

NEWSLETTER

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Issue 3

Happy New Year



Greetings and welcome to 2020 and year of the metal rat! 2019 has been a remarkable first year as we launched the second phase of the AMEP.

This year, AMEP will continue focusing on its goal to improve the investment environment for extractives sector in Mongolia by closely working with our government, industry, and civil society partners. We are implementing six activities that each contributes toward achieving overarching goal. These activities are: development of a Mongolian Mineral Property Valuation Code, support for the implementation of new Transfer Pricing rules in the revised taxation laws, completion of data entry for Mongolia's Geological Catalogue System, Coalbed Methane - Australia Regulatory Good Practice, development of guidelines for implementation of national Accounting standard for exploration and mining operation, and support for the review of regulation of feasibility studies.

We are pleased to present each activity in detail through our newsletters. In this third issue of the AMEP newsletter, you will learn more about Feasibility Studies and what we are achieving with our partners.

What is a Feasibility Study?

- A feasibility study contains technical and economic data on an ore body and examines the options for mining, treatment methods, environmental impacts, waste management and other aspects of the operation.
- Feasibility studies include list of licenses, exploration history, reserve estimate map, infrastructure plan, safety and risk management, economic and financial assessment, project implementation timeline, mine general structural map, environmental management, and enrichment and processing plan.

Who is involved in developing **Feasibility Studies?**

Feasibility studies are prepared by a group of specialists. At a minimum, the team will include a geologist, geotechnical engineer, mining engineer, metallurgist, process engineer, environmental scientist and mineral economist.

More complex projects require larger and more complex teams of specialists. As well as geologists and mining engineers and environmental scientists, mid-level teams will also include hydrogeologists, civil engineers, mechanical engineers, electrical engineers, process design staff, specialist financial modeler, lawyers, social scientists.

Mongolia versus International **Practice**

The Ministry of Mining and Heavy Industry has established a Working Group to review the 2012 "Regulations of requirements of scoping and feasibility studies and for acceptance of feasibility study." AMEP 2 is assisting with advice on international practices relating to feasibility studies. Reform in this area is complex and will take time. As a first step, however, updated regulation leading to a more efficient process and higher standards will contribute to an improved investment environment.

The 2012 regulation applies to preliminary study of all types of mineral occurrences, pre-feasibility of reserves of mineral deposits and feasibility studies of mining projects. The regulation also governs the requirements of project developers and implementers.

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Mongolia versus International Practice (cont.)

In Mongolia, all mining projects must submit a feasibility study compliant with the 2012 regulation within one year of being granted a Mining License. The Professional Mineral Resource Council is the state organization responsible for discussing and accepting feasibility studies based on minerals reserve estimation reports.

In contrast, the content of Western feasibility studies conform with the requirements of lenders and investors. Government and regulators do not set standards for, or approve, feasibility studies.

Feasibility studies in Western countries are designed to facilitate project finance. In Mongolia feasibility studies are part of the regulatory process and help with government planning.

With the support of the Ministry of Mining and Heavy Industry and professional associations, AMEP 2 has conducted roundtables and workshops to introduce aspects of Western feasibility studies for Mongolian stakeholders to consider.

For example, in the case of Western feasibility studies, expected content (breadth) and precision (depth) of feasibility studies have increased and standardized over time. The American Association of Cost Engineers (AACE) classification for study breadth and depth are widely accepted.

The content of feasibility studies must support the required levels of accuracy. The American Association of Cost Engineers classification is:

Feasibility Studies: +/- 10 to 15%;

Prefeasibility Studies: +/- 20 to 25%; and

Scoping Studies: +/- 30 to 35%

Cost estimation must be detailed to obtain the required level of accuracy. Comprehensive risk analysis is mandatory. These are some points of difference between Western feasibility studies and the feasibility studies currently prepared to meet Mongolian requirements.

Next steps

The advice AMEP's experts are providing to the Ministry's Working Group includes a comparative assessment of international practices relating to feasibility studies and a concept note on possible reforms to the Mongolian regulation. The Working Group will continue to deliberate during the first half of 2020. International expert, Steve Gemell will return to Mongolia in March to further discuss whether aspects of Western feasibility study practice are suitable for Mongolia.



