



Australian Mining Risk Forecast - 2019/2020

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The Global outlook

Every year, KPMG in the Northern Hemisphere asks mining executives about the state of their industry, key trends, and their expectations for their organisations. This year, we expanded the survey to capture key global market trends, backed by responses from over 130 executives and industry highlights from Canada, Australia, Brazil and South Africa. The survey was conducted during a year of growing uncertainty combined with strong growth potential for the mining industry. To name just two examples, the risk of a trade war remains a point of concern for global markets, while strong fundamentals for base metals continue to be driven by infrastructure development and rapid growth in areas such as renewable energy and electric vehicles.

The top three areas of focus arising from the Global survey were noted to be:

- 1 Macro financial risks.
- 2 Permitting risk.
- 3 Community relations and social licence to operate.

[View the Global Mining Survey](#)

The Australian perspective

Like much of the global mining sector, macro-economic instability along with regulatory and compliance changes/burden and commodity price risks, are presenting challenges in the Australian market. However, this is not a new challenge and the market has adapted to operating in this environment, which is why it no longer ranks as highly as other risks on a residual risk basis.

The top three areas of focus for Australia that arose from the survey are:

- 1 Stakeholder expectations and social licence to operate.
- 2 Controlling operating costs — productivity.
- 3 Access to key talent.

Below is a subset of specific risks extracted from the Global Mining Survey (including the top 3 themes prior) with specific relevance to the Australian Mining Sector. Consideration was given to risks that may be applicable to Australian mining organisations with assets operating in Australia or abroad.

Stakeholder expectations

Societal expectations continue to mature and grow, creating increasingly greater requirements for organisations to operate ethically and with integrity. How an organisation manages these needs and rising expectations has a profound impact on its reputation and its 'social currency'. A good example of this is the growing anti-coal sentiment in Australia impacting on the ability to obtain approvals to construct new coal mines.

It is also imperative for organisations to understand their reputations can be indirectly impacted by the actions of others within the same industry (e.g. the lessons learnt from tailings dam failures, will heavily influence safety expectations for these structures globally going forward).

Access to key talent

Recent growth in mining activity at the same time as universities are reporting reduced enrolments for mining engineering related courses has increased the importance of talent acquisition and retention. Of significance to note is the availability of 'digital' talent,

which is essential to support the ongoing control and upkeep of new technologies and analysis of the data they often produce. Capability to analyse significant amounts of information to support data driven decision making, is increasingly essential.

Ability to access and replace reserves

Exploration is essential for future growth and stability of the industry to replace mining reserves that are rapidly depleting. As more reserves are exhausted, mineral quality and availability in domestic locations will eventually reduce, which may lead some Australian

centred organisations to commence activities in foreign jurisdictions for the first time. Venturing out of familiar domestic jurisdictions may expose some organisations to new risks, especially political and social, driven by the jurisdiction they are operating in.

Environment

Environmental risks have intensified as forecasts reflect the results of global inaction to climate change and concerns are raised over the effectiveness of climate change initiatives¹. Within Australia, changes in regulations, coupled with regulatory pressures such as higher mining royalties, taxes, carbon prices, licence fees and tolls are seen as a significant risk to the industry. Organisations need to be considering

the environmental impact across the mine's respective lifecycle from initial feasibility throughout operations and closure.

Water management has also been identified as a key to addressing water availability impacted by extreme weather events and water contamination.

Macroeconomic uncertainty

The WEF Risk Report 2019¹, describes global risks around the idea of governments 'taking back control'. Resonating with this is the rise of protectionism and the potential effect this can have on free trade globally, which may also have a ripple effect on commodity prices. Additionally, the International Monetary Fund (IMF) forecasted in October 2018 that the rate of global growth will be subject to a slowdown². Of great importance to Australian organisations in respect of these trends is the forecasted slowdown in the growth of the Chinese economy and how this may affect commodity prices and business profitability in the future.



Balancing productivity and operating costs

As operating costs increase organically, they need to be offset by efficiency and cost cutting initiatives. Organisations need to be aware that changes to core operating functions have to yield a productivity benefit but also be accompanied by a robust assessment as to how business resilience may be affected by the change. This mindset will assist organisations in mitigating the impact of potential business disruptions brought about by process improvements and changes under the productivity agenda.

A fine balance needs to be maintained between operating costs, production and quality. This becomes increasingly important as resources diminish, as without careful long term mine planning, short term mining activities that are focused on decreasing operating costs and maximising production, may not only deliver a reduced quality of product but could also detrimentally affect the ability to access future required resources.

Infrastructure

The Global Infrastructure Hub (GIH), a body created by the G20, has projected that there is a US\$158 billion gap between required infrastructure investment for 2040 against current investment trends in Australia, which include gaps of \$10 billion in telecommunications, \$56 billion in ports, \$65 billion in rail, and \$642 million in roads³. Many miners depend on, or will depend on, public infrastructure

for their input and output supply chains. A concern is whether these will remain dependable during the asset life or whether the investment gap may begin to impact supply chains. An additional source of potential uncertainty is the impact of climate change on existing infrastructure and to what extent it may impact supply chains sooner rather than later.

Cyber security & digital disruption

Due to the pursuit of process automation and increasing digitalisation, new risks are emerging to core operating functions that previously were not applicable. As an example, traditional 'manual' processes are now potentially vulnerable to online attacks by malicious actors (e.g. manned vs. autonomous haulage systems) due to their automation. The increasing reliance on digital technologies requires the appropriate increase in investment to maintain and control these technologies and mitigate the business risks they introduce.

Privacy and data usage concerns continue to be the focal point for Artificial Intelligence (AI) and Machine Learning discussion. Privacy laws were established on the assumption that data would be collected and applied in decision making by humans, however technology can now collect and analyse significant volumes of data as well as make decisions thereon at speeds not considered when the laws were made.

Political instability

The rise in populism amongst democratic nations has led to changes in government and policy across the globe. As governments take more 'polarised positions', the strength of the populist movement increases, further increasing the potential for greater political instability and tensions amongst its citizens.

Due to the increasing amount of exploration activities undertaken in overseas areas, businesses are more exposed to changing regulations and political instability. Examples of this would be the threat of the nationalisation of resources or significant tax changes brought on by changes in political powers as already evidenced in Africa.

Health, safety and wellbeing

Health and safety risks are always present in the mining industry, which in recent history have generally been well controlled. However, due to the shifting landscape to improve efficiencies and 'do more with less', organisations have to be wary of the influence their decisions can have on their business' working culture.

As local mining organisations venture out of domestic jurisdictions for the first time in search of new mine locations, their exposure to location specific health and

safety risks will broaden which should be considered in investment decisions.

More organisations are now focusing on employee wellbeing through separate programmes in recognition that work related stresses can impact wellbeing and mental health. These issues can be exacerbated by working in remote sites potentially away from family and friends.

Emergence of non-traditional minerals

Market volatility risk exists for minerals with demand primarily dependant on technology, such as lithium and nickel and their associated uses in battery technologies. It is critical for organisations to be agile enough to capitalise on these investments with the understanding of the dependencies of the risk landscape they are operating within. A good example of the emergence of these minerals is the rapid expansion of the lithium industry, particularly in

Western Australia. The lifecycle of these new assets is likely to differ from the traditional mining lifecycle and require integration with downstream supply chains. This presents a different risk profile to that of more traditional commodity mining companies and accordingly may require different approaches and new skill sets.

Opportunities to create new value

Change is the only certainty for today's mining industry. Along with traditional risks such as commodity price and access to reserves, new and growing threats involving digital disruption, emergence of non-traditional minerals into the market, access to water and energy, health and safety issues, climate change, and a host of other factors, all play a critical role in the risk landscape.

However, miners can also help support growth and sustainability through the adoption of innovative technologies designed to better manage operation costs, improve extraction methods, streamline distribution, increase worker productivity, and mitigate risks by building new partnerships and attracting the right talent. In every case, the proper strategic response to risk can be an opportunity to create value for mining companies.

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