**What do Canada’s mining executives say will most impact their strategic plans?**

Every year in September at our annual Mining Executive Forum, KPMG surveys executives from some of Canada's largest mining companies to gather their important feedback on the top perceived risks facing the Canadian mining industry and other jurisdictions. Our annual survey updates the market with critical insights into the risks, challenges and multi-year trends that are top of mind for mining executives.

### Top 10 risks in 2017 vs 2016

<table>
<thead>
<tr>
<th>2017</th>
<th>2016</th>
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<tbody>
<tr>
<td><strong>01</strong> Commodity price risk</td>
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<td><strong>02</strong> Permitting risk</td>
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<tr>
<td><strong>03</strong> Access to capital, including Liquidity</td>
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<td><strong>04</strong> Community relations and social license to operate</td>
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<td><strong>05</strong> Controlling capital costs</td>
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<td><strong>06</strong> Environmental risk</td>
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<td><strong>07</strong> Political risk</td>
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<td><strong>08</strong> Ability to access and replace reserves</td>
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<td><strong>09</strong> Controlling operating costs</td>
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<tr>
<td><strong>10</strong> Capital allocation</td>
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The 2017 results showed a relatively consistent risk landscape compared to previous years. The Top 10 risks identified by executives were largely unchanged and represent widely known risks across the mining industry. This year’s survey also asked respondents whether they expected each risk to significantly impact their ability to execute against their strategic plans over the next three years.
Commodity price, access to capital and maintaining a social license to operate remained high on the list and represent significant risks in the industry. Macroeconomic trends will continue to influence strategic decisions and so, too, will increasing attention to corporate social responsibility. The recent introduction of the Canadian Ombudsperson for Responsible Enterprise (CORE) to enforce responsible conduct of Canadian companies operating abroad and resolve conflicts with local communities underscores the importance of mining sustainably for the benefit of all stakeholders. Mining businesses should also monitor the progress of Bill C-69 which proposes the creation of the Impact Assessment Agency of Canada (IAAC) to lead all impact assessments of energy and natural resources projects in Canada going forward. If passed, the new federal legislation would fundamentally alter the regulatory landscape for project assessments.

Controlling capital and operating costs also remained important risks on mining executives’ radars. This will likely be welcome news for investors who worry that mining companies will repeat the mistakes of the past by chasing production at any cost as commodity prices continue to rebound.

Permitting risk jumped back into the Top 10 in 2017 – up from number 11 in 2016. This finding potentially indicates rising uncertainty over obtaining necessary operating permits in a sometimes complex permitting process. According to the Fraser Institute’s annual report on permit times for mining exploration, 70% of respondents in 2016 indicated that the time for permit approval has lengthened in the last 10 years, and that companies are less likely to invest in a jurisdiction if they are unsure about obtaining necessary permits.

Capital allocation also returned to the Top 10 – up from number 12 in 2016. Effectively allocating scarce capital to projects is always difficult; doing so in a volatile commodity price environment with high uncertainty regarding permitting, political, social, environmental and other factors is extremely challenging. In our experience, many mining companies are finding new ways to enhance their capital allocation process during times of uncertainty or tempered optimism. Those who are doing it best are explicitly linking capital decisions to their enterprise risk assessment process and risk appetite.

Political risk stayed flat at number seven this year, which is surprising given the current volatility in the broader global geopolitical landscape. In its report on the top risks for 2018, the Eurasia Group, a top global political analysis firm, said if it “had to pick one year for a big unexpected crisis – the geopolitical equivalent of the 2008 financial meltdown – it feels like 2018.” Indeed, the mining industry is no stranger to the often unpredictable effects of geopolitical risks and disruption in the global system. Companies are reliant on global commodity markets and operate around the world, often in developing countries subject to shifting political environments. Government actions such as resource nationalism, dramatically increased taxation and restrictive regulation can decimate project values in an instant.

In today’s rapidly changing world, should political risk rank higher in mining executives’ minds? Are companies gaining a sufficient understanding of the geopolitical environment and mitigating the risks?

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1 Fraser Institute, Permit Times for Mining Exploration in 2016, February 2017, Kenneth P. Green and Taylor Jackson
2 Eurasia Group, Top Risks 2018, Ian Bremmer and Cliff Kupchan
What risks did not make the Top 10?
Given the relatively stable Top 10 risks perceived year-over-year by mining executives, attention should also be directed to some of the risks that did not rank as highly.

- Are some of these emerging risks that need to be higher on a company’s radar?
- Do some represent strategic opportunities that should be further explored?

Commenting on last year’s survey, we said that many in the mining industry feel it may be premature to innovate in the face of potential disruption given all of the other pressing challenges they face today. In this year’s survey, innovation and the risk of disruption increased ten spots to #16, however it did not crack the Top 10. Ironically, when KPMG surveyed the same group of executives about whether some job positions will be automated or significantly impacted by technology in the next three years, the majority of respondents expected 13 positions to be adversely affected or made redundant due to rapid transformational advancements in technology.

Top 10 job positions at risk of disruption in the mining industry
Ranked by highest portion of respondents, indicating these roles will be automated or significantly impacted/changed by technology in the next three years.

1. Truck Driver
2. Mine Planner
3. Shovel I Mucker Operator
4. Hoist Operator
5. Contracts Administrator
6. Maintenance Planner
7. Warehouse Clerk
8. Geologist
9. Warehouse Supervisor
10. Maintenance Engineer

It seems contradictory that innovation and the risk of disruption fall below the Top 10 when most mining executives surveyed believe several positions will be automated within three years. This finding may indicate that mining companies consider themselves well prepared for technological change and, as a result, do not expect disruption to impact their ability to execute their strategic plans over the short term. However, true preparedness in the face of disruption seems unlikely to be true for many companies operating in this sector.

Managing risk is not just about protecting the downside, it is also about identifying emerging risks as opportunities to create value and responding to them strategically. Mining companies need to decide how to respond to the coming tidal wave of technological change before those outside of the industry disrupt it for them.

Of course, innovation and technological change lead to increased risk as well. Cybersecurity ranked at #18 this year, up two spots from the 2016 survey. That said, mining companies may underestimate the risk of a cyberattack compared to, for example, high public profile consumer companies with sensitive customer and pricing information. However, cyberattacks present a very real threat to companies’ data and system access. The likelihood and impact of an attack only increases as mining companies move to automated mining operations with more data, more reliance on technological systems and more ways to access them both.

The mining industry is subject to many complex, interdependent risks. In many ways, the landscape has not fundamentally changed over the last year, but there are several emerging risks that are primed to bring significant change to the mining industry and, more broadly, the way people and businesses operate in an increasingly technology-driven world. Companies which have a robust enterprise risk management process to identify, assess and respond to risk will be better positioned to create value while protecting the downside.

If you would like to discuss the results of this survey further, or the impacts they may have on your business, please contact us directly.
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