



Environmental, Social, Governance (ESG) Capability across Queensland's Critical Minerals Industry

*Presented by the Australasian Institute of Mining and Metallurgy
(AusIMM) in partnership with the Queensland Government*

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Key Takeaways

- Industry, community, and government stakeholders share a common desire: to build stronger ESG capability across Queensland's Critical Minerals Industry (QCMI).
- Stakeholders recognise that ESG capability needs further development and express strong support for initiatives that will strengthen it.
- Building trust and improving ESG performance across the sector will depend on greater transparency, deeper collaboration, and breaking down silos.
- Findings highlight an opportunity to build capability of parties involved in coordinated regional planning and benefit sharing negotiations for enduring community and regional development.
- Industry encourages all levels of government to build a deeper understanding of mining operations and innovation opportunities.
- Communities want deeper, more genuine engagement with industry, supported by improved ESG knowledge that empowers them to participate effectively in planning and decision-making.
- To build stronger ESG capability, stakeholders are calling for practical, experience-based learning — from real-world case studies to in-person collaboration and peer exchange.
- Stakeholders express strong support for developing tools and resources that enhance ESG capability — and for establishing a trusted central hub to streamline access to information.

Table of Contents

1.0 Background	3
2.0 Consultation objectives	3
2.1 What we did	3
3.0 The QCMi ESG capability baseline	5
3.1 Current vs desired capability	5
3.2 How ESG capability is perceived	6
3.3 Challenges to ESG capability	6
4.0 Opportunities for capability uplift	9
4.1 ESG capability priorities	9
4.2 Learnings from the regions	10
4.3 Focus areas for ESG capability uplift	10
4.4 Preferred delivery methods for ESG capability uplift	12
5.0 Strategies to support capability uplift	13
5.1 Initiatives being delivered to support ESG capability uplift	13
6.0 Glossary	14
7.0 Acknowledgement	16

1.0 Background

The Australasian Institute of Mining and Metallurgy (AusIMM), in partnership with the Queensland Government, undertook a comprehensive assessment of ESG¹ capability² across the Queensland Critical Minerals Industry (QCMI).

Still an emerging sector, the QCMI involves the extraction, processing, and export of critical minerals like vanadium, cobalt, and rare earths, essential for technologies like batteries, renewable energy systems, and advanced electronics.

This summary draws upon a more detailed report that reviewed current ESG capability across the QCMI and identified strategies to support ESG capability uplift.

2.0 Consultation objectives

The consultation had two primary objectives:

- 1. Understand how people across Queensland perceive ESG capability across the QCMI** – identify priority ESG topics, key challenges, opportunities and areas of strength. These insights establish a baseline against which the QCMI's capability in ESG can be measured and tracked over time.
- 2. Find gaps and ways to improve** - by examining gaps in ESG capability and identifying the types of support and learning initiatives preferred by QCMI stakeholders. These insights helped guide strategies to strengthen ESG capability across the sector.

2.1 What we did

Initially a desktop study was conducted to review industry trends and determine how to best support opportunities and growth across the QCMI. The research undertaken reviewed material issues from across the resource sector. The relationship between ESG, material issues and capability emerged. The exhaustive list of material issues was reduced to 16 overarching ESG themes, which are listed in **6.0 Glossary**.



Figure 1: Consultation process

An extensive industry consultation to develop an evidence-base and understand current ESG capability and gaps (the baseline) was developed, drawing upon the stakeholders' perception of the QCMI's capability across the 16 themes. This summary presents highlights from that consultation.

As shown in **Figure 1**, the consultation engaged over 500 participants from industry, government, and community through online surveys, in-depth interviews, and regional workshops.

1 The research undertaken reviewed operational ESG, which is the integration of sustainability practices into a company's daily operations.

2 Capability - a combination of behaviours, skills, processes and knowledge that affects an outcome. The development of organisational capabilities is linked to achieving excellence in performance metrics.

Survey respondents

Through an online survey, the project captured early insights into ESG capability – offering a clear snapshot of how stakeholders see the sector today. This baseline provides a strong foundation for measuring progress in future studies.

- 86% of survey respondents represent the mining industry.
- Nearly half of the survey respondents are involved in the QCMI.
- Many operate from key Critical Minerals Zones³ and areas - Mount Isa, Richmond and Julia Creek, and Cape Flattery. Stakeholder representation from across other regions within Queensland impacted by mining were also captured. The geographic distribution of respondents is shown in **Figure 2**.

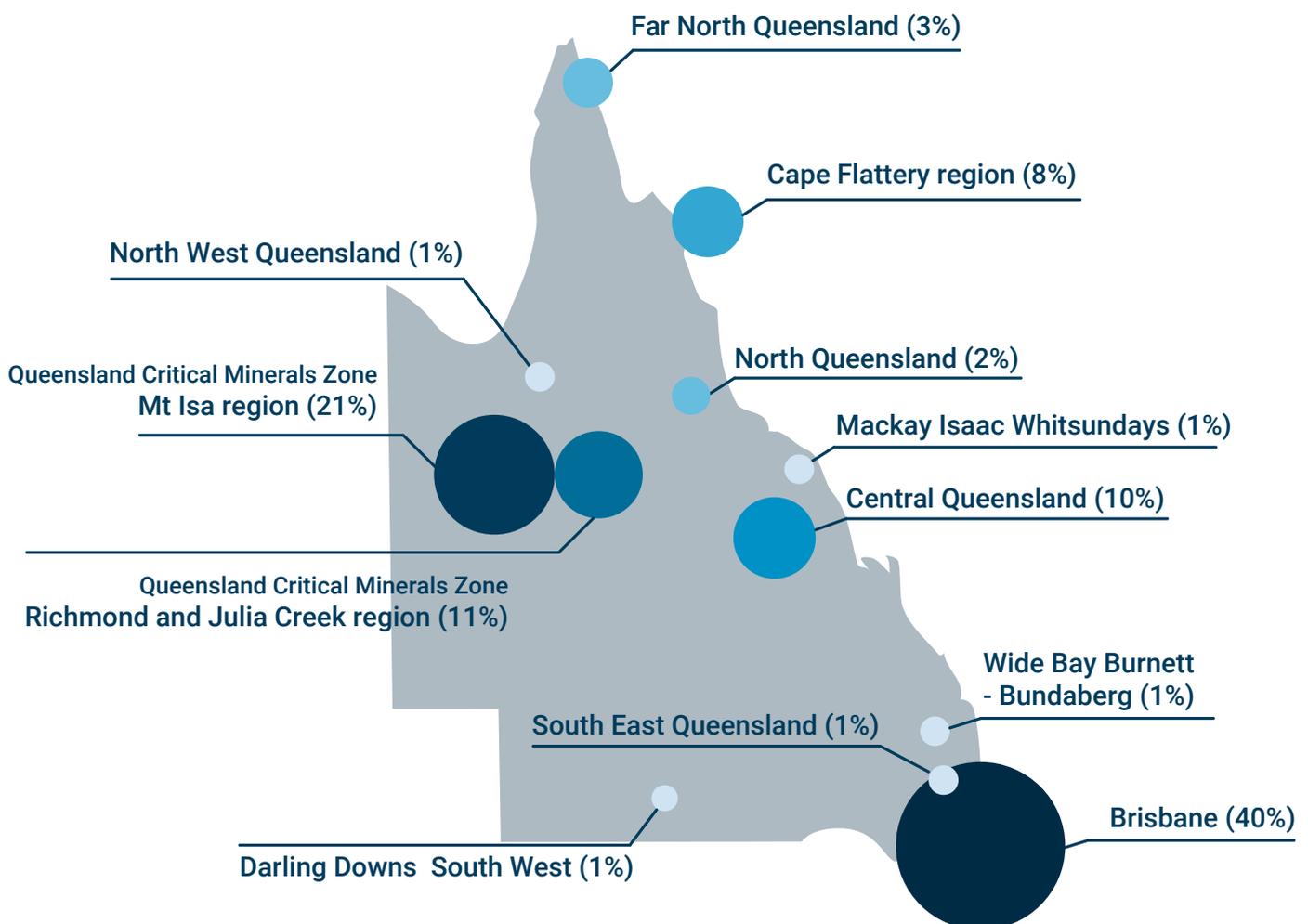


Figure 2: Survey respondents' location of operations, by region

³ As identified in the Queensland Critical Mineral Prospectus, Critical Mineral Zones include Richmond/Julia Creek and Mount Isa.

Interview participants

To add depth to the survey data, 38 interviews were conducted with senior leaders across the QCMI. These participants included mining operators, mining associations, First Nations community members, investors, consultants, researchers, and other key stakeholders involved in the critical minerals supply chain.

Workshop attendees

Regional workshops ensured local voices were included in the assessment. Workshops were held in:

- Julia Creek (emerging mining industry)
- Mount Isa (long established mining community)
- Cairns/Far North Queensland (FNQ) (dispersed regional hubs)
- Mackay (manufacturing focus).

3.0 The QCMI ESG capability baseline

The baseline⁴ assessment showed which ESG capabilities stakeholders think the QCMI does well, where it needs to improve, and what they want its future ESG capability to look like.

3.1 Current vs desired capability

The research revealed a gap between where ESG capability stands today and where stakeholders want it to be across the QCMI. Respondents saw the current capability as *Basic*, but there's strong desire across stakeholder groups and regions for the QCMI to demonstrate *Leading* ESG capability.

As shown in **Figure 3**, survey results reveal a consistent view of current ESG capability across the four maturity levels. Across stakeholder groups, perceptions are largely aligned, with only slight differences between industry and community. Industry is marginally more positive about current capability – as evident when reviewing *Limited* and *Good* results. Overall, survey respondents indicated ESG capability is perceived as *Basic*.

However, on average, QCMI stakeholders desire ESG capability that can be perceived as being between *Good* and *Leading*. Comparatively, over 40% of respondents from all four stakeholder groups desire *Leading*. Most notably, 68% of government (federal, state, local) respondents indicated they desire *Leading*, with nearly half of community respondents sharing this sentiment.

During other phases of the research, results confirmed the survey findings. Interview participants, who are senior leaders selected due to their experience within the sector, perceive current ESG capability as *Basic*, but desire *Leading*. Across workshop attendees, who are community members involved in or impacted by the sector, overall results mirrored survey results.

⁴ A baseline is an initial recording of data that provides insights into certain geographic or demographic cohorts that can later be compared or measured against.

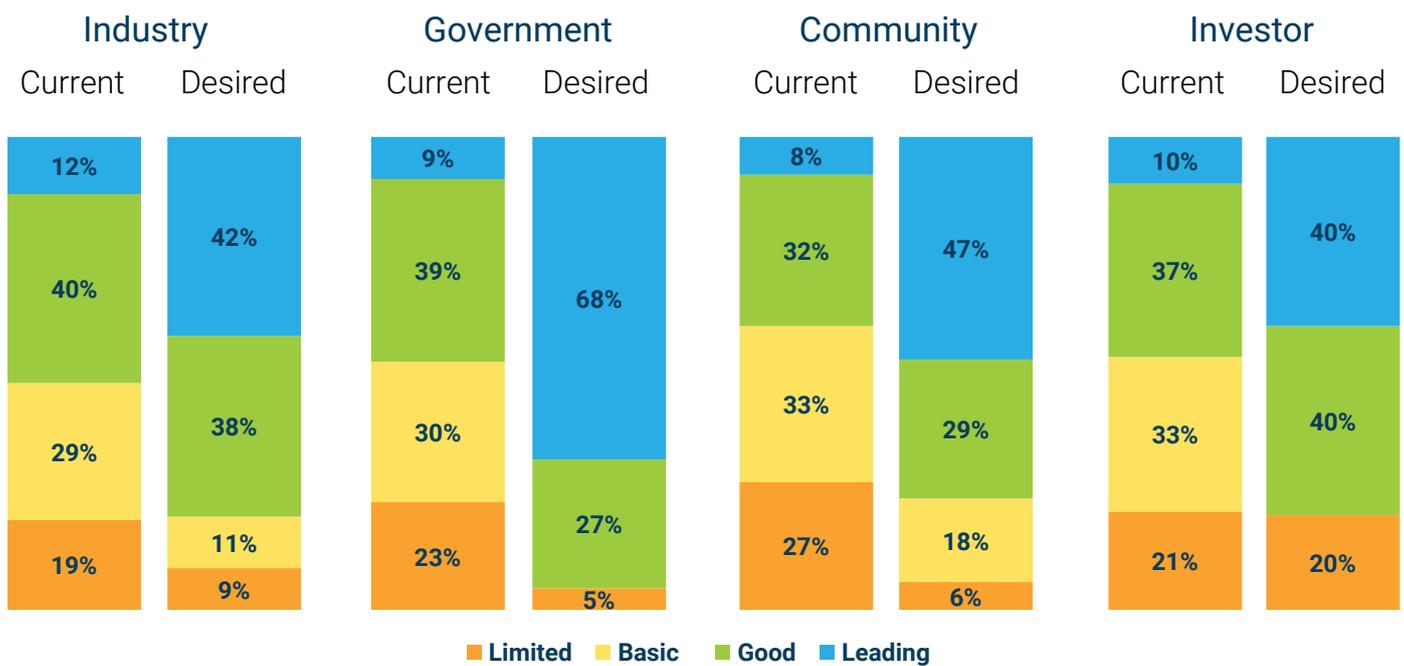


Figure 3: Current vs desired ESG capability, survey results by stakeholder group

Additional insights on the perception of ESG capability:

Regional stakeholders see ESG more positively. People in mining regions rated ESG capability slightly higher than those in Brisbane. This likely reflects their closer connection to mining operations and ESG efforts on the ground.

Larger organisations lead the way. Bigger mining companies with mature systems and governance structures are seen as stronger in ESG performance—especially in regulatory compliance and leadership commitment. Smaller operators and explorers are not lacking intent, but they often don't have the resources to embed strong ESG practices. These groups need more targeted support to build ESG capability.

3.2 How ESG capability is perceived

To understand how ESG capability is perceived across the QCMI, 16 ESG themes common across the resources sector were assessed to determine a capability baseline. To ensure consistency survey respondents were asked to use an adapted version of the International Council on Mining and Metals (ICMM) Maturity Framework (**Figure 4**). They could also select *N/A* if a theme was not applicable or don't know if they were unsure. Respondents were also given definitions of the 16 ESG themes (please refer to **6.0 Glossary**) and asked to evaluate current capability using the ICMM Maturity Framework. **Figure 5** presents how survey respondents perceive current capability across the 16 ESG themes.

Level	Descriptor	Definition
0	N/A	Some themes will not be applicable or possible for some organisations.
1	Limited	Limited progress or integration of the theme at the organisation level or early in the development cycle.
2	Basic	The organisation has a basic understanding of the theme and at a minimum is in compliance with jurisdictional regulatory requirements.
3	Good	The organisation meets the performance expectations of the host community and is aligned with international good practice.
4	Leading	The organisation is demonstrating leading practice through innovative processes and approaches for managing the theme.

Figure 4: Assessment framework adapted from the ICMM Maturity Framework 2022

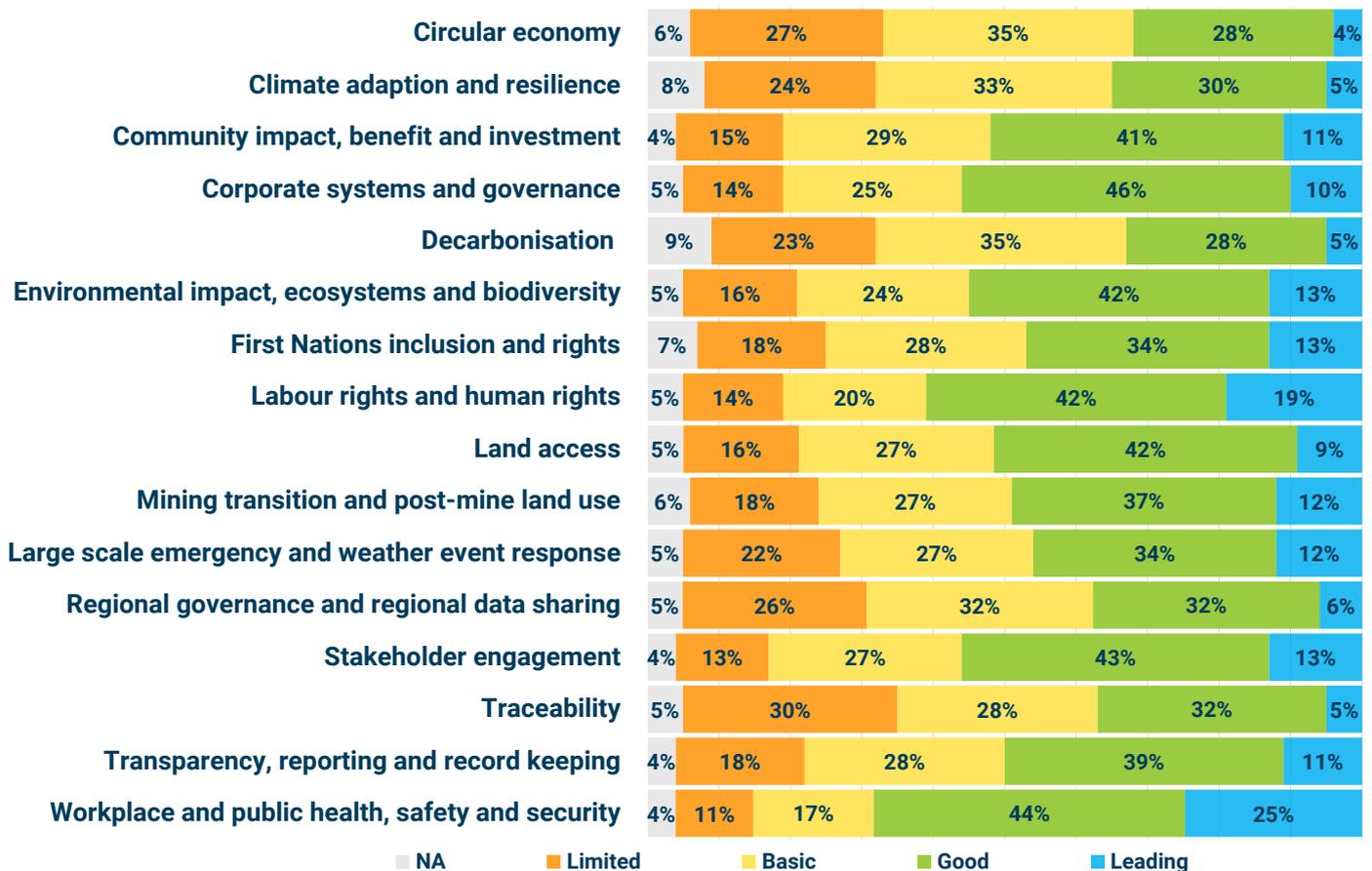


Figure 5: The perception of QCM capability across ESG themes

Insights on ESG themes across the QCM

Current capability across the 16 ESG themes findings revealed that newer and emerging ESG themes, such as circular economy, traceability, decarbonisation, climate adaptation, and regional governance are perceived as demonstrating lower capability on average and a greater percentage of *Limited* capability across the sector, with 30% of respondents indicating uncertainty or *Limited* awareness of how to apply ESG in practice.

Within the middle of the results are emergency and weather event response, transparency and reporting, and post-mining planning. ESG themes related to First Nations inclusion, land access, and community benefit demonstrated slightly better capability, suggesting adequate capability but room for improvement.

Stronger capability is seen across more established, mature themes such as corporate systems and governance, environmental management, and stakeholder engagement. Labour rights and workplace health and safety are recognised as the QCMI's most capable themes.

Analysis of the ESG themes rated as leading highlights the strong influence of regulation. As shown in **Figure 6** the QCMI performs well in compliance-driven areas such as workplace safety and labour rights – the most highly regulated themes.

To the contrary and evident in **Figure 7**, the QCMI is less prepared to meet emerging investor and market expectations. Themes such as traceability and circular economy, rated the weakest, tend to be less regulated and less embedded in organisational culture.

Overall, the results suggest that while traditional, compliance-driven ESG areas are well embedded, emerging themes require greater focus, investment, and understanding to reach the same level of maturity.

Importantly, this does not suggest additional regulation is the solution. The complexity of regulatory frameworks was identified as a key barrier to building ESG capability.

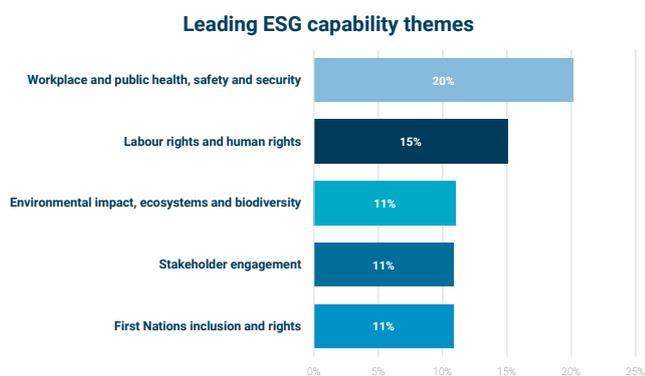


Figure 6: ESG themes perceived as leading within the QCMI

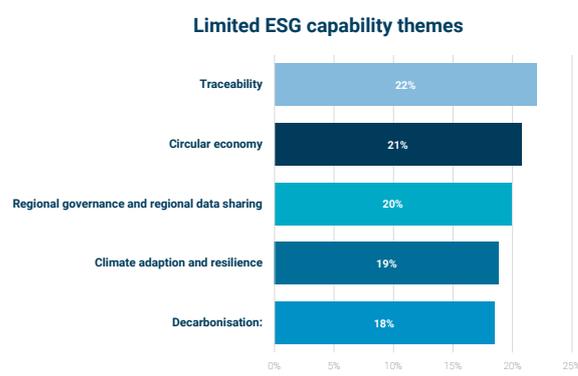


Figure 7: ESG themes perceived as limited within the QCMI

Additional insights include:

Stakeholder engagement divides opinion. Some operators are recognised for genuine, early engagement that exceeds requirements - but this isn't consistent yet. Communities see engagement as vital to real impact, and ongoing dialogue is key to maintaining trust and linking mining operations with social outcomes.

Embedding First Nations perspectives and voices. While many companies aim to involve First Nations communities, local perspectives suggest these efforts often feel tokenistic. Trust will grow only from genuine interactions and recognising the value gained through community-led participation.

Transparency is valued but must improve. Stakeholders appreciate current reporting efforts, yet many say information still isn't clear, accessible, or accountable enough to truly meet expectations.

3.3 Challenges to ESG capability

Participants identified several key challenges: a lack of awareness about the business case that supports ESG, uneven distribution of benefits to communities, and limited transparency in reporting. Stakeholders also highlighted the need for stronger sustainability expertise and clearer, less complex regulatory frameworks. Many agreed that deeper, more consistent community engagement from both industry and government is essential for achieving long-term shared benefits.

4.0 Opportunities for ESG capability uplift

To support the development of capability, participants identified their priority ESG themes, the types of support needed, and preferred learning approaches.

4.1 ESG capability priorities

Priority themes were largely consistent throughout the consultation (**Figure 8**) and across Queensland, including regional areas. Four key ESG capability priorities emerged:

1. Community, impact, benefit, and investment
2. Environmental impact, ecosystems, and biodiversity
3. Mining transition and post-mine land use
4. Circular economy.

These priorities closely align with the findings from regional workshops. For example, Julia Creek emphasised social infrastructure; Mount Isa focused on community impact, benefits and investment, and First Nations pathways; while Mackay highlighted the circular economy.

This alignment shows that stakeholders across the state are increasingly united around key sustainability issues - underscoring the importance of targeted, regionally responsive strategies to improve capability and deliver shared outcomes.

There are a number of common threads. Although ESG priorities vary across regions, all stakeholder groups agree that lasting, community-based outcomes are essential. Ensuring that ESG initiatives deliver tangible, enduring benefits remains a unifying goal across the sector.

Rank	Industry	Government	Community	Investor
1	Community impact, benefit and investment	Environmental impact, ecosystems and biodiversity	Environmental impact, ecosystems and biodiversity	Climate adaption and resilience
2	Environmental impact, ecosystems and biodiversity	Community impact, benefit and investment	First Nations inclusion and rights	Community impact, benefit and investment
3	Mining transition and post mine land use	Circular economy	Climate adaption and resilience	Transparency, reporting and record keeping
4	Circular economy	Mining transition and post mine land use	Community impact, benefit and investment	Corporate systems and governance
5	Decarbonisation	Regional governance and regional data sharing	Mining transition and post mine land use	Environmental impact, ecosystems and biodiversity

Figure 8: Top five priorities for ESG capability uplift, survey results by stakeholder group

4.2 Learnings from the Regions

Regional workshops in Julia Creek, Mount Isa, Cairns/FNQ, and Mackay ensured local voices directly informed the assessment of the QCMI and accounted for regional priorities. While each region faced its own distinct challenges, all emphasised the importance of improved community planning, stronger governance, and ensuring lasting benefits from resource development.

- **Julia Creek:** Discussions centred on responsible resource management, environmental care, and ensuring tangible community benefits. Participants identified challenges around poor planning, limited local services, and uneven benefit sharing. Opportunities included strengthening infrastructure, generating long-term benefits, and developing tailored engagement initiatives like community induction programs.
- **Mount Isa:** Key priorities identified were post-mine land use, circular economy opportunities, First Nations inclusion, and greater transparency. Participants emphasised the need for fairer royalty distribution, stronger governance, and better collaboration to overcome silos and promote regional diversification.
- **Cairns/Far North Queensland:** Participants emphasised environmental and community impacts, First Nations participation, and proactive planning for mining legacies. Challenges such as governance gaps, high costs, limited planning, and reliance on fly-in-fly-out (FIFO) workers were noted. Opportunities focused on improving transparency and governance, enhancing regional planning, reforming policy, developing local skills, and building shared value to earn and maintain social licence.
- **Mackay:** Key themes emphasised long-term community benefits, accountability in post-mine land use, and alignment with circular economy principles. Challenges included poor communication, planning gaps, and regulatory complexity. Opportunities focused on cross-sector collaboration, stronger governance, fostering innovation, and learning from international best practice.

There is strong agreement across all regions – consistent with survey findings – that ESG leadership must be grounded in local values and deliver tangible, practical outcomes. Community impact, benefits, and investment were consistently identified as top priorities, underscoring the need for meaningful and lasting results for host communities.

Participants expressed a clear desire to strengthen ESG capability with community benefit at its core. Key barriers include limited ESG knowledge, weak communication, and fragmented leadership. Better planning and coordination are needed. Stakeholders frequently raised poor communication, weak planning, and fragmented governance as persistent challenges. Many identified the need for a dedicated regional ‘conciierge’ function – with the authority to coordinate efforts, share knowledge, and drive collaboration – to help deliver stronger, more connected ESG outcomes. Reliable infrastructure was also identified as essential for sustainable regional growth.

4.3 Focus areas for ESG capability uplift

Participants were asked to identify what ESG capability uplift should focus on. Responses ranged from practical initiatives - such as workshops, corporate shadowing, training programs, management plans, awareness campaigns, and online information hubs - to broader priorities like developing ESG strategies and improving knowledge sharing.

These insights were consolidated into five key focus areas, as listed below.

- 1. Building ESG knowledge and practices** – helping people understand what strong ESG performance looks like and how to apply it in practice.
- 2. Mining and regulation familiarisation** – improving stakeholder understanding of mining processes and the regulatory frameworks that shape exploration and operations.
- 3. Fostering community shared value approaches** – ensuring ESG activities deliver mutual benefits for both industry and communities.
- 4. Enhancing governance and transparency** – strengthening how decisions are made, communicated, and held accountable.
- 5. Improving stakeholder engagement and communication** – making engagement more inclusive, continuous, and meaningful.

Additional insights on ESG capability uplift included:

Education and resources are critical: Participants highlighted a shortage of skilled ESG professionals and significant gaps in training. Industry representatives emphasised the need for role-specific, region-specific, and experience-appropriate learning to better support effective decision-making.

“To improve QCMI capability, it is essential to enhance industry-wide ESG awareness, provide targeted training programs” - Mining association respondent

“Education and targeted awareness programs of ESG practices, case studies, systems and processes.” - Both mining operator and explorer respondent

Community benefit is the common thread: Although ESG priorities vary across regions, all stakeholder groups agree that lasting, community-based outcomes are essential. Ensuring that ESG initiatives deliver tangible, enduring benefits remains a unifying goal across the sector.

Communities want legacy, not just profit: Communities are calling for long-term planning, respect for Country, and outcomes that extend beyond compliance - building legacies that create meaningful, intergenerational value rather than short-term gains.

“Initiatives that drive impact and fruitful investment results that are benefiting to stakeholders and have social return on investment” - Consultant/service provider respondent

Limited ESG knowledge holds communities back: During regional workshops, community members reported that they lack the knowledge and confidence to engage meaningfully in ESG-related planning or decision-making. However, there is a clear desire to learn, participate, and play a more active role in shaping ESG outcomes.

Data and transparency drive innovation: Stakeholders linked strong data collection and transparent feedback loops to ongoing innovation and improvement. They emphasised the importance of understanding what works, what doesn't, and sharing these learnings across the sector to build collective capability.

“Industry engagement, best practice sharing and learning, and collaboration with stakeholders” - Government respondent

A trusted source for accessing ESG knowledge is missing: Stakeholders noted the absence of a central, reliable hub for ESG information. They mentioned challenges and uncertainty identifying credible examples of best practice or clear guidance on where to start.

“QCOMI ESG Hub with lots of resources, courses, people to get advice from etc” - Mining operator respondent

4.4 Preferred delivery methods for ESG capability uplift

Stakeholders consistently emphasised that ESG capability development should be practical and experience driven. As demonstrated in **Figure 9**, people prefer learning through real-world examples, peer-to-peer exchange, and hands-on activities. These approaches build confidence, encourage collaboration, and foster shared responsibility by revealing what succeeds, what fails, and the lessons behind both.

Stakeholders emphasised the importance of creating a central knowledge hub and improving transparency. Open access to data, case studies, and best practice examples was seen as critical to supporting innovation, collaboration, and more informed decision-making.

Preferred Learning Formats for ESG Capability Uplift

1. Case studies
2. Face-to-face communication
3. Peer-to-peer learning formats
4. Conferences
5. Central information hubs

Figure 9: Preferred learning formats for ESG capability uplift from across the QCOMI

The preferred learning formats of stakeholder groups associated with the QCOMI were also assessed to determine what ESG capability uplift initiatives would best support each of these groups.

Figure 10 displays the preferred learning formats for mining operators, explorers, and investors.

Stakeholder groups	Preferred learning formats		
Mining operators	Peer-to-peer	Face-to-face	Info hub
Mining explorers	Conference	Info hub	Handbook
Investors	Handbook	Info hub	Workshop

Figure 10: Preferred learning formats for community, government, and mining operators

5.0 Strategies to support ESG capability uplift

Seven practical, stakeholder-driven strategies (**Figure 11**) have been identified to strengthen ESG capability across the QCMI. Together, these seven strategies form a practical, evidence-based framework to support ESG capability uplift across the QCMI. Some strategies focus on strengthening the overall evidence base to inform future action, while others aim to deliver practical tools, clear guidance, and collaborative platforms that directly enhance ESG knowledge and practice across the sector.

Category	Need	Strategy	Description	Targeted stakeholder
Planning and content	For a clear understanding of what is already being done and where the gaps remain.	Gap analysis and content mapping.	Create a consolidated map to identify gaps, reduce duplication, and support other uplift strategies.	Mining industry, government.
	For ESG planning that reflects local contexts, addressing specific community needs and opportunities.	Regional priorities mapping.	Aligns regional insights to tailored ESG actions and capability efforts for each area.	Government, community.
Information and learning tools	For a centralised, reliable source of ESG information that is easily accessible and trusted.	Information hub.	Provides a central, online hub with frameworks, case studies and guidance.	Mining industry, government, community, investors.
	For clearer, role-specific guidance and practical, real-world examples that people can learn from.	ESG handbook/guidance factsheet.	Offers practical "how-to" advice and examples on targeted ESG gaps.	Mining industry, investors, and Community.
	For comprehensive ESG training that covers missing topics and provides a clear, structured path for upskilling.	Competency descriptions and training index.	Matches training to ESG themes and identifies skills to improve capability.	Mining industry.
	For capability-building efforts that are tailored to the diverse needs and preferences of different stakeholders.	Integrated capability uplift matrix.	Links stakeholders to learning topics and methods that work best for them.	Mining industry, government.
Stakeholder coordination	For stronger collaboration and greater community involvement in planning processes.	Regional ESG capability forums.	Co-designed education forums for ESG capability uplift, transparency and benefit maximisation.	Government, community.

Figure 11: Seven strategies to support capability uplift within the QCMI

5.1 Initiatives being delivered to support ESG capability uplift

Aligned with the ESG capability uplift strategies informed by the primary data, AusIMM is delivering ESG capability uplift mechanisms and initiatives to support uplift across the QCMI. Most notably, AusIMM is delivering an information hub as a central repository for ESG content relevant to the critical mineral sector. The hub will feature content from across the QCMI and beyond - showcasing the great work that has been and is being conducted across the sector and providing Queensland's stakeholders and regions with access to information.

6.0 Glossary

- **Circular economy** - Minimising waste, maximising resource use, and creating a closed-loop system where products, materials, and resources are reused, repaired, refurbished, and recycled instead of being discarded after a single use.
- **Climate adaptation and resilience** - An organisation's approach to understanding, planning for, and managing climate-related risk, impacts, and opportunities.
- **Community impact, benefit and investment** - Outcomes and contributions that explorers, projects, operations or closed sites have on the surrounding communities.
- **Corporate systems and governance** - Frameworks, processes, and structures that guide and manage the operations of a corporation in relation to ESG matters, ensuring that it is run ethically, legally, and efficiently. Ensuring governance aligns with the interests of stakeholders.
- **Decarbonisation** - Understanding and reducing greenhouse gas emissions caused by operations and their value chains.
- **Environmental impact, ecosystems and biodiversity** - How an organisation identifies, minimises or positively enhances their impact on the environment.
- **First Nations inclusion and rights** - The recognition, respect, and promotion of the rights, cultures, and participation of First Nations peoples in business policies, processes and procedures. Ensuring that First Nations communities are included in decision-making processes that affect their lands, cultures, and ways of life.
- **Labour Rights and Human Rights** - The incorporation of workforce voices and rights throughout the organisation's value chain.
- **Land access** - The processes by which mining companies obtain permission to explore, develop, or extract minerals or resources from land.
- **Mining transition and post mining land use** - Processes and strategies involved in managing land after mining activities have ceased. Ensuring that the land is rehabilitated, repurposed, and used in a sustainable way, benefiting both the local community and environment.
- **Regional governance and regional data sharing** - Management, decision-making, and collaboration at a regional level to ensure maximised and multi-user application of resources, infrastructure, assets and information.

- **Stakeholder engagement** - Process of actively involving individuals, groups, or organisations that have an interest in or are affected by a project, decision, or business activity.
- **Traceability** - The process of tracking the journey of minerals from their extraction through their entire supply chain, including processing, trading, and eventual end use. Ensuring transparency, accountability, and sustainability in the mineral supply chain.
- **Transparency, reporting and record keeping** - Providing ESG information to stakeholders about an organisation's activities or performance. Adhering to applicable sustainability reporting standards and ensuring the accuracy, accessibility and security of data.
- **Workplace and public health, safety and security** - Practices, policies, and strategies designed to ensure the wellbeing of employees and community, prevent accidents, and protect organisations from risk. Safeguarding the workforce, assets and communities from external threats.
- **Emergency and weather event response** - The coordinated efforts and strategies implemented by organisations, governments, and communities to prepare for, manage, and mitigate the impact of emergencies and extreme weather events.

7.0 Acknowledgement

AusIMM thanks the members of the ESG Advisory Panel (the Panel) for their valuable contributions. Formed through the partnership between AusIMM and the Queensland Government, the Panel has played an important role in supporting the goals of the Queensland Critical Minerals Strategy.

By sharing insights, reviewing research, and offering practical advice, the Panel has helped build understanding of ESG opportunities and challenges in Queensland's critical minerals sector. Their input has guided the development of recommendations to strengthen sustainability, industry capability, and collaboration across the sector.

We'd like to hear from you

Have feedback or questions?

We welcome your input. Please email ESGCapability@ausimm.com with 'Feedback' in the subject line.

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