Mineral Economics for Geologists
CET Short Course
2 December 2015
Presented by Professor Allan Trench & Mr John Sykes
This course is ideal for technical professionals across the mineral exploration, mining and mineral processing industries as a foundation in economic concepts and strategic decision-making in the minerals industries and as a primer for the transition between purely technical roles in companies and management roles. The course also has appeal to professionals in technical roles in the minerals sector and in the minerals exploration industry in strengthening their economic and strategic knowledge of the drivers of industry advantage that accrue from market-related factors.

This one-day intensive course focuses on the principles and fundamentals of mineral markets, covering both the major exchange-traded metal markets (gold, silver, PGM’s, base metals), bulk commodities (iron ore & coal seaborne trade), intermediate markets (metal concentrates) and other markets (alloying metals, uranium, rare earth elements).

In particular, the course places specific emphasis upon understanding the strategic behaviours, the economic rationale and the value drivers and market impact of supply-side decision-making by companies across different mineral markets. The concepts of attractive industry structures prone to strong returns and competitive markets where returns are more difficult to achieve will be introduced and discussed.

Providing a basic understanding of the fundamental principles of mineral markets, adopting both microeconomic and macroeconomic lenses to both explore and explain market dynamics, the course will:

— Progress beyond a simple economic textbook view of the supply and demand for minerals towards a practical, pragmatic perspective of how mineral markets actually work in practice, based on real-world examples of minerals-company (supply-side) and metal consumer (demand-side) behaviours over time;

— Give participants grounding across over 20 mineral markets to identify and assess how the different drivers of economic value vary between mineral markets;

— Assess the demand-side, supply-side, competitive and regulatory forces that shape minerals markets, including the economic impact and consequences of market interventions by governments where they occur; and

— Use examples of the following mineral markets at high-level to illustrate key concepts: Aluminium, Antimony, Chromium, Cobalt, Coking Coal, Copper, Diamonds, Gold, Iron Ore, Lead, Lithium, Manganese, Mineral Sands, Molybdenum, Nickel, Niobium, Phosphate, Platinum Group Metals, Potash, Rare Earth Metals, Silver, Tantalum, Thermal Coal, Tin, Tungsten, Uranium, Vanadium, Zinc, and other traded commodities.
Markets factors that will be assessed include:

— Demand drivers and end-use sectors;
— Commodity supply structures classified by main product, co-product and by-products;
— The geography of mineral supply;
— Intermediate markets;
— Geological and mine characteristics of mineral supply as they impact upon costs,
— Market mechanisms; and
— Common management methods to assess structural attractiveness of mineral markets.

Presenters

Allan Trench is Professor (Risk & Value) at the Centre for Exploration Targeting (CET), University of Western Australia and Curtin University Graduate School of Business, a Non-Executive Director of several resources sector companies - and the Perth representative for CRU Strategies, a division of independent metals & mining advisory CRU group.

Allan has over 20 years experience within the mining/metals and oil/gas sectors including senior management positions with WMC and Woodside Energy. Allan has held academic positions at Oxford University (Geophysics) and Curtin University of Technology (Mineral Economics) and worked as a management consultant with McKinsey & Company engaged in both strategy and operations-focused engagements. His current focus is the analysis of corporate and asset-level mineral exploration strategies, value accretion through effective exploration and the analysis of mineral markets. Allan is the author of nine books and 50 journal and technical publications in geology/geophysics and mineral finance/management.

John Sykes is a PhD Candidate in Risk & Value at the Centre for Exploration Targeting, focusing on the long term economics of the supply-side of the copper industry and aiming to define the “Copper Mine of Tomorrow”. He lectures on the Master of Science in Mineral & Energy Economics at Curtin University and is the author of a number of industry reports, technical and media articles on mine and mineral economics.

John is also Founder and Director of Greenfields Research, which specialises in the analysis of long term economics, minerals exploration and mine project development. Prior to this he worked as a Copper Mining & Smelting Consultant for the international commodities advisory, CRU Group in London. Through these roles he has worked extensively in the copper, gold, tin and rare earths sectors, amongst other base, precious and specialty metals industries. John holds a Master of Science with Honours in Geology with the Royal School of Mines, Imperial College London and a Master of Science in Geophysical Hazards from University College London.
Key Benefits
At the end of the course participants will:

— Appreciate that static analysis of supply-demand does not capture the whole context of a mineral market.
— Have greater familiarity with how different market factors should influence corporate decisions and market entry strategies
— Discover that a favourable industry cost position is not the sole driver of value creation in a mineral market
— Have acquired the skills to identify and evaluate new mineral markets beyond simple price-related attractiveness
— Have a solid springboard to expand their skills in this exciting field, where there are rewards for companies able to move quickly in their assessment of the potential of mineral projects in different mineral markets.

Computer & Textbook requirements
No specific software is required – however it is recommended that participants bring with them their own laptop computers as a group exercise will be undertaken during the day that will require preparation of a Powerpoint presentation.

Registration
Please see attached registration form or go online to:


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Title: Mr     Ms
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Course Attending: Mineral Economics for Geologists 2015
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PLEASE NOTE
No refunds for cancellations made within 2 weeks of the course or for ‘no shows’. Participants can be substituted. If the minimum number of participants is not achieved participants will be notified 2 weeks prior to course start date and fees will be refunded.

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