INDUSTRY INSIGHT

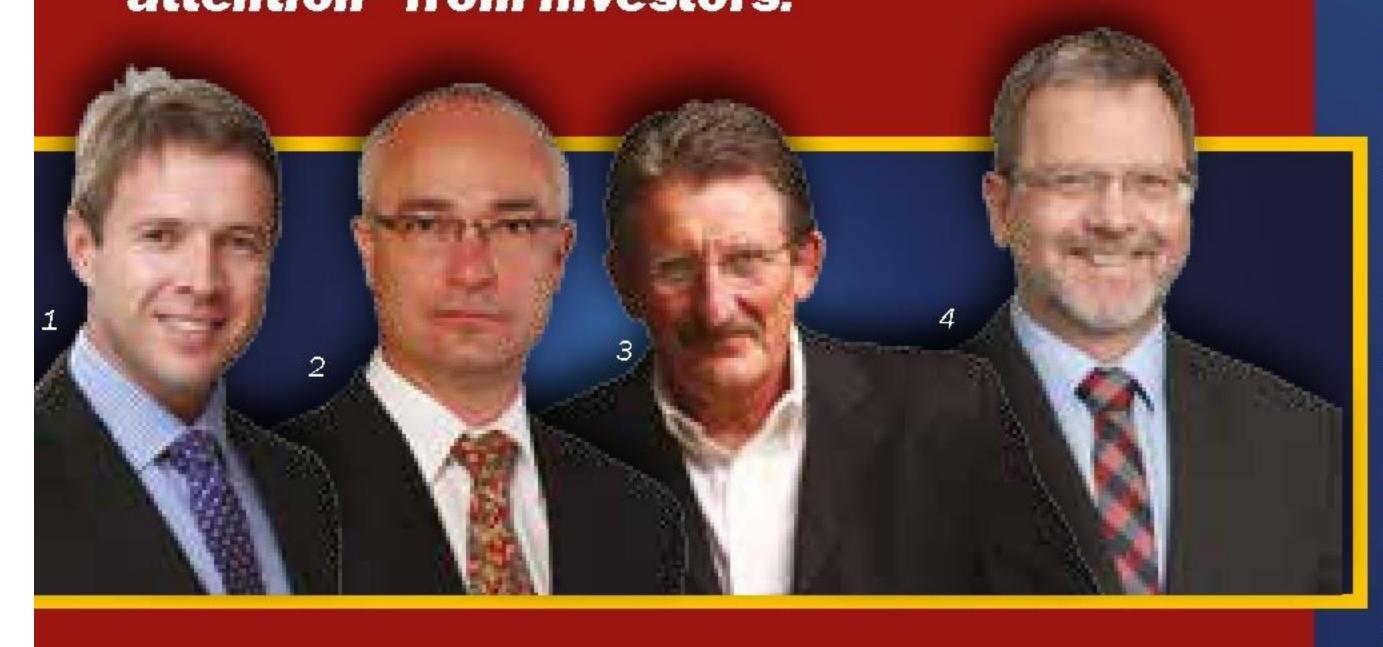
JUDGING IN THE RISK OF INVESTING IN THAT MINING PROJECT



Mines that do not establish and maintain a strong relationship with local stakeholders may court considerable risk in terms of the reporting standards

s hopeful signals from commodity markets tempt some investors back into mining projects, they would do well to keep a close eye on how companies protect their mineral reserves by properly managing all the risks.

Growing environmental and social (E&S) risks are among the range of 'modifying factors' that constantly threaten project sustainability – warranting special attention from investors.



By SRK Consulting partner and principal consultant Andrew van Zyl (1), partner and principal environmental scientist Darryll Kilian (2) and SRK corporate consultants Roger Dixon (3) and Mark Noppe (4)

apital access is a key business risk for the mining and metals sector into 2017, according to consulting group EY[1], with capital raised down 10% in 2016 and credit access remaining constrained in 2016. However, a 2016 survey of fund managers showed that about 50% of those investing in metals and mining expected to increase the amount of capital they deployed last year^[2]. Unsurprisingly, the main concern, according to the survey, was commodity prices. But local economist Dr Roelof Botha[3] pointed out that gold and iron ore had risen during 2016 to reach price index points of between 110 and 120 respectively when compared to the index base of 100 in April 2015. Platinum also recovered during 2016 after a dip in 2015.

All this makes for a difficult investing environment, where risk analysis and management are key to success. Good investment decisions start with an appreciation of the principles contained in global and national reporting standards for exploration results, mineral resources and mineral reserves. When listening to champions pitching their projects, investors need to be clear about how the promoters have accounted for the modifying factors that stand between the ounces discovered in the ground, and realistic production targets that are achievable and sustainable once mining starts. The factors considered when determining a mineral reserve which is the economically mineable portion of a measured or indicated mineral resource – traditionally include technical, financial and legal mitigation strategy.

issues related to project feasibility. Increasingly, however, they include E&S issues that underpin the company's social licence to mine – and these factors are often more difficult to foresee, manage and resolve.

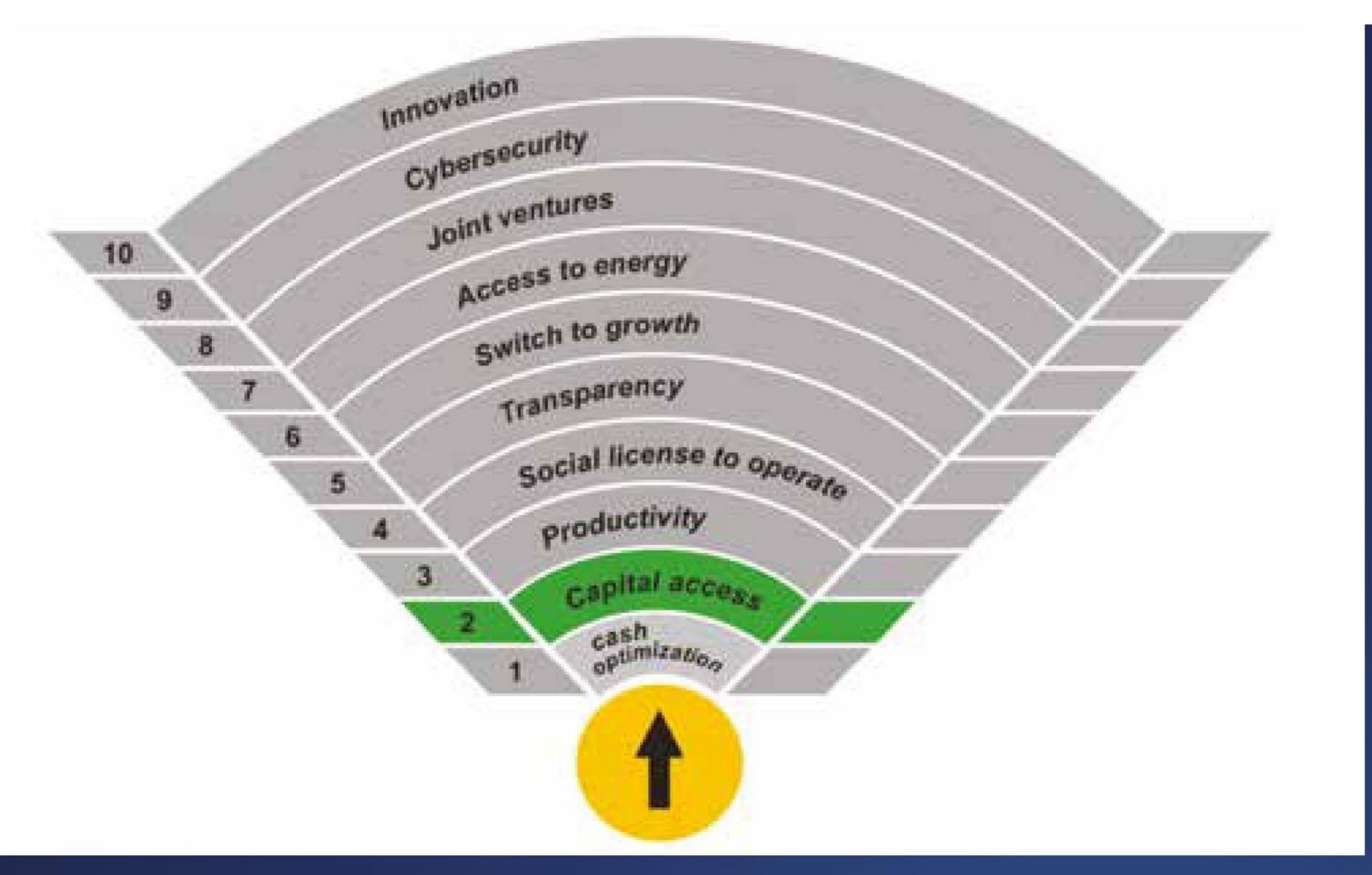
DEVASTATING EFFECTS

They can be nonetheless devastating to project success. In a recent example, a major global miner had to withdraw from a \$5 billion copper and gold project after community opposition and the expiry of operating and construction permits forced it to reclassify its reserves as resources.

It is therefore not surprising that reporting standards organisations like the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) and the South African Mineral Resource Committee (SAMREC) have highlighted the importance of stakeholder engagement during all project planning stages.

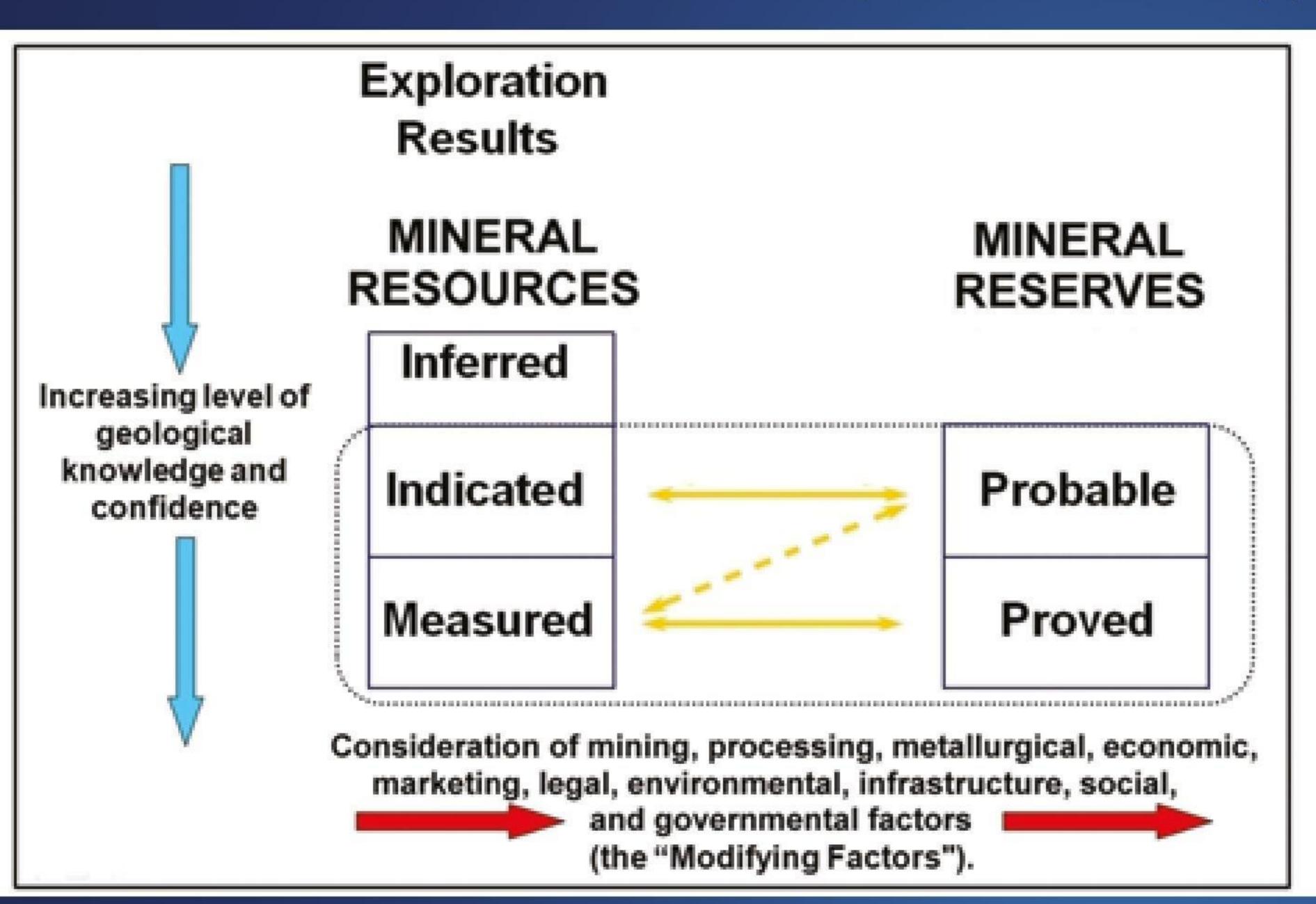
The CRIRSCO Template, for instance, requires the Competent Person to "describe any environmental factors that could have a material effect on the likelihood of eventual economic extraction" and requires them to describe the proposed mitigation measures.

Similarly, its increased investment in junior miners led the International Finance Corporation (IFC) to publish 'A Strategic Approach to Early Stakeholder Engagement: A Good Practice Handbook for Junior Companies in the Extractive Industries' in May 2014 – as part of its own risk mitigation strategy.



A Capital access is a key business risk for the mining and metals sector into 2017 according to consulting group EY

TINVESTORS need to be clear about how the promoters have accounted for the modifying factors



Mining ventures are also discovering to their cost that the 'tick-box' approach to compliance is often not enough to secure and maintain their vital social licence. Indeed, mines that do not establish and maintain a strong relationship with local stakeholders may court considerable risk in terms of the reporting codes. The range of issues affecting a project's relationship with local communities, for instance, can be complex and bewildering to project managers – and can extend to factors like drought and inflation, which have no direct link to the mining operation itself.

CONSTRUCTIVE LINKS

Investors therefore need to be assured that mines have built a strong and constructive relationship with local communities, and prioritise these relationships as a core value for the management team. Robust links with stakeholders allow projects to adapt and respond to social licence risks, even those that they don't see coming.

Mining companies need to be mindful of the fact that there is usually a dangerous

gap between the respective world views and perceptions of company management, and the community members whose lives are affected by mining – a gap arising from their dramatically different life experiences and circumstances.

There has been substantial progress in recent decades in encouraging a greater focus on measuring and addressing E&S impacts. Initiatives include the Rio Declaration in 1991, which established environmental and social impact assessments (ESIAs) as a global priority, and the Millennium Development Goals, as well as the United National Declaration on Indigenous Rights – which placed greater emphasis on socio-economic issues. The IFC's Performance Standards in 2006 (and revised in 2012) set another benchmark for good practice in the global mining sector, bolstered by the closely aligned Equator Principles.

DISAPPOINTING PROGRESS

Despite these imperatives and incentives, however, progress on this front is frequently still disappointing – with many companies failing

to integrate E&S management into their core systems. Our experience suggests that many clients suffer from deficits such as a lack of internal capacity, a lack of understanding of management systems, and a lack of alignment between policies and implementation. Companies also often do not understand stakeholders' views and priorities, and do not use their monitoring activity to sufficiently inform management decisions. Successful companies, on the other hand, are addressing E&S risks and issues early in the project process and develop integrated and wellcommunicated strategies to deal with them. By doing this, they move their operations along the sustainability continuum – from reactive to proactive, and towards creating shared value for all stakeholders.

Among the expertise we have developed in responding to client requirements, a useful tool is our 'relative confidence framework' on which stakeholders can plot the development progress of a mineral project at any point in time. Using such a framework helps gauge the levels of confidence that investors can assign to a project as it evolves.

The framework can track and situate a project as it moves from its early 'aspirational' stages of pre-discovery and exploration, through the subsequent, 'conceptual' level (defining the resource and assessing the approximate mining parameters), and on to the phase where substantive data can be applied to define mineral reserves and development options.

This provides a useful shorthand for investors to evaluate what companies say about their projects' resources, reserves and valuations, so that these statements can be compared to the actual progress made in the project development cycle. Claims about mineral reserves, for instance, are conditional on the economics of the project, so they cannot be made or implied when a developer is still essentially at the stage of a scoping study. A high standard of technical and economic studies – investigating all relevant modifying factors – is required to convert a project's mineral resources to mineral reserves; the strength of the project's viability and sustainability is only as strong as its weakest link.

- [1] -http://www.ey.com/Publication/vwLUAssets/EY-business-risks-in-mining-and-metals-2016-2017/%24FILE/EY-business-risks-in-mining-and-metals-2016-2017.pdf
- [2] -http://www.mining.com/privatecapital-is-ready-to-invest-7-billion-inmining/
- [3] -Presentation at BME Conference Nov 2016.