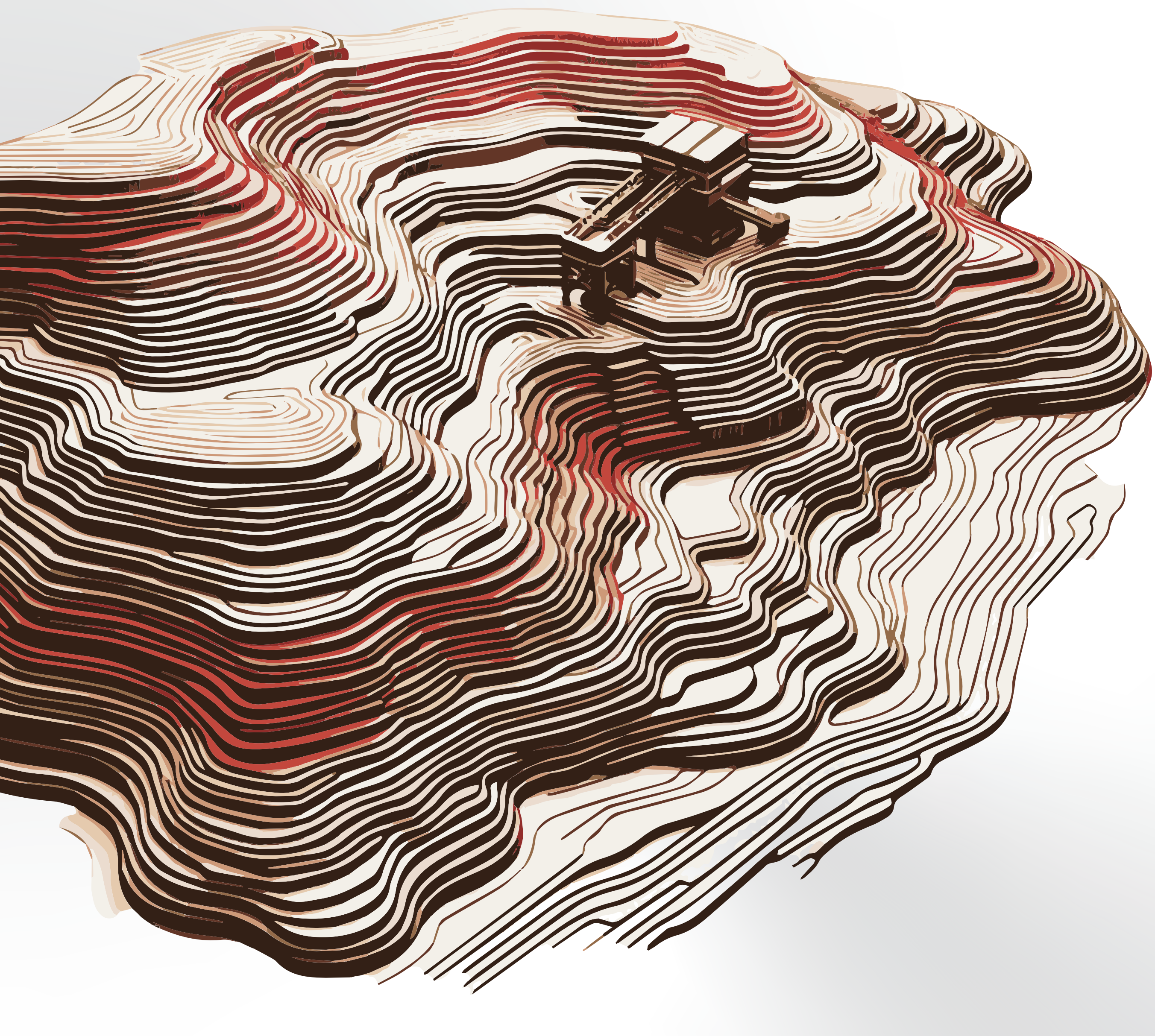


ALTOPARTNERS
Executive Search & Leadership Advisory

THE ALTOPARTNERS SPOTLIGHT ON MINING: TALENT STRATEGIES FOR AN INDUSTRY IN TRANSITION

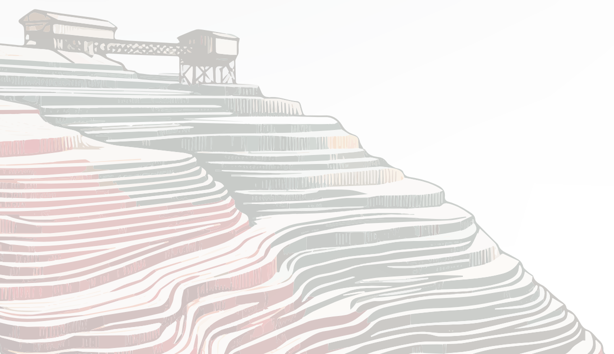
FEBRUARY 2024

INTRODUCTION

The mining industry has long been considered to be a contributor to environmental and social ills. That might still be the case – but the industry is now also viewed as critical to the decarbonisation of the planet because it provides the raw materials that are needed for the global energy transition from fossil fuels to alternative sources of energy. Mining may be essential to the supply of these so-called green minerals, but that doesn't mean that the industry is being given special dispensation on environmental, social and governance (ESG) issues. If anything, ESG has become even more top of mind for regulators, communities and investors, placing the onus on the industry – as the first source of emissions in the clean energy value chain – to accelerate its decarbonisation plans even as it is under pressure to ramp up production of critical minerals.

Experts are unanimous that if the mining industry is to deliver on its potential and its promises to stakeholders, it needs to accelerate efforts to modernise operations through technology and automated, digitised, AI-enabled operations. Tech talent is at a premium and that has significant implications for the way mining companies position themselves for the future. Allied to this is the need to manage stakeholder expectations, engage more effectively with regulators, climate-proof operations, and address legacy issues, all of which will necessitate a hard look at how the industry manages, measures and reports on ESG matters.

While any discussion on mining is highly context-driven, our global mining and resources practice group agree that regardless of jurisdiction, integration of ESG into corporate strategy is going to be more important than ever in 2024 and the next decade. Organisations that leave ESG work to a small and often underfunded department to manage (and in too many cases, solve), do so at their peril. In this report, partners in Argentina, Australia, Canada, Chile and South Africa examine regional challenges, and their impact on talent strategies.



KEY MINING TRENDS IN 2024 THAT WILL IMPACT TALENT MANAGEMENT

1. WALKING THE TALK ON ESG
2. THE RACE FOR CRITICAL MINERALS
3. DIGITAL MINES A GREATER FOCUS ON AUTOMATION AND AI-ENABLED OPERATIONS
4. STAKEHOLDER TRUST ISSUES
5. RESOURCE NATIONALISM
6. CLIMATE-RELATED RISKS AND EVENTS
7. MANAGING LEGACY ISSUES
8. SUPPLY CHAIN COMPLEXITIES
9. ENVIRONMENTAL ACTIVISM (INCLUDING CYBER THREATS)
10. BOOM AND BUST CYCLES

TALENT, TRUST, AND TECHNOLOGY – KEY TO A SUCCESSFUL ESG STRATEGY

OPERATIONALISING ESG, AND EMBEDDING IT INTO ORGANISATIONAL STRATEGY, REQUIRES A DIVERSE SET OF SKILLS SPANNING TECHNICAL, MANAGERIAL, POLICY, AND SUSTAINABILITY DOMAINS. THIS MEANS THAT IN ADDITION TO TRADITIONAL TECHNICAL AND ENGINEERING EXPERTISE, MINING ORGANISATIONS ALSO NEED PEOPLE WHO CAN:

- **Inspire diverse teams to embrace efficiency agendas.**
- **Operationalise technological and digital strategies.**
- **Shape culture by boosting employee engagement and morale.**
- **Build/rebuild trust among communities.**
- **Engage effectively with regulators and policymakers.**
- **Position mining as a responsible industry and a force for good.**
- **Identify, attract and nurture the high-potential leaders of the future.**
- **Build a talent pipeline that reflects the organisation's diversity and technology goals.**
- **Audit ESG activities and benchmark outcomes against peers.**
- **Project manage large-scale initiatives in green technology and infrastructure.**

Since many of these skills are currently in demand by other industries in less remote areas with fewer legacy issues, it is going to require a concerted strategy to make mining more attractive to millennials and members of Gen Z, who prefer to work for organisations whose social justice goals match their world view. This is going to require a mindset change – including managing commodity cycles that cause operations to shed jobs during downturns, embracing technology and digital platforms that make operations less reliant on boots on the ground, as well as reviewing operational procedures (like 6 am onsite meetings) that make mining unattractive to female employees with family responsibilities.

READ

'THE ALTOPARTNERS SPOTLIGHT: BIG OIL ON THE PRECIPICE OF CHANGE, CAN GEN Z HELP?'

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ARGENTINA

In the wake of the recent pro-business election result, Argentina's economy is set to boom. It's early days, though, and challenges abound. Working with an experienced in-country team can smooth the way for investors, says Ricardo Bäcker, Founding Partner and Chairman of Backer & Partners | AltoPartners Argentina.

Argentina is one of the richest – and most under-exploited – countries in the world in terms of mineral potential. A recent change in the political order is set to reverse the former government's protectionist approach, promising to usher in more business-friendly policies. This is in contrast to neighbouring Chile and Bolivia, the other two members of the so-called Lithium Triangle, where government policy favours state ownership and intervention.

A complex macroeconomic climate

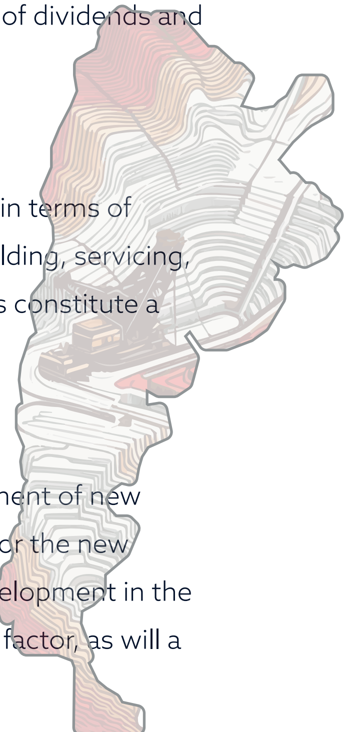
While the AltoPartners team and their clients are optimistic about the future, they caution that new policies could take a while to be implemented, which may cause investors to postpone making big mining-related decisions until there is more clarity on key macroeconomic factors. But the country can't afford to wait too long: The lack of foreign currency impacts directly on the import of goods and services, as well as on the permits for repatriation of foreign currency for the payment of dividends and interest abroad.

Infrastructure and logistics remain a challenge

Mining projects and operations tend to be in remote areas, which presents challenges in terms of infrastructure and logistics. The road and railway networks are not optimal, making building, servicing, and supporting operations in remote areas difficult. In some instances, road conditions constitute a serious hazard for drivers and local communities.

Energy availability

Access to energy in remote areas has historically been a limiting factor in the development of new operations. Expanding the country's energy and power network is therefore a priority for the new government. This, combined with a pro-business approach, should see significant development in the region, but stakeholder engagement with local communities will remain a key success factor, as will a commitment to ESG.



Limitations in purchasing and contracting services

Most mining provinces in Argentina have implemented preferential procurement and recruitment policies designed to safeguard contractors and local workforces through regulations that require mining companies to purchase and contract significantly at the local level. This approach is understood as an attempt to preserve value in each province, emphasising the importance of strengthening local communities. It's too soon to tell if a pro-business government will amend or relax any of these policies, but it's worth noting that, in general terms, these regulations can impact negatively on cost management and efficiency.

Wooing younger recruits

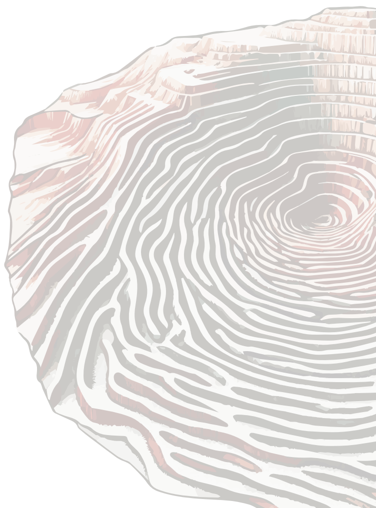
A major opportunity exists for mining companies to improve their engagement efforts with local universities in a bid to attract young talent, which can be especially challenging given the remoteness of the operations and the living conditions – a factor that also accounts for the dearth of millennials and women in mining.

Best piece of advice: Resist the temptation to micromanage your in-country team

"Without an in-country management team who understands the culture and is familiar with the environment, companies will make many mistakes which can impact profitability. Argentina produces high-calibre graduates, and there is no shortage of skilled professionals capable of navigating the complexities and intricacies of the economic and financial landscape at C-suite level, even if they do not have a specific background in mining. The same holds for community and government affairs, as well as human resources. Even in supply chain or logistics, local knowledge makes a significant difference."

> UNFORTUNATELY, CLASHES OCCUR WHEN INTERNATIONAL COMPANIES DON'T SUFFICIENTLY TRUST THE PROCESS AND DEFAULT TO MICROMANAGING THEIR IN-COUNTRY C-SUITE APPOINTMENTS, WITH PREDICTABLE RESULTS. WORKING WITH A KNOWLEDGEABLE, RELIABLE SEARCH PARTNER WHO KNOWS THE INDUSTRY AND THE MARKET, GOES A LONG WAY TO MITIGATING THIS RISK. WE DON'T LIKE SURPRISES ANY MORE THAN OUR CLIENTS, SO WE MAKE SURE THERE ARE NONE.

– Ricardo Bäcker



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CHILE

A crippling drought and a bureaucratic quagmire are two of the most immediate challenges facing the world's leading producer of copper and the second-biggest global producer of lithium. But that's not the only thing keeping mining clients awake at night, says Nicolás Mora, Managing Director of Equation Partners | AltoPartners Chile. Ongoing and intense debates around constitutional changes and mining policies are stretching strategic management and compliance skills to the max. Having a real-time finger on the political and social pulse of the region is key to mitigating investment risk in a complex and evolving operating environment.

Bedding down Chile's mining policy

The Chilean government has been working on the National Mining Policy 2050 since 2019. The policy aims to guide the future development of sustainable mining for Chile through a participatory process at national and local levels. The policy hopes to future-proof the industry by addressing decreasing mineral grades, improving the industry's climatic and environmental footprint, and strengthening the development of a technology-based cluster. This will require a range of skills, including digital expertise, innovation and creativity, sustainability, social responsibility, and collaboration. Leaders who can foster a culture of innovation and continuous learning to keep up with the changing demands of the industry while also expanding the talent pool by diversifying its workforce and promoting gender equality are going to be crucial to its success.

Growing government control of critical minerals

Mirroring global trends for governments to invest in critical minerals projects and supply chains, Chile recently announced a joint venture between the state-owned copper mining company Codelco and the private (publicly traded) company SQM. This partnership marks a significant development in Chile's approach to lithium mining, reflecting a strategic shift toward greater state control and involvement in this crucial sector. Set to take effect from January 1, 2025, Codelco will have a majority stake in the joint venture, holding 50% plus one share. While the collaboration between these two entities is expected to enhance Chile's position as a global leader in lithium production, adhering to sustainable and environmentally conscious practices will require an even greater focus on innovation and R&D. Since these skills are in high demand globally, significant work will have to go into making the mining industry in Chile more attractive and accessible to a wider section of the labour force.

Addressing an onerous and convoluted permitting system

While recent amendments proposed to Chile's Mining Code (Law No. 21,420) and other legal provisions related to the mining sector promise to streamline the current multi-step permitting system and clarify obligations for mining companies, the current system is a significant deterrent to new entrants, especially compared to less onerous protocols in Peru or Argentina. A strong government relations portfolio capable of effectively engaging with a diverse set of government and quasi-government stakeholders around policy development, legislative and policy changes, and compliance with environmental regulation, taxation, indigenous rights, and obligations to local communities is essential.

ESG comes into sharper focus

Chile leads the LATAM region on sustainability, ranking 30th out of 166 countries in the UN's latest Sustainable Development Report. Environmentally, there is an increasing demand for the mining industry to adopt more sustainable practices, driven primarily by communities and the state. This includes better waste management, minimising land use, fostering better relations with local communities, and rehabilitating mining sites post-extraction.

Megadroughts, climate change and innovation

A punishing drought, now in its second decade, is impacting the Chilean economy across the board, including IT, agriculture, and mining. Water usage is a national priority and desalination plants are increasingly required for water-intensive mining activities such as processing and dust suppression. This trend is expected to continue as water scarcity and climate change become more pressing and as the technology for desalination becomes more efficient and cost-effective. However, innovative solutions will be required to manage the environmental impact of the desalination plants, including energy consumption and the disposal of brine, a byproduct of the desalination process.

Addressing a growing skills shortage

Talent – its acquisition, development, and retention – is crucial to addressing the challenges currently facing operations in Chile. A shortage of specialised roles in the field of automation, data analysis, and environmental management means that increasingly mining companies must look globally for talent, which comes at a price.

> BUILDING A LOCAL TALENT PIPELINE WILL REQUIRE COMPANIES TO ACCELERATE EFFORTS TO DEVELOP A CULTURE OF INNOVATION AND CONTINUOUS LEARNING TO KEEP UP WITH THE CHANGING DEMANDS OF THE INDUSTRY, WHILE SIMULTANEOUSLY DIVERSIFYING ITS WORKFORCE AND PROMOTING GENDER EQUALITY TO DEEPEN THE TALENT POOL.
>
> – Nicolás Mora

SOUTH AFRICA

Hostage negotiators, forensic investigators, training and communication specialists, sustainability champions, and political science graduates – these are some of the skills currently being sought by mining companies with operations in South Africa, and they speak volumes about conditions on the ground. With mines becoming progressively deeper and ore grades declining, the unit cost of mine production in South Africa is under significant pressure. The situation is exacerbated by rapidly rising input costs, particularly those of energy, labour, and transport; erratic exchange rates; and an uncertain policy and regulatory environment. Add ageing infrastructure, class action suits, and crime syndicates, and it's little wonder that most mine managers operate in crisis mode. After decades of lacklustre performance, however, technology has an opportunity to revitalise South Africa's beleaguered mining industry, but it will take skilled leaders to bring employees and labour unions with them, says Takalane Khashane, Director of Search Partners International (SPi) | AltoPartners South Africa.

Managing out of polycrisis mode

In South Africa, the challenges have been so multi-faceted and far-reaching for so long that the challenge for many mining executives is to stabilise operations before they can even begin to introduce the new technology and skills required to build digital mines. Strong leaders and successful change agents come at a premium.

Not fewer jobs, but different jobs

Technology, especially technology aimed at improving efficiency, is often viewed with suspicion by powerful labour unions, who are concerned that it will mean fewer jobs for their members. A successful transition to cleaner mining will only be possible with the support of organised labour and local communities, requiring mining companies to illustrate the positive impact for all stakeholders, especially in terms of health and safety, and the potential to reimagine jobs and create new ones. Some technology, such as the introduction of hydrogen trucks and the construction of power generation facilities, such as solar and wind, attracts less resistance from employee representatives, but technology, for example, that monitors operator behaviour, fatigue patterns, productivity, and related aspects, typically faces severe resistance and, in some cases, active sabotage and circumvention. Education, diplomacy, transparency, and engagement are key to this procss.

Training and education remain a priority

Helping the workforce to transition from traditional mining roles to knowledge workers must be part of the strategy to retain jobs, especially given that the mining industry remains one of South Africa's largest employers. Local recruitment policies are key to sound community relations, obliging many mining companies to actively shore up teaching skills and school infrastructure in local communities to ensure a local talent pipeline.

More efficient spending on ESG

For many South African operations, the trick is to balance competing social demands with the need to invest in environmental best practices. Mining companies are increasingly providing the infrastructure that would ordinarily be the responsibility of national and local government, such as power supply, waste disposal, roads, and health facilities in addition to fulfilling responsibilities under the industry's social and labour plans, such as direct employment, and providing commercial opportunities for local businesses. These demands often leave mining operations with the bare minimum to spend on environmental rehabilitation, which in turn fuels environmental activism and community distrust. Making the ESG budget go further is a key priority, highlighting the need for strategic skills and auditing expertise to identify focus areas and define consistent metrics against which sustainability will be measured going forward.

Cleaning up legacy issues

Abandoned and worked-out mines (that have spawned dangerous, illegal mining ventures known as Zama Zamas) and ongoing litigation around silicosis and other health and safety-related issues, mean that mining companies are increasingly required to digitise records to ensure that information remains accessible and available long after mining operations have ceased, or employees have moved on.

Top skill: collaboration – at continental, national, regional and community levels

South Africa is the largest manganese producer in the world and has sizeable reserves of critical minerals such as cobalt and copper as well as 85% of global reserves of platinum group metals. Neighbouring countries are equally well-endowed: Zimbabwe boasts substantial lithium resources and Mozambique and Madagascar have the largest reserves of graphite. Further north, the Democratic Republic of Congo and Zambia have significant cobalt, copper and lithium reserves while Mali and Ghana remain important players. The news of the discovery of coltan deposits in Kenya could also be a game-changer for the continent, and the East Africa region. Leveraging these resources is an opportunity to get right what many consider one of the failures of the industry: a continent-wide beneficiation strategy including infrastructure (getting the minerals to market), trade incentives, and the enforcement of programmes to prevent illegal mining and transportation of illegally mined and beneficiated minerals. As a step in the right direction, South Africa is working with other nations on the continent to develop a critical mineral resources strategy that aims to boost developing economies. This is both an opportunity and a risk for mining companies and will test their diplomacy and strategic skills.

> ‘DELIBERATE AND INTENTIONAL EDUCATION INTERVENTIONS IN LOCAL MINING COMMUNITIES SHOULD BE VIEWED AS A LONG-TERM STRATEGY AIMED AT LEAVING NO CHILD BEHIND. MINING COMPANIES THAT HAVE A HAND IN PRODUCING THE ANALYSTS, ENGINEERS, DOCTORS, AND SUSTAINABILITY EXPERTS OF TOMORROW WILL ALSO BE INVESTING IN THEIR SOCIAL LICENCE TO OPERATE.’
>
> – Takalane Khashane

AUSTRALIA

A combination of rich mineral resources, favourable government policies, technological advancement and a highly skilled workforce have made Australian mining companies among the safest and most profitable on the planet. According to Mining Technology, the industry has been a bastion of stability amid the uncertain times of the COVID-19 pandemic, with resources and energy exports reaching a staggering $221.2bn in value between June 2019 and June 2020. It's the single largest and most profitable sector in the country. So, why then, does it have an image problem? Fixing this is key to securing the best talent in the decades ahead, says Richard Fortune, Managing Partner at AltoPartners Australia and co-head of the AltoPartners Global Natural Resources practice group.

Image problems equal talent problems

Australian mining companies are at the forefront of technological advancement and health and safety, but more work needs to be done to attract a new generation who seek purpose-led companies, putting the onus on executive searches to find purpose-led leaders. Industry leaders also need to continue building a talent pipeline by attracting a much broader cross-section of talent from the ground floor up and ensuring they retain this talent, even during cyclical downturns.

Preventing a repeat of Juukan Gorge

Closing the gaps in ESG is a priority for boards and the C-suite. The destruction of Juukan Gorge, a 46,000-year-old site of global cultural and archaeological significance in 2020, has prompted a review of ESG practices across the industry. Global executives should watch the evolution of ESG carefully, particularly those frameworks and reporting codes likely to be adopted as best practice. For example, the JORC Code governing Australia's reporting of Resources and Reserves is currently being updated to address deficiencies in the protection of cultural heritage sites like Juukan Gorge, among other ESG considerations.

Driving DE&I through culture change

While addressing the optics at board and leadership level is important, it's not going to make a significant difference to diversity, equity and inclusion if the operating culture remains unchanged. Focusing exclusively on optics merely papers over the cracks without addressing the cause. Fortune recommends that companies go deeper and look at the individual attitudes that make up the culture of the organisation, starting with boards and leadership teams: "We need to recruit the attitudes, from the top down, to create the sort of culture we want. Otherwise, we will end up with a 'new guard' who are just as exclusive and conformist as the old, just with different allegiances."

Strategic and lateral thinkers are key

"Mining bosses are often good at seeing risks, at the expense of opportunities. Industry needs more strategic and lateral thinkers, who ask the 'why' questions that expose assumptions and blind spots of the core mining disciplines. At the same time, deep domain experience is fundamental."

> ANY AREA THAT HAS THE POTENTIAL TO MAKE OR BREAK THE BUSINESS, REQUIRES PEOPLE WITH DEEP EXPERIENCE IN THOSE AREAS AROUND THE TABLE. PERHAPS YOUR BOARD AND LEADERSHIP AREN'T THE EXPERTS, BUT THEY WILL KNOW WHO TO BRING IN AND HOW TO HARNESS THEIR THINKING.
>
> – Richard Fortune

CANADA

In Canada, learning from the past to ensure that the new 'gold rush' (in the form of minerals essential for the transition to clean energy) doesn't create more environmental problems than it hopes to solve, is top of mind for all stakeholders. For many countries, the response has been more regulation and oversight. However, an onerous permitting environment puts undue pressure on existing operators while restricting new entrants to those that can afford to weather bureaucratic delays. The solution, says Kevin Hall, Managing Partner of Bluestone Leadership Services | AltoPartners Canada and co-head of the AltoPartners Global Natural Resources practice group, is for mining companies and their supply chains to embrace ESG as part of their core DNA.

Balancing regulatory and capital requirements

While Canada has enormous potential to power the energy transition, there is currently only one rare earth operation in the country. Increasingly complex and onerous regulatory burdens mean that the timeframe to acquire, plan, develop and commission new mining operations has increased significantly. Since capital funders typically have shorter investment horizons, there is a financing gap between start-up and production. Whether the federal government will be willing or able to address this gap remains to be seen.

Beefing up cyber security

As global climate change activists continue to target natural resource companies and their ESG record, organisations will need to pay attention to cyber security.

Higher standards, higher costs?

High environmental standards tend to come with costs which low-cost mineral producing countries do not incur. This needs to be balanced against the cost of inaction, which could put an organisation's social and legal licence to operate at risk. Investment in renewable energy, electrification of mining equipment, and carbon capture and storage technologies are investments in the future of the planet and the company. The pushback against ESG and Diversity, Equity and Inclusion (DE&I) in parts of neighbouring United States is unlikely to take root in Canada, where indigenous communities and environmental causes enjoy more popular and political support.

Diversity challenges

Top talent with international operating experience continues to be in demand – particularly for diversity candidates. Many publicly traded companies are actively aiming for a board structure that is made up of at least 30% women. This is more challenging for the junior producers who don't have the budget or the cachet of the majors.

> THE ABILITY TO EXECUTE ON A STRATEGY, MEASURE PERFORMANCE (ESPECIALLY ESG METRICS), AND THINK OUT OF THE BOX WILL BE WHAT SETS CANDIDATES APART IN CANADA'S NEXT MINERAL BONANZA. MY ADVICE FOR BOARDS AND CEOS IS TO HAVE THE CONFIDENCE TO HIRE PEOPLE STRONGER THAN YOU. IT'S OLD ADVICE, BUT RARELY FOLLOWED.
>
> – Kevin Hall

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CONCLUSION

While ESG compliance and reporting is expected to be a major driver of new jobs across the industry, our partners also emphasised the importance of effective government relations as part of ESG strategies. From Australia to Chile to North America and South Africa the right mining codes and permitting systems are key to striking an optimal balance between legal obligation and corporate responsibility. An outdated, opaque, and inefficient permitting system is as much a threat to mining companies as it is to communities and economies, often inspiring shortcuts with the attendant reputational and environmental risks. From a talent perspective, a strong and effective government relations portfolio has never been more important. Driving transparent, collaborative policy supported by efficient permitting systems is a key priority for governments and mining companies alike if the industry is to reinvent itself to grow responsibly.

A government and community relations team with a strong grasp of the issues and the skills to track trends and prepare for obstacles is no longer a nice-to-have. Advisors with deep local knowledge and a fit-for-purpose executive team can be the difference between success and failure

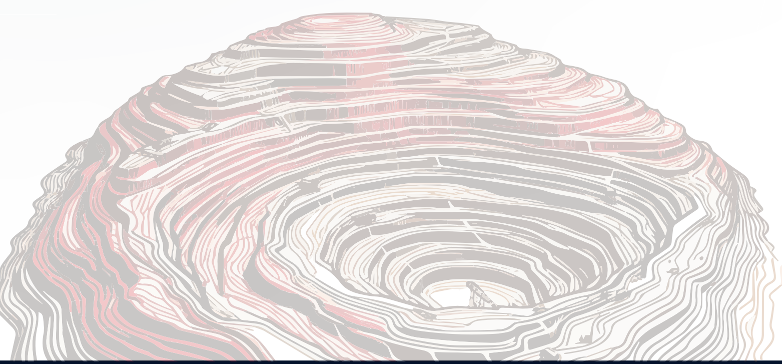
Right on cue, the South African Department of Mineral Resources and Energy's announcement on the eve of the 2024 African Mining Indaba that its preferred bidder for the country's mining resource management system, or cadastre, includes a Canadian company at the cutting edge of technology, has been greeted with cautious optimism. A transparent, efficient cadastral system is seen as a welcome first step to addressing the country's backlog of mining and exploration applications (worth an estimated R20 billion).

THREE STEPS TO BUILDING AN ESG TALENT PIPELINE THAT MINING ORGANISATIONS CAN TAKE RIGHT NOW

1. **Skills mapping:** Identify the skills gaps and map your current talent against your risk register and your strategic plan.

2. **Soul searching:** Review your offering. How does it stack up against your competitors, bearing in mind that your competition is no longer just your peers in the industry, but any sector looking for innovative, tech-savvy specialists in the field of R&D, data, automation and AI-driven robotics. What are you doing to retain your best people?

3. **Storytelling:** Make your company more appealing to young talent by talking authentically and honestly about the issues that are important to them. Demonstrate how your brand is a force for good. Ensure that your communications function is sufficiently resourced to do this effectively in a digital age, including investing in content hubs, design skills and social media listening strategies. And don't neglect internal communications: your employees are ultimately your best brand ambassadors.



WITH GRATEFUL THANKS TO OUR CONTRIBUTORS

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