

Question

Cite this article: Keeling A, Hall R, and Holcombe S (2024). What is the experience with governance models that manage and engage diverse stakeholders through a closure transition? *Research Directions: Mine closure and transitions*, 1, e2, 1–2. doi: <https://doi.org/10.1017/mcl.2023.2>

Received: 1 December 2023

Accepted: 1 December 2023

Corresponding author:

Arn Keeling; Email: akeeling@mun.ca

What is the experience with governance models that manage and engage diverse stakeholders through a closure transition?

Arn Keeling¹, Rebecca Hall² and Sarah Holcombe³

¹Department of Geography, Memorial University of Newfoundland, St. John's, Canada; ²Department of Global Development Studies, Queen's University, Kingston, Canada and ³Sustainable Minerals Institute, University of Queensland, Brisbane, Australia

Context

Traditionally understood in technical, environmental and (to a lesser extent) socio-economic terms, mine closure and transition is increasingly recognized as a significant governance challenge. Governance, in this context, refers not merely to the legal aspects of mine reclamation or closure regulation but rather the broader suite of actors, institutions, processes, methods, rules and practices that guide and oversee mine site transitions. Governance structures, interactions and practices are shaped by power relations as well as reflecting embedded norms and values. Since the 1980s, mine closure governance has expanded from a preoccupation by industry and governments with hazard mitigation, environmental reclamation and, in some cases, economic and social 'adjustment,' to encompass a wider set of social, economic and environmental aspects of closure (Kendall 1992; Laurence 2006). These issues may affect workers, local and regional development agencies, Indigenous rightsholders, fence-line communities and environmental advocates, among others (Bainton and Holcombe 2018; Everingham et al. 2020). This broad range of actors and issues, in turn, has generated reactions and responses from individual companies, industry associations and governments at all levels seeking to mitigate closure and transition impacts (Morrison-Saunders et al. 2016; Owen and Kemp 2018; Hodge and Brehaut 2023).

Meeting the challenges of mine site transition requires new forms of interaction and governance processes, some of which may be incorporated into formal requirements (such as impact assessment, regulatory compliance or negotiated agreements) (Kabir 2021; Getty and Morrison-Saunders 2020), and others which remain in the realm of semi-formal and site-specific processes (such as industry standards, community/stakeholder engagement, regional planning initiatives or even co-governance arrangements) (Monosky and Keeling 2021a; ICMM 2019; Xavier et al. 2015; MAC 2008). The timelines and mechanisms surrounding closure governance also present confounding factors, including the long-term impacts of social dislocation and questions of adequately funding and managing long-term liabilities associated with environmental reclamation (Mills 2022; Aghakazemjourabaf and Insley 2021; Keenan and Holcombe 2021).

In the end, the success or failure of closure governance has implications not only for the communities and landscapes planning for or experiencing closure but also for the wider question of mining's social acceptability and the industry's claims to foster "sustainable development." For local Indigenous communities, inheritors of post-mining landscapes, closure governance intersects with broader questions of Indigenous land rights, self-determination, and social and economic reclamation (Hall and Pryce 2023; Hall and Ascough 2023; Boulot and Collins 2023; O'Faircheallaigh and Lawrence 2019; Monosky and Keeling 2021b; Beckett and Keeling 2019; Barnes et al. 2020; Cohen 2017). Yet, this stage of a mine's life presents financial and resource constraints as production rates decline, meaning there may be unfulfilled socio-economic development expectations and increased complexity around legacy issues.

Despite a recent surge in research interest relating to mine closure governance, many questions remain about how to optimize mine closure to ensure just and sustainable closure and reclamation outcomes. Addressing these challenges requires attention to the vast differences in regulatory, social and economic contexts across the global industry. This geographical diversity resists easy generalization of examples or prescriptions for "best practices" for mine closure governance. Nevertheless, there is much to learn from past and ongoing examples of mine closure and reclamation activities to inform governance arrangements now and in the future. In this spirit, we are inviting the submission of case studies, tools and analysis from any relevant mine closure context that addresses aspects of the central question above, as well as submissions providing insight into governance challenges and processes more generally. The following are some relevant themes and questions to consider:

© The Author(s), 2023. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

- What are the most important or effective governance mechanisms (voluntary or regulatory; formal or informal) for mine closure and transition?
- What are the key challenges in engaging stakeholders/right-holders in closure governance?
- What are the main risks associated with the failure of governance and engagement around closure?
- How should closure governance processes adapt and change over the life of the mine and beyond the transition phase?
- What are some notable success stories/cautionary tales of mine closure and transition planning and governance?

How to contribute to this question

If you believe you can contribute to answering this question with your research outputs, find out how to submit in the Instructions for authors. This journal publishes results, analyses, impact papers and additional content such as preprints and “grey literature”. Questions will be closed when the editors agree that enough has been published to answer the question so before submitting, check if this is still an active question. If it is closed, another relevant question may be currently open, so do review all the open questions in your field. For any further queries check the information pages or contact this email mines@cambridge.org.

Competing interests. None.

References

- Aghakazemjournabaf S and Insley M** (2021) Leaving your tailings behind: Environmental bonds, bankruptcy and waste cleanup. *Resource and Energy Economics* **65**, 101246.
- Bainton N and Holcombe S** (2018) A critical review of the social aspects of mine closure. *Resources Policy* **59**, 468–478.
- Barnes R, Holcombe S and Parmenter J** (2020) *Indigenous Groups, Land Rehabilitation and Mine Closure: Exploring the Australian Terrain*. Brisbane, Australia: Sustainable Minerals Institute.
- Beckett C and Keeling A** (2019) Rethinking remediation: Mine reclamation, environmental justice, and relations of care. *Local Environment* **24**, 216–230.
- Boulot E and Collins B** (2023) Regulating mine rehabilitation and closure on indigenous held lands: Insights from the regulated resource states of Australia and Canada. *International Development Policy | Revue internationale de politique de développement* **16**, 5319.
- Cohen T** (2017) Bringing country back? In Jalbert K, Willow K, Casgrande D and Paladino S, (eds.), *ExTRACTiON: Impacts, Engagements, and Alternative Futures*. London: Routledge, 137–150.
- Everingham J-A, Svobodova K, Mackenzie S and Witt K** (2020) *Participatory Processes, Mine Closure and Social Transitions*. Brisbane, Australia: Centre for Social Responsibility in Mining.
- Getty R and Morrison-Saunders A** (2020) Evaluating the effectiveness of integrating the environmental impact assessment and mine closure planning processes. *Environmental Impact Assessment Review* **82**, 106366.
- Hall R and Ascough H** (2023) Care through closure: Mine transitions in the mixed economy of the Northwest Territories, Canada. *Gender, Place & Culture* **30**, 1415–1436.
- Hall R and Pryce B** (2023) Colonial continuities in closure: Indigenous mine labour and the Canadian State. *Antipode*. <https://doi.org/10.1111/anti.12968>.
- Hodge RA and Brehaut H** (2023) Towards a positive legacy: Key questions to assess the adequacy of mine closure and post-closure. *Mineral Economics* **36**, 181–186.
- International Council on Mining and Minerals (ICMM)** (2019) *Integrated Mine Closure: Good Practice Guide*, 2nd ed. ICMM.
- Kabir SMZ, Rabbi F and Chowdhury MB** (2015) Mine closure planning and practice in Canada and Australia: A comparative review. *World Review of Business Research* **5**, 1–22.
- Kabir Z** (2021) The role of social impact assessment (SIA) in the development of a mine closure plan in regional Australia. *Journal of Environmental Assessment Policy and Management* **23**, 2250015.
- Keenan J and Holcombe S** (2021) Mining as a temporary land use: A global stocktake of post-mining transitions and repurposing. *The Extractive Industries and Society* **8**, 100924.
- Kendall G** (1992) Mine Closures and Worker Adjustment: The Case of Pine Point. In Neil, C, Tykkalainen, M, and Bradbury, J (eds.), *Coping with Closure: An International Comparison of Mine Town Experiences*. London: Routledge, 131–150.
- Laurence D** (2006) Optimisation of the mine closure process. *Journal of Cleaner Production* **14**, 285–298.
- Mills LN** (2022) Getting closure? Mining rehabilitation reform in Queensland and Western Australia. *The Extractive Industries and Society* **11**, 101097.
- Mining Association of Canada (MAC)** (2008) Towards Sustainable Mining Mine Closure Framework Mine Closure. <https://mining.ca/resources/guide-s-manuals/tsm-mine-closure-framework/>.
- Monosky M and Keeling A** (2021a) Planning for social and community-engaged closure: A comparison of mine closure plans from Canada’s territorial and provincial North. *Journal of Environmental Management* **277**, 111324.
- Monosky M and Keeling A** (2021b) Social considerations in mine closure: Exploring policy and practice in Nunavik, Quebec. *The Northern Review* **52**, 29–61.
- Morrison-Saunders A, McHenry MP, Rita Sequeira A, Gorey P, Mtegha H, Doepel D** (2016) Integrating mine closure planning with environmental impact assessment: Challenges and opportunities drawn from African and Australian practice. *Impact Assessment and Project Appraisal* **34**, 117–128.
- O’Faircheallaigh C and Lawrence R** (2019) Mine closure and the Aboriginal estate. *Australian Aboriginal Studies* **1**, 65–82.
- Owen J and Kemp D** (2018) *Mine Closure and Social Performance*. Brisbane, Australia: Centre for Social Responsibility in Mining, Sustainable Minerals Institute.
- Xavier A, Veiga MM and Zyl DV** (2015) Introduction and assessment of a socio-economic mine closure framework. *Journal of Management and Sustainability* **5**, 38–49.