

## **Quarterly Activity Report and Appendix 5B for 30 June 2022**

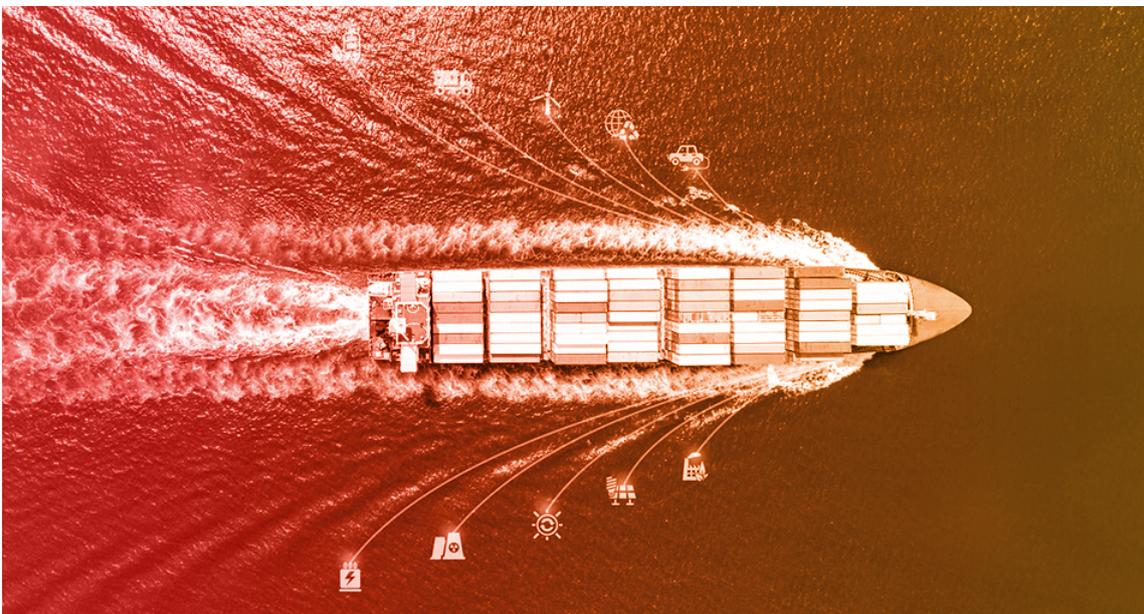
### **Highlights**

#### **Uley 2 – Execution of Binding Offtake Agreement with Swiss Commodities Trading Group**

During the quarter, the Company executed a binding offtake agreement (Offtake Agreement) with Swiss based global metal and minerals trading group MRI Trading AG for the sale of 100% of its Uley 2 production for a term ending 5 years from the first delivery of Uley 2 flake graphite production.

MRI is uniquely positioned to add Uley 2 flake products seamlessly to its existing minerals coverage. The agreement delivers ready access to MRI's Japanese and European customer base which has significant synergies with the Company's traditional customers.

These customers demand reliable supply of quality products and offer premium pricing. Based on consensus forecasts, high prices within these customer markets are likely to be sustained over the long term. The partnership with MRI is a key part of the Company's commercial strategy. It provides a strong platform to build critical market share – the combination of key customer access and direct connectivity to MRI's superior freight capabilities provides the stability and reliability of supply demanded within these markets.



MRI commenced sales and marketing activities immediately following execution of the agreement and the Company's handover of its pre-existing commercial relationships. The Company will continue to provide all necessary technical support to MRI in its dealings with prospective customers.

The Offtake Agreement will result in the transition of the supply of flake graphite to QSP from the Company to MRI.

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#### **ABOUT QUANTUM GRAPHITE LIMITED**

QGL is the owner of the Uley flake graphite mineral deposits located south-west of Port Lincoln, South Australia. The company's Uley 2 project represents the next stage of development of the century old Uley mine, one of the largest high-grade natural flake deposits in the world. For further information, [qgraphite.com](http://qgraphite.com).

### QSP Operating Plans

During the quarter the Company progressed the negotiation of the definitive agreement with Sunlands Co. governing the financing and operation of QSP. This agreement is expected to be finalised by the end of Q1 F2023.

### QSP Thermal Energy Storage Pilot Project Update

During the quarter, arrangements were finalised with Technische Universität Bergakademie Freiberg's INEMET group to undertake the independent ultra-high temperature test work. The test work is being conducted at a commercial scale well beyond the bench scale of the programs completed in prior years. The critical test work includes various specifications of Uley coarse flake graphite required to form the thermal energy storage media essential for Sunlands Co. long duration energy storage battery cells.

The results of the INEMET test work will be utilised to construct a commercial pilot plant capable of fully demonstrating the Sunlands Co. Long Duration Energy Storage (LDES) technology.

The successful completion of this work and the operational phase of the pilot plant will expedite commercialisation of the Sunlands Co. technology.

QSP estimates that initial results should be available by September 2022.



### QSP Technical and Market Studies

On 4 April 2022, the Company released details of the submission made by QSP to the Australian Energy Ministers Meeting. The submission outlines QSP’s recommendations for changes to the National Electricity Market’s (NEM) rules to support the installation of LDES within the NEM.

The submission makes specific references to a type of LDES, referred to as RESERVE STORAGE; this relates to a form of deep mass storage that would enable the acceleration of the penetration of renewables within the NEM.

Thermal LDES and the forecast increase in global EV manufacturing support a significant increase in the market for Uley 2 coarse graphite. Together with the supply to the traditional thermal management market segments, the Company offers a diversified commercial exposure that sets it apart from other flake graphite producers.




## Thermal Long Duration Energy Storage

“...At Macroeconomics Advisory, we have estimated that the cost of replacing existing thermal power with solar and wind and back-up will be in excess of \$150 billion. That impact is likely to be borne by governments/taxpayers.

But there is a way to avoid most of these transition costs and perhaps restore some of our old manufacturing base sourcing cheap, emissions-free, reliable energy.

**The thermal option**

One little known option that is apparently ready to go is long-term thermal storage. It is a scalable and compact way of storing energy that provides relatively cheap, very-long-duration back-up for intermittent systems. Even better, it is a leading-edge Australian-based technology.

The technology sources flake graphite locally to manufacture energy storage blocks that are fitted within energy storage cells. The critical breakthrough is that these cells operate at a very high operating temperature range with virtually unlimited cycles and can be charged and discharged simultaneously.

This unique capability enables them to drive the large-scale turbines used in coal-fired power stations. Heating cells with solar and wind generation and then using this heat to drive these turbines means it can deliver dispatchable power through the existing infrastructure in the Hunter and La Trobe valleys. The technology fits Angus Taylor’s far-sighted plan to support technologies even if the execution of the strategy is floundering.

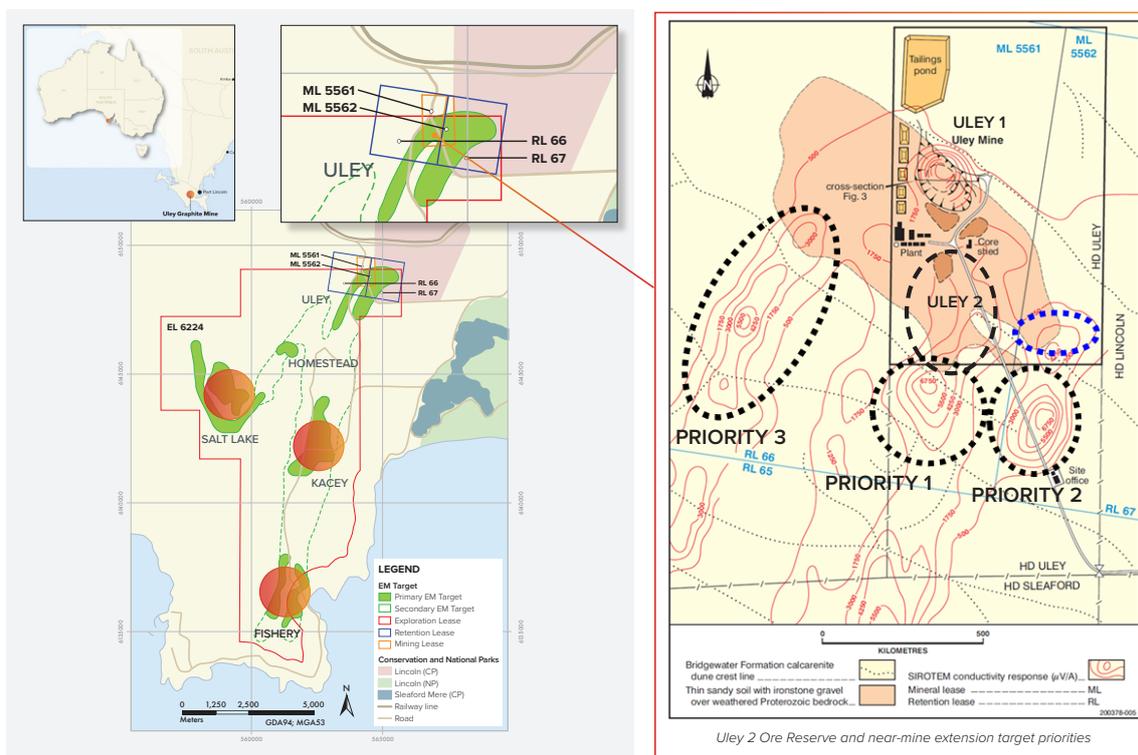
Who would have thought risk-averse bureaucrats would use it to dole out big dollars to foreign-sourced solar (including solar thermal), wind and now, hydrogen?

Why not just back the thermal option that appears to require no assistance whatsoever? It may just offer the good folks at the Energy Security Board the level of energy security to allow them to sleep nights.”

*Dr. Stephen Anthony, Contributor*  
- Australian Financial Review, 28 March 2022

Dr. Anthony’s comments follow Macroeconomics Advisory’s study in which it undertook an independent assessment of the requirements for long duration energy storage (LDES) within the NEM as part of the AEMO Net Zero by 2050 Plan. This study examines in detail the deployment of large scale thermal LDES by retrofitting existing coal fired power stations with TES technology. The findings in this study also form the basis for Macroeconomics Advisory’s submission to AEMO on 11 February 2022; see Attachment 2 for study highlights.

### Uley 2 Pit Location and Resource Extension Priorities



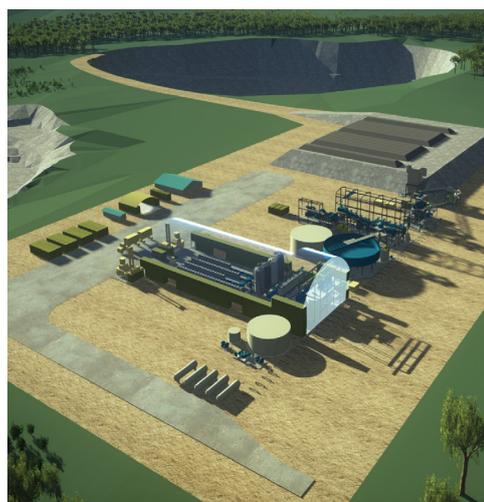
Priority 1 Short Term Ore Reserve extension: Uley 2 South 50m, Infill drilling at Uley 3 (area bordered by blue dotted line).

Priority 2 Medium Term Resource extension: Uley 3 South, Extension drilling to 50m-by-50m intervals.

Priority 3 Long Term Resource extension: Uley 2 West geophysical anomaly target, Uley 2 South beyond Priority 1 along strike of the geophysical anomaly.

## Uley 2 Phase 1 Mining Study and Feasibility Summary Financial Metrics

Total undiscounted cash flow	A\$310.5million*
Crusher feed	500,000 tonnes per annum
Graphitic carbon grade	11.89%
Graphitic carbon recovery	84%
Concentrate purity	>97% graphitic carbon
Capital expenditure	A\$79.98 million
Processing cost (PCAF)	A\$55.3 per tonne
Mining cost (MCAF)	A\$2.5/t milled at surface plus 5c for every 4m
Production	55,000 tonnes per annum
Product Cost (Av LOM)	US\$368 dmt
Product Price (Ex-works)	US\$919 dmt



\*Includes JORC 2012 Reserves and Resources

## Schedule of JORC 2012 Minerals Reserves and Resources

### JORC 2102 Mining Study Reserve Statement, November 2019

Reserve	Classification	Tonnes (kt)	Total Graphitic Carbon (%)
Uley 2	Proved	811	11.66
Uley 2	Probable	3,191	11.95
	<b>Total</b>	<b>4,003</b>	<b>11.89</b>

### JORC 2012 Mineral Resource Estimate (MRE), November 2021

Resource	Classification	Tonnes (kt)	TGC (%)	Density (t/m <sup>3</sup> )	TGC (kt)
Uley 3	Inferred	900	6.6	2.1	59
	<b>Uley 3 Total</b>	<b>900</b>	<b>6.6</b>	<b>2.1</b>	<b>59</b>
Uley 2	Measured	800	15.6	2.1	125
	Indicated	4,200	10.4	2.1	435
	Inferred	1,300	10.5	2.2	137
	<b>Uley 2 Total</b>	<b>6,300</b>	<b>11.1</b>	<b>2.1</b>	<b>697</b>
<b>Uley Project Total</b>	<b>TOTAL</b>	<b>7,200</b>	<b>10.5</b>	<b>2.1</b>	<b>757</b>

## Schedule of Tenements (ASX Listing Rule 5.3.3)

Tenement	Tenement Type	Interest <sup>1</sup>	Changes during the Quarter
ML5561	Mining Licence	100%	Nil
ML5562	Mining Licence	100%	Nil
RL66	Retention Licence	100%	Nil
RL67	Retention Licence	100%	Nil
EL6224 <sup>2</sup>	Exploration Licence	100%	Nil

<sup>1</sup>All interests are registered in the name of the company's subsidiary, Quantum Graphite Operations Pty Ltd and held as at the end of the quarter.

<sup>2</sup>An application has been lodged for the renewal of EL6224.

## Corporate Information and Announcements

As at 30 June 2022 the company had 294,431,800 ordinary shares and 28,571,429 unlisted options on issue and 1,610 shareholders. The top 20 shareholders held 58.98% of the issued ordinary shares in the company.

As at 30 June 2022 the company held cash at bank of \$1,004,703.

As at 29 July 2022 the company held cash at bank of \$4,622,120. This report should be read in conjunction with all prior announcements made by the Company and available at <http://quantumgraphite.com/investors>.

The pro forma Appendix 5B (Mining exploration entity and oil and gas exploration entity quarterly report) is attached to this report.

## Competent Persons Statement

The Company confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters relating to Mineral Resources is based on, and fairly represent, the Mineral Resources and information and supporting documentation extracted from the reports prepared by a competent person in compliance with the JORC Code (2012 edition) and released to the ASX (including under the company's previous code, VXL on 17 December 2014, 5 May 2015 and 15 May 2015 respectively).

## Forward Looking Statements

All statements other than statements of historical fact included in this announcement including, without limitation, statements regarding future plans and objectives of are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects' or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the company, its directors and management of QGL, that could cause QGL' actual results to differ materially from the results expressed or anticipated in these statements.

QGL cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. QGL does not undertake to update or revise forward- looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law.

### FOR FURTHER INFORMATION CONTACT:

Company Secretary  
Quantum Graphite Limited  
E: [info@qgraphite.com](mailto:info@qgraphite.com)



**QUANTUM SUNLANDS  
PARTNERSHIP**

### About The Quantum Sunlands Partnership

QSP is a joint venture between the Company and The Sunlands Co. Ltd for the manufacture of coarse natural flake based thermal storage media. The coarse flake will be exclusively sourced from the Company's Uley mine. The finished media will be fitted within Sunlands Co.'s long duration energy storage cells.

<https://www.sunlandscs.com/>

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

<b>Quantum Graphite Limited</b>
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ABN

41 008 101 979
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Quarter ended ("current quarter")

30 June 2022
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Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation (if expensed)	-	-
(b) development	-	-
(c) production	-	-
(d) staff costs	(23)	(92)
(e) administration and corporate costs	(250)	(1,160)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
1.5 Interest and other costs of finance paid	-	(61)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	80	80
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(193)</b>	<b>(1,233)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation (if capitalised)	(108)	(845)
(e) investments	-	-
(f) other non-current assets	-	-

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(108)</b>	<b>(845)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	859
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(83)
3.5	Proceeds from borrowings	-	1,262
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	(192)
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>-</b>	<b>1,846</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	1,305	1,236
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(193)	(1,233)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(108)	(845)

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	1,846
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>1,004</b>	<b>1,004</b>

5. Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts		Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	-	-
5.2	Call deposits	1,004	417
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,004</b>	<b>417</b>

6. Payments to related parties of the entity and their associates		Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(305)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>7.</b>	<b>Financing facilities</b> <i>Note: the term 'facility' includes all forms of financing arrangements available to the entity.</i> <i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
7.1	Loan facilities	-	-
7.2	Credit standby arrangements		-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

<b>8.</b>	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (Item 1.9)	(193)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	(108)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(301)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	1,004
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	1,004
8.7	<b>Estimated quarters of funding available (Item 8.6 divided by Item 8.3)</b>	<b>3</b>

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

DATE:	28 July 2022
AUTHORISED BY:	ROCHELLE PATTISON COMPANY SECRETARY

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.