

Project 3.14

Opportunities for growth in Australia's mine closure solutions industry

Why the project?

The closure of mine sites and management of their residual risk is an expensive and risky challenge for mining companies and governments alike. However, mine closure activities can offer a revenue stream for a diverse set of businesses offering solutions across the value chain.

This economic opportunity is expected to grow in coming decades as mine sites reach the end of their economically productive life.

Beyond the direct economic opportunity associated with the provision of mine closure solutions (MCS), they may also be opportunities for businesses to add value by generating new products and revenue streams from mine waste and to support the development of valuable post-mining land uses. Examples of value-adding opportunities include renewable energy generation, tourism, reprocessing waste for critical minerals or for use in construction materials.

This project seeks to demonstrate that Australia could turn the costs and liabilities associated with mine closure into an opportunity to generate an industry of experienced Australian MCS providers. These can reduce the cost of closure for miners and maximise the value that can be returned to local communities after the conclusion of mining operations.

What are the project objectives?

The opportunities for growth in Australia's mine closure solutions industry project has several key objectives, including to:

- build consensus on the strategic direction of the mine closure solutions industry
- identify growth opportunities for MCS businesses that deliver economic, social and environmental value, including opportunities for First Nations, regional and Australian businesses
- support the case for investment in the MCS ecosystem as a mechanism to both reduce risks and closure-related financial liabilities
- support industry development and promote export opportunities, positioning Australia as a global leader in MCS by outlining industry strengths and competitive advantages
- identify solutions that can improve closure outcomes across a triple bottom line approach.

What will the project deliver?

The final public report seeks to:

- outline macro trends that will impact the demand for MCS
- describe the scale of the opportunity presented by mine closure in the coming decades
- identify where Australia can export existing and emerging mine closure capabilities to position the nation as a global leader
- identify high-level enablers for Australia's MCS industry development
- build on relevant outcomes of CRC TiME's foundational projects to enhance their reach and impact.

Who are the end users?

Project Partners, METS, mining industry, government

Opportunities to engage?

Stakeholder consultations (invitation only), online workshops, draft report reviews

Timeline

Quarter 2 - Quarter 4 2023

How does this align with CRC TiME Impact objectives?

Mines are closed in ways that deliver social, economic and environmental value

Closed sites are repurposed to enable a faster transition to diverse and resilient local economies

Mine closure business solutions drive new commercial and/or regional closure opportunities

Continued investment in Australian resources

Policy, decisions and management systems reduce risks



Project Partners

CSIRO, Minerals Research Institute of WA, Fortescue Metals Group, Department of State Development, Infrastructure, Local Government and Planning (QLD), Ecoene, Deswik Mining Consultants, GHD Group, Landloch, Okane Consultants, K2Fly, Ecoplant Australia, Sustainable Solutions Global, Intract Australia, The University of Queensland, METS Ignited Australia, Department of State Growth (TAS), EnviroMETS