



ENVIRONMENTAL SOCIAL GOVERNANCE

Disclosure Report QEM Limited - 30 June 2024

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ASX:QEM



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ASX Announcement

19 July 2024

QEM Annual ESG Report at 30 June 2024

Highlights:

- QEM completed first year of offsetting unavoidable Greenhouse Gas (GHG) emissions following second annual inventory assessment conducted by Carbonhalo.
- Completed inaugural stakeholder Materiality Assessment with updated ESG focus areas (refer diagram below).
- QEM became a WISER (Women In Sustainable Energy & Resources) Inc. Bronze Partner.

Critical minerals explorer and developer QEM Limited (ASX: QEM) (“**QEM**” or “**Company**”) is pleased to release its Annual ESG Report and tenth consecutive Quarterly ESG Report using Socialsuite’s ESG Go platform to monitor and disclose the Company’s ESG progress and initiatives.

QEM’s initial baseline ESG report was released to the market at the end of the March quarter 2022 (see ASX announcement dated 31 March 2022). Progress updates to QEM’s ESG disclosures on the 21-core metrics set by the World Economic Forum (WEF) were delivered in each of QEM’s Quarterly Activities Reports since then (see ASX announcements dated 26 July 2022, 27 October 2022, 30 January 2023, 31 March 2023, 27 July 2023, 26th Oct 2023, 31st Jan 2024 and 30th Apr 2024). The metrics QEM reports on form part of WEF’s standardised and globally recognised Stakeholder Capitalism Metrics ESG framework, with the Company’s current ESG focus highlighted overpage.

QEM Managing Director Gavin Loyden stated, “Our sustainability goals are running in tandem with the development of the Julia Creek Project, assisted by our quarterly ESG reporting. We are progressively improving the Company’s ESG integration and data quality.”

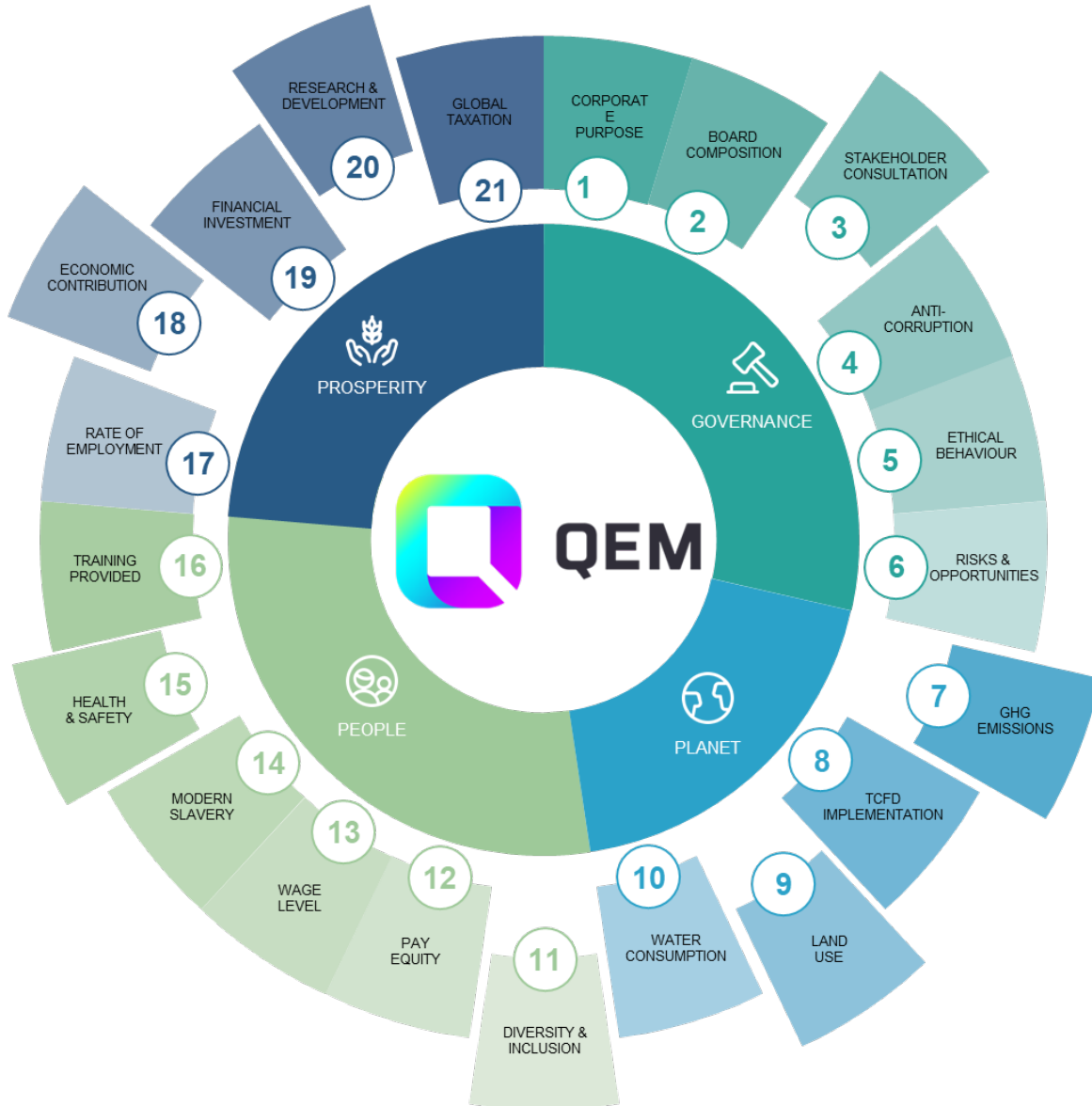
“We’ve learnt a lot since early 2022 when we began reporting on the World Economic Forum’s 21 core metrics.

“Our key goal remains consistent over time; to allow investors and other stakeholders to see how QEM’s ESG progress is aligned to the Company’s goal to help meet increasing global demand for Vanadium for safe, long duration energy storage systems,” said Mr Loyden.

QEM’s ESG highlights for this quarter follow, including a 12-month ESG metric status comparison and QEM’s full ESG Disclosure and Materiality Reports, each reviewed on completeness by Socialsuite.



Image 1: QEM has adopted the WEF Stakeholder Capitalism Metrics ESG Framework (below).



QUARTERLY HIGHLIGHTS

PLANET - GHG EMISSIONS

In Q1 2023, QEM engaged Carbonhalo to conduct our inaugural third-party verified GHG emissions inventory assessment for FY 2022 (12 months ending 30 June 2022). This initial assessment recorded total GHG emissions of 146.80 tonnes of CO₂ equivalent (tCO₂e). A follow-up assessment for FY 2023 showed our business activity had returned a reduction in emissions to 116.15 tCO₂e.

QEM uses these assessments as one of the tools to track progress towards a low-carbon footprint and achieving our sustainability objectives. To further our commitment, QEM has also offset its unavoidable emissions through verified carbon credits from projects focused on renewable energy, technology-based emissions reduction, habitat regeneration, and waste capture. These offsets are sourced from Australian ACCUs and International VERRA/UNFCC projects.



QEM is also dedicated to fostering sustainability awareness and engagement among our employees, clients, and stakeholders, encouraging collective participation in our carbon reduction initiatives by sharing with stakeholders our emissions reduction plans. We have also committed to reassess our emissions annually, with the next evaluation underway for the end of FY 2024 through Carbonhalo.

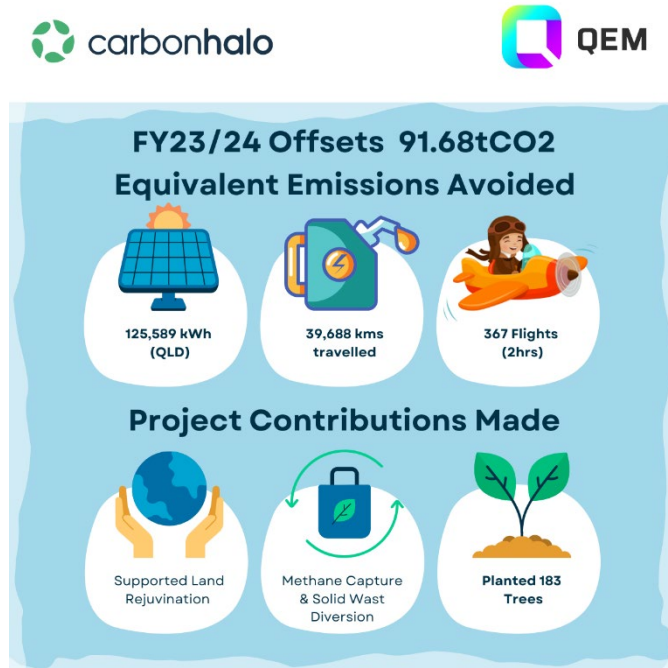


Image 2: QEM's unavoidable emissions offsets sourced from Australian ACCUs and International VERRA/UNFCC projects

PLANET – WATER CONSUMPTION

ATC Williams, an international consulting engineering company that specialises in design and management of tailing storage facilities and their associated tailings dewatering and water distribution infrastructure, was initially engaged to provide a preliminary assessment of the feasibility of a range of potential water supply options for the Julia Creek Project. Since October 2022, QEM has continued to work with ATC Williams to conduct the monthly groundwater and surface water quality monitoring program. This monitoring program commenced in November 2022 and continued monthly for over 12 months to characterise environmental baseline conditions and inform the engineering design for tailings storage facilities. The water monitoring is now occurring at quarterly intervals.

GOVERNANCE – MATERIALITY & STAKEHOLDER ENGAGEMENT

QEM is committed to openly consulting with - and communicating our progress to - internal and external stakeholders, including potential investors. We understand the importance of maintaining transparency in the way the Company operates so our stakeholders and investors understand our goals and the progress we are making throughout the Company and may be actively involved throughout the process.



QEM's ESG Materiality Assessment was distributed to nearly 100 stakeholders in Q3 FY23/24 and the Company received about a 25% rate of return, providing valuable feedback on QEM and the Julia Creek Project through a sustainability lens. An analysis of material issues captured and feedback of material issues to stakeholders occurred in Q4 FY23/24. The survey results were extremely aligned with our current focus but will help us prioritise and improve on material ESG matters. Importantly, our stakeholders placed a priority on the key areas that we also see as vital to our company: Good health and well-being, affordable and clean energy, reduced inequalities, sustainable cities and communities, decent work and economic growth, and life on land.

PROSPERITY – ECONOMIC CONTRIBUTION

Investment in our community is a high priority for QEM. QEM contributes to the region with work packages being assigned to local contractors in Julia Creek and the North West Minerals Province, for work including fabrication, plant hire, civil site works, building renovations, and preparation for QEM's drilling campaigns and general property maintenance.

QEM also seeks to support the greater communities in which we operate, with a particular focus on youth and women's development, education and sport. QEM proudly sponsors the Julia Creek Saints junior girls and boys and senior rugby league teams, as well as the annual Town vs Country Women's Netball, Juniors and Seniors' Rugby League.

QEM is a major sponsor each year of the following McKinlay Shire events:

- Julia Creek Dirt N Dust Festival held in April.
- Saxby Roundup weekend in June/July
- Sedan Dip in August
- Big Weekend in September/October
- Beach Races in November

In 2024, QEM became a WISER (Women In Sustainable Energy & Resources) Inc. Bronze Partner & sponsored the WISER International Women's Day Event held in Brisbane in March 2024.



Progress

- P In progress
- G Gap
- C Completed
- N Not applicable

Period Comparison (Period 5 vs 9)

Governance		Period 5 (Apr to Jun 2023)		Period 9 (Apr to Jun 2024)	
Code	Description	Status	Progress (A1-A5)	Status	Progress (A1-A5)
GOVERNING PURPOSE					
GO-01-C1	Setting purpose	VERIFIED	C C C C C	REPORTED	C C C C C
QUALITY OF GOVERNING BODY					
GO-02-C1	Governance body composition	VERIFIED	C C C P P	VERIFIED	C P C P C
STAKEHOLDER ENGAGEMENT					
GO-03-C1	Material issues impacting stakeholders	VERIFIED	P C C C C	REPORTED	C C C P C
ETHICAL BEHAVIOUR					
GO-04-C1	Anti-corruption practices	VERIFIED	C C C	VERIFIED	C C C
GO-04-C2	Mechanisms to protect ethical behaviour	VERIFIED	C C	VERIFIED	C C
RISK AND OPPORTUNITY OVERSIGHT					
GO-05-C1	Integrating risk and opportunity into business process	VERIFIED	C C C P C	VERIFIED	C C P C C
Planet		Period 5 (Apr to Jun 2023)		Period 9 (Apr to Jun 2024)	
Code	Description	Status	Progress (A1-A5)	Status	Progress (A1-A5)
CLIMATE CHANGE					
PL-01-C1	GHG emissions	VERIFIED	C P P	VERIFIED	C C C
PL-01-C2	TCFD implementation	VERIFIED	P P P	VERIFIED	P P P
NATURE LOSS					
PL-02-C1	Land use and key biodiversity areas	VERIFIED	N C N N N	REPORTED	N C N N N
FRESHWATER AVAILABILITY					
PL-03-C1	Water consumption	VERIFIED	P P P P P	REPORTED	P P P P P
People		Period 5 (Apr to Jun 2023)		Period 9 (Apr to Jun 2024)	
Code	Description	Status	Progress (A1-A5)	Status	Progress (A1-A5)
DIGNITY AND EQUALITY					
PE-01-C1	Diversity and inclusion	VERIFIED	C P C C C	VERIFIED	C C C C C
PE-01-C2	Pay equality	VERIFIED	P P P P	VERIFIED	C G P P
PE-01-C3	Wage level	VERIFIED	P C	VERIFIED	C G
PE-01-C4	Child, forced or compulsory labour	VERIFIED	P	VERIFIED	P
HEALTH AND WELL-BEING					
PE-02-C1	Health and safety	VERIFIED	C P	VERIFIED	C P
SKILLS FOR THE FUTURE					
PE-03-C1	Training provided	VERIFIED	C P	REPORTED	P C
Prosperity		Period 5 (Apr to Jun 2023)		Period 9 (Apr to Jun 2024)	
Code	Description	Status	Progress (A1-A5)	Status	Progress (A1-A5)
EMPLOYMENT AND WEALTH GENERATION					
PR-01-C1	Rate of employment	VERIFIED	P P	REPORTED	C C
PR-01-C2	Economic contribution	VERIFIED	C C	REPORTED	C C
PR-01-C3	Financial investment contribution	VERIFIED	N C	VERIFIED	C N
INNOVATION OF BETTER PRODUCTS AND SERVICES					
PR-02-C1	Total R&D expenses	VERIFIED	C	REPORTED	C
COMMUNITY AND SOCIAL VITALITY					
PR-03-C1	Total tax paid	VERIFIED	C	VERIFIED	C

*N.B.: Metric Status 'Verified' is reviewed on completeness by Socialsuite, not a third-party auditor
 ESG Report Data Disclaimer
 QEM Limited | Period Comparison | Published on 17 Jul 2024





QEM
ASX : QEM

ASX Announcement

19 July 2024

ENDS

This announcement was authorised for release on the ASX by the Board of QEM Limited.

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ABOUT QEM

QEM Limited (ASX: QEM) is a publicly listed company which is focused on the exploration and development of its flagship Julia Creek Project, covering 250km² in the Julia Creek area of North Western Queensland.

The Julia Creek vanadium and oil shale project is a unique world class resource with the potential to utilise and deliver innovative and sustainable energy solutions, through the production of energy fuels and vanadium pentoxide. QEM strives to become a leading producer of liquid fuels and in response to a global vanadium deficit, also aims to become a global supplier of high-quality vanadium pentoxide, to both the nascent energy storage sector and the Australian steel industry.

This globally significant JORC (2012) Mineral Resource of 2,870 Mt @ 0.31% V₂O₅ is one of the single largest ASX listed vanadium resources and represents a significant opportunity for development. The resource is comprised of 461Mt @ 0.28% V₂O₅ in the Indicated category and 2,406Mt @ 0.31% V₂O₅ in the Inferred category, with the added benefit of a contingent (SPE-PRMS 2018) in-situ oil resource of 6.3 MMbbls of Oil equivalent in the 1C category, 94MMbbls in the 2C category, and 654MMbbls in the 3C category, contained within the same ore body.

The tenements form part of the vast Toolebuc Formation, which is recognised as one of the largest deposits of vanadium and oil shale in the world and located less than 6km east of the township of Julia Creek. In close proximity to all major infrastructure and services, the project is intersected by the main infrastructure corridor of the Flinders Highway and Great Northern Railway, connecting Mt Isa to Townsville.

*The information in this announcement that relates to the mineral resource and contingent resource estimates for the Company's Julia Creek Project was first reported by the Company in its IPO prospectus dated 20 August 2018 and supplementary prospectus dated 12 September 2018 (together, the "Prospectus") and the subsequent resource upgrade announcements ("Resource Upgrade") dated 14 October 2019, 7 April 2022 and 5 March 2024. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus and Resource Upgrade, and in the case of estimates of Mineral Resources and Contingent Resources, that all material assumptions and technical parameters underpinning the estimates in the Prospectus and Resource Upgrade continue to apply and have not materially changed.

Environmental, Social, and Governance (ESG)

QEM Limited (“QEM” or the “Company”) is committed to the principles of ESG as the most effective means of creating long-term enterprise value and addressing the societal priorities enshrined in the United Nations’ Sustainable Development Goals. In March 2022, we made a commitment to commence reporting on the Environmental, Social, and Governance (ESG) disclosures of the [Stakeholder Capitalism Metrics \(SCM\) of the World Economic Forum \(WEF\)](#).

We are in the process of making ESG disclosures in the form of a set of universal, comparable ESG metrics focused on people, planet, prosperity and principles of governance that organisations can report on regardless of industry or region. This table represents our [reporting against the 21 core metrics](#), being reviewed quarterly and updated periodically.

We use this universal ESG framework to align our mainstream reporting on performance against ESG indicators. By integrating ESG metrics into our governance, business strategy, and performance management process, we diligently consider all pertinent risks and opportunities in running our business. We continue to look for opportunities for further transparency on the topics which are material to our business.

To track our disclosure progress and demonstrate our sustainability performance against the WEF SCM framework we utilise [Socialsuite’s ESG disclosure platform](#). Socialsuite ESG enables us to demonstrate our ongoing commitment to ESG by providing a dedicated solution to track, report, and share our ESG disclosures. With Socialsuite ESG we have started the journey of building robust ESG credentials.

Last updated: 16/7/2024

Governance

GOVERNING PURPOSE

Setting purpose

CODE	TYPE	STATUS	LAST UPDATED
GO-01-C1	Full disclosure	Reported	16 Jul 2024

QEM Limited (ASX:QEM) is focused on the exploration and development of the Julia Creek Project, a unique world class critical minerals resource, with the added potential to utilise innovative and sustainable energy solutions.

QEM's objective with its Vanadium and Oil Resources seeks to help build Australia's sovereign capability:

- Vanadium to meet increasing global demand for Critical Minerals for safe, long duration energy storage systems via vanadium flow batteries, while also playing a key role in decarbonising the steel and construction industry
- Fuel production to assist in providing liquid fuels security and regional supply to local industries (agriculture, mining, transport and defence)

See Also: [About QEM](#)

QUALITY OF GOVERNING BODY

Governance body composition

CODE	TYPE	STATUS	LAST UPDATED
GO-02-C1	Full disclosure	Verified	30 Jun 2024

The QEM Limited Board of Directors has established a corporate governance framework, policies and charters, to support its commitment to the highest standards of corporate governance. To achieve this, QEM's Board has adopted a number of charters and policies which aim to ensure that value is created whilst accountability and controls are commensurate with the risks involved. These policies are in accordance with the recommendations set out in the ASX Corporate Governance Principles and Recommendations – 4th Edition.

Together with the Company's Constitution, a number of charters and policies have been adopted. These include a Diversity Policy which reflects QEM's commitment to building a diverse and skilled team, which the Board strongly believes will lead to continuous improvement in safety, innovation and productivity.

While the QEM Board strongly believes in the benefits of an independent, diverse, and socially inclusive Board, we recognise that we do not currently represent all of these inclusive indicators. We are committed to ensuring greater gender representation, a diverse mix of qualifications, experience and expertise (including ESG competencies), and independence among our Board in the future, and we will work diligently to effect change.

Our Board members' skills, competencies and experience are set out on the Company's website. During Q1 FY22/23, the directors' skills were reviewed, and an ESG-inclusive Board matrix was adopted and placed on the website. This matrix summary of the directors' skills was most recently updated and replaced on the QEM website during Q1 FY23/24.

See Also: [Our Team](#), [Corporate Governance Plan](#)

STAKEHOLDER ENGAGEMENT

Material issues impacting stakeholders

CODE	TYPE	STATUS	LAST UPDATED
GO-03-C1	Full disclosure	Reported	16 Jul 2024

QEM Limited operates in one of the world's richest mineral-producing regions, on Wunumara Aboriginal Lands, six km south-east of Julia Creek in the McKinlay Shire, NW Queensland. Exploration permits totalling 250 sq.km are all situated within the Eastern Resource Development Corridor, the MITEZ corridor and the North West Minerals Province.

Listed on the ASX in 2018, QEM's Board aims to ensure that shareholders are informed of all major developments affecting the Company's state of affairs. All disclosures and announcements made to the ASX are placed on the Company's website.

QEM's community and stakeholder engagement objectives with regards the Julia Creek Project (the Project) are to:

- Raise stakeholder awareness of the Project, and its potential impacts and timelines
- Initiate early engagement to ensure stakeholders have sufficient time to consider the Project's potential impacts and provide input into mitigation strategies
- Understand and address stakeholder concerns, issues, and interests
- Ensure disadvantaged and hard to reach stakeholders and groups are identified and included in community engagement activities
- Identify opportunities to work together with stakeholders to develop strategies that maximise Project benefits and minimise adverse impacts

Since listing, QEM has been very open and active in our local communities, both on the Gold Coast where the Board is based, and in Julia Creek and the surrounding region. A range of engagement and communications tools are currently in use, including but not limited to Face-to-face meetings, Councils' briefings, Government departmental briefings, Community roadshows and public information sessions, Business briefings, Project newsletter and fact sheets, Project email, Regular updates to the Project website, Media releases and Investor presentations and webinars.

The Project has actively engaged with key stakeholders including the local McKinlay Shire Council, the Queensland Departments of Energy, Resources, and State Development, Infrastructure, Local Government and Planning, and the Federal Critical Minerals Office, as well as numerous other Local, State and Commonwealth Government representatives.

QEM is an active member of industry groups Vanitec (the global vanadium association), the Association of Mining and Exploration Companies (AMEC), Mount Isa To Townsville Economic Zone (MITEZ), Townsville Enterprise (TEL), and the Advanced Materials Battery Council (AMBC), in order to maximise the Project's community engagement strategy, and support and contribute to the regional development of the NWMP as an emerging vanadium operator.

QEM is committed to openly consulting with - and communicating our progress to - internal and external stakeholders, including potential investors. We understand the importance of maintaining transparency in the way the Company operates so our stakeholders and investors understand our goals and the progress we are making throughout the Company, and may be actively involved throughout the process.

In Q1 FY23/24 the Company undertook the first steps to conduct a Materiality Assessment to identify the most relevant sustainability/ESG issues for QEM. This process weighed the impacts of ESG issues and their importance to QEM, as well as to our key stakeholders (double materiality). At this stage, mapping and grouping of our stakeholders took place.

QEM's ESG Materiality Assessment was distributed in Q3 FY23/24 and we received about a 25% rate of return, providing valuable feedback on our company and our Julia Creek Project through a sustainability lens. The survey results were extremely aligned with our current focus but will help us prioritise and improve on material ESG matters. Importantly, our stakeholders placed a priority on the key areas that we also see as vital to our company: Good health and well-being, affordable and clean energy, reduced inequalities, sustainable cities and communities, decent work and economic growth, and life on land.

See Also: [Project Update Flyers](#), [QEM ESG Dashboard](#)

ETHICAL BEHAVIOUR

Anti-corruption practices

CODE	TYPE	STATUS	LAST UPDATED
GO-04-C1	Full disclosure	Verified	30 Jun 2024

The Company is committed to conducting all of its business activities fairly, honestly with integrity, and in compliance with all applicable laws, rules and regulations. QEM's Board, management and employees are dedicated to high ethical standards and recognise and support the Company's commitment to compliance with these standards.

In particular, the Company is committed to preventing any form of Corruption and Bribery and to upholding all laws relevant to these issues, including the Anti-Corruption Legislation. In order to support this commitment, the Company has adopted this Anti-Bribery and Anti-Corruption Policy (ABC Policy) to ensure that it has effective procedures in place to prevent Corruption and Bribery.

See Also: [Anti-Bribery and Anti-Corruption Policy](#)

RISK AND OPPORTUNITY OVERSIGHT

Integrating risk and opportunity into business process

CODE	TYPE	STATUS	LAST UPDATED
GO-05-C1	Full disclosure	Verified	30 Jun 2024

The Board determines the Company's "risk profile" and is responsible for establishing, overseeing and approving the Company's risk management framework, strategy and policies, internal compliance and internal control.

The Board assists management to determine whether it has any material exposure to environmental or social risks, and if it does, how it manages, or intends to manage, those risks; and where appropriate, benchmark the Company's environmental or social risk profile against its peers.

The Board also considers whether the Company has a material exposure to climate change risk.

See Also: [Risk Management System](#)

ETHICAL BEHAVIOUR

Mechanisms to protect ethical behaviour

CODE	TYPE	STATUS	LAST UPDATED
GO-04-C2	Full disclosure	Verified	30 Jun 2024

Any personnel or stakeholder who believes that a violation of QEM's Anti-Bribery and Anti-Corruption Policy or any laws has been committed, is being committed, or is being planned, is encouraged to report the matter immediately to the Board or the Anti-Bribery Officer.

If anyone is unsure whether a particular act constitutes Bribery, a Facilitation Payment, Secret Commission, Money-laundering or an improper Item of Value, or has any other queries, they should ask the Board or the Anti-Bribery Officer.

The Company prohibits retaliation against anyone reporting such suspicions. Personnel who wish to raise a concern or report another's wrongdoing, or who have refused pressure to either accept or offer a bribe, should not be worried about possible repercussions. The Company encourages openness and will support any Personnel who raises genuine concerns in good faith under this Policy. Further, the Company has a Whistleblower Protection Policy which affords certain protections against reprisal, harassment or demotion for making the report.

See Also: [Whistleblower Protection Policy](#)

Planet

CLIMATE CHANGE

GHG emissions

CODE	TYPE	STATUS	LAST UPDATED
PL-01-C1	Full disclosure	Verified	30 Jun 2024

QEM Limited has reviewed the GHG Protocol Reporting Standards and understands its implications for the planned Julia Creek Vanadium and Oil Shale Project. As the mining project has not yet commenced, we are not at this stage of mining disclosure.

However, as an interim step for a company committed to responsible environmental, social, and governance practices, in Q1 2023 QEM engaged Carbonhalo to conduct an inaugural QEM Greenhouse Gas (GHG) emissions inventory assessment at a third party verified level, for the financial year of 2022 (FY 2022) being the 12 months ending 30 June 2022. A subsequent inventory assessment was undertaken at the end of FY 2023.

In undertaking our inaugural GHG Baseline Assessment, QEM can measure its progress towards our low carbon footprint goal. This step is crucial to quantify our efforts towards achieving the Company's sustainability objectives.

The GHG Baseline Assessment conducted by Carbonhalo identified total GHG emissions of 146.80 tonnes of carbon dioxide equivalent (tCO₂e) for FY22. For FY23, total annual emissions dropped to 116.15t.

Purchased energy or electricity in FY22 was calculated as the second largest emissions component at 22%. The collection of actual electricity consumption has enabled a more accurate calculation bringing the total % of emissions down to 5%.

Going forward, QEM will focus its emissions reduction efforts on activities and areas with the highest emissions, in this case Scope 3 (C3) in which business travel was identified as the top emitter at 59% of QEM's total measurable emissions. QEM is currently engaged in intense stakeholder relations and marketing activities which often require the team's in-person presence. It is anticipated post current project phase, travel requirements will incrementally decline.

QEM is committed to combining our activities in emission reduction with the use of certified offsets. Our total emissions for FY23 of 116.15t is being offset each month (since Sept 2023) and will be reassessed at the end of FY24 through Carbonhalo which provides verified carbon credits that focus on emissions reductions projects across the globe. These offsets are distributed between Australian ACCU's and International VERRA / UNFCCC Offsets, with projects including renewable energy, technology-based emissions reduction, regeneration of natural habitat and capturing of waste.

QEM is also committed to educating and engaging our employees, clients and stakeholders about the importance of sustainability and carbon reduction and encouraging them to support and participate in our efforts.

NATURE LOSS

Land use and key biodiversity areas

CODE	TYPE	STATUS	LAST UPDATED
PL-02-C1	Full disclosure	Reported	16 Jul 2024

Background: In November 2022, Epic Environmental (Epic) issued the Julia Creek Project Ecological Assessment Report (EAR). The scope of the EAR includes a baseline assessment of the ecological values within QEM's tenement. The EAR was developed with information from desktop assessments, and extensive a post wet season flora and fauna field survey and a dry season flora field survey. These surveys were conducted in March 2022 and November 2022 and including regional ecosystem flora surveys, habitat assessments, bird surveys, spotlighting surveys and fauna trapping. Following ecology and flood studies conducted in late 2022, groundwater and surface water quality monitoring has continued on a monthly basis. The monitoring program will continue for a minimum of 12 months to characterise environmental baseline conditions and inform the engineering design for tailings storage facilities.

The EAR is likely to support a future Environmental Impact Assessment under the State Development and Public works Organisation Act 1971 or similar process to support a future Environmental Authority. The EAR may also inform a future significant impact assessment to support a referral under the Environment Protection and Biodiversity Conservation Act 1999.

This ensures that following the removal of mining products, QEM is able to meet its goal to rehabilitate the Project area to the ecological quality and community that existed onsite prior to disturbance or to a standard resembling adjacent ecological communities. Acceptable rehabilitation outcomes will be determined through community consultation, landowner consultation and discussions with local council.

A topographic aerial drone survey of the entire tenement area was conducted in June/July 2022 to baseline the environmental condition of QEM's tenements before any ground is broken on the project.

Cattle grazing currently occurs in the Project area. The agricultural features of the Project area include:

- A stock route reserve within EPM 27057
- No mapped cropping zones
- No mapped Priority Agricultural Areas
- Project area is not located within or adjacent to Strategic Cropping Land
- No mapped Strategic Environmental Areas
- The Project area is mapped as Pasture land – sown pastures, and native pastures on high fertility soils

There are no mapped World Heritage areas, Ramsar protected wetland sites, nationally important wetland sites, State Forests or Nature Refuges within or adjacent to the Project area.

FRESHWATER AVAILABILITY

Water consumption

CODE	TYPE	STATUS	LAST UPDATED
PL-03-C1	Full disclosure	Reported	16 Jul 2024

As the Julia Creek Project is currently at planning stage, QEM Limited does not currently have any water consumption or withdrawal. As the Project progresses, appropriate assessments will take place before implementation.

The Julia Creek Project covers 250 km² and is located approximately 6 km southeast of the township of Julia Creek in northwest Queensland. The western portion of the Project

area is within the Julia Creek catchment and the eastern portion is within the upper catchment of Spellary Creek and Alick Creek (tributaries of the Flinders River).

During operations, the Project is anticipated to need approximately 4,000-6,000 ML of raw water per year. This will be required for a range of purposes, such as ore processing, potable water, dust suppression, tailings management, etc. As the water demand will be largely driven by ore production rates and the tailings disposal method, this volume may change as the project design and production forecast is refined.

ATC Williams, an international consulting engineering company that specialises in design and management of tailing storage facilities and their associated tailings dewatering and water distribution infrastructure, has been engaged to provide a preliminary assessment of the feasibility of a range of potential water supply options for the Project. Since October 2022, QEM has worked with ATC Williams to conduct the monthly groundwater and surface water quality monitoring program. This monitoring program commenced in November 2022 and continued monthly for over 12 months to characterise environmental baseline conditions and inform the engineering design for tailings storage facilities. The water monitoring is now occurring at quarterly intervals.

CLIMATE CHANGE

TCFD implementation

CODE	TYPE	STATUS	LAST UPDATED
PL-01-C2	Partial disclosure	Verified	30 Jun 2024

While the Task Force on Climate-Related Financial Disclosures (TCFD) framework is voluntary in Australia, QEM Limited is investigating what the implementation of the TCFD framework will signify for its flagship and future projects.

People

DIGNITY AND EQUALITY

Diversity and inclusion

CODE	TYPE	STATUS	LAST UPDATED
PE-01-C1	Full disclosure	Verified	30 Jun 2024

Together with the Company's Constitution, a Diversity Policy has been developed which reflects QEM's commitment to building an inclusive, diverse and skilled team, which the Board strongly believes will lead to continuous improvement in safety, innovation and productivity.

Diversity may result from a range of factors including age, gender, ethnicity, cultural background or other personal factors. QEM Limited values the differences between its people and the contribution these differences make to the Company.

QEM is currently in the early stage of its development with relatively few employees but is absolutely committed to employee diversity. QEM's current female to male employee ratio is one to three. The Board of QEM aligns with the Queensland Resources Council's diversity target of 30 percent female participation across the sector by 2026 and is aiming for the same at all levels of the organisation as QEM grows. In terms of ethnicity, 50% of employees identify as Hispanic or Anglo-Indian. The average age of a QEM employee is 46 years.

QEM is committed to providing equal opportunities in respect to employment and employment conditions, including hiring, training and career advancement.

See Also: [Diversity Policy](#)

HEALTH AND WELL-BEING

Health and safety

CODE	TYPE	STATUS	LAST UPDATED
PE-02-C1	Partial disclosure	Verified	30 Jun 2024

QEM Limited is committed to maintaining strong standards of health, safety and labour rights in order to improve employee productivity and operational efficiency and enhance employee well-being.

QEM is currently in the early stage of its development and hence does not currently measure for this indicator.

QEM staff, consultants and contractors operate under the Company's Health and Safety policies and procedures which cover: site inductions, safety training, personal protective equipment, job hazard analysis, working in heat, incident report, emergency response, vehicle pre-start inspection, among others.

QEM policies and procedures are documented and all personnel entering site works within QEM Health and Safety system.

Whenever contractors are engaged to work for QEM, their HSE systems and policies are compared against QEM's to determine their HSE policies and procedures are at a minimum comparable to QEM's.

QEM is currently assessing proposals to audit QEM's HSE system to ensure it is fit for purpose as the Company enters the next project phase.

All relevant safety documentation and reports are archived in QEM's repository of information.

SKILLS FOR THE FUTURE

Training provided

CODE	TYPE	STATUS	LAST UPDATED
PE-03-C1	Partial disclosure	Reported	16 Jul 2024

QEM Limited's workforce diversity strategies include developing programs to develop a broader pool of skilled and experienced senior management and Board candidates,

including workplace development programs, mentoring programs and targeted training and development.

The Company is committed to developing its employees and equipping them with knowledge and skills relevant to the energy transition. In December 2022, a QEM employee completed a Graduate Certificate in Sustainable Energy, supported by the Company.

One employee is currently progressing a Remote Pilot License (RePL) through National Drones.

All QEM employees participated in presentation and media training in 2023.

Two QEM employees attended Leadership Development courses for Managers and Senior Managers during the reporting quarter Q3 FY23/24.

DIGNITY AND EQUALITY

Pay equality

CODE	TYPE	STATUS	LAST UPDATED
PE-01-C2	Full disclosure	Verified	30 Jun 2024

QEM is currently in the early stage of its development with very few employees. However, from the outset, QEM wishes to measure and monitor its gender diversity and related metrics such as pay equality, with a view to bridging the diversity gap, attracting talent and driving long-term competitiveness. The average male's compensation to female's at QEM increased from 137.7% to 150% at the end of FY 23/24, moving the company further away from wage equality.

DIGNITY AND EQUALITY

Wage level

CODE	TYPE	STATUS	LAST UPDATED
PE-01-C3	Full disclosure	Verified	30 Jun 2024

QEM Limited is currently in the early stage of its development with too few employees to provide any meaningful wage level data by gender.

The employees at QEM are compensated higher than the Australian minimum wage and are not subject to minimum wage rules. The CEO percentage of average compensation of all employees decreased slightly over FY 23/24 from 157.6% to 155%.

DIGNITY AND EQUALITY

Child, forced or compulsory labour

CODE	TYPE	STATUS	LAST UPDATED
PE-01-C4	Full disclosure	Verified	30 Jun 2024

QEM Limited aims to uphold the highest moral, ethical and legal standards in all we do, especially surrounding human rights and modern slavery.

QEM does not condone, support or contribute, either directly or indirectly, to Modern Slavery.

QEM has a simple supply chain that includes the purchase of products and services needed for the businesses day-to-day operations, however, we still have a zero tolerance approach to all forms of modern slavery and human trafficking within its business and within its supply chain. QEM is committed to acting ethically and with integrity in all its business dealings and relationships and to ensure modern slavery and human trafficking is not taking place in its own business or in any of its supply chains.

We have various policies place that support our day-to-day operations that are intended to promote ethical and legally compliant business conduct and to ensure all staff and suppliers meet our core values. Our policies contribute to our commitment to prevent violations of human rights such as modern forms of slavery in our business including our Code of Conduct, Anti-Bribery and Corruption, Equal Employment Opportunity & Discrimination Policy, Bullying & Harassment Policy and Grievance Handling Policy.

To underpin our policy commitments, the Company shall endeavour to:

- Where appropriate, engage directly with new suppliers in respect of our anti-slavery policy to gain a proper understanding of the measures they have in place to ensure that modern slavery is not occurring within their own businesses.

PEOPLE

- We expect our contracted suppliers to hold their own suppliers to the same standards.

Prosperity

EMPLOYMENT AND WEALTH GENERATION

Rate of employment

CODE	TYPE	STATUS	LAST UPDATED
PR-01-C1	Full disclosure	Reported	16 Jul 2024

This financial year there were no new hires nor employees who left the Company.

INNOVATION OF BETTER PRODUCTS AND SERVICES

Total R&D expenses

CODE	TYPE	STATUS	LAST UPDATED
PR-02-C1	Full disclosure	Reported	16 Jul 2024

QEM Limited's Full Year Statutory Reports, Quarterly Activity Report & Appendix 5B disclosure of expenditure and activity reflect the level of R&D costs during the period. Continuous work goes towards the evaluation and development of our projects.

As part of its R&D efforts, QEM's vanadium and oil shale bench scale pilot plant testing continues, including additional petrology and vanadium pentoxide processing flow sheet optimisation. These works follow the successful bench-scale pilot plant testing which delivered a significant improvement in vanadium extraction rates and oil yields. The pilot plant was designed and developed to validate the Company's proprietary extraction process, ahead of a commercial demonstration plant. This pilot plant will also provide feedstock for the multi-user vanadium processing facility in Townsville to be funded by the Queensland Government. QEM's R&D investment is a vital step in bringing Australian vanadium to market.

In December 2022, QEM announced that the University of Queensland's Sustainable Minerals Institute (UQ SMI) commenced mineral characterisation and beneficiation work for QEM Limited's critical minerals project. The QEM and UQ SMI collaboration is focused on optimising Vanadium Pentoxide (V2O5) grade via fine particle beneficiation. UQ SMI

employs a multi-disciplinary approach to mineral processing to potentially reduce energy use and the environmental footprint of mining operations.

QEM has also partnered with The University of Queensland (UQ) to produce the first high purity vanadium pentoxide (V₂O₅) from an industrial waste stream in Australia. V₂O₅ is the essential component of the electrolyte used in vanadium flow batteries. QEM engaged UQ in this Circular Economy project to upcycle vanadium-bearing catalyst sourced from Queensland industrial waste. UQ conducted a small-scale laboratory demonstration of all the processing steps in recycling the vanadium catalyst into a high purity vanadium oxide product (>99%). This research and development project is part of the Trailblazer Universities Program for Resources Technology and Critical Minerals, led by Curtin University in partnership with The University of Queensland and James Cook University.

There is rapidly growing demand globally for vanadium to create Vanadium Redox Flow Batteries (VRFBs) ideal for storing large renewable energy sources such as wind and solar. Due to their large-scale storage capacity, VRFBs could provoke higher usage of wind, solar, and other renewable intermittent power sources and are already employed globally for load-levelling functions within renewable energy systems. With the reusable potential of vanadium in VRFBs, this means that they are 100% recyclable and sustainable. New installs of VRFBs are expected to grow exponentially by 2030, driving the increase in demand for vanadium.

Vanadium not only supports the energy transition but additionally the CO₂ savings by using vanadium in the construction and steel industry, already account for the carbon footprint of producing that vanadium.

Further information can be found on QEM's website.

See Also: [ASX Announcements](#), [Vanadium Batteries](#)

COMMUNITY AND SOCIAL VITALITY

Total tax paid

CODE	TYPE	STATUS	LAST UPDATED
PR-03-C1	Full disclosure	Verified	30 Jun 2024

QEM Limited understands how taxes are important sources of government revenue, fiscal policy and contributes to economic stability.

For disclosure of the total level of tax paid by QEM, please refer to the Full Year Statutory Accounts and Quarterly Activity Report & Appendix 5B Cash Flow Report.

See Also: [ASX Announcements](#)

EMPLOYMENT AND WEALTH GENERATION

Economic contribution

CODE	TYPE	STATUS	LAST UPDATED
PR-01-C2	Full disclosure	Reported	16 Jul 2024

QEM Limited's Economic Contribution during the Reporting Period correlates to the long-term financial performance of the Company, and wealth creation for its stakeholders.

Disclosures relating to revenues, operating costs, wages and benefits, payments to providers of capital, payments to government, and monetary support from government appear in QEM's Full Year Statutory Accounts, as well as in the Quarterly Activity Report & Appendix 5B.

Investment in our community is a high priority for QEM.

In 2022, QEM invested in a permanent presence in the town of Julia Creek, just 6km from our flagship vanadium project. QEM leased the property which was formerly the Suncorp Bank, for office space and executive accommodation.

In the first quarter of 2023, QEM employed local tradespeople to renovate the premises, ready for the official opening on 17 April 2023 by Mayor of McKinlay Shire Council Philip Curr during the MITEZ Vanadium Forum in Julia Creek.

QEM contributes to the region with work packages being assigned to local contractors in Julia Creek and the North West Minerals Province, for work including fabrication, plant hire, civil site works, building renovations, and preparation for QEM's drilling campaigns and general property maintenance.

QEM also seeks to support the greater communities in which we operate, with a particular focus on youth and women's development, education and sport.

QEM proudly sponsors the Julia Creek Saints junior girls and boys and senior rugby league teams, as well as the annual Town vs Country Women's Netball, Juniors and Seniors' Rugby League.

QEM is a major sponsor each year of McKinlay Shire events:

- Julia Creek Dirt N Dust Festival held in April.
- Saxby Roundup weekend in June/July
- Sedan Dip in August
- Big Weekend in September/October
- Beach Races in November

In 2024, QEM became a WISER (Women In Sustainable Energy & Resources) Inc. Bronze Partner & sponsored the WISER IWD Event held in Brisbane in March 2024.

See Also: [Statutory Accounts](#)

EMPLOYMENT AND WEALTH GENERATION

Financial investment contribution

CODE	TYPE	STATUS	LAST UPDATED
PR-01-C3	Full disclosure	Verified	30 Jun 2024

Investment is a key driver of economic growth and a company's capacity to expand its operations and create additional employment.

QEM discloses information on investment activities in the Full Year Statutory Accounts, as well as in the Quarterly Activity Report & Appendix 5B.

QEM does not currently pay dividends.

See Also: [ASX Announcements](#)



Materiality Assessment 2024

Between February and March 2024, QEM conducted its first double materiality assessment. Through a process of engagement and analysis we identified 20 sustainability areas that present material impacts, risks and opportunities to our organisation. Our operations impact in various ways on the economy, people and environment, and likewise material sustainability matters pose risks and opportunities to our organisation. This materiality assessment informs our decision-making and helps us prioritise sustainability topics and metrics for improvement and public reporting.

Approach and methodology

We conducted our materiality assessment using Socialsuite's Materiality technology platform. We leveraged Socialsuite's ongoing monitoring of the sustainability landscape in which they assess the coverage of issues in voluntary ESG standards, peer annual and sustainability reports, regulatory and legislative documents, ESG scoring and rating methods, as well as media and social media trends. We conducted a double materiality assessment to

identify topics material from both inside-out and outside-in perspectives. We reached out to 86 stakeholders, and had a 26% response rate, on a 15-minute materiality survey to gather quantitative and qualitative insights. Analysis of our industry, competitors, and stakeholder engagement, helped us identify 20 material sustainability topics, which we will report on, monitor, and manage.

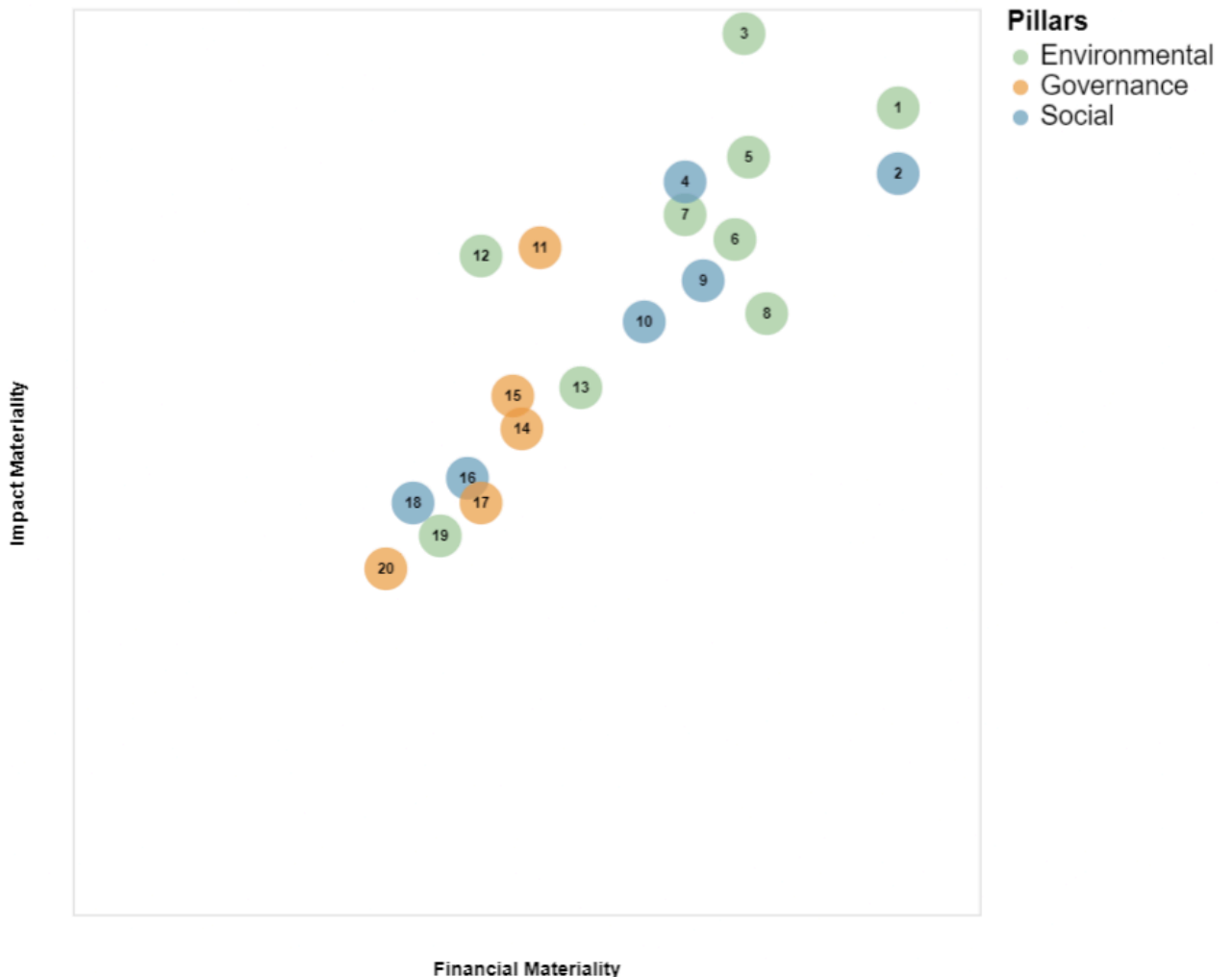
Materiality assessment process

1. Setting the scope	We determined our objectives and goals for the assessment; including selecting to use the double materiality approach to also consider our impact.
2. Topic mapping	We reviewed industry specific sustainability topics and created a long-list of sustainability issues potentially material to our business.
3. Stakeholder mapping	We created groups for our key internal and external stakeholders, gave each group a weighting, and then added individual stakeholders to the groups.
4. Stakeholder engagement	Using Socialsuite's materiality assessment platform we engaged our stakeholders with a survey to capture the issues they see as material.
5. Analysis and validation	We analysed stakeholder-survey results to identify topics considered material and validated this with qualitative survey comments and internal insights.
6. Selection and alignment	We selected topics deemed material through stakeholder engagement and internal analysis, and aligned the material topics with the SDGs.

Material topics

Environmental	Social	Governance
1. GHG Emissions	2. Stakeholder Engagement	11. Critical Incident Risk Management
3. Ecological Impacts	4. Employee Health & Safety	14. Business Ethics
5. Water and Wastewater Management	9. Human Rights and Community Relations	15. Indirect Economic Impacts
6. Closure and rehabilitation	10. Diversity, Inclusion and Equal Opportunity	17. Business Model Resilience
7. Waste and Hazardous Materials Management	16. Labor Practices and Management	20. Physical Impacts of Climate Change
8. Energy Management	18. Land and resource rights	
12. Air emissions & quality		
13. Material Usage & Recycling		
19. Climate adaptation, resilience, and transition		

Materiality Matrix



Analysis

Stakeholder Insights

In the voices of our stakeholders, we hear a collective plea for responsible stewardship over our environment, echoing concerns about air quality, ecological impacts, and the need for rehabilitation post-closure. Their words underscore the importance of adapting to climate change, embracing renewable energy, and minimising our ecological footprint. Moreover, they emphasise the paramount importance of prioritising employee health and safety, fostering a diverse and inclusive workforce, and nurturing positive community relations. Through their insights, we find not only challenges but also opportunities—to innovate, to build trust, and to forge a path towards a sustainable and prosperous future.

Impacts

Our most material topics collectively highlight the significance of environmental sustainability, ethical conduct, workplace safety, community relations, and economic development. Failure to address these concerns adequately could lead to

environmental degradation, ethical scandals, safety incidents, community opposition, and economic instability.

Risks

Our key sustainability risks include regulatory non-compliance, reputational damage, legal liabilities, workplace conflicts, economic inequality, and loss of trust from stakeholders. Ignoring these risks may result in long-term negative consequences for the business.

Opportunities

We identified opportunities in demonstrating commitment to sustainability, implementing innovative environmental practices, fostering a strong ethical culture, ensuring a safe and healthy work environment, enhancing community relations, promoting economic development, and contributing positively to local economies. By addressing these topics effectively, the business can mitigate risks, build resilience, and create long-term value for stakeholders.

Impacts	Risks	Opportunities
<p>Stakeholders emphasise the need to maintain or improve air quality to minimise environmental impacts, indicating potential impacts on health and ecosystems.</p> <p>Stakeholders highlight the importance of rehabilitation efforts post-closure to ensure minimal environmental impact and potential positive outcomes for local communities.</p> <p>Potential negative ecological impacts can result from the company's activities, indicating potential impacts on biodiversity and habitats.</p> <p>The inherently dangerous nature of exploration and mining activities underscores the importance of prioritising employee health and safety to mitigate risks of accidents and fatalities.</p>	<p>Risks associated with regulatory non-compliance were highlighted, indicating potential legal and financial consequences.</p> <p>Failure to address environmental and social concerns may lead to community opposition, posing risks to the company's social licence to operate and reputation.</p> <p>Risks of workplace conflicts were mentioned, indicating potential negative impacts on employee morale, productivity, and retention.</p> <p>Risks associated with economic instability in local communities were highlighted, which could affect company operations and relationships with stakeholders.</p> <p>The potential physical impacts of climate change can pose risks to the company's operations, such as extreme weather events.</p>	<p>Opportunities in implementing innovative environmental practices can help address environmental challenges and gain a competitive edge.</p> <p>Building a strong ethical culture provides an opportunity to enhance the company's reputation, attract investment, and foster trust with stakeholders.</p> <p>Opportunities exist in fostering positive relationships with local communities through responsible practices, potentially leading to enhanced social licence to operate and support for the company's activities.</p> <p>There is potential for the company to contribute to economic development in local communities, creating job opportunities and supporting local businesses.</p>

Stakeholder engagement

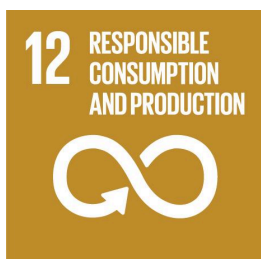
QEM's Materiality Assessment survey had a response rate of **26%**.

Frequency and review

We endeavour to conduct a materiality assessment annually to determine the sustainability areas we have an impact on, as well as identify the risks and opportunities our business faces in the short, medium, and long-term. Our materiality review process will start with the previous period's topics and identify any potential new areas that could be material. Ongoing stakeholder engagement will help us determine any changes in potential material

topics. The significance of topics to stakeholders is likely to change, as the sustainability landscape continues to rapidly develop. Each reporting period we will use our material topics to inform our corporate sustainability reporting. We will identify and prioritise alignment with the Sustainable Development Goals (SDGs), focusing on those Goals directly impacted by our business operation

Sustainable Development Goals



We have aligned the Sustainable Development Goals (SDGs) to our material topics, which resulted in 14 Goals we could potentially impact. Subsequently, we have prioritised the SDGs to identify the Goals we have the most impact on as a business, resulting in six prioritised SDGs.

