AusIMM

Report: AusIMM and CRC TiME Post-Mining Land Use Policy Forum

Table of Contents

Executive Summary

On 31 July 2025, the Australasian Institute of Mining and Metallurgy (AusIMM) and Cooperative Research Centre for Transition in Mining Economies (CRC TiME) convened industry, government and research leaders in Brisbane to contribute to discussion on how to further beneficial and productive use of post-mining land in Australia. Participants included technical leads from organisations such as EnviroMETS, the University of Queensland's Sustainable Minerals Institute and AusIMM's kindred industry bodies.

The Post-Mining Land Use (PMLU) Policy Forum built on and reflected developments made across the regulatory, technical, commercial and socio-cultural dimensions of PMLU in Australia over recent years.

The Forum sought to understand the current context and outline how resources professionals and our partners can best contribute to improved post-mine outcomes.

Stakeholders at the Forum identified opportunities for a new approach to PMLU in Australia, extending on findings from the work of AusIMM and the CRC TiME, various state parliamentary inquiries, the Federal Productivity Commission and others.

This approach would see regulators, the sector, communities and post-mining proponents move beyond the minimum expectation of a 'safe, stable and non-polluting' landform to embrace an integrated, value-accretive and sustainable PMLU approach.

To transform mined sites from potential liabilities into valuable regional assets, such as renewable energy hubs, agricultural sites, data centre and even tourism destinations, Forum participants identified three 'enabling areas':

1. Regional planning and integration.
2. Policy and regulatory coordination.
3. Governance and collaboration.

Discussion highlighted three areas for further exploration:

1. Ensuring tenure frameworks include an appropriate mechanism or pathway to support productive and beneficial PMLU. integrating the environmental, health and safety, waste management, cultural heritage, land access and mining dimensions that apply to PMLU across regions and levels of government.

2. Implementing a place-based, life of mine approach to PMLU planning, including by introducing regional 'concierge' or 'coordinator' model. The 'concierge' would have a mandate to engage PMLU proponents, local communities and industry; participate in and coordinate regulatory approvals; and simplify the interaction for non-government parties with local, state and federal agencies.

3. Considering how to lift professional capability in post-mine land use, including within existing and new training, higher education and research programs.

The opportunity to continue developing and refining these actions is clear. Our next step is to seek further input and feedback to define a shared pathway for stakeholders across the sector. This report will form the basis for ongoing engagement with our professional community on how to best support and unlock post-mine land, assets and waste where appropriate.

In doing so, AusIMM and our partners will build on the legacy of our professional community in mine closure, rehabilitation and post-mining transitions. Our 15,000 members work across all fields of practice, at all stages of the mining lifecycle, and in fields ranging from mine engineering to chemical processing, environmental management, social performance, technology and occupational health and safety.

The Forum and this Report is a key step in AusIMM's work to corral this expertise and contribute a balanced, evidence and experience based perspective on the role our sector can play in delivering enduring benefit for the community.

Comment from the convenors

Stephen Durkin FAusIMM, CEO AusIMM

Delivering enduring benefits across the mining lifecycle is one of the most significant evolutions in our industry's commitment, capability and capacity over recent decades.

Indeed, for AusIMM, it is not merely an evolution that we have witnessed, but one that we have led as a professional community active across all stages of the mining lifecycle, in a breadth of disciplines, a range of commodities, and along the value chain from exploration through to production, closure and post-mining land use.

In the Australasian region, world-class mining professionals have led the development of new standards, technologies and approaches to value-creation as priorities shift for the industry, government, community, landholders and First Nations people.

Witness the developments at sites such as Mount Morgan, the Kidston Pumped Storage Hydro Project or in the Latrobe and Hunter Valleys. All show the dedication and capability of professionals in resources, and the potential of a well-coordinated and comprehensive approach to post-mining land use.

AusIMM Policy Forums are an initiative to engage leaders from across our professional community to generate evidence, shape policy and define pathways for the continued enhancement of capability in our sector. The goal reflects our mission: to advance the sector for the benefit of the community.

The AusIMM - CRC TiME PMLU Forum is perhaps the ideal expression of this focus. Stakeholder expectations, industry ambition, technical capability and government buy-in are coalescing to present an opportunity for long-term reform in relation to PMLU.

The message is clear: a place-based approach, an appropriate regulatory framework and the mechanisms to ensure we develop and maintain industry and professional capability are essential to delivering the best PMLU outcomes for our broader community.

We thank the delegates to our Post-Mining Land Use Policy Forum for their expertise and likewise relay our sincere gratitude to colleagues at the CRC TiME for their partnership and support. AusIMM's message now is for industry and government to heed the recommendations made in this report, and to join with us to both define and implement a shared pathway for the beneficial and productive use of post-mining land.

Stephen Durkin FAusIMM CEO

Delivering beneficial and productive post-mining land use

Government and academic reviews highlight both the need and opportunity to move beyond a risk-centric 'care and maintenance' approach to post-mining land use (PMLU).

Delegates to the AusIMM – CRC TiME Post-Mining Land Use Policy Forum called for a proactive and integrated approach to PMLU in Australia, which sees the transition from mining activities as an opportunity to create new economic and social value while managing impacts to environment, land and communities.

Importantly, this opportunity is borne out in the many case studies from both within Australia and around the world regarding the innovative use of post-mining land. This shows industry capability, professional practices and standards are (or certainly can) keep pace with shifting social and economic priorities.

These case studies also point to what Forum delegates described as the key enablers for beneficial and productive post-mining land use:

1. A place-based approach,
2. A PMLU-ready regulatory framework, and
3. A program to lift technical capability, enhance governance and embed this integrated approach at the project level – through the work of professionals.

This report outlines key findings across each of these enablers in the sections that follow.

Enabler: Prioritising regional approaches

Participants in the Forum emphasised that the most significant shift required is moving from site-specific, risk-centric regulation to a more holistic regional approach that considers the cumulative impacts of mining and other land uses on the environment, community, and infrastructure, as well as the cumulative value of mining and post-mining land use.

Engaging local communities, particularly Traditional Owners, from the earliest stages of individual projects is an imperative. Forum participants noted that, while there is more to do, industry practice has matured substantially over recent years.

Participants acknowledged the need to keep 'pushing' towards a more collaborative and integrative approach. The opportunity here is to identify the diverse range of beneficial post-mining land uses—from renewable energy to tourism—that might be pursued in a given area, and to then proceed with projects that reflect local conditions and meet the expectations and aspirations of the community.

Key enablers within a regional approach are:

1. **Integrated, long-term regional plans** that identify and account for PMLU within a broader socio-conomic and environmental context. This could involve the development of specific plans for post-mine land use or integration into existing planning frameworks. As is good practice, these plans should be informed by comprehensive needs analyses and consider public-private partnerships to support commercialisation.

   In practice, the development of a regional plan may be led by either a government or non-government party. From a governance and 'constitutional' perspective, however, delegates agreed that representation and some degree of decision-making is required across local, state and federal governments, industry partners and the community. The emphasis was on the right fit for the region, rather than a one size fits all approach.

2. Developing and exploring **regional coordinators or concierge models** to bridge the gaps between government, mining companies, Traditional Owners, regional development organisations and "next use" proponents. Different models are being used across the country, such as the Net Zero Economy Authority (Commonwealth) and planned NSW Future Jobs and Investment Authority.

A key area for further consultation is to explore how these agencies currently do or could support PMLU project proponents in navigating regulatory requirements across distinct domains including mining, water, environment, native title, and heritage, and across different levels of government.

Enabler: Clarifying regulatory pathways

Participants saw current regulatory pathways for post-mine land use as requiring attention. There is opportunity to clarify how regional planning, regulatory frameworks (including tenure arrangements) and wider planning schemes can be adapted across the life of mine.

A "coordinator general" model used in some states for new developments could be a potential avenue to support cohesion and efficiency where appropriate.

Delegates identified several building blocks:

1. Improving tenure arrangements: Options proposed include tiered tenure systems that align with the different stages of the mining lifecycle. This approach could provide greater flexibility than the frameworks extant in some jurisdictions, although care must be taken not to cause unintended consequences or weaken the overall regulatory framework. Delegates highlighted potential to learn from the implementation of Western Australia's Diversification Lease.

2. Regional planning: Better coordination within existing frameworks or considering new approaches to regional planning that define multi-user planning zones and provide a clear regulatory pathway for projects is a key opportunity. Forum delegates suggested regional coordinators or concierges could play a leading role here, with opportunities to learn from past practice.

3. Manage residual risk and develop new financial models: Participants noted the need to address challenges associated with residual risk in transferring mine land, infrastructure and waste to new users.

4. Consider 'waste' as a resource and develop relevant 'know-how': There is increasing recognition of the potential for reprocessing waste for new purposes. This is particularly relevant for critical minerals, which are often co-located with legacy waste and by-products from historical mine sites, offering an opportunity to recover valuable resources.

   Delegates acknowledge, however, that this needs to balance research and development with commercialisation. Much of the science, processing and other technologies require to re-process at commercial scale do not exist.

5. Integrate the socio-economic transition: There are increasing expectations for coordinated socio-economic transitions when mining ends. Clarifying roles and responsibilities between different parties, including governments, mining industry, next users and others. This includes roles and opportunities for Traditional Owners and regional communities in transition planning.

6. Connecting mine closure and PMLU: Importantly, delegates emphasised the distinction between effective rehabilitation regulation and comprehensive planning for beneficial PMLU. Delegates described significant reforms delivered by state governments over the last decade to modernise financial provisioning and assurance frameworks, strengthen closure requirements and introduce higher rehabilitation standards. Now there is opportunity to consider different models for connecting mine closure and PMLU, with a focus on value generation in addition to risk management.

As practice lifts across closure, rehabilitation and dimensions of risk management, continued efforts to share best practice, lift capability and deliver effective project governance is required to deliver beneficial and productive PMLU.

Enabler: Governance frameworks to achieve best practice

Governance is not just a matter for governments. When it comes to beneficial and productive PMLU, delegates emphasised that it this is a shared task given the commercial, operational, technical and other factors affecting potential PMLU.

In many cases, mining companies will have limited operational experience in developing non-mining land uses. Attracting and collaborating effectively with non-mining proponents is therefore a key opportunity for industry to advance PMLU outcomes, as well as an area that will demand new thinking from industry.

Delegates identified opportunities to help miners more actively engage with prospective post-mining land users; define projects; share relevant site, technical and stakeholder data; and manage land in a way that preserves future value. In practice, this would involve:

1. Building professional capability around closure planning to support proactive risk and liability management.
2. Supporting new business and operational models for PMLU, including public-private ventures and partnerships with Traditional Owners. Opportunities could exist in re-use of infrastructure, such as energy and water assets.

Governments may consider ways of incentivising PMLU where it is appropriate to do so.

Further work is required to understand different models to identify, quantify and manage 'residual risks'. At the project level, site data and operational information from miners can help post-mining proponents identify and develop new projects. At a macro level, outcomes could potentially be advanced through broader data sharing and collaboration, subject to commercial confidentiality.

Effective, long-term planning should also incorporate comprehensive analysis of future workforce needs and identify new and transferable skillsets, as part a comprehensive multistakeholder strategy for resource communities. This will involve working across the skills, training and higher education system, including with local universities and Registered Training Organisations (RTOs).

Delegates discussed the potential for highly skilled mining and METS workforces to generate new capabilities by working across broader energy, manufacturing and other value chains. As professionals cycle back through the minerals sector, these experiences can help to advance industry capability and underwrite the Australian minerals sector's position as a global standard, technical and professional leader.

PMLU presents a particularly relevant example of how this value can play out within a single industrial ecosystem, with the right training, education and employment frameworks.

AusIMM is exploring the future of professional pathways in the resources sector through its Professional Pathways Whitepaper process.

Putting the enablers into practice

Regional planning and coordination

For exploration	Insight
1. Establish integrated, long-term regional plans for PMLU	A site-by-site approach to PMLU does not always deliver the most value. As with all aspects of economic and social development, projects need to be considered and planned for at the regional level. This is about looking beyond a single site, or a single objective such as risk mitigation or commercial development. An integrated approach requires consideration of PMLU from the earliest stage of life-of-mine planning.w Proposals could be economically focused, identifying opportunities for beneficial PMLU in the context of broader regional development, infrastructure, and workforce needs. Plans should map existing and planned assets (e.g., electrical, rail, water infrastructure) that can be leveraged for new uses like renewable energy, data centres, or agribusiness. Forum participants coined the term 'functional integration' to identify concurrent land uses and regulatory overlays, such as a combination of solar farms and biodiversity conservation areas.
2. Consider a 'Concierge' or 'Coordinator-General' approach	Participants emphasised that no single entity could deliver beneficial and productive post-mining projects alone. Successful PMLU is a collaborative effort involving miners, government, community groups, Traditional Owners, and "next use" proponents. A key takeaway was the need for a dedicated function, likely within government, to act as a centralised coordinator. This role would connect potential users with mined land, navigate regulatory hurdles, and facilitate partnerships with other interest groups.

Policy and regulatory coordination

For exploration	Insight
1. Introduce flexible tenures	A consensus view was the need to explore a more flexible, tiered tenure system that can transition with the site's life, from active mining to rehabilitation and then to a new PMLU. This includes a clear, commercially practical structure for partitioning and transferring liabilities.
2. Allocate risk and manage liabilities	One of the most substantial commercial and regulatory challenges is to allocate risk for legacy, mining-related and post-mining land uses. In practice, and at a technical level, the delineation between existing and emerging risks is not clear. It is therefore important that comprehensive and continuous risk assessment forms a central part of planning, approvals and day-to-day operations for all post-mining projects.
3. Align regulatory processes and frameworks	Forum participants observe that local, state and federal regulations covering mining approvals, environmental management, health and safety, infrastructure and other areas all have PMLU applications. A coordinated approach to 'de-silo' these frameworks will not only support beneficial and productive PMLU but can also enhance outcomes across different jurisdictions and portfolios.

Governance and collaboration

For exploration	Insight
1. Incentivise beneficial PMLU	Policy settings and financial mechanisms are needed to encourage industry to pursue PMLU opportunities. While in early stages of consideration, this could include tax incentives, grants and public private partnerships. The process and outcomes must be transparent for all interested stakeholders.
2. Early, ongoing and inclusive community engagement	Starting community engagement at the earliest stages of a mining project is fundamental. Community-led proposals often garner the greatest support and offer the most viable path to long-term success. This is particularly vital for Traditional Owners, who can act as stewards of the land and whose rights and interests, including Native Title, must be respected and integrated.
3. Sharing knowledge and best practice	A significant opportunity exists to establish a national framework to a common, comprehensive, accessible database of site-specific technical and commercial information to identify opportunities, inform PMLU proponents and facilitate meaningful engagement and collaboration with local communities. Examples of current database models include the CRC TiME PMLU Hub.
4. Integrated skills planning	As part of effective, long-term region-wide planning, stakeholders should collaborate on comprehensive skills analysis to understand future workforce needs and develop reskilling programs with local universities and Registered Training Organisations (RTOs)/ Critically, the resources sector can create opportunities for its highly skilled technical and professional workforces to generate new capabilities by working across broader energy, manufacturing and other value chains. As professionals move back to the sector, these experiences can help to advance industry capability and see the Australian resources sector continue its role underwriting Australia's broader economic development.

A pathway for beneficial and productive post-mining land use

Suggested pathway to achieve beneficial and productive post-mining land use

The initial content in this 'suggested pathway provides the basis for continued engagement on mechanisms to share knowledge, lift industry capability, connect researchers and harmonise regulatory frameworks as part of work towards an integrated, highest common standard across jurisdictions.

This pathway outlines a phased approach for implementing the recommendations from the AusIMM and CRC TiME Post-Mining Land Use (PMLU) Policy Forum. The actions are grouped along short, medium, and long-term timelines and assigned to key stakeholder groups.

Our focus at this stage is specifically on 'Phase 1'. Phases 2 and 3 will form the basis for AusIMM and the CRC TiME's continued engagement in 2026.

Phase 1: Completing engagement and building support			
Timeline	2025-26		
Priorities	• Complete engagement as part of Forum initiative, with a focus on identifying leading global practice across key PMLU enablers • Test report insights, enablers and opportunities through engagement with key stakeholders • Work to deliver a multiyear approach based on outcomes from 12 months of engagement • Introduce 'quick wins' including to professional development content delivered through courses, conferences and publications		
Lead	AusIMM and CRC TiME	Government	Industry and Academia
Focus	• Release Forum Report and use to further consider • Inform further consideration of opportunities canvassed in the report, including potential enabling tenures	• Consider Report outcomes as part of resources policy development processes • Prioritise analysis of regional concierge and PMLU tenures	• Participate in Forum and post-Forum engagement • Contribute case studies to Forum Report
Impact	• Clarity on potential pathways • Gather case studies, best practice guidance and initial policy proposals to include in subsequent PMLU reports.		
Activities	• Awareness and engagement activities, including via digital media, a webinar and state roundtables • State and Federal Government briefings. • Act as a trusted source of knowledge and data to inform policy and regulation relating to post-mine land use		

Phase 2: Policy translation and implementation

Timeline	2026-27		
Priorities	• Detailed design of regional coordinator, concierge and other centralised planning models. • Deliver professional development, skills and industry capability uplift tools – including through comprehensive (sector-wide) workforce planning as part of AusIMM Professional Pathways process. • Introduce knowledge-sharing database based on the CRC TiME PMLU Hub or a similar model, with appropriate governance and strategy for long-term management.		
Lead	AusIMM and CRC TiME	Government	Industry and Academia
Focus	• Integrate PMLU into Professional Development offering. • Continue research across skills planning, workforce needs. • Develop proposals for PMLU capability uplift, prioritising workforce transition and skills redeployment. • Explore development of knowledge database for PMLU, collaborating with industry partners to identify mechanism for ongoing maintenance	• Prioritise options for dedicated 'Concierge' or 'Coordinator-General' role. • Develop long-term, integrated regional plans for PMLU. • Introduce flexible, tiered tenure systems. • Consider financial incentives, such as tax benefits and grants, for PMLU projects	• Universities as key partner for AusIMM in skills and capability uplift, knowledge database • Industry to invest in in-house PMLU capability, pursue partnerships with commercial parties to progress novel PMLU projects
Metrics	• Develop in consultation with Forum delegates, as part of subsequent stakeholder engagement.		

Phase 3: Maturity and maintenance

Timeline	2027 onwards		
Priorities	• Maintenance of PMLU standards for industry, professionals via legislation, regulatory material, professional and industry codes • Delivery of industry capability uplift programs including professional development content • Implementation of effective regional planning functions with the participation of state, federal and local governments • Monitor progress against PMLU priorities		
Lead	AusIMM and CRC TiME	Government	Industry and Academia
Focus	• Maintain AusIMM professional development offering – including Life of Mine Conference • Ensure Professional Codes and Standards deal with PMLU	• Maintain coordination across regulatory frameworks, levels of government. • Monitor: Establishment and effectiveness of regional concierge models	• mMonitor: Continue research, content development for PMLU • Monitor: Industry to invest in in PMLU capability, pursue partnerships with commercial parties to progress novel PMLU projects
Metrics	• Develop in consultation with Forum delegates, as part of subsequent stakeholder engagement.		