Despite predictions and hidden hopes that the mining sector will imminently recover, the industry’s down cycle continues apace. Weak commodity prices, declining grades and a falloff in demand—particularly from China—are exacerbating capital shortages and impelling companies to cut back on their exploration spending. Yet regulatory mandates, tax burdens and stakeholder expectations remain as high as ever. As a result, miners find themselves caught between the proverbial rock and hard place, uncertain how to extricate themselves from the negative spiral.

In many ways, the industry has come to a crossroads. On the one hand, opportunities still abound. A s with previous down cycles, this one too will come to an end once the specter of commodity shortfalls becomes reality and demand once again outstrips supply. Forward-thinking companies are preparing for the eventual upswing by strengthening their operational excellence, improving productivity, embracing innovation and adopting transformative technologies. On the other hand, some changes seem enduring. China’s shifting economic realities could arguably alter global mining market dynamics for years to come. The changing global energy mix will slowly but surely impel miners to reconsider their asset portfolios. And the ever-expanding view of corporate and personal welfare will continue to drive miners to refine their safety programs and devise more effective stakeholder engagement strategies.

Amid this mutable environment, miners are increasingly asking tough questions: Have the world’s demand factors for commodities irrevocably changed? Do we need new mining approaches? Is the traditional profit model shifting? Can we afford to take out more costs? Is our financing model broken? How can we reduce unsustainable debt levels? While not all these questions have answers, they need to be asked if miners hope to position for growth in what promises to be an altered future. The companies most likely to succeed are those that relentlessly seek to uncover best practices, reward innovation and take bold actions across the board.

**Key messages**

1. **Although it may not feel like it, this down cycle—like the super cycle before it—will eventually come to an end. To position for the upswing, miners must be willing to ask tough questions and approach endemic market challenges without any preconceptions.**

2. **By taking a new look at traditional operating assumptions—in areas ranging from labor negotiations, technology investments, portfolio diversification and stakeholder relations to fund raising, exploration, M&A and safety—miners can begin to reconceive themselves as the pioneers of the future rather than the bastions of the past.**
1 Going lean
Operational excellence remains front and center

- Despite the benefits realized by several years of cost reduction efforts, miners cannot afford to become complacent about cost control.
- In an effort to achieve true operational excellence, industry leaders are leveraging best practices from other industries and tackling difficult issues, including labor relations.
- Other strategies to unlock further gains include energy efficiency programs, the adoption of lean practices, investing in innovation (from automation and robotics to data analytics and materials processing), data integration, supply chain optimization, back office outsourcing, operating model review, improved capital allocation, working capital efficiency, greater collaboration and a focus on accountability/metrics.

2 Innovation: the next generation
Preparing for exponential change

- Although innovation has become a critical theme for miners, many mining companies remain at the early stage of the adoption curve—placing most of their innovation focus on technological optimization of old techniques rather than looking for new ways to configure and engage externally.
- To avoid falling behind, miners should aim to stay abreast of cross-sectorial innovations that may affect the industry in the future—including advances in networks, machine learning, genomics, wearables and hybrid airships.
- Nearer-term strategies miners should consider adopting now include enhanced innovation, collaborative ecosystems, digital workforce engagement, improved asset management, aligning work processes with energy availability, 3D printing and modularization.

3 China’s painful transition
Looking for the silver lining

- Given the outsized effect China exerts on world markets, miners should take steps to understand the global impact of the country’s domestic market trends—particularly as the Chinese Government follows an increasingly interventionist path.
- After taking steps to prop up the stock market, the Communist Party of China decided to change the way it manages its currency’s value. These moves may threaten the government’s ability to fund new programs designed to spur future growth.
- On the plus side, concerns over currency weakness may spur Chinese enterprises to buy overseas assets over the short-term—including natural resources. To prepare for these incipient shifts, it would be worth miners considering extreme scenarios, developing plans relative to China’s investment initiatives and leveraging Chinese expertise in areas such as design, construction and financing.

4 Adjusting to the new normal
What goes down must come up

- Although commodity demand—particularly out of China—is down, production is not falling apace. In fact, some producers have ramped up output to reduce unit costs, consolidate market share or simply avoid the costs associated with shutting down older mines.
- Despite this excess supply, however, declines in exploration and project pipelines may ultimately lead to future supply shortages. That’s especially true as growing rates of urbanization, industrialization and infrastructure development push up global demand.
- To find a balance between current and future demand factors, miners should hone the ability to scale production, labor and other inputs and outputs up or down in response to shifting economic trends. They may also benefit from using modular designs, easing back on current production (where possible) and partnering with junior explorers.
The shifting global energy mix
Preparing for inevitable change

• For years, the global move towards renewables has threatened the outlook for thermal coal. Although fossil fuels are bound to continue playing a critical role in the global energy mix, the move to alternative power sources is inevitable.
• This will likely translate into stronger demand for uranium (for nuclear generation) and commodities used in battery storage (to address the intermittency of renewable generation).
• To prepare for these shifts, miners should pay close attention to global energy demand patterns, diversify into new commodities, re-evaluate their energy strategies and think through carbon pricing.

Engagement party
Changing the nature of stakeholder dialogues

• Despite the challenges facing the mining industry, stakeholder expectations continue to rise, making it harder for miners to reconcile the often competing needs of governments, local communities, non-governmental organizations, employees and regulators.
• In the face of these challenges, one thing is certain: old tactics no longer work. Instead, a new form of stakeholder engagement is needed—one that can demonstrably meet the demands of multiple groups.
• To succeed at these efforts, miners should align their investments with the underlying needs of their disparate stakeholders, explore the benefits of social media, leverage data analytics and social listening tools, involve senior managers in stakeholder negotiations, hold dialogues across an entire mining cluster, help inform national mine strategies and be prepared to walk away from projects that no longer promise to deliver a solid business benefit.

The capital crisis
Starved of finance, miners struggle to survive

• With segments of the industry running at a loss, and rising industry debt burdens, attracting capital has become harder than ever.
• In response, companies continue to seek out alternative sources of financing—even when the terms aren’t entirely in their favor.
• This is driving some miners to become increasingly creative in their efforts to uncover new financing options. Strategies include partnering with Asian engineering, procurement and construction firms; commercializing dormant assets; pooling resources; pursuing debt reduction strategies; considering crowdfunding; and seeking government funding.

A taxing time for miners
A global tax reset challenges yesterday’s tax management

• In an effort to curb inappropriate tax management, the OECD and G20 introduced 15 base erosion and profit sharing (BEPS) action items that will fundamentally change the tax implications associated with a range of business activities.
• For miners, this will likely translate into heightened scrutiny of their tax compliance, substance and transfer pricing policies. With a compliance deadline of December 31, 2016, miners have less than one year to prepare for these regulatory changes.
• To keep pace with the evolving tax environment, companies should take steps to understand the financial implications of these new tax rules, assess their operational and corporate structures, take a fresh look at their tax management and engage with government stakeholders—especially where tax rules related to stability or production agreements threaten to change.
The M&A paradox
To buy or not to buy; that is the question

• Despite predictions of a pick-up in mining M&A, M&A deal values and volumes continue to disappoint. In fact, the most active deal flow in recent years has come from divestments and rescue-type deals.
• Ironically, now may actually be the ideal time for miners to be making acquisitions. With distressed assets hitting the market, and majors divesting, buyers could acquire uncontested assets.
• To take advantage of these opportunities, miners may want to consider buying counter-cyclically and thinking twice before divesting.

Safe, secure and healthy
An expanded view of corporate and personal welfare

• Although miners have made great strides strengthening their safety programs with the use of data analytics, industry risks related to both safety and security continue to grow. This is partly due to an expanded definition of safety—which now encompasses both physical and mental health.
• To keep abreast of these changes, miners should be prepared to tackle new risks arising not only from flagging mental health statistics, but also from the risk of physical harm and the mounting threat of cyber attacks.
• To enhance their safety records and security postures, miners may want to strengthen their safety analytics, adopt more robust mental health policies, improve their security protocols, employ risk monitors, conduct risk assessments and improve crisis management.