

DIRECTORS

Chairman
John Foley

Managing Director
Gavin Loyden

Non-Executive Director
John Henderson

Non-Executive Director
Daniel Harris

Non-Executive Director
David Fitch

JULIA CREEK PROJECT

Vanadium
Oil Shale



QEM Limited

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QEM Quarterly ESG Disclosure Report

- QEM releases quarterly Environmental, Social and Governance (ESG) report for Q4 FY2022
- Disclosures are made against the World Economic Forum's *Stakeholder Capitalism Metrics*
- QEM to continue using Socialsuite to monitor, disclose and streamline ESG progress and initiatives, and release quarterly ESG disclosure reports

QEM Limited (ASX: OEM) ("**QEM**" or "**Company**") is pleased to announce that it has published its quarterly Environment, Social and Governance (ESG) report for Q4 FY2022 with disclosures on 21 core metrics set by the World Economic Forum (WEF) in its standardised and globally recognised *Stakeholder Capitalism Metrics* ESG framework.

As the Company continues to advance its Julia Creek vanadium and oil shale project with associated green hydrogen potential, QEM Managing Director Gavin Loyden said he was pleased to follow up the Company's first Baseline ESG Report released at the end of last quarter. On 31 March 2022, QEM announced to the ASX that it had proactively adopted the global standard for ESG Reporting.

"This subsequent ESG disclosure report captures this point in time on QEM's ESG journey. We are progressively and purposefully embedding ESG reporting into our all operations and governance systems. 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, and may be actively involved throughout the process," Mr Loyden said.

QUARTERLY ESG HIGHLIGHTS

- Comprehensive reporting on environmental management activities completed during the quarter (eg. baseline ecology and habitat assessments, and aerial drone surveys).
- Improved disclosures on stakeholder mapping and consultation, ensuring hard to reach stakeholders and groups are identified and included in community engagement activities.
- The Company aspires to create a diverse workforce that supports equitable participation in regards to age, gender and ethnicity, demonstrated for the moment by a small corporate employee base that has a one to one gender ratio.

QEM will continue to use Socialsuite's ESG reporting platform to measure, improve, and disclose key ESG metrics and indicators. We commit to ongoing ESG reporting on at least a quarterly basis, openly sharing our progress and initiatives to create long-term value for all our stakeholders.

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 focussed 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 / oil shale project is a unique world class critical minerals resource with the added potential to deliver and utilise innovative 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 2,850 Mt @ 0.31% V₂O₅* is one of the single largest ASX listed vanadium resources and represents a significant opportunity for development.

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 Mount 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 and 7 April 2022. 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 GOVERNANCE

Disclosure Report QEM Limited - 1 Apr 2022 to 30 Jun 2022

Powered by
Socialsuite ESG

<https://www.qldem.com.au>
ASX:QEM

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 Go disclosure platform. ESG Go enables us to demonstrate our ongoing commitment to ESG by providing a dedicated solution to track, report, and share our ESG disclosures. With ESG Go we have started the journey of building robust ESG credentials.

Last updated: 25/7/2022

Governance

SETTING PURPOSE

Setting purpose

TYPE

Full disclosure

STATUS

Verified

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

LAST UPDATED

19 Jul 2022

SEE ALSO:

[About QEM](#)

GOVERNANCE BODY COMPOSITION

Governance body composition

TYPE

Full disclosure

STATUS

Verified

LAST UPDATED

19 Jul 2022

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.

SEE ALSO:

[Our Team](#)

[Corporate Governance Plan](#)

MATERIAL ISSUES IMPACTING STAKEHOLDERS

Material issues impacting stakeholders

TYPE

Full disclosure

STATUS

Verified

LAST UPDATED

19 Jul 2022

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 and 1800 community information line, 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 Facilitation Office, as well as other State and Commonwealth Government representatives.

QEM is an active member of industry groups AUSIMM, Vanitec, The Queensland Resources Council, The Queensland Exploration Council, the Association of Mining and Exploration Companies (AMEC), MITEZ and H2Q, as well as being a founding member of the Queensland Vanadium Consortium, 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.

SEE ALSO:

[Project Update Flyers](#)

ANTI-CORRUPTION PRACTICES

Anti-corruption practices

TYPE

Full disclosure

STATUS

Verified

LAST UPDATED

19 Jul 2022

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

TYPE Full disclosure	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.
STATUS Verified	
LAST UPDATED 19 Jul 2022	<p>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.</p> <p>The Board also considers whether the Company has a material exposure to climate change risk.</p> <p>SEE ALSO: Risk Management System</p>

MECHANISMS TO PROTECT ETHICAL BEHAVIOUR

Mechanisms to protect ethical behaviour

TYPE Full disclosure	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.
STATUS Verified	
LAST UPDATED 25 Jul 2022	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

GHG EMISSIONS

GHG emissions

TYPE

Partial disclosure

QEM Limited has reviewed the GHG Protocol Reporting Standards and understands its implications for its planned projects. As the project has not yet commenced, we are currently not at this stage of disclosure.

STATUS

Verified

LAST UPDATED

19 Jul 2022

LAND USE AND KEY BIODIVERSITY AREAS

Land use and key biodiversity areas

TYPE

Full disclosure

In March 2022, QEM Limited, with its environmental consulting partner EPIC Environmental, completed initial baseline surveys of the Julia Creek Project area, including regional ecosystem surveys, habitat assessments, bird surveys, spotlighting surveys and fauna trapping.

STATUS

Verified

LAST UPDATED

19 Jul 2022

EPIC is working through the Environmental Impact Statement for the Julia Creek Project.

Aerial drone surveys were conducted in June/July 2022 to baseline the environmental condition of QEM's tenements before any ground is broken on the project.

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.

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.

WATER CONSUMPTION

Water consumption

TYPE
Partial disclosure

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

STATUS
Verified

LAST UPDATED
19 Jul 2022

Operational demand is expected to be sourced from dewatering of open pits, and allocation from regional dams or from the Flinders River, as part of the Gulf Resource Operations Plan. A water distribution network including dams and pipelines will be established.

TCFD IMPLEMENTATION

TCFD implementation

TYPE

Partial disclosure

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.

STATUS

Verified

LAST UPDATED

19 Jul 2022

People

DIVERSITY AND INCLUSION

Diversity and inclusion

TYPE

Full disclosure

STATUS

Verified

LAST UPDATED

19 Jul 2022

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.

Though QEM is currently in the early stage of its development with relatively few employees, the Company's commitment to employee diversity can be demonstrated by its current one to one female to male employee ratio.

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 SAFETY

Health and safety

TYPE

Partial disclosure

STATUS
Verified

LAST UPDATED
22 Jul 2022

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.

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

TRAINING PROVIDED

Training provided

TYPE
Full disclosure

STATUS
Verified

LAST UPDATED
19 Jul 2022

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 and hence, QEM is currently providing financial support for employment-related masters studies in sustainable energy for an employee.

Total spend on education and training was approximately \$3000, equating to \$1500 per employee.

PAY EQUALITY

Pay equality

TYPE
Full disclosure

STATUS
Verified

LAST UPDATED
19 Jul 2022

QEM is currently in the early stage of its development with too few employees to provide any meaningful pay equality data. However, it is one of the future measurable objectives for the Company to continue achieving gender diversity and monitor its achievement.

WAGE LEVEL

Wage level

TYPE
Full disclosure

STATUS
Verified

LAST UPDATED
19 Jul 2022

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 is 196%.

CHILD, FORCED OR COMPULSORY LABOUR

Child, forced or compulsory labour

TYPE

Full disclosure

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

STATUS

Verified

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

LAST UPDATED

19 Jul 2022

The Modern Slavery Act 2018 (Cth) requires entities based, or operating, in Australia, which have annual consolidated revenue of more than \$100 million, report annually on the risk of modern slavery in their operations and supplier chains, and actions to address those risks.

Whilst QEM Limited does not yet fall into this reporting criteria, the Company is committed to assisting in the eradication of Modern Slavery by implementing this policy and managing the risk with suppliers so as not to engage in Modern Slavery.

Prosperity

RATE OF EMPLOYMENT

Rate of employment

TYPE

Full disclosure

This quarter there have been no new hires or employee turnover to report at QEM Limited.

STATUS

Verified

LAST UPDATED

19 Jul 2022

TOTAL R&D EXPENSES

Total R&D expenses

TYPE

Full disclosure

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.

STATUS

Verified

LAST UPDATED

19 Jul 2022

As part of its R&D efforts, QEM's vanadium and oil shale bench scale pilot plant has been successfully commissioned and test work has begun. The pilot plant has been 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.

Currently, over 90% of vanadium is used to make high-strength, low alloy steel (HSLA). Additionally, there is rapidly growing demand 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. The International Renewable Energy Agency forecasts utility scale batteries to capture 44% of battery energy storage market in the next decade. Global VRFB deployments are likely to grow at 34% as installation costs fall and efficiencies increase. The volume of vanadium demanded from VRFBs is forecasted to grow from 28kt to between 126kt and 420kt by 2030.

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](#)

TOTAL TAX PAID

Total tax paid

TYPE

Full disclosure

STATUS
Verified

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

LAST UPDATED
19 Jul 2022

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](#)

ECONOMIC CONTRIBUTION

Economic contribution

TYPE
Full disclosure

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.

STATUS
Verified

LAST UPDATED
19 Jul 2022

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.

Additionally, during the reporting period, QEM was a major sponsor of the 2022 Julia Creek Dirt N Dust Festival, with naming rights for the QEM Mount Isa Convoy to the Creek. The convoy focused on the theme of inviting people to "Have a "Yack in the Outback", acknowledging the impact that events such as COVID, flood and drought have had on the community. A "Yack Shack" was erected inside the Dirt N Dust area at the Creek to provide a chance for a Yack with the Royal Flying Doctors' Service throughout the weekend festival.

QEM sponsored the "Investing in Women in Resources Networking Breakfast" organised by the Women in Mining

and Resources Queensland (WIMARQ) Gold Coast Chapter and supported by the Queensland Resources Council.

Managing Director Gavin Loyden participated in his second Vinnies CEO Sleepout on the Gold Coast, raising \$7,636 to support the homeless.

QEM also proudly sponsors the Julia Creek Saints junior girls and boys and senior rugby league teams.

The Company will continue to review its level of contribution, commensurate with its activities.

SEE ALSO:
[Statutory Accounts](#)

FINANCIAL INVESTMENT CONTRIBUTION

Financial investment contribution

TYPE
Partial disclosure

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

STATUS
Verified

QEM discloses information on investment activities in the Full Year Statutory

LAST UPDATED
19 Jul 2022

Accounts, as well as in the Quarterly Activity Report & Appendix 5B.

QEM does not currently pay dividends.

SEE ALSO:
[ASX Announcements](#)