

# DIAGRAM

## Project 2.2: Classification of mine closure planning approaches

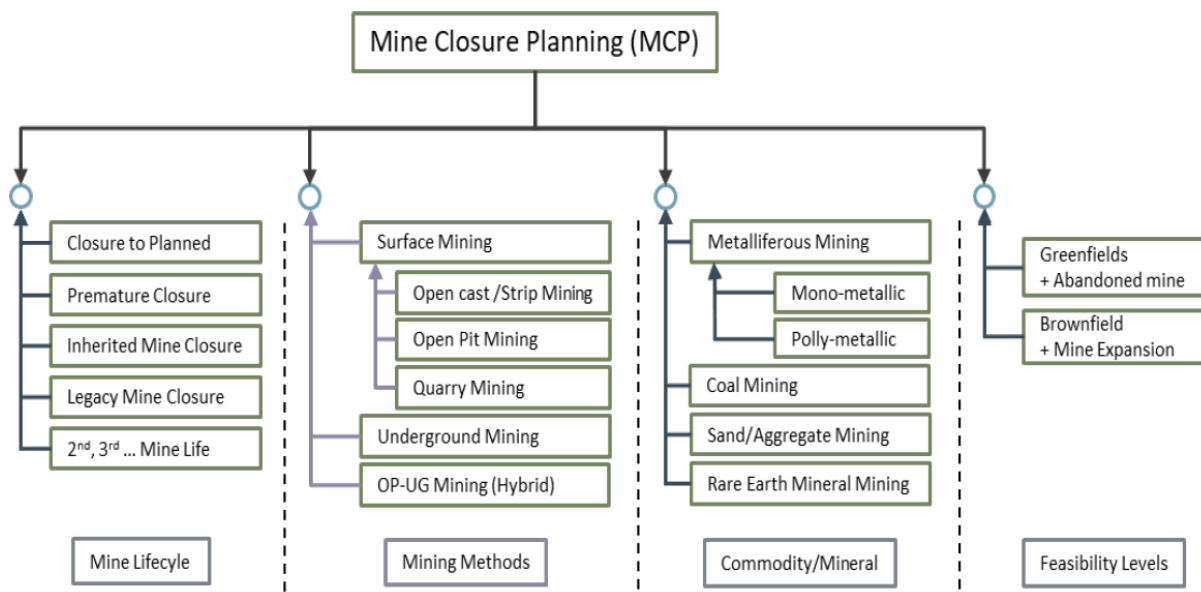
**CRC TiME**  
Transformations in Mining Economies

Australian Government  
Department of Industry,  
Science and Resources | AusIndustry  
Cooperative Research  
Centres Program

Extracted from: Dzakpata, I., Qureshi, M., Kizil, M. and Maybee, B. (2021). [Exploring the Issues in Mine Closure Planning](#). CRC TiME Limited, Perth, Australia.

*These are extracts only. Each should be read in context of the full final report. Please refer to the full report for more information.*

### Classification of Mine Closure Planning approaches based on various criteria



## Summary

Through a comprehensive literature review, the notion suggesting a one-size-fits-all approach to Mine Closure Planning (MCP) was found. There was little mention of different approaches for MCP and their associated constraints.

Clearly there could be as many different approaches as there are different mining methods. These different mining methods are often associated with different commodities, number of products of interest, as well as the stage of the mine (brownfield or greenfield). The above diagram shows a classification of MCP approaches based on mine lifecycle, mining method, commodity mined, and feasibility levels.

Because of the level of uncertainty that exists in the early stages of a mine's lifecycle – in terms of the deposit, future technological changes, potential reshaping of socioeconomic, geopolitical, and other factors – these may not be factored into the initial mine closure plan that allows a mine to begin operations.

For example, a mine may begin as a single metallic product mine, but after a few years, when the deposit is better understood or new treatment/recovery procedures (or technologies) have become available, it may become a polymetallic product mine. There could also be deposit areas that have been entirely depleted in the same mine as well as areas with ongoing greenfield activities. As a result, a mine closure plan chosen in the initial stages may not apply to the type of exploitation that may prevail in the mine's later stages. Similarly, the mine's socio-economic impact may change, requiring a change in the MCP.

## REFERENCES

Dzakpata, I., Qureshi, M., Kizil, M. and Maybee, B. (2021). [Exploring the Issues in Mine Closure Planning](#). CRC TIME Limited, Perth, Australia.

## ABOUT US

The Cooperative Research Centre for Transformations in Mining Economies is part of Australia's national innovation ecosystem. Our diverse partnership brings scale, collaboration and coordinated investment to tackle the most complex mine closure and post-mine transition challenges. Together we're rethinking what's possible to improve outcomes for people, communities, the environment and industry.

We acknowledge the traditional custodians across all the lands on which we live and work, and we pay our respects to Elders both past and present.

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