



QUEENSLAND
FUTURES INSTITUTE



QLD POLICY LEADERS' FORUM
**THE FUTURE OF
MINING AND RESOURCES
FOR QUEENSLAND**

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QLD POLICY LEADERS' FORUM

THE FUTURE OF MINING AND RESOURCES FOR QUEENSLAND

PANELISTS:



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Head of Operations
BMA



JANETTE HEWSON

Chief Executive Officer
Queensland Resources Council



MARK SCOTT

Chief Executive Officer
and Managing Director,
Hastings Deering



**PROFESSOR RICK
VALENTA**

Director Sustainable
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Snapshot

The 2025 Queensland Futures Institute's **Future of Mining and Resources for Queensland** panel brought together industry leaders to explore the risks and opportunities shaping the state's resources sector. The discussion highlighted Queensland's strong global position – resulting from its high-grade resource base, world-leading mining technology and skilled workforce - against a backdrop of rising global demand for critical minerals, metallurgical coal and low-carbon steel inputs.

The discussion focused on the sector's essential role in enabling Queensland's economic growth and the energy transition, and the need for stable policy settings to underpin continued investment and competitiveness. The panel also addressed the key challenges facing the industry - including lengthy project approval timeframes, policy volatility and regulatory burdens that are discouraging exploration and new investment.

Summary of Panel Comments

- The resources sector contributes one in every \$4 of Queensland's economy, supports one in six jobs, and delivered \$12.8 billion in royalties last year. Brisbane alone sees 220,000 people employed directly or indirectly through mining.
- While public understanding of the sector's economic role has improved, stronger communication of the industry's leadership in decarbonisation and environmental management is needed to maintain support.
- Mining and sustainability are not in conflict. Mining and resources will continue to be required to meet infrastructure, decarbonisation and sustainability needs.
- For example, Queensland is well placed to supply the resources needed for the energy transition, and there are potential opportunities for downstream development to further add value if supported by the right policy settings.
- Stable and predictable policy settings are essential for continued investment and growth of the industry. This is threatened by sudden royalty regime changes, overly prescriptive regulation – which impedes innovation, and long project approval timeframes (up to 15 years), discouraging local and global capital which may result in the state missing key opportunities in the current cycle.
- Exploration activity has stagnated as a result of unsupportive policy settings and regulation. Unlocking Queensland's critical minerals potential, especially in regions like Mt Isa, will require policy reform to attract investment and drive exploration activity.
- The sector is currently seeing progress in technology and innovation – with BMA pioneering mining automation, including Autonomous Haulage Systems and remote-controlled dozing, to reduce safety risks and build future workforce capability.
- The shift from coal and gas is also changing the future of work in the industry. However, many skills in the sector are transferable. Achieving net zero may require up to 600,000 jobs, so it is critical to plan for these future workforce needs.
- Continued focus on STEM, apprenticeships, and capability-building is essential. The sector is investing heavily in training and sees this as critical to sustaining a competitive, technologically advanced workforce.
- The sector must also begin planning for mine closures – considering what success looks like and how to ensure social and environmental commitments are met. The industry currently lacks experience and policy clarity in this area.

Panel Comments



Paul Turner

- Brisbane is Queensland's biggest mining town, directly and indirectly employing over 220,000 people - around a third of the full-time workforce - and contributing \$46 billion to the city's GDP.
- The connection between Southeast Queensland and the rest of the state through mining is critical; it's not an 'us versus them' situation.
- There's no sustainable future in Queensland without the resources sector - its role is inevitable, underpinning our entire economy and renewable future.
- You can't build the new stadium in Brisbane without 30,000 tons of steel produced from Queensland coal, nor fund the Olympics without resource sector royalties.
- Beyond coal and gas, rare minerals and metals like zinc are increasingly important in this sector.
- Overall, resources contributed \$35.8 billion supporting Queensland businesses and generated \$12.8 billion in royalties last year.



Janette Hewson

- I joined the Queensland Resources Council (QRC) as CEO last year.
- We have over 200 members representing every part of the resources ecosystem, including explorers through our Queensland Exploration Council, producers who rail and ship products domestically and internationally, contractors like Hastings Deering, and many consultants and services members.
- We represent coal, gas, metals and emerging critical minerals.
- The resources sector has a significant contribution to the Queensland economy - one in every \$4 of the state's economy is generated through the resources sector, supporting 17,000 Queensland businesses and one in every six jobs.
- Beyond the economic contribution, the sector also facilitates personal connections – for example, in understanding and working with people and businesses in the regions. This shows the real difference the resources sector makes across Queensland – both in regional areas and in Southeast Queensland.



Professor Rick Valenta

- The Sustainable Minerals Institute focuses on understanding and optimising the role of resources in global sustainability.
- We work closely with diverse stakeholders, including mining companies, governments, NGOs and international organisations.
- Our aim is to understand mining regions deeply and improve outcomes for people, the environment and mining projects themselves.
- We partner on mining projects to enhance sustainability outcomes, reduce environmental footprints and improve efficiencies.
- We also collaborate with stakeholders and postgraduate students to foster future leadership in the industry.
- Our strength is producing and commercialising innovations and enabling technologies through long-term, multi-project, co-creative partnerships. This approach is collaborative, allowing us to align our research capabilities with industry challenges to find practical, relevant solutions.
- We engage broadly across sectors, including coal, gas, copper, gold, phosphate and other critical resources.

Panel Comments



Mariette Bylsma

- Having worked in mining for 20 years on major projects globally, including in the U.S. and Canada, I have seen firsthand the positive impact our industry has on communities, economies and society.
- BMA alone contributed more than \$4 billion in royalties, taxes and government grants in FY24.
- We also spent over \$8 billion with suppliers, reflecting our strong footprint in regional Queensland and growing partnerships with local suppliers.
- BMA operates five mines across central Queensland - four open-cut and one underground; we own the Hay Point Coal Terminal in Mackay, with an extensive rail network transporting coal from Central Queensland to Mackay for global export.
- At any given time, about 10,000 people work directly or indirectly in our business.
- Our success relies heavily on partnerships - working closely with industry bodies, academia and service contractors.



Mark Scott

- Hastings Deering was established in 1932 and is deeply entwined with Queensland's resources industry.
- Reinforcing Janette's earlier points - one in every \$4 in Queensland's economy and one in six jobs are linked to the resources industry, showing its positive economic impact for Queensland and Australia broadly.
- We have some of the world's best providers along the entire value chain – from materials, miners, contractors and service providers.
- We are world-leading in safety, sustainability, productivity and best-practice management.
- We operate on a global scale, contributing significantly to Queensland's economy and international standing.
- As a service provider, it's important to remember our global presence requires economic sustainability for the industry to enable continuous reinvestment, growth and prosperity.

How do you view the current public perception of mining—particularly coal and gas—and its impact on Queensland's economy?



Janette Hewson

- Over the past 15 years, the industry has experienced criticism from the anti-fossil fuel movement and has lost bipartisan support, despite our major economic and social contributions.
- It has felt like we've been forced to choose sides, rather than focusing on making Australia as productive and economically strong as possible.
- Industry associations and member companies have worked hard to explain our contributions and importance - this work will remain necessary.
- Recent research we conducted with 1,200 Queenslanders immediately after the state election showed around 70% of Queenslanders understand the importance of the resources sector, and about half of Queenslanders view the industry favourably.
- While we explain our economic contributions well, we must also highlight our leadership in decarbonisation.
- For example, the resources sector has led in emissions measurement and decarbonisation initiatives for around 15 years – preceding many other industries.
- Clearly communicating our environmental practices and decarbonisation efforts is critical to improving our public perception.

Panel Comments

Is Queensland - and Australia more broadly - currently seen as an attractive and stable destination for resources investment? Is sovereign risk becoming a concern for international capital, given the scale of investment required?



Mariette Bylsma

- I believe Queensland is uniquely positioned with some of the world's best high-grade metallurgical coal assets.
- With growing demand for metallurgical coal - especially from regions like India and Southeast Asia - Queensland is strongly placed to respond and lead in technological innovation.
- Metallurgical coal is essential for producing steel needed in infrastructure for a low-carbon future, such as wind turbines and transmission lines - and we mine that right here in Central Queensland.
- Queensland must consider how to remain attractive for future investment and growth, which requires stable and consistent policy settings.
- The 2022 royalty regime change by the previous Queensland Government significantly challenged our competitiveness and attractiveness as an investment destination, making the state one of the highest tax jurisdictions globally.
- Our industry needs resilience - not just through commodity price cycles, but also operational disruptions like significant rainfall events in Central Queensland earlier this year.
- Our CEO publicly stated Queensland is no longer an attractive investment destination due to these policy challenges, which hinder the industry's resilience to these cycles.
- The state needs competitive, stable policy settings to attract international capital back to Queensland and Australia – particularly given competition for other investments globally.
- We remain open to continued dialogue with the government, and it's positive to see work addressing regulatory timeframes for project approvals.
- However, from a cost-competitive perspective, doing business in Queensland remains challenging. There's a clear opportunity for Queensland to improve and regain a competitive investment environment if supported by the right investment settings.

As a major provider to the resources sector, but with a significant Brisbane-based workforce, how critical is a strong and thriving Queensland resources industry for companies like Hastings Deering?



Mark Scott

- Hastings Deering's history and future are deeply entwined with the resources industry.
- Our business extends well beyond Brisbane - about a third of our employees are based here and two thirds are spread across regional Queensland - from Weipa to the Bowen Basin, Mount Isa and southern areas.
- Our business operates in every part of the economy - from diesel mechanics working on Caterpillar trucks, to caterers, scientists, accountants, and cleaners.
- We invest billions in our facilities and infrastructure, and are currently undertaking significant upgrades in Central and Southern Queensland, including Brisbane, to build for growth and support the industry's future.

Panel Comments

- To stay ahead it is important to understand the future industry and economic needs, including planning for training and capability building.
- We're proud of our 45 consecutive years of training apprentices – and we are one of Australia's largest single training organisations, especially in Queensland. This benefits both our customers and the industry.
- Ongoing investment is critical - not just for our business, but also for Queensland and the broader economy. The resources industry's certainty and ongoing opportunity underpins this necessary, continuous investment.

How do we balance our long-term sustainability and carbon targets with the continued importance of the resources industry to state economies like Queensland and Western Australia?



Professor Rick Valenta

- The assumption that sustainability and mining are opposing forces isn't correct.
- Sustainability and mining are integral to each other; we cannot achieve our decarbonisation targets without significantly increasing mining.
- The metals we produce are essential for the global energy transition and meeting carbon targets.
- Although not yet widespread, I believe future metal buyers will increasingly assess jurisdictions based on their sustainability practices.
- For Queensland, the key point is we have the capacity and capability to mine sustainably. We are well positioned for this, given that we already lead the world in sustainable mining practices.

If we are going to mine coal and iron ore, is Australia one of the best and most responsible places in the world to do it?



Professor Rick Valenta

- It's absolutely not an option to stop mining - we've seen detailed analyses showing we won't switch off these industries anytime soon.
- Queensland has exactly what the world needs, and we have the capability to lead the world in sustainably mining and producing these essential metals.
- However, there is also a significant opportunity for Queensland to further develop a downstream industry due to geopolitical pressures. However, but relying solely on market forces to achieve this is difficult – and it will therefore require government leadership and support.
- Governments face the challenge of deciding how far they should intervene to support the development of critical minerals industries, especially as many deposits require complex and substantial investment.
- The real challenge is moving away from the idea that sustainability and mining are mutually exclusive. Instead, we should identify how Queensland can best address future global sustainability challenges, leveraging our competitive strengths.
- Queensland is uniquely placed to leverage our transferable skills and natural advantages, including infrastructure such as ports and renewable energy potential.

Panel Comments

There are significant policy challenges facing the mining industry right now, particularly around royalties and environmental approvals. How do you see these challenges evolving and what role does government have in consultative policy development to avoid disrupting the industry?



Janette Hewson

- Mining and resources is probably one of the most overregulated industries.
- Because of this, there should be confidence in how environmental and social impacts are managed; the sector is required to manage risk very effectively.
- However, over the past 15 years, regulations have become overly prescriptive - telling us exactly what steps to take, rather than focusing on outcomes.
- Producers often know best how to manage risks, and overly prescriptive regulations hinder innovation.
- We're pleased the new state government has started consulting more closely with us. Previously, changes like the royalty adjustments were released without notice, causing disruption for the industry.
- We're working very closely with the state government, particularly the Department of Environment – which is important for both the industry as well as building community confidence.
- We need a better balance to manage risk effectively and ensure regulatory confidence without hindering progress.
- For instance, producers often consider how to improve land use while operating, which often involves looking to use mine land for renewable energy to aid decarbonisation. However, this can face lengthy processes involving licence changes, community consultations and environmental impact assessments – ultimately discouraging these innovative solutions.
- Addressing this issue is part of our broader productivity challenge - we need fewer box-ticking exercises and more meaningful outcomes.
- We provided the state government a roadmap to achieve this balance; we can't afford 12–15 years for new projects to reach production, as this will risk missing critical mineral, copper and coal opportunities.
- The reality is that if project economics don't stack up, neither new nor existing projects will proceed.

Australia's mining and resources industry is often at the forefront of technological change and innovation. What are some of the ways in which BMA is applying new technologies in its operations?



Mariette Bylsma

- At BMA, we have large operations producing products essential for global decarbonisation - but we are also doing work in technology and innovation.
- Last week, we hosted GRX in Brisbane, providing a global platform for vendors to showcase mining technology and innovation.
- BMA has always embraced technology to meet global needs for metals and data centres crucial for decarbonisation.
- We introduced Autonomous Haulage Systems (AHS) in our operations in 2020 - this technology has been a game changer for the industry.

Panel Comments

- We now operate one of the world's largest autonomous coal mines, positioning us strongly to create the workforce of the future through technology.
- Another example is the implementation of remote dozing technology at our site, addressing identified risks like vibration and engulfment when operating dozers on stockpiles.
- Operators now remotely control equipment via a high-tech onsite centre, using high-speed internet and thermal-imaging CCTV - something unimaginable just 10 years ago.
- Technology integration in mining can sometimes be perceived as threatening employment - but we've found it positively changes the nature of jobs, allowing employees to build new, exciting skills.
- Operators are initially sceptical about new technology but quickly become excited, recognising they are acquiring valuable future-oriented skills.
- We often say our industry could be the Silicon Valley of mining if we fully embrace and integrate technology. This represents a critical opportunity to enable the industry to develop the skilled workforce needed - despite competition for resources - given upcoming events like the Olympics.

Can mining compete with a construction industry for products which are going to be highly demanded with the twin challenges of massive population growth and the Olympics in Southeast Queensland over the next decade?



Mark Scott

- There are strong opportunities - especially around the autonomous hauling and dozing.
- Queensland and Australian mining more broadly have led the way globally in using technology to operate more safely, productively and sustainably.
- The technology examples already discussed show how innovative our industry is, this innovation also creates new job opportunities across the sector.
- There will continue to be strong demand for engineers and a need to invest in STEM education – across school, institutional and industry levels.
- I applaud the state government's decisions around Olympic infrastructure – as this will be a great opportunity to showcase Brisbane, Queensland and Australia while building long-term infrastructure for population growth.
- Construction and mining industries have a complementary, symbiotic relationship. This is best exemplified by the reliance of mining on civil construction and vice versa.
- Resource demand will continue to draw from both sectors, and the opportunities across each will grow in parallel.

Panel Comments

Can renewable energy genuinely replace the 63,000 direct jobs in coal and gas currently being filled in Queensland? How can we facilitate this transition to minimise social disruption in mining communities?



Professor Rick Valenta

- We recently held a workshop with the Mackay-based Resources Centre of Excellence to explore this exact issue and brainstorm future opportunities.
- These aren't just coal and gas jobs - they're roles in operating complex heavy industry, project construction, digital process control, AI systems, health and safety and leadership - all of which are transferable.
- Therefore, the question isn't whether renewables will replace today's jobs, but rather what kinds of roles will exist by 2050, when today's newborns are entering the workforce.
- A Wood Mackenzie report projects metallurgical coal demand will be higher in 2050 than now, with Australia expected to supply it.
- There are over 1,400 blast furnaces globally – which would cost trillions to replace - so metallurgical coal won't disappear anytime soon.
- Net Zero Australia, which UQ helped lead, modelled credible decarbonisation scenarios - and all of them include continued gas use for firming renewables. So gas jobs also won't disappear.
- We'll need a vast build-out of infrastructure to reach net zero – which is estimated to require 600,000 jobs, double current direct mining employment.
- Most of those jobs will be in regional Queensland and Western Australia.
- On top of that, we'll be mining critical minerals and possibly developing downstream industries too.
- As such, I think our biggest challenge may be not having enough people to do all this work.
- As Mariette noted, the jobs will evolve - but the capabilities and transferable skills we've developed position us well to seize these opportunities.

Audience Questions

How can we address the current exploration drought, and where is financing coming from to develop new mines?



Janette Hewson

- When I look at the last 15 years of policy and overregulation, it's clear we're seeing a drought in exploration projects.
- As someone born in Mount Isa, I know how important exploration is to that region - and it's also Queensland's shining star for critical minerals potential.
- We must get exploration policy right if we want to unlock that opportunity.
- As already mentioned, investment capital is global - it will go where it's welcomed and where it can generate the best return for shareholders.
- That's why our work on improving approvals processes is so important - it can't take 14-15 years to get a project up and running, or else we risk losing investors and financiers altogether.

What do you think are the underestimated risks facing the Queensland mining industry – from the perspective of financial, social license, climate resilience and geopolitical risk?



Mariette Bylsma

- We're all aware of today's fast-changing political landscape - both internally and globally.
- However, continuing to decarbonise our industry will remain critically important. We can't achieve decarbonisation alone and will need technology and strong partnerships with vendors to reach those goals.
- Research and development is just as essential as tech deployment - we need both to enable real change.
- At BHP, we're actively exploring the viability of battery-electric trucks and alternative fuels at both global and local levels.
- Another key emerging area is mine closure. We will see operations shut down over time, and we need to think about what this will require. Closure is an evolving space in Australia and globally, and we currently have limited experience with it.
- Like with exploration, closure requires coordinated work with governments to get this right.
- We need to start thinking now about what success looks like - both here in Australia and across BHP's global operations - so we have clarity and confidence in how to manage closure well.
- This is a fantastic opportunity to partner with governments and others on both closure and decarbonisation as part of our broader industry commitment.



Prof Rick Valenta

- As already mentioned, one of the biggest risks we're facing as an industry is the increasing time it takes to develop new projects.
- Globally, it now takes years from the discovery of a new copper deposit to first production.
- While regulation is often blamed for this, we need to dig deeper to determine the real causes of these delays.
- There's a lot we still don't fully understand about why these timeframes keep blowing out.
- Many people have opinions, but not many have informed knowledge - so identifying and addressing the true sources of delay is a critical risk we need to address.

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