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ASX ANNOUNCEMENT

ASX: QEM

13 October 2020

Quarterly update for the period ending 30 September 2020

QEM Limited (ASX: QEM) (**"QEM" or "Company"**) is pleased to provide an update on its activities for the quarter ending 30 September 2020.

QEM continued its focus on the exploration and development of its flagship Julia Creek vanadium and oil shale project, which covers 249.6km² in the Julia Creek area of North Western Queensland, Australia.

It is the only company in the world currently in a position to develop a vanadium and oil combination project, which it is progressing under the leadership of a management team with extensive resources sector experience. The latest investor presentation highlighting this dual commodity opportunity is available here;
https://www.qldem.com.au/wp-content/uploads/2020/09/QEM-Investor-Presentation-Sep-2020.pdf

QEM Managing Director, Mr Gavin Loyden, said the successful test results revealed during the quarter at its Julia Creek project would enable the Company to continue to pragmatically advance its flagship project towards pre-feasibility stage.

"Following the positive oil shale extraction results, it is pleasing to see that the results from the vanadium extraction tests are also highly promising," Mr Loyden said.

"Buoyed by the momentum of these terrific extraction test results, in the September quarter we also swiftly commenced the next phase of test work to identify the optimal processing route for the ore body at Julia Creek.

"Efficient extraction and processing of both commodities is critical, as it positions us to unlock the significant value potential Julia Creek possesses."

Vanadium Extraction Testwork

On 11 August 2020, the Company announced the results of its vanadium extraction test results at Julia Creek to the ASX.

The extraction tests were conducted via acid leach testing, and revealed impressive vanadium extraction efficiencies of up to 92% on shale ash samples.

Crucially, the Company was able to achieve very high extraction efficiencies of around 90% on shale ash samples produced at 900°C for both the Oil Shale Lower (OSL) and Oil Shale Upper (OSU) samples.

Extraction efficiencies for the shale ash samples produced at 700°C and 1000°C were lower, at around 60 per cent to 70 per cent for the OSL and OSU, respectively.

The results for the as-received shale samples identified extraction efficiencies up to around 74% at 900°C, compared to between approximately 47% and 55% for the as-received shale samples produced at 700°C and 1000°C.

QEM Limited
Level 11, 216 St Georges Terrace
Perth WA 6000 Australia

John Foley Chairman
Gavin Loyden Managing Director
Daniel Harris Non-Executive Director
David Fitch Non-Executive Director

www.qldem.com.au
info@qldem.com.au
+61(0) 8 9481 0389

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These tests suggest that at a production temperature of approximately 900°C, QEM will achieve very high vanadium extraction efficiencies.

This facilitates QEM's ability to narrow in on the optimal temperate profile and run time for vanadium extraction.

The release of the vanadium extraction test results followed the successful results of the oil shale extraction tests, which were announced in the June quarterly activities report (refer to ASX announcement dated 29 July 2020).

The oil shale and vanadium extraction tests have both been undertaken by an independent NATA-accredited laboratory company, HRL Technology Group Pty Ltd (HRL).

Processing Route Testwork

The positive and precise extraction results provided a robust basis for QEM to commence further tests in the September quarter to develop the optimal the processing route for Julia Creek.

As stated in the ASX announcement dated 17 September 2020, the latest testing will examine other vanadium extraction scenarios, conduct additional acid leaching testing, and undertake further roasting tests with additional roasting reagents.

These results, which will be conducted by HRL, are set to be finalised in the December quarter.

Following the completion of these tests, engineering and costing activities to develop and evaluate the extraction process, including assessing economic viability, will be progressed by E2C Advisory Pty Ltd.

COVID-19 Impacts

QEM is pleased to report that it continues to experience no material COVID-19 impacts on its operations.

The Company is maintaining adherence to Government directives to ensure it does its part to mitigate the risk of an outbreak.

ASX ANNOUNCEMENT

ASX: QEM

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Use of Funds

In line with obligations under ASX Listing Rule 5.3.4, QEM Limited provides the following information with respect to its Use of Funds Statement set out in its Replacement Prospectus dated 20 August 2018 and its actual expenditure since ASX admission on 17 October 2018.

Expenditure Item	**Use of Funds (20.8.18) '000**	**Actual Expenditure (17.10.18 – 30.09.20) '000**	**Variance '000**	**Note**
Opening cash	480	40	(440)	1
Proceeds from the Offer	5,000	5,000	-	
Total	**5,480**	**5,040**	**(440)**	
Estimated expenses of the Offer	510	340	170	**2**
Director fees, consulting fees and staff wages	1,070	1,065	5	**3**
Administration expenses and working capital	1,140	930	210	**4**
Exploration and development expenditure on the Julia Creek Project	2,760	895	1,865	**5**
Interest income	-	(87)	87	
R&D/Grant income	-	(347)	347	
Total	**5,480**	**2,796**	**2,684**	
Remaining Cash	-	**2,244**	**2,244**	

Notes:

1. Cash balance on 20.8.18 varies to cash balance on 17.10.18 due to payments towards expenses of the Offer, director fees, consulting fees, staff wages and administration expenses over this period.
2. Expenses of the Offer paid post 17.10.18 totalled $340k. Expenses of the Offer paid prior to 17.10.18 were $165k giving a grand total of $505k. Actual expenses of the Offer are materially consistent with the use of funds budget, with variances related to timing not quantum.
3. Actual director fees, consulting fees and staff wages are materially consistent with use of funds budget. Note, for cashflow purposes the Company classifies its Managing Director and Exploration Manager wages as directly attributable to exploration and development expenditure on the Julia Creek Project.
4. Actual Administration expenses and working capital costs are materially consistent with use of funds budget.
5. Actual Exploration and development expenditure on the Julia Creek Project is currently under the use of funds budget by $1,865k. A further detailed breakdown of exploration and development expenditure.

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Expenditure Item	Use of Funds (20.8.18) '000	Actual Expenditure (17.10.18 – 30.09.20) '000	Variance '000
Drilling programme	480	83	397
Engineering and feasibility studies	1,240	430	810
Environmental	708	-	708
Geology and geophysical surveys	228	336	(108)
Statutory compliance	104	46	58
Total	**2,760**	**895**	**1,865**

The major variance in exploration and development expenditure relates to engineering and feasibility studies and environmental costs. These costs largely relate to the preparation of environmental impact statements, pre-feasibility studies and mining application costs which are deferred until such time as the Company settled upon the most suitable processing technology for its vanadium / oil shale project. With the Company's Julia Creek Project containing an existing defined global resource of 2,760Mt Vanadium JORC resource with an average V2O5 content of 0.30%, and a 3C Contingent Oil Resource of 783 MMbbls of Oil, focus has predominately been on process development rather exploration. As outlined elsewhere in this report, development progress has been slower than anticipated due to factors outside of the Company's control with external providers, however the Company currently has a very promising technology which it is reviewing for application, using both internal resources and external consultants.

Related Party Payments

ASX Listing Rule 5.3.5: Payments to related parties of the Company and their associates during the Quarter totalled $82k. The Company advises that this relates to non-executive director's fees, executive directors' salaries and a technical consulting fee to Energy Source LLC (an entity associated with Mr Daniel Harris).

Other ASX requirements

ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure during the Quarter was $262k. Exploration during the quarter focused on oil and vanadium extraction testwork - full details of activity during the Quarter is set out above.

ASX Listing Rule 5.3.2, there were no mining production and development activities during the Quarter.

ASX ANNOUNCEMENT

ASX: QEM

Tenement Schedule

In line with obligations under ASX Listing Rule 5.3.3, QEM Limited provides the following information with respect to its Mining Tenement holdings as at 30 September 2020.

Project	Country	Tenement	Status	% Held	Change During Quarter
Julia Creek	Australia	EPM25662	Granted	100%	-
Julia Creek	Australia	EPM25681	Granted	100%	-
Julia Creek	Australia	EPM26429	Granted	100%	-
Julia Creek	Australia	EPM27057	Granted	100%	-

- **END** -

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

For further information, please contact:

Gavin Loyden
Managing Director
P: +61 7 3303 0161
E: gavin@qldem.com.au

Shane Murphy
Investor Relations
P: +61 420 945 291
E: shane.murphy@fticonsulting.com

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 resource with the potential to deliver 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 2,760 Mt @ 0.30% 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 16km 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.

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