



Prospectus brief INVITATION TO PARTICIPATE

Residual risk trade-offs and transfer models

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CRC
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What is the challenge?

An integral part of mine closure is that the process allows tenements to be transferred to a subsequent land holder (government or other) with clear identification of the remaining liability in the community/region when the land transfer is complete.

This liability will have different consequences due to the unique nature of mining. Liability remaining in communities will depend on commodities mined, the environment in which the mining took place, the prevailing economic situation and the proximity of the operation to local communities and groups.

The ways that risks are calculated using existing methods and discount rates lead to incomplete assessment of residual risk. To compound the complexity, there is not currently a uniform process across jurisdictions for identifying how to measure residual risk. As a result, the current processes can lead to:

- A lack of confidence that a suitable closure outcome will be reached
- Inefficiencies for companies operating across multiple jurisdictions
- A lack of transparency for communicating the rationale for certain decisions with stakeholders
- Unrealised post mine social and economic development due to the exclusion of the opportunity cost or unforeseen closure costs in decision making



Opportunities for Co-design

CRC TiME partners are encouraged to join a process that aims to collaboratively define a common methodology for the identification and calculation of residual risk, as well as a framework and related tools to assess the compensation (monetary and other) that should be provided to a group willing to assume and manage that residual risk.

Researchers will work with all stakeholders (Companies, Communities, Indigenous groups, Regulators, METS, Regional and Local Government agencies, etc.) to engage in a 360 degree view of the complex issues around risk identification and calculation.



Background

In some states, for a miner to achieve closure and relinquish a mining tenement, a miner must not only be able to identify and document the liability that will remain with an acceptable level of certainty based upon the prevailing regulations, but they must also assess the ongoing risks (residual risk). As regulation progresses, it is expected that this will become a requirement across jurisdictions. CRC TiME has the opportunity to extend these frameworks to create a transparent, inclusive, commonly applied methodology that addresses these issues in the calculation of residual risk, and develop a process for identifying a liability offset (monetary and other) that provides confidence in the management of that residual liability and risk into the future.



Intended Benefits

This initiative will provide methodologies and frameworks within existing processes that:

- Create an understanding of the value of natural capital assets and their influence on decisions around how a mining operation should be closed and when.
- Provides a transparent common approach to the calculation of the residual liability and risk.
- Facilitates a consistent use of information in a transparent way by all stakeholders to enhance communication during decision-making.
- Consistent approaches across jurisdictions making it easier for mining to assess and avoid unforeseen costs.
- Identifies opportunities for the creation of social and economic benefit following the closure of a mine.
- Taking care of land in perpetuity.

Development of risk assessment framework and methodology for identifying an acceptable offset

This initiative will develop non-market-based valuations and measurement frameworks in addition to natural capital accounting systems that can be applied in the context of mine closure and the assessment of residual risk.

It is intended that this initiative will have five (5) related components that are undertaken in parallel:

01

Natural Capital Accounting Framework

This component will be undertaken through a series of case studies that contribute to training and resources for best practice natural capital accounting.

02

Assessment of Risks (high level)

Development of a process for quantifying the uncertain nature of future events and the intangible nature of residual risks and potential benefits in reaching the desired closure plan.

03

Case studies

This component will engage with sites that are performing their closure risk assessments at different stages of the mining life cycle to test the hypothesised framework

04

Model for the assessment of post mining land use

Modelling of how opportunities should be approached and costed (financial and risk) so that a complete view of the post-mining land use is provided

05

Residual liability method

Identification of a hypothesised process for identifying the residual liability that will be left by a site, and the corresponding residual risk that must be managed or transferred.



PATH 1

Transferring risk to an enduring organisation
- prosperity for all



PATH 2

Mine is abandoned and transferred to state
- financial cost to the taxpayer



PATH 3

Mine indefinitely stuck in care and maintenance
- no economic transition for the community post mining

For further details or to indicate your interest, please contact A/Prof Bryan Maybee



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