Evolution of Mining Codes Relevant to Copper: Impacts and Improvements

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Overview

• Introduction

• Regulatory Trends

• Recent Changes in Mining Laws and Regulations

• Existing Laws and Regulations – A Review

• Global and Regional Developments

• Recommendations for the Future
MINEHUTTE RATINGS & INDICES

• REGULATORY RISK RATING (RRR):

Measures the risk that an investor will lose the economic benefits of a mineral discovery based only on the key laws, regulations and policies that apply in country.

• CORRUPTION POTENTIAL INDEX (CPI):

Measures a jurisdiction’s corruption potential based on: (1) The importance of various governmental decisions in the administration of mineral projects; (2) the degree of discretion associated with those decisions; and (3) the number of state actors involved in decision making.

• CORRUPTION RISK INDEX (CRI):

Provides a mathematical screening of the CPI through the lens of the Economists’ Democracy Index. Measures the likelihood of government actors using discretionary powers for improper purposes.
### KEY REGULATORY RISK CRITERIA

<table>
<thead>
<tr>
<th>Category</th>
<th>Glossary</th>
<th>Maximum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Access</td>
<td>Measures the ease of acquiring exploration rights and the 'openness' of the system to foreign, junior and other participants.</td>
<td>10</td>
</tr>
<tr>
<td>Exploration Exclusivity</td>
<td>Measures the extent to which the exploration rights are exclusive to the holder, including undiscovered minerals.</td>
<td>10</td>
</tr>
<tr>
<td>Exploration Duration</td>
<td>Measures the ability of a holder to retain exploration rights through a minimum exploration period.</td>
<td>10</td>
</tr>
<tr>
<td>Right to Mine</td>
<td>Measures the ability of the explorationist to acquire mining rights (as well as environmental permits).</td>
<td>15</td>
</tr>
<tr>
<td>Tenure Certainty</td>
<td>Measures the ability to fully extract resources from a mine and the right of access.</td>
<td>15</td>
</tr>
<tr>
<td>Economic Certainty</td>
<td>Measures the discretion of government to interfere with economics operationally and on an exit strategy.</td>
<td>15</td>
</tr>
<tr>
<td>Regulatory Certainty</td>
<td>Measures the stability of the regulatory framework.</td>
<td>10</td>
</tr>
<tr>
<td>Other Factors</td>
<td>Measures all other aspects of the regulatory framework both positive and negative.</td>
<td>15</td>
</tr>
<tr>
<td>MineHutte Score</td>
<td>Measures the risk that an investor or operator will lose the economic benefits of a mineral discovery, based purely on the mining regulation, with 100 being zero risk.</td>
<td>100</td>
</tr>
</tbody>
</table>

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www.minehutte.com
## REGULATORY RISK SCALE

<table>
<thead>
<tr>
<th>MineHutte Score</th>
<th>Investment Potential</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>75 +</td>
<td></td>
<td>Extremely Low Risk</td>
</tr>
<tr>
<td>65-75</td>
<td>INVESTIBLE</td>
<td>Low Risk</td>
</tr>
<tr>
<td>55-64</td>
<td></td>
<td>Moderate Risk</td>
</tr>
<tr>
<td>49-54</td>
<td></td>
<td>High Risk</td>
</tr>
<tr>
<td>49 or less</td>
<td>CAUTION REQUIRED – ADDITIONAL LEGAL PROTECTION NEEDED FOR INVESTMENT</td>
<td>Extremely High Risk</td>
</tr>
</tbody>
</table>
GENERAL TRENDS IN LAWS & REGULATIONS

Regulatory Trends

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Law does not operate in isolation – it is one of many factors which must be considered when evaluating investment opportunities – but it is one of the most important factors in an investment decision.
REGULATORY RISK RATINGS FROM COPPER PRODUCING COUNTRIES

- Copper producing jurisdictions have some of the best mining laws from a regulatory risk perspective in the world.

- That said, some of the most challenging and high risk jurisdictions are also some of the largest copper producers in the world; in such countries companies are often nationally / state owned (or in some cases funded by wealthy citizens).
REGULATORY RISK RATINGS FROM COPPER PRODUCING COUNTRIES - HIGH RISK FACTORS

- Restrictions on foreign investment and ownership
- Nationalistic terms
- Discretionary language
- Ambiguous provisions
- Subjective requirements
RECENT CHANGES IN MINING LEGISLATION

- **Mexico:** Mining Law Regulation 2012
  - One of the top rated jurisdictions in the world by MineHutte, second only to British Columbia.
  - In 2012 investment in mining grew by 43% (Mexican Mining Chamber) and at the end of 2013 investment in mining was at an all time high of $8 billion (USD).

- **Zambia:** Mines and Mineral Development Act 2015
  - Replaced the 2008 law. One of the newest pieces of legislation from the larger copper producing countries.
  - Some of the finest quality EIA legislation.

- **Finland:** Mining Law 2011
  - One of the leading examples from the EU – sets a standard which other EUMS would be well advised to follow.
  - Law is well-drafted, well-structured and a thoughtful piece of compromise as between the state, indigenous communities, land owners and mineral developers; its stated purpose is "to promote mining ... and exploration, in a socially, economically, and ecologically sustainable manner" and, in our view, it has achieved its purpose.
RECENT CHANGES IN MINING LEGISLATION

- **Portugal:** *Geological Resources Law 54/2015*
  - From a risk perspective few fundamental changes from previous law.
  - May be likened to the style of Australian laws and regulations.

- **China:** *Mineral Resources Law 1986*
  - China actively regulates this sector.
  - Changes are opening up the mining industry to foreign investment but restrictions remain and state control is high. That said, changes are positive from a regulatory risk perspective - indicating movements in the right direction. Still a difficult environment for a foreign investor.

- **Indonesia:** *Mineral and Coal Mining Law 2009*
  - Regulatory changes are very common – usually in the form of government regulations.
  - Difficult investment environment for foreign investors – supplementary agreements are common.
FINLAND
• No potential for competing licences
• Three-year limit before rights can be granted over areas previously covered by mineral rights
• Exploration rights are not mineral specific

HIGH RISK
• Competing and overlapping exploration rights permitted
• Competition between explorationists likely due to mineral specific rights
• Unclear terms for addition of other minerals

CHILE
• Principle of first come / first served applies - priority of filing honoured
• The application criteria for exploration rights are objective
• Free and open access

HIGH RISK
• Award of rights is discretionary
• Applicant will be considered as to its appropriateness to undertake work
• Criteria for rights are subjective or vague – government ultimately decides

EXPLORATION EXCLUSIVITY

OPEN ACCESS

EXAMPLES FROM EXISTING MINING CODES
LOW RISK / HIGH RISK

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EXAMPLES FROM EXISTING MINING CODES
LOW RISK / HIGH RISK

EXPLORATION DURATION

PERU
• Mining concessions are irrevocable and indefinite in duration
• Absolute right to keep exploration rights by performing work
• Period suitable for discovery (alternative)

HIGH RISK
• Short or undefined initial exploration period
• Discretionary renewal of exploration rights
• Sensitive to language - “up to”

RIGHT TO MINE

ARIZONA
• Discovery removes any right of challenge to the claim
• Criteria for mining rights objective and based only on the discovery of a viable deposit
• EIA has clear timelines, requirements and appeal rights

HIGH RISK
• Many variations – award of mining licence is discretionary / subject to negotiation / political
• Criteria for mining rights are discretionary or subjective
• EIA – unclear, lacking timelines & benchmark, no appeal rights

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EXAMPLES FROM EXISTING MINING CODES
LOW RISK / HIGH RISK

TENURE CERTAINTY

USA (FEDERAL)

- Mining claims can be held in perpetuity – leases for a set duration but clear renewal rights given
- Claim holder has exclusive right to use surface and clear processes apply to private land
- Clear, objective and unambiguous grounds for revocation of right

ECONOMIC CERTAINTY

BRITISH COLUMBIA

- Clear fiscal framework in terms of both fees & rentals and royalty rates
- Transfer of rights is free from restrictions – simple requirement only
- Changes of control are not regulated

HIGH RISK

- Undefined or short tenure without guaranteed renewal rights
- Surface rights are negotiable – not given in favour of miner / basis for compensation or resolution weak
- Revocation of mining licence on the basis of broad or subjective terms

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### Examples from Existing Mining Codes

#### Low Risk / High Risk

<table>
<thead>
<tr>
<th>Country</th>
<th>Low Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REGULATORY CERTAINTY</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **BRAZIL** | • Active regulation of the sector  
• Modernise the administration of the industry  
• Amendments to law in 2008, significant amendments in 2017 | • Archaic laws unchanged for decades  
• Old regulatory environment – unsuitable to deal with new developments  
• May result in rushed amendments or regulatory ‘quick fixes’ |
| **MEXICO** | • No obligation to operate any differently than a general corporate participant in the country  
• Modern and well drafted legislation  
• Law is clear, miner is favoured and there are few burdens that may be considered political in nature or overly onerous | • Obligations to list on local stock exchanges  
• Onerous provisions with heavy burdens placed on investors and operators  
• Poor legal drafting |

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CASE STUDY: CÔTE D’IVOIRE


- Exploration Licences Granted (Ministry of Mines and Energy):
  - 2014: 110
  - 2016: 160

- Government Revenue from Licence Fees (EITI):
  - 2014: $445,782 (USD)
  - 2015: $2.17 million (USD)

- Africa’s fastest growing economy in 2016 (International Monetary Fund).
GLOBAL AND REGIONAL MINING LAW DEVELOPMENTS

- World Initiative of Mining Lawyers (WIOML) – Investors’ and Miners’ Model Mining Code
- CEMAC: Central African Economic and Monetary Community – Draft Mining Code
- ECOWAS: Economic Community of West African States’ Directive on Harmonization of Guiding Principles and Policies in the Mining Sector
RECOMMENDATIONS FOR THE FUTURE

• Starting point for attracting foreign investment not end point from a legislation perspective.

• Short term – Stabilisation Agreements as a tool for mitigating regulatory risk but these agreements are not without problems.

• Avoid “reactive” legislative changes.

• “Trusted” advisors and information overload.

• Canada & Australia – ‘Dos and Don’ts’

• Know your MineHutte ratings.
QUESTIONS
&
THANK YOU FOR LISTENING