



**Securing mining's future workforce:
Taking action today for a better tomorrow**

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If you want to change the world, it all starts with finding the right people. Cripps Leadership Advisors explore ways to tackle the mining skills shortage head on.

The mining industry faces a conundrum when it comes to talent. It should, in theory, be a desirable place to work; jobs are well paid and provide exciting opportunities for global travel. There are long-term career prospects, a chance to use cutting-edge technologies for environmental and social benefit, and companies are harnessing data and connectivity to support modern ways of working.

But, despite this, businesses find themselves facing an unprecedented shortage of skilled workers. [Research by McKinsey & Co](#) has found that mining isn't currently an aspirational industry for young technical talent, with 70% of survey respondents aged 15-30 years old saying they definitely or probably wouldn't work in mining. These numbers correlate with [low enrolment and graduation figures](#) for core mining educational courses across the globe.

Companies have long known recruitment and retention to be a problem and, although there has been much talk about solutions and some action, movements to counteract the brain drain thus far have been insufficient. The result is a growing impact on bottom lines; [McKinsey](#) said that 71% of mining leaders find the talent shortage is holding them back from production targets and strategic objectives.



Ask any senior leader in mining today, and they'll agree that it's tough to find workers. There are various reasons for that, but foremost are the outdated perceptions people have of what the industry does and how it does it.

Simon Thomas | President, BHP Potash

To better understand the underlying issues and potential solutions, Cripps Leadership Advisors asked Simon Thomas, President of BHP Potash, and Joanne Doyle, a Senior Manager at Deloitte Consulting, to join its Director for Natural Resources, Rowan Phendler, for a debate.

Doyle agreed: "Mining job vacancies are elevated, particularly in countries like Australia and Canada, which are key producers of critical metals. The demand for talent is at an all-time high. As of Q3 2022, there were [over 8,000 jobs available within mining](#) across Canada and many of those vacancies aren't being filled."

According to the [Mining Industry Human Resources Council](#), Canada's mining industry is expected to see a shortage of 80,000 to 120,000 workers by 2030. It's a similar story in Australia, a 2022 report from the [Australian Resources and Energy Employer Association](#) found that the mining industry would need 24,000 new workers by 2027 to uphold new projects. However, the market will likely only provide around [16,000 graduates](#); there will be close to a 30% deficit unless swift action is taken.



Shifting the focus from roles to skills

The remoteness of mine sites is a barrier to talent. Most operations globally, both new and old, are situated far from cities with attractive infrastructure and services. The industry's main response to this so far has been to increase wages and employ remote operations centres or autonomous systems where possible.

Some governments, like the Canadian Federal government, have added [express entry programmes](#) to their immigration policies to encourage talent into critical roles. These measures are somewhat helpful but have not proven effective enough.

Doyle explained that the mining industry has always placed an emphasis on roles when recruiting, but she believes that shifting the focus towards skills could create new possibilities.

"A high proportion of in-demand roles are for heavy equipment operators," she said. "The mining industry tends to search internally for candidates to fill these, or in sectors such as oil and gas. However, if companies were to focus on the skills needed to perform those roles, then the talent pool widens significantly."



The reason being that the skills needed for mining are changing fast with the introduction of digital technologies, systems and analytics. There are plenty of people in less obvious industries with those skills. From there we can look at training or upskilling them to help them make the transition across industries.

Joanne Doyle | Senior Manager, Deloitte Consulting

Thomas agreed: "Being clear on the industry's ambitions and the skills needed to support new ways of mining opens it up to being a competitor for labour against companies, like Amazon and Microsoft."

He added that, while a certain amount of manual labour and dedicated roles are still needed, the more generic elements of mining organisations will allow them to navigate future trends.

"For instance, mining is critical in providing the resources needed for the world to decarbonise and for food security," Thomas explained. "How we provide these resources is at the forefront with an emphasis on social value as key performance indicator."





Moving to a new mining industry

While mining is fundamentally a traditional industry, it's critical to society's future and 'rebranding' it as an exciting and meaningful place to work will be critical in attracting new talent.

Time for a rebrand

In fact, for those who want to affect change in the world, there's no better place to work; the mining industry underpins [nearly half of all global economic activity](#), meaning the level of positive influence it can wield is greater than any other.

"That's probably the biggest unique selling point that the mining industry has – the chance to make a difference to the planet and to global prosperity," said Phendler. "To help combat climate change, restore biodiversity and lift people out of poverty. Who wouldn't want to be a part of that?"

To create a broader narrative for mining and the opportunities it provides, some companies have chosen to evolve the imagery they use in public material, like adverts. In showing the products and lifestyles commodities create rather than mine environments, these images link the purpose of mining with people's daily lives.

Some have gone further and removed the word 'mining' from their company mission statements altogether, dubbing themselves 'resource companies' or 'material providers' instead.

"At BHP, our purpose is to bring 'people and resources together to build a better world'," said Thomas. "That ambition's at the heart of everything we do."

The aspirations and expectations of potential employees are also changing and mining organisations must evolve to keep pace. Communicating internal changes to work, like the possibility for flexible and remote working as well as benefits, is important to this.

Doyle said: "If miners want to attract more women, they must think about strategic planning and opportunities for hybrid work. That includes things like shift scheduling; arranging shifts so that people can fit work around their personal commitments. When it comes to benefits, more parents would probably join mining companies if bursaries were available to support their children's education as well as their own."

In diversifying the talent pool, it's also vital to look at the design of work and the way in which it's managed rather than affected. For instance, using lifting tools for heavy items improves safety *and* allows a broader spectrum of candidates to apply for roles in areas such as maintenance.

In 2016, BHP began pursuing gender balance across its organisation. [BHP Potash recently accomplished this](#), and Thomas credits the achievement to the company's intentional strategy and perspectives.



We needed to ensure we were walking the talk on BHP being a safe, inclusive and diverse place. From the small things, like site uniforms designed for women, work design and tools, to the bigger things, such as remuneration and recognition; it all matters.

Simon Thomas | President, BHP Potash



Accessing alternative talent pools

Mining firms have the opportunity to find new talent that will grow their business, and their industry, but it requires new thinking and new strategies.

Get involved with education

Greater involvement in post-secondary education will also boost recruitment in time. By working with educational establishments, companies have the chance to break down public misconceptions, create more entry points and accelerate uptake for students.

“**Better aligning curriculums with the industry’s future needs is critical, as is a greater emphasis on micro-credentialing.**”

Rowan Phendler | Director, Cripps Leadership Advisors

Phendler goes on to state, “There are plenty of students outside of the classic engineering and geology fields who could bring new ideas into mining given the chance (not everyone needs a four-year degree programme).”

Doyle added: “Tapping into high schools and creating excitement around mining using language and tools that students understand is key. For example, gaming is very attractive to youths. It can be used to boost engagement and foster the skills needed to work in mining.”

Science North’s online game, [Mining Evolution](#), is a good example. This supplements educational programmes for youngsters in grades 4-12 using experiential learning to promote mining.

Speaking to untapped talent

Recruitment is important, but it’s only one piece of the puzzle. The mining industry’s not only failing to attract new talent, but a large portion of its current workforce will also retire within the next decade.

The [Society for Mining, Metallurgy & Exploration](#) has forecast that half the US mining workforce (around 221,000 people) will retire by 2029. Valuable

knowledge will be lost if companies don’t find a way to bridge the generational gap and retain institutional learnings.

Technology will help in capturing processes and instilling best practices in new recruits. But miners should also look to attract and include groups who are currently underrepresented in their workforces, for instance, people with diverse physical and mental capabilities, the LGBTQIA+ community, Indigenous peoples, those from diverse racial and religious backgrounds... people whose presence will enrich the industry and make it a more interesting place to work.

“To be part of the mining and metals workforce, you don’t necessarily need to work in a mine,” Thomas reminded us. “There’s a place for everyone whatever their interests, expertise and needs. We must demonstrate that better and develop programmes which help a more diverse element of our society see their place in the future of mining.”

The search for future talent isn’t just about diversifying *who* companies look for, but also *where* they look for them.

Mining is a teachable subject and if a candidate has the right skills, then it shouldn’t matter in which sector they honed their craft, only that their attitude and mindset support the transition to a new landscape, and that the processes needed to make that transition a success are in place.

“Having experience within the mining industry shouldn’t be a prerequisite for job applications,” said Doyle. “Companies can look to adjacent industries. For example, there are lots of maintenance supervisors in the automotive sector who have the skills required to perform that role within mining too. By drilling down job requirements to the skills level, it broadens the pool of available talent exponentially.”

If miners can master this, there’s a sea of talent in other asset-intensive industries, including agriculture, manufacturing and technology, that they could look to immediately to fill vacancies.



Going above and beyond

There's a range of things that mining companies can do in both the short and long term to secure a plentiful, vibrant, supply of talent.

The aforementioned initiatives are a starting point – the minimum requirement to begin addressing the mining skills shortage – but Thomas believes there's more that could be done. There's a range of things that mining companies can do in both the short and long term to secure a plentiful, vibrant, supply of talent.

“Collaborative work must be undertaken with governments on long-term workforce planning to understand the skills gap and how policies can be created to plug that,” he said. “Mining companies could also be more expressive on non-core areas in which they are actively participating, for instance, developing carbon-free steelmaking. This will promote a wider understanding of the impact of mining. Ultimately, this isn't just about sustaining mining through talent, it's about supporting global supply chains.”

Doyle concurred: “Showcasing supply chains and partnerships will change public sentiment surrounding mining,” she said. “Linkages to brands that people wouldn't normally associate with mining, but which are hugely attractive to youth, for instance, Tesla, and

explaining how critical metals are to those brands will help too.”

Phendler added: “As more government stimulus becomes available to the industry by way of critical metals policies, mining companies must also ensure that capital trickles down to their HR functions and to their work with schools and universities, so there's a steady stream of talent coming through the ranks. We must work together to overcome this challenge.”



Cripps Leadership Advisors will host a panel discussion on this subject at Resourcing Tomorrow in London, UK, on 30 November 2023. To learn more, visit the [Resourcing Tomorrow event website](#).



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