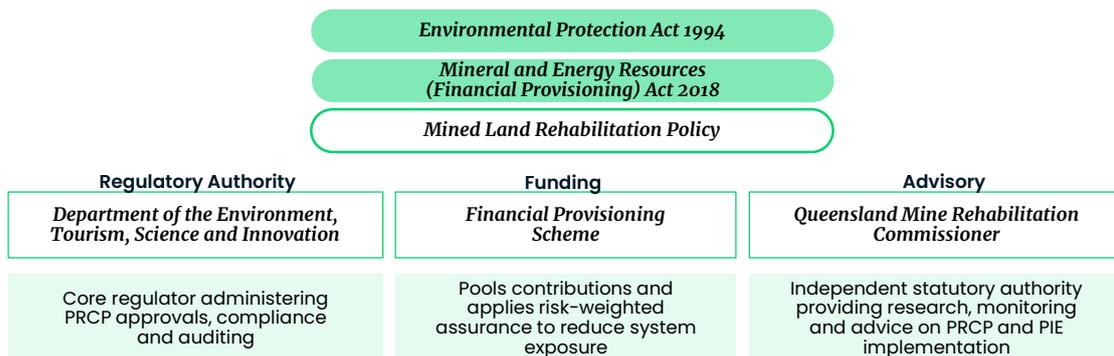
Financial risk to the State is managed through the Financial Provisioning Scheme (FPS), established under the Mineral and Energy Resources Act 2018. The FPS scheme is administered by the Scheme Manager and is designed to safeguard the State from financial risk if resource activity environmental authority (holders) or small-scale mining tenure (SSMT) fail to meet their environmental management and rehabilitation obligations.⁸

PRCPs aim to ensure mining owners and operators progressively rehabilitate land to a safe and stable condition, minimising environmental harm and helping to rehabilitate lands to a standard capable of supporting post-mining uses. PRCP schedules replace the rehabilitation requirements in an environmental authority and provide for how land will be progressively rehabilitated throughout the life of a mine.

The regime seeks to operationalise progressive rehabilitation efforts through key mechanisms, including:

- **Risk-based contributions:** allocating each operator a risk category and either requiring a contribution into a pooled Scheme Fund or a surety (e.g. bank guarantee) equal to the Estimated Rehabilitation Cost (ERC).
- **Incentivising progressive rehabilitation:** as milestones in a PRCP are achieved, the ERC decreases, which in turn reduces the financial provisioning burden on the operator.
- **Residual liability management:** the pooled Scheme Fund can be accessed by the Scheme Manager (Queensland Treasury) to cover costs of rehabilitation where a company defaults, and also contributes to addressing legacy mine liabilities.

The scheme also generate funds to support the rehabilitation of abandoned mines and to advance research into best practice mine rehabilitation.



8. Queensland Treasury. (2025). Financial provisioning scheme. Queensland Government.

How the PRCP reforms operate in practice

The table below illustrates how the intended benefits of the PRCP reform are put into practice through the framework’s operational mechanisms.

Intended Benefit of Reform	How it is operationalised via the PRCP regime
Progressive delivery of rehabilitation activities	<ul style="list-style-type: none"> ▪ PRCP schedules apply legally binding milestones for progressive rehabilitation activities, enforceable under the Environmental Protection Act 1994. ▪ The legislative enforcement of these schedules prevents operators from deferring rehabilitation until the end of mine life and ensures land is progressively restored, not only reducing risk but also encouraging opportunities for land to be unlocked for productive uses earlier, generating greater potential community, environmental and economic benefits.
Accountability for operators and owners	<ul style="list-style-type: none"> ▪ Any areas that are not rehabilitated to an agreed post-mining land use (PMLU) is classified under the regime as a non-use management area (NUMA). ▪ NUMAs are subject to a statutory Public Interest Evaluation (PIE) undertaken by the regulator to determine whether any residual features or land form of the NUMA is justified and serves a legitimate public interest. ▪ This process holds operators to account for any land not returned to a productive or safe condition, and ensures decisions about leaving residual land features are transparent and justified in alignment with community expectations.
Risk-based financial provisions	<ul style="list-style-type: none"> ▪ The Financial Provisioning Scheme (FPS) manages the State’s financial risk if an operator defaults. ▪ The delivery of PRCP milestones influences operator risk profiles and compliance performance to determine the level of financial provision offered. ▪ This framework incentivises progressive rehabilitation by linking financial obligations to compliance performance. As rehabilitation milestones are achieved and estimated rehabilitation costs decrease, operators may face reduced financial provisioning requirements.
Transparency and increased community engagement	<ul style="list-style-type: none"> ▪ All PRCPs, PIE reports and outcomes of compliance audits or policy decision making are publicly published to create greater visibility and transparency for community, government and the sector more broadly. ▪ This visibility improves trust and social license by ensuring that the public and other key stakeholders can scrutinise rehabilitation commitments, compliance performance, and decisions about residual land forms.
Closure certainty and future uses	<ul style="list-style-type: none"> ▪ Before an authority can be surrendered, operators must make residual risk payments for land that carries ongoing management needs. This provides certainty that liability is not transferred to the public, while creating clear pathways for land to be returned to safe, stable, and beneficial future uses.

Owner and Operator Benefits – Certainty, Lower Risk, Faster Returns

Mining land owners and operators can access a range of benefits through the adoption of PRCPs, including receiving greater clarity and certainty regarding future rehabilitation and site closure pathways, and improved financial, risk, and reputational outcomes throughout the life of the project, unlocking opportunities for earlier financial returns or investment attraction.

- ✓ Structure & Certainty
- ✓ Financial Returns
- ✓ Risk Management
- ✓ Reputational Improvement
- ✓ Pathway Clarity

Owner & Operators

Greater Structure and Certainty Surrounding Progressive Rehabilitation

Optimised Financial Returns Through Early Land Release

Progressive rehabilitation of mining lands has the potential to unlock earlier revenue generating activities and opportunities on site for land-owners and operators through land leasing, land sale or productive reuses tied to profit generating activities. This approach also encourages greater distribution of closure costs in a more efficient manner throughout the site's operations, supporting greater resource and expenditure management.

Reduced Long-Term Liabilities and Owner-Operator Risk Exposure

Stronger compliance with site rehabilitation and management via the PRCP regime's mandated milestones supports lowering the probability of unforeseen or detrimental site remediation costs and ensures strengthened compliance with regulatory expectations. The reporting of NUMAs and requirement to undertake a Public Interest Evaluation (PIE) by the regulator further supports alignment with public interests to ensure owners and operators maintain social license and community buy-in to any future remediation and rehabilitation works on site.

Closure Pathway Clarity and Reduced Site Uncertainty

The PRCP legislative regime provides a more defined closure pathway for site owners and operators, helping reduce uncertainty in appropriate timing, milestones and requirements whilst also enabling greater engagement and transparency between industry, government, regulatory authorities, investors and community.

Have owners and operators realised significant benefits to date? What limitations exist within the current reforms?

Research conducted in 2022 by CRC TiME identified that while Queensland's 2019 reforms have sought to strengthen accountability and environmental outcomes, benefits for owners and operators to date may be limited.⁹ CRC TiME identified that for new mines, the reforms provide clearer obligations and incentives for progressive rehabilitation, however, mines established prior to the 2019 reforms may be exempt from the new requirement to return land to a stable condition through transitional provisions in cases where the mine has an authorization for a void in a flood plain. As a result, the impacts of the reforms in achieving progressive rehabilitation are currently limited, particularly for void rehabilitation and progressive rehabilitation of pre-existing open cut mines. A lack of transparency around financial assurances and limited access to publicly accessible rehabilitation progress information limits accountability, with ambiguities in key terms such as 'rehabilitation' and the uncertain role of community consultation further compounding these issues and creating risks to social license.

Consequently, some operators may face heightened long-term liability, reputational risks, and regulatory uncertainty in the short- to medium-term.

9. CRC TiME (2025). Post Mining Land Use – Practice Mapping: Ensham Coal Mine Case Study (Fact sheet Project 1.3). <https://crctime.com.au/crcwp/wp-content/uploads/2025/04/Fact-sheet-Project-1.3-Case-Study-Ensham.pdf>

Community Benefits – Restored Land, Thriving Communities, New Opportunities

The PRCP regime seeks to deliver wide-reaching benefits to communities by ensuring mined lands are progressively restored and repurposed into safe, productive, and sustainable assets, supporting long-term social, environmental, and economic outcomes. These include:



Social, Economic & Environmental Benefits

Community

Driving Positive Social, Environmental and Economic Outcomes

Enhanced Public Amenity and Land Reuse:

By enforcing proactive action from owners and operators to transform post-mining sites into safe and accessible land use forms creates greater opportunity for developable land plots suitable to uses that can better support recreation, cultural, tourism, conservation, and regional development outcomes for communities.

Employment Creation and Regional Economic Diversification:

The establishment of immediate jobs to support necessary rehabilitation works on sites that are undergoing progressive rehabilitation, in addition to more long-term opportunities stemming from new and emerging industries (such as renewable energy, agribusiness, and tourism), are critical community benefits of a more progressive rehabilitation model. This in turn has the potential to support greater regional resilience and economic diversification outcomes in previously coal-mining dominated local economies.

Mitigation of Stranded Asset and Environmental Liability Risks:

Proactive closure and progressive rehabilitation of mining lands is important to preventing any ongoing prevalence of degraded or hazardous land resulting from contamination and poor management of mining lands, helping to reduce community exposure to health, environmental, and safety risks as well as reducing the number of abandoned assets and lands that can be optimised for better uses.

Benefits to and role of State and local government – stronger oversight, reduced liabilities, regional growth

State and local governments are positioned to achieve stronger oversight of mining activities, ensuring rehabilitation and closure outcomes are clearly defined and enforceable. This reduces long-term financial liabilities while fostering transparency and consistency across the sector.



Capability uplift & knowledge sharing



Reduced fiscal liabilities



Rehabilitation as BAU

State & Local Government

Supporting Industry-Wide Capability Uplift and the Rehabilitation Narrative

Reduction of Future Public Financial Liabilities and Legacy Burden:

The 2017 Queensland Government “Better Mine Rehabilitation for Queensland” discussion paper and subsequent review found that Queensland’s historical regulatory framework was failing to deliver effective rehabilitation outcomes, resulting in consistent contamination issues and abandoned assets across the state, demanding stronger legislative mechanisms. Out of this, the Mineral and Energy Resources (Financial Provisioning) Act 2018 came into effect, establishing the Financial Provisioning Scheme and mandating of PRCPs. Through this, government aimed to ensure future rehabilitation costs are borne by operators rather than the state, helping to shield government budgets and communities from any burden of legacy remediation costs upon site closure.

Cultural and Policy Shift in Progressive Rehabilitation Industry Narrative:

The move towards enforceable milestones and the establishment of the FPS marked a tangible and symbolic shift from government in taking a more optional ‘maintenance and management’ model towards site rehabilitation towards more proactive and productive reuse outcomes. This shift not only has a role in enhancing community trust in government and the regulation of post-mining uses, but strengthens the onus from government in leading industry towards a collaborative and aligned rehabilitation agenda in line with energy transition objectives.

Supports Building Technical Expertise and Knowledge Sharing:

Builds expertise within government agencies, industry and local councils in progressive closure requirements, technical considerations, land-use planning needs, and encourages industry-wide transparency through the public release of PRCPs and progress reporting. This, supported further by research and knowledge partnerships between industry, universities and the Queensland Mine Rehabilitation Commissioner fosters an ongoing commitment to learning from best practice, industry works to date, failures and exemplars to strengthen future rehabilitation and reuse outcomes.

What this means for government going forward?

Under Queensland’s PRCP regime, government’s role in progressive rehabilitation extends beyond regulation, with the state participating as an active enabler of the energy transition. Its role extends to enforcing compliance through clear milestones and financial assurance, building technical expertise and knowledge bases, and aligning rehabilitation outcomes into broader regional, community and economic development strategies. During consultation, stakeholders noted that further future reforms may be required to clarify ‘rehabilitation’ and post-mining land use pathways to provide greater certainty for operators and communities and ensure greater uptake of progressive rehabilitation and PRCPs. Stakeholders noted how government may be able to play a leading role in strengthening transparency across the sector by enabling information sharing and publishing of rehabilitation performance data and creating a central publicly available repository of data on progressive rehabilitation compliance, performance and outcomes to keep community and industry informed.¹⁰

10. Queensland Government(2023). 2022–23 Report – Queensland Mine Rehabilitation Commissioner (Tabled paper).

Key Lessons Learned

01

Legislative enforcement can act as a critical enabler to unlocking progressive rehabilitation and productive reuses, signaling a structural reset for industry to drive sustainable, long-term change.

- A comprehensive regulatory reform mandate and strong institutional mechanism (such as the FPS and PRCPs) establish a critical foundation for sustained, proactive and more accountable land rehabilitation to restore or reuse former mining sites, driving more sustainable outcomes over the long term.
- Significant legislative enforcement and regulatory framework overhauls, such as the introduction of the FPS under the MERFP Act 2018 and mandatory PRCP regime can play a strategic role in resetting industry behaviours and attitudes towards progressive rehabilitation, encouraging more proactive actions as opposed to reactive responses. This ensures an alignment of financial, environmental and social outcomes for post-mining uses, embedded throughout operational lifecycles.

02

Embedding the public interest as a justification for rehabilitation and productive reuse ensures action is no longer optional.

- Prioritising the public interest makes rehabilitation and productive land reuse a mandatory social and environmental imperative, not an optional afterthought for owners and operators.
- By framing rehabilitation and productive land use within the public interest, operator legitimacy, community trust and stakeholder engagement are strengthened, enhancing social license and reputational outcomes for industry.

03

Accountability supported by institutional mechanisms encourages industry towards earlier, better-financed and more transparent post-mining uses that bring benefits to all.

- Structured, progressive closure requirements can catalyse industry-wide adoption of proactive, well-funded, and transparent post-mining land uses and rehabilitation practices, strengthening social, economic and environmental outcomes whilst also ensuring greater sustainability and feasibility of rehabilitation options.

*Has success been realised to date?
Are other jurisdictions well-positioned to benefit from similar reforms?*

The Queensland PRCP reforms represent a significant legislative and regulatory intervention aimed at improving the environmental and social outcomes of mining activities through an enforceable framework to manage rehabilitation obligations, progressively release land for reuse, mitigate legacy risks, and reduce liability exposure and risk for the State.

Insights from stakeholder consultations indicates that the reforms have succeeded to a notable extent in strengthening the link between financial assurance, operational planning, providing clearer obligations, greater regulatory oversight and post-mining land rehabilitation, addressing long-standing deficiencies that previously left legacy mines and abandoned sites inadequately managed.

However, stakeholders noted that while other Australian jurisdictions, such as Western Australia, face comparable challenges with legacy and operational mine rehabilitation, any legislative reform model must be carefully contextualised. Queensland's mining and planning regime is distinct, and the transfer of lessons to create a potential blueprint for progressive rehabilitation outcomes in other jurisdictions requires consideration and adaptation to local institutional, regulatory, and mine legacy conditions.

Key Learnings

to Support First Nations Outcomes

Adequately resource and build capacity with First Nations so that they can meaningfully participate in the definition, design and realisation of the social and economic outcomes of decommissioning.

Mining and energy infrastructure in Queensland occur on the lands of many Traditional Owner groups, each with enduring connections to Country and water. These lands carry a complex legacy of social, cultural, and environmental significance, which must be considered in rehabilitation and post-closure planning.

Established in 2019 under Queensland's mining and environmental legislation, Progressive Rehabilitation and Closure Plans (PRCPs) are a Government-led initiative, requiring mining operators to progressively rehabilitate land, establish post-mining land use objectives, and implement mechanisms for ongoing monitoring and compliance.

PRCPs provide a framework mandating early planning, staged rehabilitation, and engagement with affected stakeholders to deliver environmental, social, and long-term community benefits. While early engagement is required, it is limited to affected stakeholders and may include First Nations communities only if they have a 'genuine interest' in the land being rehabilitated, adjacent areas, or surrounding amenities. First Nations-specific engagement is not explicitly required, and the legislation generally refers to First Nations solely in terms of a 'cultural interest.'

This narrow scope often restricts meaningful participation, tends to rely on a small number of representatives, and risks the loss of knowledge and continuity when those individuals move on. As a result, engagement frequently reflects compliance with the minimum legal standard rather than leading practice.

Leading practice goes beyond mere compliance, focusing on early and sustained engagement, capacity-building, Free, Prior, and Informed Consent (FPIC) principles, and the integration of cultural values into rehabilitation planning. Rehabilitation should be leveraged as a positive opportunity for First Nations communities, generating social, cultural, and economic outcomes that exceed minimum legal requirements.

To enable meaningful participation and ensure project outcomes align with community needs and aspirations, the legislative and implementation framework should explicitly require First Nations-specific engagement, adequately resource participation, and actively incorporate community feedback into planning.

Many Traditional Owner groups have historically been excluded from decision-making processes that directly affect land, water, and the economic opportunities tied to rehabilitation. This exclusion is characterised by late engagement, occurring after planning has been completed, which reduces the ability of communities to participate in a self-determined way. There is limited evidence on whether PRCP engagement has been effective or valued by First Nations communities. Engagement often occurs late in the process, and insufficient resourcing limits meaningful participation.

Perspectives may differ between First Nations community groups, so engagement should be tailored to reflect these differences and ensure equitable representation. The development of the PRCP legislative framework provides little clarity on whether First Nations people were consulted, highlighting the absence of meaningful input from their communities in shaping the framework.

The First Nations contributions and perspectives have been prepared by Indigenous Energy Australia (IEA) on behalf of Urbis.

Key Learnings

to Support First Nations Outcomes

Where feedback has been provided, First Nations communities have emphasised the need for earlier engagement, stronger resourcing, and more meaningful opportunities to influence rehabilitation and closure outcomes.

To enable positive outcomes, First Nations communities must be adequately resourced by asset owners to participate ahead of time.

This ensures opportunities to build skills, knowledge, and a comprehensive understanding of the project, enabling them to meaningfully participate and shape project outcomes. Even where communities have had the opportunity to contribute, they are often not sufficiently resourced or lack the capability to actively influence the outcomes of closures and rehabilitation.

Decommissioning for First Nations outcomes – Resourcing First Nations knowledge, capacity and voices

Leading practice decommissioning requires resourcing First Nations communities to build capacity to play a material role in site decommissioning, rehabilitation and planning. Communities need time to build up capacity and capability to prepare for decommissioning if they are to capitalise on the opportunities decommissioning presents and avoid any possible adverse impacts.

This approach is important if First Nations communities are to participate meaningfully in shaping project outcomes that best meet community needs and aspirations.



Case Study 2
Deep Dive

Private Repurpose Investment
*to drive transformative change – learnings
from Lithgow, New South Wales*

Private Investment to Drive Transformative Change

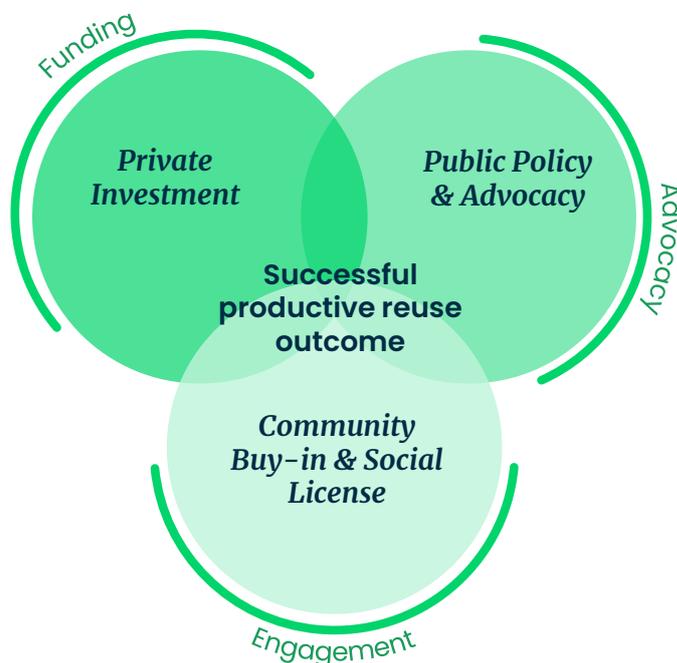
The transition away from coal- and gas-fired power has left behind a series of complex legacy sites requiring rehabilitation, environmental management, and new economic uses. In this context, private investors have emerged as central actors in reimagining the productive potential of former industrial lands.

Unlike public sector entities that can face budgetary and political constraints, private investors can mobilise capital and expertise rapidly to secure new future productive uses for these sites. Their efforts are often aligned with both national energy transition goals and local economic diversification strategies.

Key benefits of this approach

The benefits of an approach through private investment include accelerating redevelopment, generating new employment opportunities, and extending the life of existing infrastructure. Private-led redevelopment also has the capacity to enable innovation, ranging from renewable energy storage projects to new industrial and manufacturing precincts, that might be difficult to achieve under traditional government-led redevelopment. Operating with different commercial drivers and risk tolerances than government, private investors have greater flexibility to trial innovative approaches to rehabilitation and reuse. This can allow for more diverse or ambitious proposals for future land uses, concurrently remaining consistent with regulatory requirements and community expectations.

However, there are also significant challenges to the private-sector led model for the rehabilitation of complex former mining land and power station sites. Remediation and rehabilitation costs are often underestimated, particularly at large industrial sites that require demolition, contamination treatment, and environmental approvals.



These high costs can slow the pace of investment and capacity to deliver any early returns on investment while sites undergo remediation. At present, patient capital (long-term investment willing to accept delayed financial returns) is required in many instances, with technological advancement requirements, policy clarity, and market opportunities all in a nascent stage.

Projects led by private repurpose proponents carry financial risks if energy markets shift or approvals are delayed, and their success depends heavily on maintaining community trust and social license. It is here where government plays a critical balancing role in creating enabling regulatory frameworks and broader policy alignment to support regional development outcomes, and facilitating connections between private investors and potential partners. Government also can support private investors by attracting skilled talent to drive transition objectives, investment advocacy for the sites, and ensuring community and environmental requirements are upheld, protecting the interests of local communities and the environment.

Repurposing Of The Former Wallerawang Power Station Lithgow, NSW

The former Wallerawang Power Station situated in Lithgow, Central-West NSW, provides a compelling example of the role private investment and industry leadership can have in driving purposeful reuse outcomes, supporting both environmental and regional development outcomes.

As a regional NSW community, Lithgow is characterised by a strong industrial heritage, much of which is tied to decades of coal mining and energy generation activity shaping the region's identity and local economy. Today, the region is situated within the centre of one of the country's fastest transitioning regions. Acceleration towards clean forms of energy production has resulted in high operating costs of fossil fuel-based assets, declining demand, and constraints in coal supply. In response to these challenges, the Wallerawang 1,000 MW coal-fired power station ceased operations in 2013–2014.

Greenspot Wallerawang Pty Ltd (Greenspot) was formed in 2020 as a joint venture (JV) between Borg and Bettergrow, two prominent New South Wales based companies. In September 2020, Greenspot finalised the purchase of the former Wallerawang Power Station and surrounding buffer lands. As Greenspot's flagship initiative, transformation of the Wallerawang Power Station and surrounding 620-hectare site seeks to honour the region's legacy and support sustainable future uses and long-term community outcomes.

The project aims to transform the site into a catalyst for transition, creating six distinct precincts, each with its own identity and character. These precincts will be shaped by the site's existing infrastructure and the unique natural qualities of their surrounding environment.



Wallerawang Transition Progress

- 2014** – Wallerawang Power Station operations cease
- 2020** – Greenspot acquires Wallerawang site with plans to transform into a multi-use precinct
- 2021–22** – Commencement of demolition activities with removal of main coal-fired power station infrastructure
- 2022** – Development approvals obtained for Wallerawang 9 Battery Energy Storage System (500MW/1000MWh)

Key themes this case study explores:

Transition from Coal to Clean Energy

Private sector leadership in driving Australia's energy transition agenda and delivering diverse future uses

Circular Economy in Action

How industrial legacies can be responsibly transformed while laying foundations for a more sustainable future

Workforce & Economy

The Importance of Workforce Transition and Economic Diversification – how communities can be better supported through transformation to achieve maximal outcomes

Governance & Policy Alignment

Strong governance, policy alignment and a long-term commitment – creating the settings and framework that underpin success, legitimacy and long-term rehabilitation viability. Sustained government support, active advocacy and patient capital as essential to realising rehabilitation benefits

Repurposing Of The Former Wallerawang Power Station Lithgow, NSW

The Greenspot 2845 Master Plan for the former Wallerawang Power Station outlines early visioning and land uses for repurposing of the 620-hectare site. Leveraging Lithgow's industrial heritage, the plan sets out a mix of land uses that combine clean energy, industrial, commercial, tourism, residential and community recreation. Together, the future site is intended to deliver long-term social and economic benefits to the Lithgow region and to New South Wales, more broadly.

Proposed Site Land Use Mix

Wallerawang 9 Battery Energy Storage System (BESS)

Central to the site's redevelopment is the \$400 million Wallerawang 9 Battery Energy Storage System (BESS). Strategically located adjacent to the 330kV Wallerawang Substation, the Wallerawang 9 BESS will play a pivotal role in supporting Lithgow's transition from coal to cleaner energy, establishing the site as an anchor for future high-tech industries and energy infrastructure investment, reinforcing Lithgow's role as a key driver of economic growth in the region.

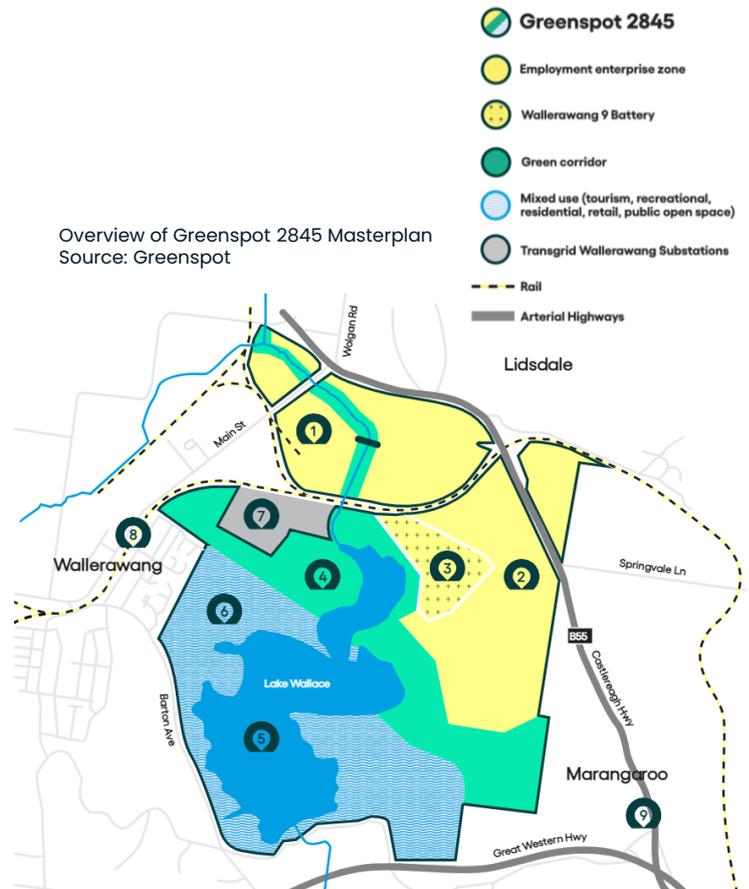
Employment Enterprise Zones

Surrounding the energy hub, significant areas of the site have been allocated as employment enterprise zones within the proposed Master Plan. These areas are positioned along arterial highways and rail connections, maximising accessibility for new industries. The proposed employment enterprise zone features approximately 200 hectares of enterprise area to support a wide variety of industries. The area is strengthened by enabling infrastructure onsite, including energy, water, transport connections and digital infrastructure, helping attract investment and potential tenants to the site.

Green Corridor

A green corridor has been planned to connect key areas of the site, enhancing riparian, grassland and bushland ecologies to support biodiversity outcomes and environmental preservation.

Overview of Greenspot 2845 Masterplan
Source: Greenspot



Mixed-Use Zone around Lake Wallace

Lake Wallace and its surroundings are earmarked within the proposed site Master Plan for mixed-use development, incorporating tourism, recreational, residential, retail, and public open space uses to strengthen liveability and destination benefits at Lithgow. Previously, Lake Wallace was built to support power for the former power station, however, within current plans, this water body has the potential for use as a reservoir for the local municipality's water supply for industry and recreational opportunities.

Transgrid Wallerawang Substations

Currently, Transgrid owns and operates 330kV and 132kV substations immediately adjacent to the site. This existing infrastructure will remain a feature of the proposed Master Plan, enabling both the BESS and future energy-related industries. The site is capable of providing secure high-speed digital connections through Transgrid's existing high-integrity data network that passes through the 330kV substation, supporting potential future high-tech tenants onsite.

Key Themes

explored

The transition of the Wallerawang Power Station under Greenspot's leadership highlights several key themes that underpin the site's transformation from a coal-based industrial facility to a sustainable, multi-use precinct, leveraged by a private-sector investor led approach.

Transition from Coal to Clean Energy

Private sector leadership in driving Australia's energy transition agenda and delivering diverse future uses

The Wallerawang transition demonstrates how private-sector leadership can actively drive Australia's decarbonisation agenda while playing a critical leadership role in supporting and redefining new regional economic identities.

- **Industry-led repurposing of legacy assets and reinvention of regional identity:** Controlled demolition and partial retention of existing infrastructure and industrial legacy assets allowed for the reuse of materials and enabled a foundation for the precinct's future development whilst still preserving the site's former history.
- **Driving clean energy outcomes while supporting diversified land uses:** Approvals for development of the Wallerawang 9 BESS (500 MW / 1,000 MWh) directly supports grid stability and renewable energy integration, with further commitments from Greenspot to support a variety of mixed uses onsite to deliver broader community benefit, including tourism, recreation and housing.
- **Delivering a true mixed-use vision to enable regional growth:** Greenspot is in the process of receiving approvals to rezone the former power station site and adjacent land from general industrial and heavy industrial zoning to an SP4 Enterprise zone to support future employment, residential, commercial, and tourism uses alongside industrial and energy infrastructure. This change will enable greater flexibility and scalability of activities across the site for a range of future uses, supporting regional growth and employment diversification outcomes for Lithgow and the surrounding region.

Success to private sector leadership in driving transition outcomes can however be constrained by financial, regulatory or operational complexities. In the case of Wallerawang, Greenspot is uniquely positioned to lead redevelopment of the site, having been established specifically to repurpose legacy industrial sites and lands, in addition to bringing a deep understanding of the local region, its economy and community. Its organisational focus, access to patient capital, and dedicated expertise and resources allow it to manage the long and complex process of remediation and transformation without the competing pressures of ongoing operational assets. The former Wallerawang Power Station site itself also provides unique enabling conditions, including scale, flexible zoning, proximity to residential areas, and access to major transport and energy infrastructure. Together this has created redevelopment opportunities that might not typically be available at other sites.

Key Themes

explored

The transition of the Wallerawang Power Station under Greenspot's leadership highlights several key themes that underpin the site's transformation from a coal-based industrial facility to a sustainable, multi-use precinct, leveraged by a private-sector investor led approach.

Circular Economy in Action

How industrial legacies can be responsibly transformed while laying foundations for a more sustainable future

The Wallerawang project illustrates a live example of circular economy principles in action within the context of Australia's current transition context, shifting the dial away from fossil fuels and towards cleaner energy production alternatives.

- **Sustainably driven demolition and remediation practices to embody circular economy principles and management of contamination risks, ensuring safety and community confidence:** Instead of conventional demolition and landfill disposal methods, Greenspot prioritised the recovery and reuse of materials onsite. By dismantling legacy industrial infrastructure in a staged and controlled manner, Greenspot sought to reduce any adverse environmental impact and mitigate contamination risks to support future land use forms.
- **Supporting community transition,** Greenspot hosted a series of entertainment lightshow events and tributes for the local community prior to demolition of the sites major structures. The intention of this was to celebrate the site's seven-decade industrial legacy and the local community who shaped its history, seeking to honour the past while embarking on a new chapter for the site and broader community.

The Importance of Workforce Transition and Economic Diversification

How communities can be better supported through transformation to achieve maximal outcomes

- **Economic displacement and job losses must be carefully managed to maintain community confidence and social license:** Transitioning from coal to clean energy has inevitable impacts for local employment and workforce transition need. Ensuring the economic and social resilience of rehabilitation projects requires proactive management of workforce displacement and established supports to generate new employment pathways.
- **Actively supporting regional housing targets and employment opportunities,** Greenspot's development proposal aims to supply 2500 jobs and 1260 new dwellings, aligning with the Central West and Orana Regional Plan 2041 and Lithgow Emerging Economies Transition Plan objectives.

"Competition for capital investment in regional areas is becoming more intense as mines and coal-fired power stations bring forward closure dates. Each area has its own unique community needs and dynamics, however in every case there will be efforts to create and maintain a stable business environment to attract major private sector investment." – Greenspot CEO, Brett Hawkins

Strong Governance, Policy Alignment and Long-term Commitment

Creating the settings and framework that underpin success, legitimacy and long-term rehabilitation viability

- **Government support to streamline approvals processes whilst safeguarding owner-operator transparency and accountability:** The NSW Government's role in the Wallerawang redevelopment includes opportunities supporting advocacy efforts and investment attraction. Supporting fast-tracked rezoning processes under the State Significant Rezoning Pathway (SSRP) has played a critical role in signaling confidence in the project and helping reduce barriers to private investment. The SSRP seeks to create a more streamlined pathway for rezoning large, precinct-scale and complex eligible State and regional rezoning proposals in NSW. Additionally, the recent implementation of the SP4 Enterprise zone as part of NSW's Employment Zone Reforms has introduced more flexibility and adaptability in land zoning for strategic planning initiatives aimed at fostering economic development, helping to facilitate diverse post-mining land uses and employment generating activities.
- **Strategic planning support and a place specific Site Advisory Group,** including evaluation panel outcomes and critical infrastructure declarations for related transmission links, have helped to further align development of the site with state-level priorities, supporting investor confidence and community buy-in for the transition of the site. Stakeholders highlighted the implementation of a Site Advisory Group as an important mechanism for coordinating state government agencies and supporting Lithgow Council through the early stages of the Wallerawang proposal. The Advisory Group ensured state resources were brought in early, including a secondee to bolster the Council's capacity, and helped streamline government inputs on a project of unprecedented scale for the area and local council. While it was no longer required once rezoning processes shifted to a state-assessed pathway, stakeholders recognised its value in providing early structure, alignment and support.
- **Sustained government support, active advocacy and patient capital** as essential to realising rehabilitation benefits: With the energy transition, rehabilitation and regional transformation being generational challenges, not short-term projects, the case of Wallerawang highlights the important synergy necessary between patient effort and capital investment, consistency, commitment and enduring partnerships between government, the private-sector and community to foster momentum and successful long-term outcomes.
- **Reflections from stakeholders highlighted a range of key areas where government could continue to play an active role** in supporting the success of privately-led rehabilitation and reuse projects, helping drive stronger governance, policy alignment and ongoing commitment critical to the success of complex, long-term transformations. These include:

Funding support to
balance cost-
sharing

Advocacy to drive
investment attraction to
the regions

Standing up site advisory
or engagement groups to
support buy-in

Key Barriers and Enablers to Private-led Site Rehabilitation and Repurposing

The planned repurposing of the Wallerawang Power Station demonstrates both strong enabling conditions, and structural barriers encountered by Greenspot, that illustrate the complex dynamics of private-led reuse.

Key Enablers

Leveraging existing enabling infrastructure

Utilisation of existing high-voltage grid connection at the Wallerawang substation and access to major roadways, rail, water sources and enabling infrastructure were identified by stakeholders as critical enablers for Greenspot in attracting diverse industry uses to the site.

Prioritising material reuse and sustainability to reduce environmental impacts of demolition

Over 40,000 tonnes of scrap metal and 25,000 tonnes of concrete have been recycled from the demolition efforts under Greenspot's Waste Management Plan, demonstrating a strong circular economy approach.

Fast-tracked rezoning and planning support from government

NSW's State Significant Rezoning Policy is currently being leveraged by Greenspot to fast-track rezoning efforts to enable earlier employment, residential, tourism, and recreational outcomes onsite.

Privately-led mobilisation through patient capital investment

As a leader in repurposing legacy assets with different commercial drivers and risk tolerances than government, private investors like Greenspot have greater flexibility to trial innovative approaches to rehabilitation and reuse, albeit with long term investment with delayed financial returns.

Strengthened government and community endorsement through established governance structures

Structured community engagement through community drop-in sessions and site advisory groups has been reported by stakeholders as critical in reinforcing the legitimacy of Greenspot's vision, early proposals and in ensuring community buy-in.

Key Barriers to be Managed

High remediation costs and funding limitations

One of the most significant challenges to manage is the high and unpredictable cost of remediation, with private investors carrying the full burden of demolishing and rehabilitating heavily contaminated infrastructure. Whilst Greenspot has available patient capital to manage this, other private investors may lack the same financial flexibility.

Lack of long-term funding assurance to deliver remediation

Whilst available patient capital may be effective for Greenspot over the short-term in mitigating the effects of this as a barrier, it is limited in terms of long-term feasibility without structured mechanisms to guarantee rehabilitation financing or access government support to share costs.

Complex and timely approvals processes

Progress was identified by stakeholders as being slowed by complex and lengthy approvals processes, a barrier that has potential to erode the commercial viability of these projects.

Managing community safety and needs

At the community level, private-led approaches must prioritise safety concerns and local expectations, while also balancing commercial interests. To manage this, Greenspot has proactively engaged with community, employers, local government and regulators to align the vision and plans for the site with community.

Lack of co-investment model to bolster funding for rehabilitation outcomes

Stakeholders identified that the absence of a co-investment model with government can lead to rehabilitation efforts being shaped largely by what is commercially feasible, as opposed to what might deliver the greatest long-term social and environmental benefits for regional communities.

Benefits to Key Stakeholders

A private sector-led approach to the rehabilitation and reuse of former mining and energy sites offers a range of benefits that extend far beyond the site's boundaries.

By placing industry at the centre of delivery, this model unlocks value from legacy assets and also drives innovation benefits, supports investment attraction to regional areas, and supports the acceleration of broader transition outcomes that generate benefits for a range of key stakeholders.

The repurposing planning of the former Wallerawang Power Station seeks to create meaningful and tangible opportunities for local communities through active engagement and preservation of the region's industrial heritage.

Through consultation and research undertaken, it is evident that Greenspot has actively engaged with stakeholders at an industry, government and community level to bring key stakeholders along the transition journey. The organisation is actively focused on not only transitioning the site to an environmentally stable and commercially viable condition, but also on supporting the transition of the local economy, enabling new skills development and talent attraction, and supporting the provision of housing and commercial opportunities.

Industry & Private Investors



Site asset recovery and maximisation for repurposing of legacies and avoiding stranded asset write-offs.



Potential to host a diverse array of investment opportunities, maximising potential returns on investment and capacity to attract investors and talent to the site and region.



Strengthened credibility and advancement in energy transition, through delivery of large scale clean energy projects (i.e. Wallerawang 9 BESS).

Community



Preservation of regional identity and heritage, whilst positioning the community for future economic and social growth.



Improved future access to mixed-use developments, generating quality of life improvements through greater housing, employment and amenity options in the region.



Collaborative engagement to build confidence and trust, through visible progress, phased demolition and development milestones to realise progress and site potential.

Government



Reduced public financial burden, with the private sector assuming the majority of capital and operational costs for repayments instead of taxpayer dollars.



Policy delivery and alignment with industry, state and federal interests, supporting achievement of collaborative efforts to deliver Australia's energy transition objectives.



Strengthened engagement and governance models improve government's holistic understanding of complex rehabilitation, improving future policy recommendations.

Key Lessons Learned

The repurposing of the Wallerawang Power Station offers important lessons for industry, government, and community.

For private investors, the project demonstrates the value of leveraging existing infrastructure to lower entry costs and accelerate redevelopment, while also underlining the need to anticipate substantial remediation expenses and collaborate with government to manage risk.

For government, the case illustrates the importance of regulatory and rezoning frameworks in unlocking investment, but also highlights the need for collaborative funding mechanisms and suitable governance structures to sustain momentum and community trust.

For communities, the case of Wallerawang demonstrates the opportunities that can emerge from industrial transformation, including supporting new jobs, housing, recreational and tourism opportunities to drive regional economic development outcomes. Critical to this, however, is the importance of early and ongoing engagement with community stakeholders to support buy-in and social license.

01 Industry & Private Investors

- ✓ **Balancing remediation costs through reuse:** Early-stage remediation and decommissioning costs, which often deter investment, can be partially offset by the innovative reuse of materials, land, and existing infrastructure or legacy assets to balance costs and reduce development timeframes.
- ✓ **Managing risk and investment profile:** While private capital is capable of driving innovation and redevelopment, these projects carry high upfront risks due to uncertain remediation liabilities and the need for available patient capital. For future projects, robust risk-sharing mechanisms and strong governance are essential to ensuring the financial feasibility of rehabilitation efforts.

02 Community

- ✓ **Community benefits are contingent, not automatic, in a private sector-led model:** Unlike state-led approaches, there is no built-in mandate for equitable outcomes or prioritisation of public interest. Sustained community advocacy and strong governance frameworks are needed to ensure public needs are balanced against private commercial imperatives.
- ✓ **Inclusion and transparency are critical enablers, requiring conscious effort:** Benefits materialise only where communities are actively included in planning processes. Without deliberate and proactive inclusion, communities risk becoming passive recipients of external investment rather than co-shapers of their future, implicating social license and reducing buy-in to change.

03 Government

- ✓ **Pathway enablement:** Government support through planning, zoning flexibility, and streamlined approvals can accelerate the repurposing of sites to more future-focused uses sooner. These regulatory enablers reduce timely and costly barriers for private investors to support project progression, encouraging investor opportunities.
- ✓ **Advocacy and attraction:** Government has a critical role to play in convening resources and governance structures to attract diverse investors and partners, helping to further mobilise investment and interest into regional rehabilitation projects that might otherwise appear too risky or marginal. Strategic co-investment from government is also essential in enabling long term outcomes that deliver not just private returns but also sustained public benefits.

Key Learnings

to Support First Nations Outcomes

Prioritise developing long-term, meaningful partnerships with an emphasis on reciprocal relationships with Traditional Owners in decommissioning and rehabilitation planning. This will ensure self-determined generational outcomes are realised.

The Wallerawang Power Station is located on Wiradjuri Country, the largest Indigenous group in NSW with a rich Indigenous history and enduring connection to land, water and sky over tens of thousands of years. After nearly six decades of operation, EnergyAustralia announced the permanent closure of Wallerawang in 2014, citing falling demand and ageing infrastructure.¹¹

Responsibility for decommissioning, demolition and rehabilitation was transferred to Greenspot in 2020, marking a new chapter for the site.¹²

Plans include the Wallerawang 9 Battery, a 500MW storage project with Shell Energy, alongside proposals for tourism, residential, retail, and industrial uses such as a gigawatt-scale data centre within a future employment zone. The Energy and Climate Fund has highlighted the project as a model for diversifying and strengthening regional economies historically reliant on coal.¹³

The proposed new precinct by Greenspot showcases the potential for decommissioned coal-fired power sites to act as drivers for regional economic transformation for coal-based communities, bringing new long-term employment and economic activity to regional economies previously reliant on coal-based industries.

Major infrastructure redevelopments like Wallerawang present significant opportunities for First Nations communities to participate in the benefits from new economic and social outcomes. Benefit-sharing arrangements can support employment, enterprise development, and self-determined social and economic benefits. Benefit-sharing arrangements can also enable participation and self-determined economic and social outcomes.

Too often First Nations communities are excluded from co-design, planning, and key decision-making processes for future land use, limiting the project's potential to address past injustices such as exclusion, land dispossession, and restricted economic participation.

The Wiradjuri people are formally recognised as Traditional Owners of the Wallerawang site, and Greenspot has engaged with the broader Wallerawang community. There is a significant opportunity to establish long-term, meaningful partnerships with the Wiradjuri community, embedding First Nations leadership, knowledge, and economic participation into the redevelopment and supporting self-determined, generational outcomes.

Power stations, including the Wallerawang, were designed, developed and operated to form the foundations of community success via the enabling nature of energy infrastructure. In line with this ultimate purpose of energy infrastructure, that spans the lifecycle of assets, decommissioning should be centred around the long-term benefit of local peoples' lives.

First Nations contributions and perspectives have been prepared by Indigenous Energy Australia (IEA) on behalf of Urbis

11. News, A. (2014, November 21). Energy Australia confirms Wallerawang will close permanently. Abc.net.au; ABC News. <https://www.abc.net.au/news/2014-11-21/energy-australia-confirms-wallerawang-will-close-permanently/5909336>

12. De Lon, A. (2021). Wallerawang Power Station Project Demolition Rehabilitation Management Plan. Wallerawang Power Station Project Demolition, 1(1), 14. Liberty Industrial. <https://www.greenspot.com.au/documents/Wallerawang%20Power%20Station%20-%20Rehabilitation%20Management%20Plan.pdf>

Key Learnings

to Support First Nations Outcomes

For decommissioning to generate this improvement within community, what the improvements are, and how they are connected to power station decommissioning, must be known. The best way to understand these outcomes is to ask community what they are, and similarly, the best way to know how decommissioning can provide long-term benefit is to work collaboratively with community to understand what pathways from decommissioning to community outcomes exist, where community needs uplift to capitalise on the opportunity offered, and where to mitigate any potential negative impacts.

The only way organisations will be able and trusted to ask these questions, and will subsequently receive a response, is via meaningful and ongoing relationships that centre around the things that community deem important. These relationships must be reciprocal, built not only on consultation, but on mutual respect, shared learning, and benefit for all involved. Trust and relationships are not only human and best practice engagement, but are a cultural requirement across many of Australia's First Nations.

Build infrastructure within relationships

Unlocking generational outcomes requires asset owners to centre reciprocal relationships as a form of social remediation with Traditional Owners. This enables self-determined outcomes and the opportunity to reconcile a history of exclusion, land dispossession and impacts to Country.

13. Greenspot. (2023). Shell Energy plans to build, own and operate the Wallerawang 9 Battery . In Greenspot (p. 2). Greenspot. <https://www.greenspot.com.au/newsroom/wallerawang-9-media-release-10-january-2023.pdf>
14. Evans, R. (2024). Next Steps for the old Wallerawang Power Station welcomed by Lithgow City Council and Greenspot – Central West Village Voice. Villagevoice.net.au; Village Voice. <https://villagevoice.net.au/2025/07/31/next-steps-for-the-old-wallerawang-power-station-welcomed-by-lithgow-city-council-and-greenspot/>
15. Wilson, S. (2024, February 5). Breathing new life into places: Wallerawang Power Station – E.C.F. Engagecf.com.au; e.c.f. <https://engagecf.com.au/breathing-new-life-into-places>

Case Study 3

HAZELWOOD

Missed opportunities

*the costs of getting it wrong –
learnings from Hazelwood, Victoria*

Hazelwood Power Station and Co-located Brown Coal Mine

The retirement of coal- and gas-fired power stations and decommissioning of mining lands represent one of the most significant land use, environmental, and socio-economic challenges facing industrial regions in transition.

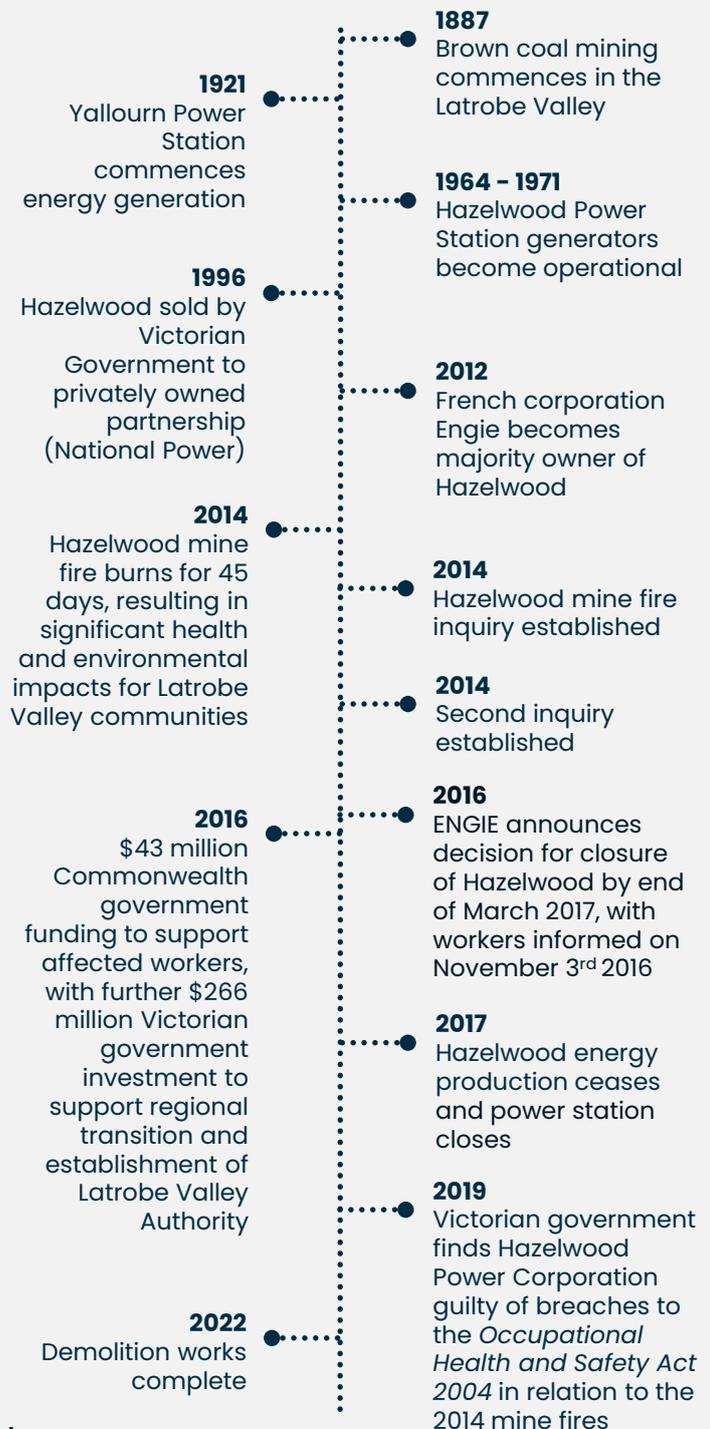
Productive reuse and rehabilitation of these sites are critical for ensuring environmental stability and community safety, and for enabling new economic opportunities and resilience in regions historically dependent on coal. When transitions are poorly managed, the consequences can result in significant impacts on communities, the environment and local economies, including long-term environmental hazards, stranded assets, loss of community trust, and severe socio-economic disruption.

The transition of the Hazelwood Power Station in the Latrobe Valley, Victoria, and its co-located brown coal mine, presents a particularly important case that reveals the critical implications for industry, community and government when the holistic planning and management of decommissioning, rehabilitation and reuse is inadequate.

This case study seeks to articulate key learnings from previous missed opportunities and the pivotal role of government in establishing a robust regulatory framework, ensuring adequate financial assurance for rehabilitation, management of environmental and geotechnical risks, and involving and proactively guiding local communities and workforces through closure and transition.

The Hazelwood case demonstrates how failures in these areas can result in missed opportunities and enduring risks, offering important lessons for future rehabilitation and reuse efforts across Victoria and Australia.

Timeline of events at Hazelwood



Note

Proposed closure dates shifted a number of times, with Hazelwood originally scheduled to close by 2005 as planned by the State Electricity Commission. After privatization in 1996, its operating life was extended to 2030 on the condition that efficiency improvements were made. In 2016, ENGIE announced Hazelwood would close in March of 2017.¹⁶

16. ABC News. (2017, March 30). Hazelwood power plant shutdown explained. ABC News. <https://www.abc.net.au/news/2017-03-30/hazelwood-power-plant-shutdown-explained/8379756>

Hazelwood Closure

An Array of Challenges

Site and Problem Context

Hazelwood Power Station and its co-located brown coal mine were first commissioned in the 1960s and became one of Victoria's leading energy generation sites – owned and operated by Engie since the early 2000s. The Hazelwood Coal Mine encountered a significant fire in early February 2014, with burning enduring for 45 days before being able to be controlled. The event resulted in significant environmental and health implications for the residents of Morwell and the broader Latrobe Valley community.

In 2014, the Premier of Victoria announced an independent inquiry into the Hazelwood mine fire to review a range of issues, including how the fire commenced, the related firefighting response, prevention and preparedness measures taken by the owner, operator and licensee, impacts on affected communities and the health emergency response.

Hazelwood's sudden closure in March 2017 marked a turning point in the Latrobe Valley's industrial history, removing both a major local employer and an infrastructure asset that had shaped the region's identity for more than half a century. Engie has now embarked on a journey for remediation and rehabilitation of the site, with the goal of transforming it into a safe, stable and more sustainable location suitable to deliver more productive future uses.

Key Challenges faced at Hazelwood

The challenges following closure were numerous. Geotechnical instability posed a major hazard for rehabilitation across areas of the site (for example, the former mining pit) and resulted in significant implications for the feasibility of rehabilitation. At the time, a range of options for reuse of key areas across the site were proposed but raised several concerns around the financial feasibility of rehabilitation, water sourcing for new site uses and the long-term viability of the transition for the region.

The Hazelwood Mine Fire Inquiry found that rehabilitation bonds were significantly underestimated, creating the risk that the costs of rehabilitation might ultimately fall to the public rather than the operator.

These issues were compounded by the rapidity of the closure, which left little time for careful transition planning and employment support for impacted workers, resulting in loss of trust and social license for Engie and government.

Risks and early warning signs

The Hazelwood case revealed several early warning signs that policymakers and regulators should monitor to prevent future failures.

Underestimated rehabilitation costs

Mine closure costs were initially estimated at approximately \$73 million by Engie in 2015, however independent experts estimated this would likely exceed \$250 million. By 2017, it was revealed these costs were likely to exceed \$743 million.

Inadequate Preparedness and Response Capabilities

Despite the complexities of weather patterns and bushfire risk at the time for regional Victoria, the Parliamentary Inquiry found that Engie (formerly named GDF Suez) was inadequately prepared as the mine operator to manage a fire of the scale at Hazelwood. The inquiry highlighted insufficient preventative mechanisms to address fires despite being in a high-risk region, further exacerbated by weak regulatory frameworks at the time.

Poor Communication and Lack of Proactive Community, Industry, Employer and Union Engagement

Whilst the Parliamentary Inquiry noted critical communication breakdowns at the time of the Hazelwood fire, further issues were identified by the community when the site's co-located Power Station closed in 2017 despite previous intentions to remain operational to 2025. This resulted in significant confusion and uncertainty for workers and members of the local community, with the public calling for a 'just transition' process and worker transition plans.

Hazelwood Today – The Role of Government in Supporting Just Transition Outcomes

Since the events of Hazelwood, including the Parliamentary Inquiry and subsequent reviews that took place following the 2017 closure of the power station, the Victorian Government has invested heavily in policy and funding efforts to facilitate a ‘just transition’ for the Latrobe Valley region.

In 2017, the Mineral Resources (Sustainable Development) Act 1990 was amended to establish the Latrobe Valley Rehabilitation Commissioner, which later transitioned into the Mine Land Rehabilitation Authority (MLRA) in 2020. The intent of the MLRA was to act as an independent statutory body to oversee the rehabilitation of declared coal mines across the Latrobe Valley, including Hazelwood, to ensure safe and sustainable closures and post-mining uses. The establishment of the MLRA formed a key recommendation arising from the Hazelwood Mine Fire Inquiry.

Enabling Rehabilitation Outcomes

In 2021, the Minister for Resources referred a series of matters relating to the mine’s rehabilitation to the MLRA for investigation. Following this, the MLRA released a report in 2022 highlighting the need for more flexible and adaptive approaches to designing, constructing, and maintaining safe and sustainable rehabilitation activities and land uses at the Hazelwood mine site while further detailed investigations and monitoring continued. This report has and will continue to inform future planning and regulatory decisions pertaining to the rehabilitation of Hazelwood.

In addition to the legislated establishment of the MLRA, the Victorian Government’s response to the findings of the inquiry included the development of a Latrobe Valley Regional Rehabilitation Strategy (LVRRS). The intention of this strategy is to support the addressing of key knowledge gaps for industry, government and community in relation to mine rehabilitation and the preferred options for the future of sites like Hazelwood. The LVRRS has been key to driving policy direction and the provision of practical guidance for the rehabilitation of mines within the region. Further amendments to the strategy were made in 2023 to take into account new information, knowledge and technical learnings made through the implementation of the strategy, providing increased clarity for owners, operators, communities and government.

Key enablers supporting government’s response

- ✓ Establishment of a formal parliamentary inquiry to **improve oversight, risk prevention**, future governance structures and policy
- ✓ **Delivery of a whole-of-region strategic rehabilitation plan, supplemented with regional economic support** packages to guide more holistic and just approaches to delivering on energy transition imperatives
- ✓ **Strengthened regulatory and governance structures** to institutionalise rehabilitation and ensure greater levels of accountability, compliance monitoring and transparency across the sector and community

Under the Mineral Resources (Sustainable Development) Act 1990 (Vic), it is required that the Minister review the LVRRS at least once every three years. In 2023, the LVRRS Amendment was released, including amendments to recognise significant changes in the region that had occurred since 2020, including the commencement of an Environmental Effects Statement (ESS) at the Hazelwood mine and the provision of conditions pertaining to water access for mine rehabilitation to protect other usage requirements of the Latrobe River system. To date, ENGIE Hazelwood’s Rehabilitation Project continues to progress through the development of their ESS and rehabilitation plans, with their Declared Mine Rehabilitation Plan due for submission in October 2025.

By institutionalising the oversight of mine rehabilitation and building on learnings and failures of the past, government has evolved a previously weak regulatory framework into one of direct compliance and accountability, paving the way for future safe and sustainable practices. Complementing this oversight, the development of the Latrobe Valley Regional Rehabilitation Strategy and significant investment in a ‘just transition’ reflect a deliberate, evidence-based approach to supporting economic, social, and environmental resilience.

Key Lessons Learned to Support Future Rehabilitation and Reuse Efforts

The Hazelwood Power Station and mine closure stands as a cautionary example of the risks with poorly prepared transitions associated with the transition from coal to clean energy futures, particularly in regional communities that have been defined by industrial heritage and fossil fuel-based industries for generations.

The failings encountered at Hazelwood demonstrate the ways in which inadequate planning, weak regulation, and limited community, industry, employer and union engagement can amplify both environmental and socio-economic risks, not only undermining the rehabilitation of mining lands but in ensuring ‘just transition’ outcomes for vulnerable communities impacted by the shift away from coal.

Despite its challenges, the Hazelwood case has however provided the impetus for reforms that have strengthened Victoria’s rehabilitation framework, particularly through policy frameworks such as the Latrobe Valley Regional Rehabilitation Strategy.

The learnings captured from Hazelwood are critical to informing future improvements to the rehabilitation and reuse of complex industrial locations for owners, operators, licensees, regulators, government and communities. Insights reveal the role government leadership can have in both rectifying past shortcomings to deliver tangible community benefits, ensuring informed decision-making, safer post-mining uses, and longer-term sustainability, economic, and workforce outcomes for affected communities.

<p>Ensuring a region-wide focus is critical to maximising rehabilitation outcomes</p>	<p>Emphasise a regional approach to mine rehabilitation rather than a mine-by-mine basis. This ensures cohesive management of land use, water resources, and community outcomes, providing a strategic framework that could have been beneficial prior to events like Hazelwood’s closure.</p>
<p>Implementing robust financial assurance and sustainable funding options early</p>	<p>Ensure financial mechanisms are accurate and enforceable, guaranteeing that mine operators are able to bear the full cost of closure and rehabilitation or seek opportunities for funding support early in the process. This prevents financial burdens from falling on the community or government.</p>
<p>Conducting early and transparent feasibility studies</p>	<p>Conduct geotechnical and hydrological studies early in the process, with a transparent publication of data. This allows for community and independent scrutiny, fostering trust and informed decision-making.</p>
<p>Inclusive community, industry, employee and union engagement across all phases of the transition lifecycle to drive benefits and social license outcomes</p>	<p>Engage proactively with employees, industry, unions and the community, including Traditional Owners, environmental groups, landholders, and local residents, in decision-making about post-closure land uses from the outset. This ensures diverse perspectives and needs are considered.</p>
<p>Long term planning to support large scale regional socio-economic transitions</p>	<p>Implement long-term planning for a socio-economic transition, including phased retraining programs, local investment in renewable energy and other industries, and deliberate strategies to build resilience in coal-dependent communities. This supports sustainable development and economic stability.</p>

Key Learnings

to Support First Nations Outcomes

Recognise and repair social damages of First Nations communities by laying the foundations for community determined generational outcomes through decommissioning and planning.

The Hazelwood Power Station and Brown Coal mine was located on Gunaikurnai Country. Gunaikurnai Country has a complex legacy of land dispossession, social upheaval and environmental impacts to land and water.

Gunaikurnai Country has been the centre of Victoria's energy economy for more than a century. As the shift to renewable energy takes off, Gunaikurnai Country continues to be front and centre of the journey. In 2016, after more than 50 years in operation, Engie announced the closure of the 1,600 MW Hazelwood Power Station and its adjacent coal mine in the Latrobe Valley – scheduled for the following year in April 2017.

The relatively short timeframe between announcing the closure, and closing operations, reduced the opportunity to meaningfully engage and carefully manage the social and economic impacts of the closure.

The closure and subsequent process of site rehabilitation, future land use planning and development, reflects an historic continuation of exclusion from mining negotiations and decision-making. This exclusion has only reinforced a legacy described by the Gunaikurnai of “take and no return” creating ongoing spiritual, emotional, and ecological trauma for the Gunaikurnai people.

Although the closure ended Engie's coal operations, it did not mark the end of Engie's ongoing and long-term presence in the region, with the development of the new BESS asset and post-closure diversified land use strategy. However, the rapid closure and lack of meaningful consultation meant that First Nations voices were initially absent from legacy planning, decision-making authority and cultural governance, perpetuating patterns of dispossession and disempowerment.

The Gunaikurnai Land and Water Aboriginal Corporation (GLaWAC) has consistently advocated for early and meaningful engagement, highlighting the need to integrate Gunaikurnai knowledge, cultural priorities, and local perspectives into planning and rehabilitation. In their position statement “Healing Wurruk after Coal”, GLaWAC emphasises that protecting and healing Country requires parallel investment in people and communities.¹⁷

This is in stark contrast to offshore wind projects in the Gippsland region that have proactively included Traditional Owners during the early planning phase centred around fostering long-term relationships and benefit sharing arrangements. GLaWAC believe the model of early conversations, investment in long-term meaningful relationships and transparency should become an industry standard that is not limited to the renewable energy industry.

The decommissioning at Hazelwood met only the legislated minimum requirements for community engagement, with a notable lack of First Nations inclusion or community legacy planning. This limited participation left First Nations communities in the region with little opportunity to influence outcomes, intensifying social and cultural impacts.

First Nations contributions and perspectives have been prepared by Indigenous Energy Australia (IEA) on behalf of Urbis

17. Gunaikurnai Land and Waters Aboriginal Corporation (2025, September 18). Healing Wurruk after coal; <https://gunaikurnai.org/healing-wurruk-after-coal/>

Key Learnings

to Support First Nations Outcomes

Following this rapid closure in 2017, Engie recognised the need to include community – including First Nations communities – voices into rehabilitation planning. Engie engaged the Gunaikurnai community through workshops, planning sessions, and ongoing dialogue during the rehabilitation phase. This approach enabled the incorporation of cultural knowledge, local priorities, and social considerations into the rehabilitation plan, while establishing enduring, trust-based relationships that support continued collaboration, monitoring, and future First Nations involvement in decision-making.

The environmental impacts of legacy mining and energy infrastructure is not the only consideration asset owners need to incorporate. Social cohesion in community is also heavily impacted by the loss of energy assets, through the impacts to jobs and livelihoods. Decommissioning can address social impacts by actively resourcing community. Empowering community to play a larger role in the decommissioning process enables community to restore and strengthen social outcomes and capture the lasting benefits from the energy transition. Legacy planning requires building long-term relationships with local communities, many of which have not previously been established, making this a critical aspect of social remediation.

By recognising the importance of local communities and First Nations knowledge in early planning, decommissioning can be designed and delivered in ways that enable self-determined, intergenerational social and economic value long after physical remediation is complete.

This approach is key to a 'just' transition of Australia's energy system – and making the most of the change to our energy system in a way that meaningfully uplifts regional communities, today and tomorrow.

Social Remediation

Decommissioning and site renewal offers asset owners an opportunity to reset relationships with First Nations communities centred around empowering community to determine generational outcomes, and correct historical misdoings.

Case Study 4

An aerial photograph of an industrial facility, likely a power plant or refinery, featuring two prominent tall smokestacks. The facility is surrounded by various industrial buildings and infrastructure. In the background, there are rolling hills under a clear sky. The foreground shows a dense forest of trees.

**Government funding to
generate impact at scale**
– learnings from Collie, Western Australia

Collie Power Station

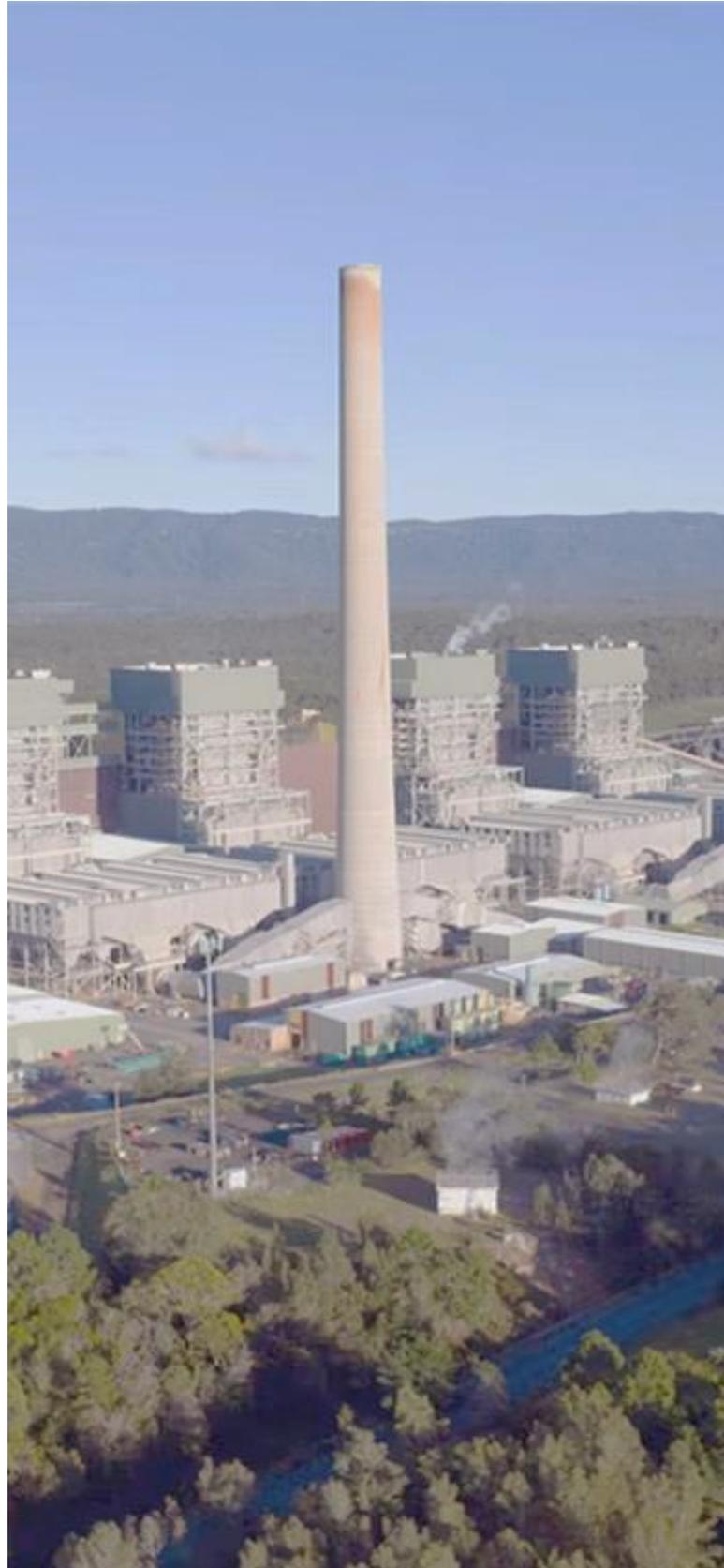
Western Australia

Public investment and state-driven leadership are critical in catalysing the transformation of former mining and power station lands into productive assets for community. Governments have a critical role to play in driving policy change, funding and building social license to support the delivery of large-scale social, economic and environmental returns from the rehabilitation and reuse of these sites.

The transition of Western Australia's Collie Power Station represents a leading example of public interest driven developments of former industrial and power generation lands being facilitated by strongly aligned policy directives to the just energy transition, supported by government advocacy and funding mechanisms.

Historically, Collie's economy has been anchored in coal mining and coal-fired electricity generation. Set for retirement by 2030, the Collie Power Station is one of WA's state-owned power stations to transition in alignment with WA's lower carbon future and regional economic development objectives.

This case study analyses the Collie transition as an exemplar in leveraging public funds and state advocacy support to drive large-scale structural change for the energy generation industry, with a particular focus on critical enablers and barriers, the role of government and lessons applicable to the productive reuse of other former mining and power station sites across Australia.



Thematic key takeaways

The Collie transition approach illustrates how targeted public funding can operationalise large-scale economic and social transformation, supporting investment into new industries, innovation and regional economic diversification in alignment with community, industry and government priorities.

Leveraging Public Investment for Systemic Impact

Collie's transition reveals the role targeted investment can play in acting as a catalyst for economic transformation. Central to the success of Collie's transition to date is the WA Government's significant investment of \$547.4 million to fund the Collie Transition Package, which features \$200 million dedicated to an Industrial Transition Fund (ITF) focused on attracting new industries in advanced manufacturing, green steel, battery production, and minerals processing. As part of its energy transition funding, the WA Government has allocated \$300 million to support the decommissioning of remaining coal-fired power stations across the region, with a further A\$16.9 million funding and grants to drive skills, training, career support, and workforce redeployment.

Supporting New Economic Futures and Diversification

A central pillar of Collie's transition strategy is industrial transformation, underpinned by flagship projects that signal new economic futures for the region. For example, investments into large-scale Battery Energy Storage Systems (BESS), green steel manufacturing feasibility studies and pilot funding to support new heavy industry ventures, including in low-emission magnesium production and graphite and steel recycling. In supporting the significant economic transition being delivered at Collie, the WA Government has also established a Just Transition Working Group, consisting of members from across industry, government and the community to inform future policy directives and implementation of the Collie Just Transition Plan.

These key thematic takeaways have been explored below, including exploring main benefits of the approach's core pillars.

Benefits of This Approach

- Multi-pronged funding streams and structural support packages to drive longer term economic transformation
- Government as both a funder and system-wide orchestrator of change for the regions
- Reduction of risk for private-sector entry to invest in site reuse and rehabilitation through structural supports
- Stimulate regional diversification and build social license

Benefits of This Approach

- Greater economic diversification and energy resilience through investment into clean-energy industries (for example, energy storage, green steel and waste recycling) to reduce reliance on fossil fuels for the region
- Innovation and future-focused development to signal regional commitment to national and state energy transition objectives
- Coordinated governance models to align investor and public interests, ensuring a clear and collaborative direction for the region's future

Workforce Transition Support and Skills Deployment

Central to the transformation of the Collie Power Station is the emphasis from state and local government policy in proactively supporting workforce transition, aligned to the Collie Just Transition Plan. Through the Collie Jobs and Skills Centre, workers are offered free career advice, retraining opportunities, and recognition of prior learning, coupled with tailored support to connect those directly impacted by the transition with new opportunities or supports. Further partnerships with TAFE have bolstered regional training infrastructure, helping to ensure a pipeline of skills aligned with future industries. This reflects an understanding that managing labour transitions requires both forward-looking skills strategies and proactive investment to manage community transition needs and reduce local economic shocks for those impacted directly.

Critical Enablers and Barriers

The success of Collie's transition rests on several enabling conditions explored at a high level within this case study. These include but are not limited to:

Enablers

Scale and breadth of public funding to support activities beyond site rehabilitation, including workforce transition management, strategic planning, enabling infrastructure investment and long-term governance

Establishment of dedicated institutional mechanisms and systemic policy change

Inclusive, proactive and long-term community engagement mechanisms to enhance social license and ensure developments are fit for purpose

Deliberate diversification of investment to support both industry and community outcomes, while prioritising active rehabilitation and repurposing where possible

Benefits of This Approach

- Proactively supporting workers through career advice, upskilling and retraining helps to support displaced workers, reducing local economic shocks and improving workforce transitions
- Strategic partnerships with TAFEs and training providers ensures skills alignment to future industries, supporting employment outcomes and regional economic resilience
- An integrated workforce strategy in alignment with the region's Just Transition Plan supports a more proactive, coordinated and sustainable approach to workforce transition, improving preparedness and responsiveness of government to worker needs

Like any approach to rehabilitation of former mining lands and power station sites, an array of barriers can implicate the success of, in this case, government's approach to leading site rehabilitation and region-wide economic transition. These barriers require management and conscious effort from government to collaborate with key stakeholders to drive project success.

Some of these factors include:

Funding delays and the provision of funds across the investment lifecycle to accelerate remediation, rehabilitation and development

Community skepticism and desire for change limiting the receptiveness to new futures and transition in line with the energy transition agenda

Long-term feasibility to support sustainable transition through public financing

The Role of Government in Driving Change

As an owner, the WA Government has played a pivotal role in driving the transition of the Collie Power Station, presenting a unique exemplar for state-driven rehabilitation and repurposing of energy generation assets.

Key to the success of the Government's approach has been in the strategic deployment of public funding to support workforce reskilling and regional

transition needs, capital investment for enabling infrastructure and investment attraction support to improve local economic diversification.

Key pillars of the WA Government's role in driving a just transition and broader regional economic development outcomes at Collie have been summarised below.

Funding	<ul style="list-style-type: none"> • Provision of direct financial support (i.e. Collie transition package) • Incentives and grants to support local economic diversification and new industry attraction • Dedicated rehabilitation funding to meet site requirements and support jobs enablement • Support for continuity of resources throughout the transition process (i.e. local worker and community support)
Skills and employment transition support	<ul style="list-style-type: none"> • Worker training and upskilling programs for energy transition focused jobs • Transition planning for legacy site workforces to minimise employment shocks and intergenerational community impacts • Redeployment support • Investment into local training institutions and TAFE to facilitate skills development in line with future industry and community needs
Enabling projects and major activities (i.e. large battery storage and grid infrastructure, and industry attraction (green manufacturing and critical minerals))	<ul style="list-style-type: none"> • Government supported economic diversification initiatives across a range of sectors (i.e. tourism, advanced manufacturing, renewables etc.) • Supporting feasibility studies to pilot and test new projects and economic/innovation drivers for the region • Rehabilitation and decommissioning as critical local employment stream in the short- to medium-term • Enabling projects that prioritise local procurement and promote regional economic development objectives
Capital investment into enabling infrastructure to drive transition	<ul style="list-style-type: none"> • Supporting upgrades to critical enabling infrastructure (i.e. grid connections and transmission lines, storage capacity, renewable assets) • Transport and logistics infrastructure uplift to support transition and rehabilitation requirements whilst also attracting new industries • Active investment into and preparation of innovation/renewable precincts to house new industries and attract global talent
Strong community engagement, transparency and established governance structures	<ul style="list-style-type: none"> • Establishment of local advisory and transition groups, as well as the Collie Delivery Unit within Government • Regular reporting and inclusive public updates on transition progress, funding allocation and key milestones • Elevating community voices as part of transition planning • Role of Government in supporting maintenance of social license and ensuring transparency
Decommissioning planning and pipeline for works	<ul style="list-style-type: none"> • Collaboration with private sector to encourage strong pipeline of decommissioning works • Oversight to ensure safety and environmental compliance • Integration of workforce transition opportunities • Strategic planning of asset closure to repurpose existing land and assets • Supporting greater transparency and certainty for investors

Key Lessons Learned to Support Future Rehabilitation and Reuse Efforts

The transition of Collie Power Station and broader region in Western Australia offers a compelling case study in leveraging public investment to rehabilitate former sites in alignment with regional economic transformation objectives.

Key lessons from Collie's transition include:

 <p>Public investment can act as a critical catalyst for driving change</p>	<p>The Western Australian Government's \$547.4 million Collie Transition Package, which features \$200 million dedicated to an Industrial Transition Fund, has been pivotal in attracting new industries and creating local jobs.</p>
 <p>Strong government leadership and advocacy are essential to driving alignment of transition goals</p>	<p>Adopting a forward-looking approach that focuses on what the region is transitioning into, rather than solely on the closure of Collie's Power station, has been essential in planning for sustainable post-mine land use and driving more holistic economic diversification outcomes. This has been enabled by strong advocacy and leadership from government in driving regional transformation outcomes.</p>
 <p>The just transition cannot succeed without clear and well supported pathways for impacted workers</p>	<p>Initiatives like the Collie Jobs and Skills Centre have facilitated the transfer of desired and emerging skills to clean energy sectors, with workers being supported through proactive retraining and upskilling programs.</p>
 <p>Institutionalised governance models and proactive community, industry, employee and union engagement builds social license, trust in government and ensures greater inclusivity in the planning of regional development outcomes</p>	<p>Formal transition groups and advisory committees in Collie, including the Just Transition Working Group have been essential in ensuring early accountability and transparency, while proactive engagement with unions, industry, Traditional Owners, and residents sought to build social license for the region's transition and transformation of the former power station. In addition, proactive engagement with industry, employees and unions on the impacts of the transition on jobs, skills needs, employment opportunities and pathways post-closure is critical to enabling positive and inclusive post-mining regional development outcomes. This helps to ensure policy decision-making responds to the voices of the region, delivering more equitable and tailored future development outcomes.</p>

Key Learnings of Collie to Support First Nations Outcomes

Acknowledging the path that First Nations communities have travelled and the journey ahead, the development of new energy systems on existing energy sites must enable social development and economic empowerment while investing in capacity and culture.

Located on Noongar Country in Southwest Australia, the Wiilman and Kaniyang people are central to shaping the lasting social, cultural, and economic impacts of the transition of Collie's Power Station to one of the largest battery storage facilities in the country.

The Collie Power Station, established in 1999 and set to close in 2027, has been central to the region's energy system, generating 340 MW for the Southwest Interconnected System.

Its closure forms part of the WA Government's \$3.8 billion energy transition investment, which includes the staged retirement of coal generation, the development of large-scale battery storage through Synergy's Collie Battery Energy Storage System, and private investment in renewable energy infrastructure such as Neoen's Collie Battery Project.¹⁸

This staged approach provides a deliberate pathway for Collie to move toward a renewable energy future while enabling community-led legacy planning.

In the hope of a 'Just Transition', the Government and Neoen are examining their relationship with the land and local eco-systems, seeking feedback from communities and promoting incentives in renewable energy development in the region.¹⁹ While engaging communities in consultation is a step towards a collaborative approach, it raises questions about whether this is enough to deliver a truly 'Just Transition'. The absence of deliberate engagement to include perspectives and leadership from Traditional Owners are common themes, and when engaged, consultations are rarely structured in a way that enables meaningful influence in decision-making.

First Nations contributions and perspectives have been prepared by Indigenous Energy Australia (IEA) on behalf of Urbis

This leaves critical voices, local knowledge and underrepresentation in shaping the energy future of the region and perpetuates the cycles of missed opportunity offered by energy systems and energy assets.

Engagement with local Aboriginal communities has taken place, though it has been largely limited to heritage matters rather than expanding to the development of enduring relationships or economic participation. Neoen has undertaken ongoing heritage consultation for the Collie Battery Energy Storage System on Wiilman Noongar Country, engaging the relevant Aboriginal parties with the support of environmental consultancy Umwelt.

While this consultation recognises and protects cultural heritage, it does not currently extend to broader social or economic empowerment or active participation in decision-making for the redevelopment of Collie's energy infrastructure. Complementing this, the Australian Research Council's "Inclusive Community Planning for a Just Transition to Net Zero Emissions" project is using Collie as a case study to explore how the coal phase-out, including the decommissioning of the Collie Power Station, can support First Nations self-determination and embed Traditional Owner perspectives in transition planning.

Co-located energy sites offer an opportunity for old energy to form the foundations of new, generational energy infrastructure.

The decommissioning of old energy offers a resource for the knowledge building, skill development and social improvement required to take advantage of the opportunity offered by new energy.

18. Sydney & Paris. (2024, October 29). Neoen's Collie Battery Stage 1 begins operating and delivering grid reliability services in Western Australia - Neoen. Neoen; NEOEN. <https://neoen.com/en/news/2024/neoens-collie-battery-stage-1-begins-operating-and-delivering-grid-reliability-services-in-western-australia/>

19. Department of the Premier and Cabinet. (n.d.). *Collie just transition*. Government of Western Australia. <https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/collie-just-transition>

Case Study 5

The Role of Incentives

in driving a productive reuse and rehabilitation agenda – learnings from the United States of America

Federal incentives and program initiatives

driving brownfield coal mine reuse

The decline of coal mining and coal-fired power generation in the United States has left a landscape of shuttered mines, abandoned power stations, and communities struggling with the dual burden of environmental degradation and economic dislocation. Across the country, there are more than 450,000 brownfields, implicating community health, amenity and development outcomes.

In response to this challenge, federal incentive programs have increasingly emerged as a crucial policy tool for addressing these challenges by stimulating the reuse and rehabilitation of former mining lands and fossil fuel-based energy facilities.

These programs, particularly those enabled through the Inflation Reduction Act (IRA) of 2022, the Environmental Protection Authority's (EPA) Brownfields and Land Revitalisation Program, and complementary state-level brownfield reuse strategies, collectively provide financial support, tax incentives, and regulatory certainty for redeveloping formerly contaminated lands, landfills and mining sites into renewable energy projects or more beneficial community uses.

The following case study seeks to demonstrate how the interaction of these initiatives, particularly targeted federal financial incentives, can accelerate the conversion of mining lands, former power station sites and other post-industrial or contaminated lands into more productive and sustainable uses.

The deployment of federal incentives in this example has proven beneficial not only in lowering financial barriers to investors but also in signaling longer-term government commitment to energy transition objectives and minimising stranded assets in communities.

Inflation Reduction Act (2022)

- Significant federal climate legislation focused on offering funding, supporting program initiatives and incentives to accelerate the clean energy economic transition across the US
- Provides incentives (for example tax credits) to organisations, businesses, educational institutions, tribal organisations and state and local councils to reduce renewable energy costs
- Under the IRA, a 10% tax credit bonus is available to any investment tax credit or production tax credit generated by a renewable energy project constructed on a brownfields site, subject to eligibility criteria

EPA Brownfields and Land Revitalisation Program

- Managed by the US Environmental Protection Authority (EPA)
- Provides funding, grants, resources and technical support to enable rehabilitation through grants and technical assistance to support projects in unlocking more productive land uses, reducing the number of abandoned or contaminated sites

Maximising rehabilitation and redevelopment opportunities through federal and state incentive and policy interventions

Whilst federal incentives to encourage renewable energy developments and formally contaminated site rehabilitation were enacted in the Inflation Reduction Act 2022 and driven by the EPA's Brownfields and Land Revitalisation Program, several states across the United States deliver their own incentives to drive investment into brownfields redevelopment.

Incentives under the Inflation Reduction Act (2022)

The IRA allocates close to \$400 billion in federal funding for clean energy, aiming to significantly cut the nation's carbon emissions by the decade's end. This support will come through a combination of tax credits, grants, and loan guarantees, with the largest share dedicated to clean electricity and transmission. Funding under the IRA is eligible to corporations, individuals, states and local governments.²⁰

EPA Brownfields and Land Revitalisation Program – delivering incentives, grants and redevelopment support

Grants provided under the EPA Brownfields and Land Revitalisation Program offer critical early-stage funding to support communities to attract additional investment into local areas and redevelop these former sites into more beneficial community uses, improving local amenity, economic, environmental and social outcomes.

In 2025, recipients of brownfield grants reported over \$41 billion leveraged, equating to approximately \$20 for every EPA brownfields dollar spent. These projects have proven to be strong job creators, with an average of 13 jobs attributed to every \$100,000 in EPA brownfields funds directed towards site assessments, cleanups and revolving loan programs, resulting in over 280,000 indirect jobs nationwide.²¹

The US Brownfields Federal Programs provide two key streams of assistance – financial and technical – across 21 different federal agencies to support projects across the below key phases of the brownfields redevelopment process:

Financial assistance provided under the EPA Brownfields and Land Revitalisation Program includes:

- Assessment Grants
- Multipurpose Grants
- Cleanup Grants
- State and Tribal Response Program Grants
- Brownfields Job Training Grants Program
- Revolving Loan Fund Grants

In addition to grants, the program offers various technical assistance grants and initiatives, including:

- Targeted Brownfields Assessment Program
- State and Tribal Response Programs – Technical Assistance Grants
- Technical Assistance to Brownfields Communities Program
- Training, Research and Technical Assistance Grants
- Free technical assistance program to nonprofits seeking to reuse brownfields
- University-led guidance and training in developing and applying equity-centred and inclusive anti-displacement strategies
- Centre for Community Progress

The interaction of the IRA, the EPA Brownfields and Land Revitalisation Program, and state-driven incentives creates a strong, layered framework for rehabilitation potential by aligning federal funding, regulatory support, and local economic priorities. Some challenges exist, however, in the model's delivery of equitable incentives and program implementation.

Phases of the Brownfields Redevelopment Process



20. U.S. Environmental Protection Agency. (n.d.). Incentives and policies. <https://www.epa.gov/re-powering/incentives-and-policies#:~:text=The%20Inflation%20Reduction%20Act%20includes,see%20Energy%20Community%20Tax%20Credit%20>
21. Kentucky Energy and Environment Cabinet. (2019). EPA 2019 Brownfields program guide. <https://eec.ky.gov/Environmental-Protection/brownfields/Grant%20Writing%20Resources/EPA2019BrownfieldsProgramGuide.pdf>

Key challenges, barriers and enablers to the US model for incentivised rehabilitation

Taken together, both the IRA and EPA Brownfields and Land Revitalisation Program present one of the US' most ambitious climate-driven policy interventions to date, promoting the reuse and redevelopment of contaminated or hazardous lands into worthwhile community or commercial uses.

However, review of this combined national framework and community criticisms highlights the tension between large-scale policy ambitions and the realities of communities on-the-ground.

While the model has the potential to unlock important opportunities, its effectiveness depends on equitable access, streamlined and well-communicated processes to communities, and stronger safeguarding mechanisms for historically marginalised areas to ensure just transition outcomes.

Enablers

Scalable tax-credit architecture to provide further incentives for projects in energy communities and low-income communities to enhance feasibility

Established brownfields program infrastructure supplying rehabilitation lifecycle support, technical assistance and reporting

Clear, long term federal policy commitment and alignment to climate policy and community development strategies

Blended funding models, combining public funding at the state and federal level with private investment

Integration of workforce retraining and skills uplift into transition policies to ensure just outcomes

The IRA and EPA Brownfields Land Revitalisation Program together create powerful enablers for mining land and industrial site rehabilitation and reuse, most notably through tax incentives and established frameworks to guide remediation and unlock investment into underutilised sites.

At the same time, significant barriers to the model remain, which may constrain the model's effectiveness and equity or replicability in different contexts.

These critical enablers and barriers have been identified at a high level below, in an effort to explore the interplay of factors shaping complex national policy, programs and incentive provisions to deliver sustainable rehabilitation outcomes for communities.

Barriers

Administrative complexity of national and state compliance frameworks resulting in delays to undertake brownfield projects

Potential transfer of excessive risk to corporations and communities to revitalise highly contaminated or complex sites

Environmental concerns and broader community impacts from contaminated sites not directly resolved by incentive model

Potential for inequitable delivery outcomes in communities with limited administrative capacity to access grants or navigate federal and state frameworks

Misalignment of grants award with site closure conditions and environmental stability threatening financial feasibility

Role of government in driving change

The US approach to redevelopment and reuse of brownfields and former mining lands under the EPA’s Brownfields and Land Revitalisation Program and Inflation Reduction Act (2022) demonstrates the role of government at the federal and state level as an enabler and catalyst.

At the federal level, the US model seeks to combine direct financial incentives with regulatory guidance, technical assistance and program coordination support to lower risk or barriers to redevelopment for communities and the private sector.

However, challenges exist within the US model and its complex interactions with state-level policy. In particular, implementation bottlenecks, administrative complexity and potential equity issues for historically marginalised areas emphasise the need for further strengthening of the program to ensure a more robust national framework.

For Australia, key learnings from this case study lie in the value that can be generated from an integrated national framework, combining leadership, technical guidance and funding with state-level mechanisms to accelerate the rehabilitation and reuse of former mining and contaminated lands.

Critical to the success of this approach is in ensuring adequate resources available to support the private sector, state and local government, Traditional Owners and community members in navigating rehabilitation programs. In addition, proactive monitoring of implementation and delivery are key to increasing national transparency of rehabilitation projects and maximising equitable long-term outcomes.

Where the federal government has played a leading role in this example

<p>Layered Incentives and Financial Support</p>	<ul style="list-style-type: none"> ▪ Federal grants provide capital to support key phases of brownfields site rehabilitation, including planning, site assessments, cleanups and redevelopment. ▪ IRA bonus credits and tax incentives add market driven pull factors for investors, particularly for clean energy focused projects, helping reduce private sector barriers and risks for taking on projects.
<p>Regulatory Clarity, Financial and Technical Assistance, and Resources</p>	<ul style="list-style-type: none"> ▪ The EPA Brownfields and Land Revitalisation Program offers detailed program guidance, technical and financial assistance, support and dedicated resources to support communities, businesses and not-for-profits with navigating federal grants and incentives and improve certainty around brownfields redevelopments.

Where could government’s role be improved

<p>Reducing State Bottlenecks and Monitoring of Program Outcomes</p>	<ul style="list-style-type: none"> ▪ Stronger monitoring and accountability mechanisms are required to better support program efficiency, equity and support the capacity of states to implement initiatives and deliver developments without bottlenecks.
<p>Remove Complexity of Eligibility Rules to Enable Equitable Access</p>	<ul style="list-style-type: none"> ▪ Several eligibility definitions under the IRA are highly technical and regularly updated, creating challenges in accessibility for communities or organisations with lower technical literacy or resources. Greater simplification and standardisation of rules between federal and state requirements may support broader participation and equity.

Key Lessons Learned to Support Future Rehabilitation and Reuse Efforts

The rehabilitation and productive reuse of former mining and power station lands presents both a challenge and an opportunity for Australia’s energy transition – particularly in leveraging a range of funding and institutional mechanisms to drive change.

Insights from the United States, in particular, the design, operation and application of rehabilitation activities and federal incentives under the Brownfields Rehabilitation Program and Inflation Reduction Act offer key lessons to inform future policy.

Key lessons from the US include:



Federal leadership and multi-layered incentives can act as catalysts for unlocking private sector investment and attraction by reducing financial risk

Targeted federal incentives can de-risk complex brownfield sites, helping attract private capital and investors that might otherwise avoid high-contamination or legacy liability environments. This supports the potential to unlock sites sooner, aligned to more meanwhile community uses.



Despite strong federal leadership, program delivery within the US has been hindered in some jurisdictions by state-level bottlenecks and inconsistency in oversight

To avoid future inefficiencies and improve the delivery of rehabilitation projects, further robust accountability and monitoring mechanisms should be implemented to better ensure states and organisations deliver timely outcomes and tangible on-the-ground progress for rehabilitation and reuse projects.



While the US’ incentives model is substantial, the complexity of eligibility criteria, definitions and requirements creates uncertainty and potential inequitable access for smaller, resource constrained groups

Future simplification and accessibility improvements should be prioritised in the design of rehabilitation programs to better ensure rules and standards are clearly understood, helping to maximise equitable access and reducing administrative burdens within groups with limited resources or knowledge on rehabilitation. This would ensure that rehabilitation of former mining lands or brownfields sites contributes not only to environmental restoration or commercial opportunities for the private sector, but also to sustainable regional and community development outcomes.

Key Learnings

to Support First Nations Outcomes

Mandating best-practice engagement as an eligibility requirement for brownfield decommissioning incentives ensures that community are adequately engaged, and that economic and generational outcomes will be considered and are determined by community.

First Nations contributions and perspectives have been prepared by Indigenous Energy Australia (IEA) on behalf of Urbis

Across the United States, brownfield sites sit on the lands of Native Americans, where the impacts of industrial development have layered onto long histories of displacement, cultural loss, and environmental harm. Federal programs such as the EPA's Brownfields Program, initiated in 1993, and the Energy Infrastructure Reinvestment Program, introduced in 2022 through the Inflation Reduction Act (IRA), provide funding and technical support for site redevelopment, including grants for site assessment, cleanup, and planning, as well as loan guarantees for energy infrastructure repurposing. While these programs demonstrate how federal incentives can stimulate the cleanup and repurposing of retired coal plants and other industrial sites, removing barriers to redevelopment and supporting local economic growth, the IRA also incorporates Tribal perspectives through formal consultation processes with federally recognised Tribes. These consultations, mandated under Executive Order 13175 and conducted by agencies such as the Treasury, Department of Agriculture, and Bureau of Reclamation, allow Tribal leaders to provide input on funding, program design, and implementation, particularly for projects on Tribal lands.

While these initiatives support economic redevelopment and environmental restoration, there is still no explicit requirement for consultation with Native American communities in the context of brownfield projects, meaning that First Nations perspectives, cultural heritage, and community-determined priorities are often left to project-level discretion rather than being embedded in program design or funding eligibility. Mandating best-practice engagement as a condition of funding or program participation would ensure that First Nations communities are meaningfully involved, able to shape economic and social outcomes, and central to determining the benefits their communities gain from redevelopment.

This experience highlights that the risks of failing to meaningfully engage First Nations and Indigenous communities are not unique to Australia. Across the globe, redevelopment often proceeds without recognition of cultural heritage, connection to land, or self-determined priorities, reinforcing patterns of exclusion rather than creating opportunity.

While these programs demonstrate a commitment to site reuse and economic renewal, they also highlight the importance of alignment between legislation and best-practice engagement with First Nations people and Indigenous communities globally. When approached inclusively, this alignment creates enduring social and economic value, fosters ownership and cohesion, and empowers First Nations to build resilience and share their own futures. Decommissioned sites can become engines for innovation, cultural recognition, and generational prosperity, providing enduring benefits that far exceed the life of the infrastructure.

For First Nations of any continent to secure the potential generational prosperity offered by decommissioning and repurposing of coal and industrial assets, governments must intervene to some degree via incentivisation or mandates, as corporate goodwill cannot be relied on to deliver an equivalent degree of outcome.

Incentivise and Mandate Best Practice

Unlocking generational outcomes requires the alignment of legislation and mandating and incentivising best-practice. Legislation, mandates, and incentives that require or encourage best practice First Nations engagement are a direct way to ensure First Nations communities are being engaged, and included and thus that they will be central to determining the benefits their communities achieve from infrastructure.

Case Study 6



Public-private collaboration
*as a critical enabler – lessons from the Hunter
NSW*

Hunter Region

Renewable Energy Transition

The Hunter region in New South Wales (NSW) represents one of Australia's most prominent coal-producing regions and has been at the heart of national and state-driven policy efforts to facilitate the renewable energy transition and support regional economic diversification.

For decades, the Hunter region's prosperity has been closely tied to coal mining and coal-fired power generation, with assets such as AGL's Liddell and Bayswater Power Stations and BHP's Mt Arthur coal mine providing employment, energy generation revenue, and energy security. However, increased competition from renewables, growing markets shifts, policy changes, and rising asset maintenance costs have accelerated the decommissioning of coal infrastructure, creating an urgent need for strategies to repurpose land, infrastructure, and labour forces.

In this context, public-private collaboration has emerged as a critical enabler of a successful transition. This case study seeks to illustrate how the rehabilitation of mining lands and power stations in the Hunter is being shaped by a cohesion of government policies, corporate initiatives, and community advocacy, with considerations to the lessons this case study offers for ongoing broader industrial and regional transitions.

Learnings from the Hunter seek to illustrate that effective whole-of-region energy transition requires more than individual site remediation efforts and siloed action. Critical to success is a holistic approach, aligning policy frameworks, strategic planning, and private and public sector investment to deliver just, economically resilient outcomes for Australia's regions.

“Regional communities like the Hunter will lead the way in Australia's transformation into a renewable energy superpower.”

– Minister for Climate Change and Energy, 2025

Integrated Planning and Policy Alignment across Local, State and Federal Levels

Collaborative Public-Private Partnerships to mobilise investment and expertise

Proactive Community Engagement to Ensure a Just Transition and Maintain Social License

Active Investment into New Industries and Workforce Reskilling to Drive Long-Term Regional Economic Stability

Long-Term Governance Structures to Enable Opportunities and Proactively Plan for Change Across the Full Lifecycle of Transition



Hunter Region Renewable Energy Transition

The Hunter region stands as a leading early mover of post-mining and power station reuse in Australia due to its historical significance, workforce capacity, and sheer physical scale. Long recognised as the heart of the nation’s coal industry, the Hunter has supported generations of skilled workers whose expertise in heavy industry, engineering, and energy production provides a strong foundation for transition.

The planned decommissioning and closure of large mines and coal-fired power stations will release vast tracts of land, such as the Hunter Energy Hub, creating an unparalleled opportunity for reuse and redevelopment at scale. These lands are strategically located near existing rail, port, and road networks as well as major transmission infrastructure, positioning the region to attract investment in renewable energy, advanced manufacturing, and clean industry.²²

Together, these factors make the Hunter not only a case study of transition in practice but also a benchmark case study for how industrial regions can leverage history, people, and infrastructure to drive new economic futures towards a net zero future.

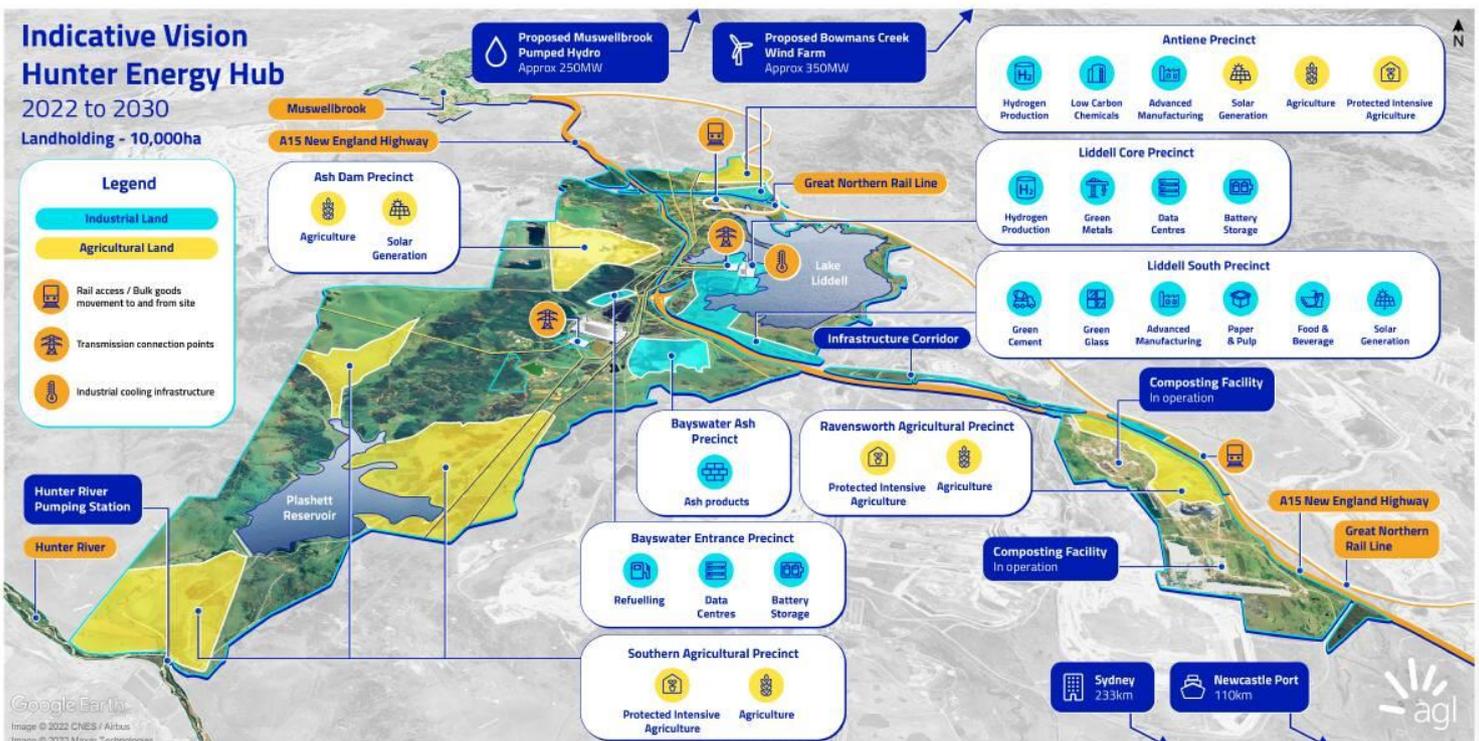
Currently, the largest piece of former coal mining or power generation land in the Hunter is the Liddell power Station and coal mine. Other coal assets, such as Bayswater Power Station, BHP Mt Arthur and Glencore Macquarie Coal, have also come offline, or will be in the near term. Demolition works for Liddell commenced in early 2024, with an anticipated completion time of approximately two years.

The AGL Hunter Hub projects aim to support grid stability, emissions reductions goals and energy supply for New South Wales.²³

The current projects being explored include repurposing of coal ash, development of a battery recycling facility, solar panel recycling and cable manufacturing, and solar panel manufacturing. Future projects include the Liddell battery, and Muswellbrook Pumped Hydro project.

A further overview of an indicative vision of the Hunter Energy Hub, which will be the catalyst and central to the Hunter Region energy transition, is included below.

Indicative Vision for the Hunter Energy Hub
Source: AGL



- AGL. (2023, September). Liddell decommissioning update. <https://www.agl.com.au/content/dam/digital/agl/documents/about-agl/how-we-source-energy/agl-macquarie/230914-liddell-decommissioning-update-september.pdf?srsltid=AfmBOorfzxyvXVAANYQXggvhsWxFA7GZBPAqVZ7aRiUl0utQKpDb2KBV>
- AGL. (2025, August 13). Climate transition action plan 2025. https://www.agl.com.au/content/dam/digital/agl/documents/about-agl/company-docs/250813-climate-transitionaction-plan-2025-final.pdf?srsltid=AfmBOooNgqy9JQc73Gx66_t0lCC4cPG2xugmXz6sB49dGwidSVaD-2

Driving a whole-of-region transformation

Critical factors to achieving success at scale

The Hunter's coordinated approach to a whole-of-region energy transition, converting several legacy coal assets (including mines and power station sites) into renewable energy and industrial opportunities presents a leading Australian example of key components that are central to transforming local economies and industry at a regional-scale.

Whilst like many of the case studies explored in this report, the approaches, challenges and initiatives are continuously evolving in line with Australia's fast-paced energy transition. Reflections and learnings at this point in time can help to support ongoing policy and strategic change across the country.

This example seeks to explore how applying a multipronged, collaborative approach to rehabilitation, combining coordinated planning, collaborative investment, community engagement, workforce reskilling and long-term governance structures can enable a successful whole-of-region transition. Critical factors that have supported the Hunter's success to date have been identified below:

Integrated Planning and Policy Alignment across Local, State and Federal Levels

Integrated planning and policy alignment has been foundational to the success of scaling transformation initiatives across the Hunter region to date. Coordination between local councils, the NSW Government, the Net Zero Economy Authority and other federal agency policies are designed to be mutually reinforcing.

Key legislative frameworks, including the *Electricity Infrastructure Investment Act 2020* and supporting policy changes have created greater legal certainty for Renewable Energy Zone (REZ) development across the region, while strategic plans at the regional level, including the Hunter Regional Plan 2041 and Blueprint for the Hunter 2050 support the alignment of local economic, environmental and social outcomes.

Collaborative Public-Private Partnerships to mobilise investment and expertise

Public-private partnerships have been cited repeatedly by stakeholders as critical to mobilising the necessary capital, resources and technical expertise required to tackle complex, long-term rehabilitation projects and regional transformations. Within the Hunter, collaborative partnerships between state and federal government agencies, energy generators, site owners, private sector stakeholders and community groups will be critical to facilitating the remediation and future closure of legacy coal assets, as well as planning for the development of new technologies (i.e. grid-scale batteries) and renewable energy hubs.

Importantly, effective collaboration between public and private sector stakeholders not only supports greater risk-sharing, capacity to leverage public infrastructure funding and accelerating project delivery through streamlined approvals pathways, but also enables greater knowledge sharing and transparency. The oversight and advocacy capacity of the public sector provides complementary benefits to the private sector's capacity for innovation and capital expenditure, ensuring projects meet the expectations and needs of both commercial and community interests.

Proactive Community Engagement to Ensure a Just Transition and Maintain Social License

As recognised in previous examples, effective and proactive community engagement is essential to securing stakeholder buy-in and legitimacy for large-scale rehabilitation projects and regional economic transitions in the shift away from fossil-fuel based energy generation. In the Hunter, proactive engagement strategies across local councils, government agencies and industry, including regular stakeholder forums, visioning processes with community, drop-in sessions and transparent communications mechanisms have helped to ensure the remediation, closure, design and redevelopment of former mining lands and power station sites respond to local needs and concerns, address employment priorities and respond to environmental concerns.

Driving a whole-of-region transformation

Critical factors to achieving success at scale

Active Investment into New Industries and Workforce Reskilling to Drive Long-Term Regional Economic Stability.

Driving long-term economic stability in transitioning regions is dependent on conscious investment into emerging and clean energy industries, alignment of regional economic development priorities and proactive workforce planning and reskilling programs.

In the Hunter, proactive workforce planning has taken place to align future skills needs with emerging and new industries tied to the State's transition agenda under the NSW Skills Plan 2024–28, including renewable energy, advanced manufacturing and sustainable agriculture as key priority sectors. As more legacy coal and power station assets undergo remediation, closure and redevelopment, there is a strong imperative for government to actively invest in supporting urgent skills gaps or future needs.

Integrated planning and policy alignment has been foundational to the success of scaling transformation initiatives across the Hunter region to-date. Coordination between local councils, the NSW Government, the Net Zero Economy Authority and other federal agencies will continue to be key to ensuring that land-use planning activities, renewable energy investments, rehabilitation efforts and workforce transition programs are mutually reinforcing.

Long-Term Governance Structures to Enable Opportunities and Proactively Plan for Change Across the Full Lifecycle of the Transition.

Effective institutionalised governance structures provide an important framework for ensuring accountability, alignment, continuity and strategic oversight across rehabilitation projects, as well as the full transformation lifecycle for regions undergoing economic transition. The Hunter region model emphasises the benefits of leveraging collaborative, multi-level governance structures to better coordinate investment, planning, initiatives, policy and monitoring of outcomes amongst federal, state, and local governments, private sector stakeholders, organisations, Traditional Owner Groups and communities.

Examples within the Hunter region include the Future Jobs and Investment Authority (NSW Government), Hunter Joint Organisation, Hunter-Central Coast Regional Reference Group and Upper Hunter Mining Dialogue.

Such governance structures and engagement forums can provide better holistic understanding and integration of policy recommendations, investment decisions, infrastructure delivery, community and workforce priorities and environmental compliance to ensure transitions are sustainable, equitable and flexible to changing needs and circumstances.

While the Hunter transition demonstrates the potential of a strongly integrated approach across all levels of government, the private sector and community, there remain inherent complexities and barriers to achieving whole-of-region transformations that must be actively managed.

Stakeholder consultations revealed a series of challenges related to the regulatory and policy settings governing productive reuse and rehabilitation of mining lands. According to some stakeholders, limitations exist around access to amenity and enabling infrastructure to support site developments post-closure, ambiguity of licensing for utilities and infrastructure post-mining, and alignment of legislation with policy and requirements at the state and local government level. Further barriers identified by stakeholders have been summarised at a high level below.

Barriers to be managed

Shifting policy and regulatory fragmentation may create misalignment between local, state and federal frameworks supporting rehabilitation and transition activities. This can create delays in approvals and levels of uncertainty, undermining investor confidence.

Financing and risk sharing of large-scale infrastructure and rehabilitation projects may require clear mechanisms and blended capital models to avoid stalling or hesitation for private investment.

Short-term political cycles and fragmented governance can undermine the long-term institutional capacity, alignment and collaboration of multi-decade projects, implicating achievement of long-term objectives.

Key Learnings

to Support First Nations Outcomes

Leverage decommissioning investment to deliver economic empowerment, through community-controlled, led, and culturally aligned, economic ventures.

The Bayswater and Liddell Power Stations are located on Wanaruah/Wonnarua Country. Wanaruah/Wonnarua Country and neighbouring First Nations communities are at the forefront of Australia's energy transition away from coal and Australia's push to become a renewable energy superpower.

The Hunter region in NSW has a long and proud history in coal mining and coal-fired power generation. For decades the Hunter region has served as Australia's largest regional economy built on the foundation of coal extraction, power generation, and industrial activity; employing tens of thousands of people and providing substantial direct and indirect economic benefits to the region. The Hunter region is now writing a new chapter in its proud history as it transitions away from a coal-based economy to a new renewable energy-based economy. Continuing the Hunter's legacy as an epicentre of energy and industrial activity in Australia.

AGL is a major player in the Hunter region and holds the largest generation portfolio in the National Electricity market. AGL's operations in the Hunter include the Bayswater Power Station and now decommissioned Liddell Power Station. As a leading energy supplier, AGL will play a central role in Australia achieving its 2050 net zero targets and has committed to a just transition, reflecting a commitment to environmental and social outcomes.

For the Hunter region, the transition away from coal presents complex challenges for Australia's largest regional economy and long-term prosperity. AGL has made efforts to engage community early, meet community expectations and manage the social and economic impacts as it plans to develop an integrated renewable energy hub with co-located industries on the sites of Liddell and Bayswater.

Organisations have demonstrated a willingness to engage early and inform community of future-oriented plans. First Nations stakeholders emphasise the need for them to continue to be included in key decision-making and involved in determining community led outcomes of decommissioning and future land use planning moving forward.

Organisations in the Hunter region have opened conversations with First Nations groups about what new economic sources may replace coal. This is pertinent, as like with the broader community, much of the First Nations community is dependent on the coal industry and adjacent industries. Despite these conversations, which have often been led by community bringing concepts for economic transition to the coal industry, there remains further work to be done in supporting First Nations determined and developed ventures.

Decommissioning of coal assets should be foundational to Indigenous economic empowerment

There is significant opportunity for the decommissioning of coal and other industrial sites across the Hunter to support the diversification of income at both a community and individual level. Supporting community to determine how they transition their financial connection with coal, and what they transition this connection to, is essential for any organisation that aims to earnestly and meaningfully play a role in Indigenous economic empowerment.

First Nations contributions and perspectives have been prepared by Indigenous Energy Australia (IEA) on behalf of Urbis

Key Lessons Learned to Support Future Rehabilitation and Reuse Efforts

The Hunter case study provides a nationally significant and evolving example of how deliberate public and private collaboration, supported by institutionalised governance frameworks, aligned strategic and policy agendas and the leveraging of combined resources has the power to catalyse systemic transformation and support successful rehabilitation outcomes.

The following lessons synthesise key takeaways from the Hunter transition, offering learnings to support the future design and implementation of similar energy transition and land rehabilitation efforts.



Policy and strategic infrastructure alignment forms the critical foundation of transition success

- Key to the success of the Hunter transition to date has been the integration of various federal and state statutory instruments, regional planning priorities and economic development strategies, and strategic infrastructure investment.
- Alignment of renewable energy policy and legislation under the *Electricity Infrastructure Investment Act 2020* and the declaration of Renewable Energy Zones across the region and country, in addition to regional economic development and workforce transition plans, have provided clear and aligned policy direction for the state's transition imperative.
- As a result, this has enhanced investor confidence and strengthened the ability to support coordinated planning and strategic investment.
- Learnings from the Hunter demonstrate that close alignment between planning and policy is essential to driving regional rehabilitation and transition, enabling outcomes that deliver lasting value for industry, communities, government, the environment, and the wider economy.



Transitions can only succeed when they are socially legitimated through effective community engagement

- Community engagement initiatives deployed in the Hunter region, including the Hunter Joint Organisation's Blueprint for the Hunter 2050 and Hunter-Central Coast Regional Reference Group, combined with interactive planning processes and alignment of local aspirations for former mining lands and power station sites are critical to obtaining social stakeholder buy-in for rehabilitation projects and transition initiatives.
- By positioning communities and organisations as active participants in rehabilitation and energy transition processes, the public and private sector can build trust, foster transparency and maintain social license to operate – particularly amongst groups that may be directly adversely impacted by the transition away from coal generation.



Enduring governance arrangements are essential to ensuring long-term transition management beyond election cycles

- The Hunter case demonstrates the importance of governance structures that support long-term rehabilitation and transition management and can remain future-proofed against project variability and government election cycles.
- By ensuring well-established commitment through formal governance models between the public and private sector, as well as regional and community groups, rehabilitation objectives, infrastructure delivery and workforce transition and upskilling can be pursued in a stable, coordinated way across the full lifecycle of the transition, maximising outcomes for all.



Appendices

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Legislative mechanisms to unlock productive reuse and progressive rehabilitation – learnings from Queensland

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First Nations

The First Nations contributions and perspectives have been prepared by Indigenous Energy Australia (IEA) on behalf of Urbis, regarding the decommissioning of former mining and coal-fired power sites for the Australian Government Net Zero Economy Authority (the Authority).

Data sources

Insights that have informed these case studies have been obtained from the following sources:

- Primary data: interviews with First Nations stakeholders, undertaken as part of the project from May – July 2025. This includes the following groups:
 - Kabi Kabi Peoples Aboriginal Corporation
 - Wonnarua Nation Aboriginal Corporation
 - Gunaikurnai Land and Water Aboriginal Corporation
- Secondary data: insights, reflections, and trends from collective experience across IEA's ten years of operations, and our team's cultural lived experience, alongside robust technical insights from suitably qualified consultants.

Authors

The insights and analysis contained within these case studies have been prepared by IEA staff – including those Indigenous team members with lived cultural expertise, and non-Indigenous team members with technical qualifications across environmental engineering, electrical engineering, law, sustainability, engagement, and social services.

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