

Mine Closure Readiness:

Are Governments and Industry Prepared?

IGF and **ICMM**

Rob Stevens, PhD, PGeo March 2022

Secretariat hosted by













INTERGOVERNMENTAL FORUM on Mining, Minerals, Metals and Sustainable Development





79 MEMBER COUNTRIES

DEDICATED TO IMPROVING MINING GOVERNANCE TO HELP ACHIEVE THE UN SUSTAINABLE DEVELOPMENT GOALS.



How do we help governments?





Current Status of Mine Closure Readiness– Are Governments Prepared?

- Briefing note summarizing the results of a 2019/2020 survey of IGF members and Mining Policy Framework assessments
- A companion blog prepared with the ICMM outlines some of the common challenges between industry and government.

Mine Closure Challenges for Government and Industry

October 14, 2021
Posted by Rob Stevens, IGF and Dawn Brock, ICMM



INTRODUCTION

Mine closure and the post-mining transition have become increasingly important to governments, industry, and society. The number of mines anticipated to close in the coming years is increasing, and we are collectively placing more emphasis on the sustainable management of mineral resources and land use. Governments and regulators have been implementing and revising mine closure policies, regulations, and guidance documents, but are those changes meeting the challenge? Are governments ready to implement those changes as more mines close? And what are the barriers to advancing the management of the post-mining transition that is expected by a socially and environmentally concerned society?

To address these questions and others, and to follow-up an Mining Policy Framework (MPF) assessments undertaken by the Intergovernmental Forum an Mining, Minerals, Metals and Sustainable Development (IGF) that have consistently identified the post-mining transition as an area of weakness in mining governance, the IGF undertook a survey of its government members in 2019 and early 2020 to assess their readiness for mine closure. The results of this survey combined with the 14 MPF assessments that have been completed by the IGF since 2014 show that while governments are aware of the importance of mine closure and the post-mining transition, many do not have the policies, regulations, enforcement, or capacity to manage mine closures. Given that hundreds of additional medium- to large-scale mines are likely to close in the next couple of decades* and that mine closure planning should start before mining begins, it is clear that many governments need to improve their policies, guidelines, and capacities to more effectively manage mine closure and the post-mining transition.

This briefing note summarizes the results of the IGF member survey and MPF assessment findings along several mine closure themes, including closure plans, financial assurance, social closure, and records of closed or abandoned mines. This is followed by a discussion

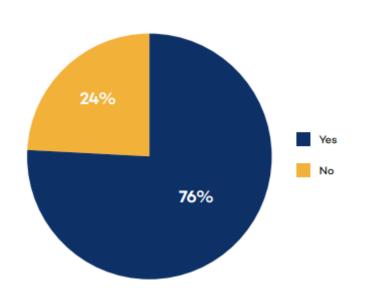


- Survey of IGF government members in 2019/20
- Review of Mining Policy Framework (MPF) assessments completed since 2014
- Total of 30 different countries across the globe spanning the full range of development as measured by the UN's Human Development Index (HDI)

Region / continent	Survey responses	MPF assessments	Total responses and assessments (%)
Africa	4	6	33
Asia	6	2	27
Europe	5	0	17
North America	1	3	13
South America	0	2	7
Oceania	1	0	3
Total	17	13	100
HDI (2020)*			
Very high	6	1	23
High	5	4	30
Medium	2	3	17
Low	4	5	30
Total	17	13	100



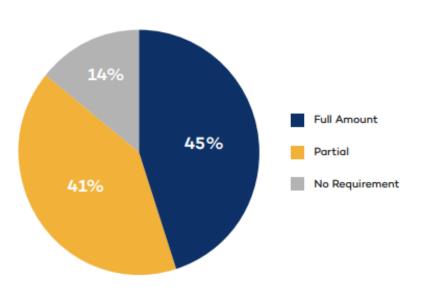
Are Mine Closure Plans Required?



- Good to see 76% of countries require closure plans
- Concern that the level of rigor and review of plans is limited in many cases
 - Lack of resources to respond to plans
 - No guidance on what should be included in the plan or how it will be factored into mining authorizations



Is Financial Assurance (FA) Required?

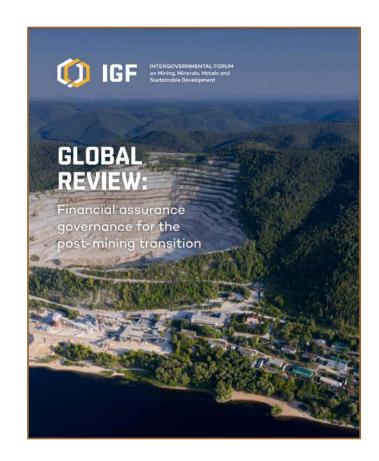


- Uncertain about completeness and accuracy of closure cost estimates
- Interestingly there is no correlation between HDI and FA requirements
 - Countries rated high to very high on the HDI range from requiring full FA to not requiring FA at all



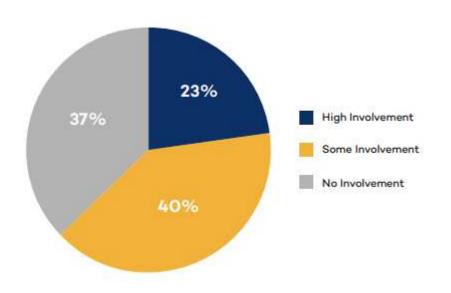
Leading Financial Assurance (FA) Policy Elements

- Closure cost estimates should be required at the mine permitting stage and reviewed regularly
- Cost estimates must be based on third-party completing the closure work
- Full amount of current closure costs should be covered by FA at all times
- Partial release of FA should be authorized as progressive reclamation is completed
- Some FA may need to be retained post relinquishment to address unforeseen future closure issues





What is the Level of Community Involvement in Shaping Mine Closure Plans and the Post-Mining Transition?



- In addition, 59% have legislation or policy that encourages planning and consideration of social transition and community impacts as part of mine closure (41% do not)
- Similar to FA there is limited correlation between HDI and level of community involvement in shaping mine closure



Challenges to Government Becoming Mine-Closure Ready

- Capacity and Experience
- Community Involvement
- Regulations and Guidance
- Financial Assurance
- Abandoned Mines
- Relinquishment





Implications for Governments

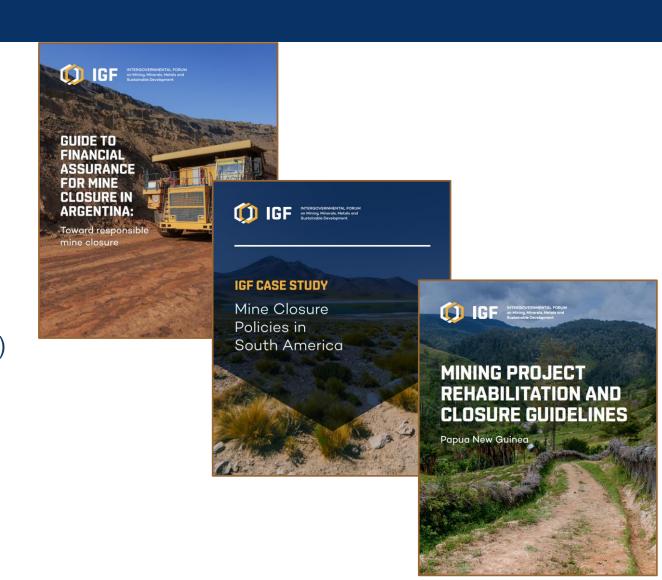
- Governments need to obtain a 'social license' to maintain and grow their mining sector
- Ensure there are sufficient human and financial resources within government to regulate closure
- Develop the modern policies to manage mine closure – draw upon the excellent guidance material that is available
- Harness mine closure expertise within industry, civil society and academia
- Work with industry to establish a clear process for the relinquishment of mines





IGF Country and Regional Closure Guidance

- Financial Assurance policy guideline for mine closure in Argentina (2021)
- Summary of mine closure policies in Chile and Peru (2021)
- Rehabilitation and closure guidelines for Papua New Guinea (2019)

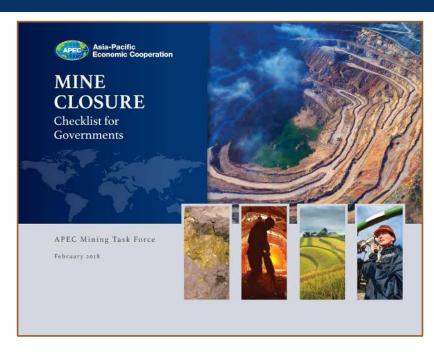




International Closure Guidance





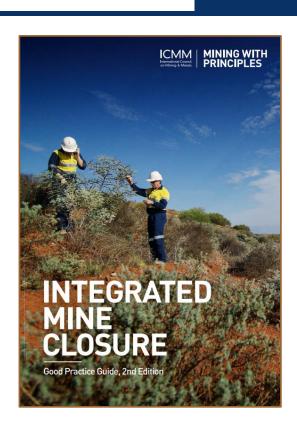


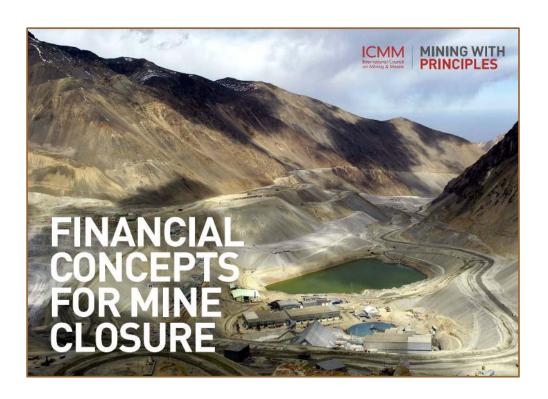
APEC, 2018

- World Bank Guidance document is new 2021. Thorough and comprehensive
- Both are aimed at government and cover similar material, but with different areas of emphasis and approach. Preparation of both was lead by senior closure engineers.



ICMM Closure Guidance





• ICMM's 2019 Integrated Mine Closure guide and Financial Concepts for Mine Closure are the best source for guidance directed at industry. Also useful for governments.

THANK YOU

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@IGFMining **in**Secretariat@IGFMining.org



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