

## DECEMBER 2019 QUARTERLY REPORT

# Battery Graphite Plant Advances towards Final Investment Decision and Government Breakthrough Paves Way for Epanko Financing

**EcoGraf Limited** (“EcoGraf” or “the Company”) (ASX: EGR) is pleased to release its activities and cash flow report for the three months ended 31 December 2019. The Company made significant progress during quarter on all key business areas.

### Highlights

- **Epanko debt financing**
  - + Positive progress achieved with KfW IPEX-Bank and a second financial institution on Epanko debt financing
  - + Revised funding structure developed with the aim of simplifying and fast-tracking the entire US\$60m of senior debt financing
  - + Historic landmark agreement signed between Barrick Gold and Government of Tanzania
  - + Resolution of Barrick dispute expected to unlock debt financing hurdles
- **EcoGraf’s Western Australian battery graphite manufacturing facility advances towards Final Investment Decision**
  - + Offtake arrangements under discussion with major battery and industrial groups in Asia and Europe
  - + Debt and equity funding processes underway with prospective financiers
  - + Letter of Intent signed with GR Engineering for construction, operations and maintenance arrangements
  - + Independent testwork confirms efficiency and environmental advantages of the proprietary EcoGraf purification process
  - + Feedstock benchmarking program in progress
- **Investment continues in Europe to transition towards renewable energy for electric vehicles, supporting the shift to new responsibly produced raw material supplies**
- **Participant Agreement signed with the Future Battery Industries Cooperative Research Centre**
- **Shareholders’ approve change of name to EcoGraf Limited at Annual General Meeting**

## BUSINESS STRATEGY

EcoGraf is building a vertically integrated business to produce high purity graphite for the lithium-ion battery and advanced manufacturing markets. Over US\$25 million has been invested to date to create two highly attractive, development ready graphite businesses.

The first new state-of-the-art **EcoGraf** processing facility in Western Australia will manufacture spherical graphite products for export to Asia, Europe and North America using a superior, environmentally responsible purification technology to provide customers with sustainably produced, high performance battery anode graphite. Subsequently, the battery graphite production base will be expanded to include additional processing facilities in Europe and North America to support the global transition to clean, renewable energy in the coming decade.

To complement these battery graphite operations, the Company is also developing the **TanzGraphite** natural flake graphite business, commencing with the Epanko Graphite Project, which will supply additional feedstock for the spherical graphite processing facilities and provide customers with a long term supply of high quality graphite products for industrial applications such as refractories, recarburisers and lubricants.



### BATTERY GRAPHITE MANUFACTURING PROJECT - KWINANA, WA

- ✓ 20,000tpa Battery (Spherical Graphite)
- ✓ US\$35M Annual EBITDA
- ✓ 37% Internal Rate of Return
- ✓ US\$141M Pretax NPV<sub>10</sub>
- ✓ Payback ~4yrs

### TANZGraphite

### EPANKO GRAPHITE MINING PROJECT - TANZANIA

- ✓ 60,000tpa Natural Flake Graphite
- ✓ US\$44.5m Annual EBITDA
- ✓ 38.9% Internal Rate of Return
- ✓ US\$211m Pretax NPV<sub>10</sub>
- ✓ US\$2B Forecast Contribution to Tanzania



## QUARTERLY ACTIVITY UPDATE

### EPANKO GRAPHITE PROJECT

The Epanko Graphite Project (“Epanko” or “the Project”) is a development ready Tanzanian natural flake graphite project. Key milestones achieved to date include:

- + Bankable Feasibility Study (“BFS”) completed by GR Engineering;
- + Bank appointed Independent Engineer’s Review completed by SRK Consulting (UK), confirming that the BFS adequately addresses all technical aspects of the proposed development and the social and environmental planning aspects satisfy IFC Performance Standards and World Bank Group Environmental, Health and Safety Guidelines;
- + Off-take commitments for the planned production secured in Asia (Sojitz Corporation) and Europe (thyssenkrupp and a large European graphite trading group);
- + Resettlement Action Plan approved by the Tanzanian Government;
- + Mining Licence granted; and
- + Letter of Intent with GR Engineering for early works program and EPC construction contract.

### Debt Financing

During the quarter EcoGraf continued to progress the senior debt financing of the new Epanko mine with KfW IPEX-Bank and a second financial institution. The Company is making positive progress to revise the proposed financing structure with the aim of simplifying and fast-tracking the entire debt financing.



On 24 January the Government of Tanzania signed a landmark settlement agreement with Barrick Gold Limited. The settlement is described by Barrick President Mark Bristow as “a historic day for Africa”.

At the signing ceremony, the President of the United Republic of Tanzania, Dr John Pombe Magufuli guaranteed Barrick full Government support and ordered respective authorities to release the concentrate containers that have been held at the port of Dar es Salaam since March 2017.

Following the signing, Barrick issued an announcement “**Barrick Back in Business in Tanzania**” and as a sign of its confidence in Tanzania also announced an exploration budget of US\$50m during 2020, seeking opportunities to sustain and expand its operations within the country.

This settlement provides the breakthrough the Company has been awaiting for over 2 years to unlock Epanko’s financing and development.

A US\$60m Epanko senior debt funding proposal is currently being prepared by EcoGraf with its proposed lenders under the revised financing structure and subject to securing the agreement of all parties, completion of necessary approvals and loan agreements is now expected to be accelerated by the recently announced Government settlement with Barrick.

The on-going support the Company has received from KfW IPEX-Bank and offtake customers in Germany and Asia, has been critical to this process and EcoGraf remains committed to establishing Epanko as a new supplier of responsibly produced, high-quality natural flake graphite products.

## **Social and Environmental Sustainability**

Epanko is unique in its Equator Principles development model. The Project has been designed to meet the strictest standards for social and environmental sustainability and to be fully compliant with IFC Performance Standards and the Equator Principles. These high standards of sustainability provide assurance to financiers and customers that Epanko products will be responsibly produced for the benefit of all stakeholders. The importance of sustainable development is reflected in the increasing emphasis globally on transparent supply chains and ethically sourced minerals.

## **Positive Economic Impact**

The Project has strong economics and in addition to generating a pre-tax NPV<sub>10</sub> of US\$211m for shareholders, will make a long-term, inter-generational contribution to economic, industrial and social development within Tanzania. It is expected to operate for over 40 years, during which time it is forecast to directly contribute over US\$2 billion to Tanzania through local employment, procurement, royalties, taxes and dividends. Over 95% of the 300 permanent staff will be Tanzanian, with an estimated 4,500 indirect jobs to be supported by the operation.

## **Community Engagement**

Maintaining an active approach to community engagement is an important and essential component of the Epanko development. EcoGraf is pleased to report that over the last 12 months that the Company has undertaken numerous social projects within the Epanko and Mahenge communities, including:

- + Construction and handover of two new demonstration houses;
- + Construction of additional buildings for the Epanko Primary School;
- + Sponsorship of 52 students to attend educational programs at the Vocation Education Training Authority’s Mikumi Centre;
- + Donation of supplies to Ulanga secondary schools in preparation for national examinations; and
- + Supply of roofing materials for a new classroom at the Nawenge Secondary School.

Additional information on these programs can be found at [ecograf.com.au/business/tanzgraphite/](https://ecograf.com.au/business/tanzgraphite/)



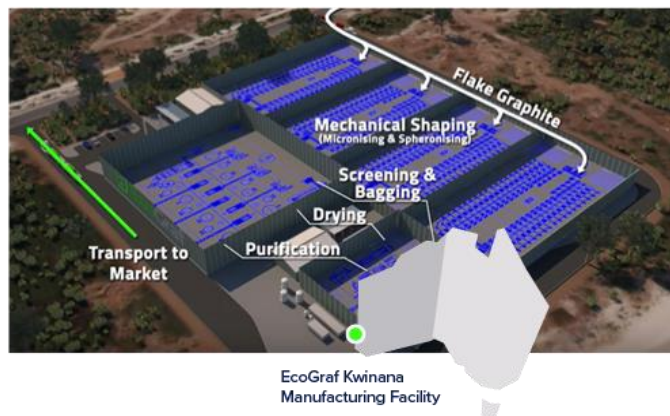
## ECOGRAF BATTERY GRAPHITE

### KWINANA DEVELOPMENT

The Company has made significant progress during the quarter to achieve key milestones for making a Final Investment Decision for the development of the new 20,000tpa battery graphite facility in Western Australia.



#### FLEXIBILITY WITH MODULAR DESIGN



A Letter of Intent was signed with GR Engineering Services Limited for the construction, operations and maintenance of the Kwinana facility and the parties are currently preparing final contract documentation. Pre-development activities for the project are progressing to schedule and the Company is finalising arrangements with the Western Australian Government's land development agency over its proposed 6.7ha site in Kwinana.

The independent testwork results from the purification process flow sheet program have confirmed the effectiveness and eco-friendly nature of the EcoGraf proprietary purification process, with no adverse emissions recorded for gaseous, aqueous or solid residues.

The results of this testwork provide GR Engineering with the information required to finalise the detailed design of the process flow sheet and equipment design data. Studies are ongoing to finalise the mass balance, process flows and quantification of wastewater volumes.

In addition, a number of other pre-development technical programs were undertaken during the quarter, including:

- + Technical documentation for Government approvals, permitting and lease arrangements;
- + Equipment testing campaigns by suppliers; and
- + Final feedstock benchmarking to determine the preferred feedstocks and finalise binding purchase agreements.

### Product Sales

The Company has continued to advance the strong interest received from prospective customers and is making encouraging progress towards finalising binding product sales arrangements, supported by a growing end-user focus on securing sustainable battery material supply chains.

Electric vehicle manufacturers have recently indicated further actions to promote responsibly produced battery raw materials, in particular:

- + BMW Group is targeting new supplies by country of origin and is developing a revised sustainability strategy for its entire value chain;
- + Volvo has announced it will become the first car maker to implement global traceability by applying blockchain technology. Traceability of raw materials used in the production of lithium-ion batteries

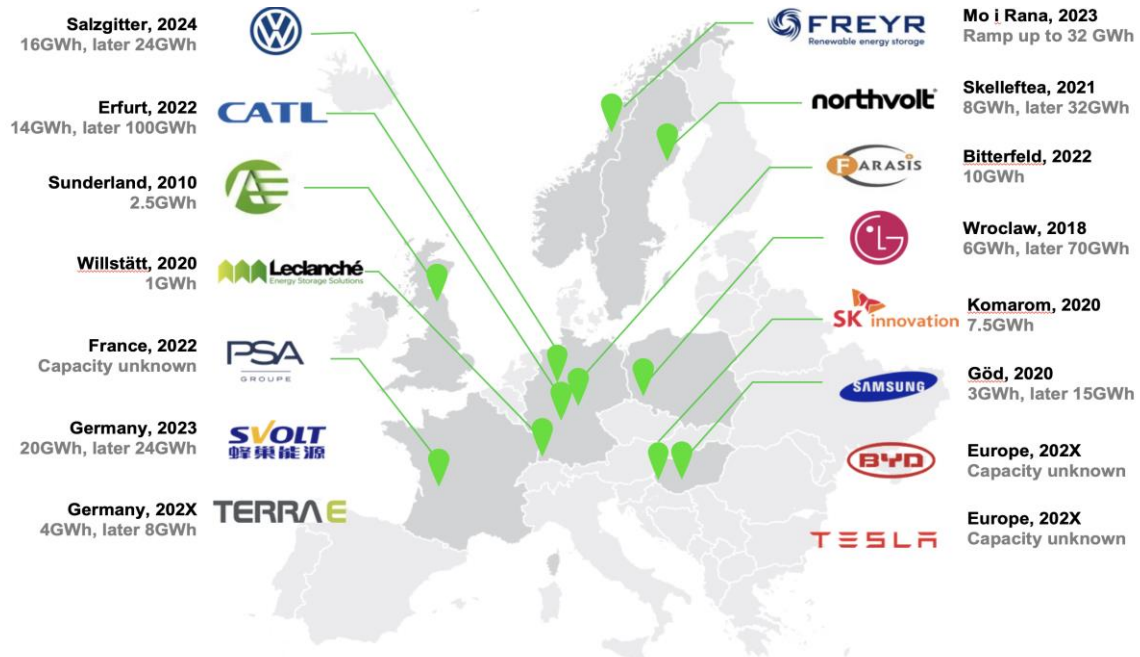




is one of the main sustainability challenges faced by car makers. Volvo stated that "customers can drive electrified Volvos knowing the material for the batteries has been sourced responsibly"; and

- + Tesla confirmed it will build Gigafactory 4 in Germany, which is expected to be operational by the end of 2021.

A summary of the major investment underway to establish new battery manufacturing capacity for electric vehicles in Europe is shown below.



### Future Battery Industries Cooperative Research Centre

The Company has formalised a Participant Agreement with the Future Battery Industries Cooperative Research Centre (“FBI CRC”). The \$135 million FBI CRC aims to position Australia as a global leader in the environmentally, ethically and socially responsible manufacture, deployment, recycling and supply of batteries and battery materials.

EcoGraf is one of the FBI CRC industry partners, helping to provide the technology and resources needed to identify opportunities for greater efficiency in battery mineral extraction and processing. EcoGraf’s proposed new manufacturing development in Kwinana, Western Australia is consistent with FBI CRC goals, which aim to expand battery minerals and chemicals production and develop opportunities for manufacturing batteries in Australia.

## CORPORATE

### Marketing

In December the Company presented at the New World Metals conference in Perth.

A 3D flythrough video of the EcoGraf’s purification facility was developed and an interview was conducted by The Market Herald.





A video fly-through of this new facility is available online at the following link:  
[Fly through video](#)

## Change of Name

On 29 November 2019, shareholders voted at the Annual General Meeting to change the Company's name to EcoGraf Limited. As a result, the ASX issued EcoGraf with the new trading code: EGR and a new website [www.ecograf.com.au](http://www.ecograf.com.au) was launched.

The new name provides greater brand recognition in the Asian and European markets, particularly in the manufacture of anode materials for lithium-ion batteries, as part of the massive investment underway in those regions to transition towards renewable energy for vehicle and industrial applications.

## Cash

Cash at 31 December 2019 was \$0.79 million and details of cash flows during the quarter are set-out in the attached Appendix 5B. The Company notes its cash position at the end of the quarter relative to the estimated cash outflows of \$0.85 million for the forthcoming quarter and the directors are assessing potential debt and equity funding alternatives to ensure the Company maintains sufficient working capital to advance its various business programs.

## Share Capital

As at 31 December 2019, share capital comprised:

- Issued fully paid ordinary shares: 294,663,747
- Issued fully paid ordinary shares subject to escrow: 11,000,000

Unlisted options:

Number	Exercise price	Expiry
1,050,000	23 Cents	6 March 2020

## SCHEDULE OF TENEMENTS

Licence	Ownership interest	Acquired/disposed during the quarter	Area (km <sup>2</sup> )	Location
ML 548/2015	100%	No change	9.62	Mahenge, Tanzania
PL 7906/2012	100%	No change	59.24	Merelani-Arusha, Tanzania
PL 7907/2012	100%	No change	26.42	Merelani-Arusha, Tanzania
PL 7915/2012	100%	No change	41.47	Merelani-Arusha, Tanzania
PL 9306/2013	100%	No change	17.53	Mahenge, Tanzania
PL 9331/2013	100%	No change	2.76	Mahenge, Tanzania
PL 9537/2014	100%	No change	84.00	Tanga, Tanzania



PL 10090/2014	100%	No change	44.88	Merelani-Arusha, Tanzania
PL 10091/2014	100%	No change	114.22	Merelani-Arusha, Tanzania
PL 10092/2014	100%	No change	23.23	Merelani-Arusha, Tanzania
PL 10388/2014	100%	No change	2.57	Mahenge, Tanzania
PL 10390/2014	100%	No change	2.81	Mahenge, Tanzania
PL 10394/2014	100%	No change	9.74	Merelani-Arusha, Tanzania
PL 10752/2016	100%	No change	23.45	Mahenge, Tanzania
PL 10868/2016	100%	No change	72.82	Merelani-Arusha, Tanzania
PL 10869/2016	100%	No change	29.95	Merelani-Arusha, Tanzania
PL 10872/2016	100%	No change	2.60	Merelani-Arusha, Tanzania
PL 10972/2016	100%	No change	3.83	Mahenge, Tanzania
PL 11081/2017	100%	No change	2.08	Merelani-Arusha, Tanzania
PL 11082/2017	100%	No change	20.77	Merelani-Arusha, Tanzania
PL 11083/2017	100%	No change	50.73	Merelani-Arusha, Tanzania
PL 11143/2017	100%	No change	2.62	Merelani-Arusha, Tanzania
PL 11511/2016	100%	No change	46.72	Merelani-Arusha, Tanzania
PL 11254/2016	100%	No change	6.73	Merelani-Arusha, Tanzania

This report is authorised for release by Andrew Spinks, Managing Director.

**For further information, please contact:**

## INVESTORS

**Andrew Spinks**  
Managing Director  
T: +61 8 6424 9002

### Forward looking statements

Various statements in this announcement constitute statements relating to intentions, future acts and events. Such statements are generally classified as "forward looking statements" and involve known and unknown risks, uncertainties and other important factors that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed herein. The Company gives no assurances that the anticipated results, performance or achievements expressed or implied in these forward-looking statements will be achieved.

### Production targets and financial information

Information in this announcement relating to the Bankable Feasibility Study conducted on the Epanko Graphite Project, including production targets and forecast financial information derived from the production targets, included in this announcement is extracted from an ASX announcement dated 21 June 2017 "Updated Bankable Feasibility Study" available at [www.ecograf.com.au](http://www.ecograf.com.au) and [www.asx.com.au](http://www.asx.com.au). The Company confirms that all material assumptions underpinning the production targets and forecast financial information derived from the production targets set out in the announcement released on 21 June 2017 continue to apply and have not materially changed.

Information in relation to the feasibility study conducted on the production of battery-grade graphite using the Company's EcoGraf technology, including production targets and forecast financial information derived from the production targets, included in this announcement is extracted from an ASX announcement dated 5 December 2017 "Battery Graphite Pilot Plant", as updated on 17 April 2019 "EcoGraf Delivers Downstream Development", available at [www.ecograf.com.au](http://www.ecograf.com.au) and [www.asx.com.au](http://www.asx.com.au). The Company confirms that all material assumptions underpinning the production targets and forecast financial information derived from the production targets set out in the announcement released on 5 December 2017, as updated on 17 April 2019, continue to apply and have not materially changed.

### Competent persons

Any information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Andrew Spinks, who is a Member of the Australasian Institute of Mining and Metallurgy included in a list promulgated by the ASX



from time to time. Andrew Spinks is a director of EcoGraf Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Andrew Spinks consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

Information in this document that relates to Mineral Resources is based on information compiled by Mr David Williams, a Competent Person, who is a Member of the Australasian Institute of Mining and Metallurgy. David Williams is employed by CSA Global Pty Ltd, an independent consulting company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". David Williams consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

Information in this document that relates to Ore Reserves has been compiled by Mr Steve O'Grady, who is a Member of the Australasian Institute of Mining and Metallurgy. Steve O'Grady is a full-time employee of Intermine Engineering and produced the Mining Reserve estimate based on data and geological information supplied by Mr Williams. Mr O'Grady has sufficient experience which is relevant to the estimation, assessment, evaluation and economic extraction of the Ore Reserve that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves". Steve O'Grady consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.





## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

EcoGraf Limited

### ABN

15 117 330 757

### Quarter ended ("current quarter")

31 December 2019

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(153)	(631)
(b) development	-	-
(c) production	-	-
(d) staff costs	(174)	(282)
(e) administration and corporate costs	(285)	(532)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	1	1
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Research and development refunds	232	232
1.8 Other (financing, product marketing and business development)	(443)	(783)
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(822)</b>	<b>(1,995)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	(2)	(4)
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) 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>(2)</b>	<b>(4)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	223	1,358
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(28)	(30)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
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>195</b>	<b>1,328</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	1,418	1,462
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(822)	(1,995)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2)	(4)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	195	1,328
4.5	Effect of movement in exchange rates on cash held	(1)	(3)
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>788</b>	<b>788</b>

5. <b>Reconciliation of cash and cash equivalents</b> 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	788	1,418
5.2 Call deposits	-	-
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>788</b>	<b>1,418</b>

6. <b>Payments to directors of the entity and their associates</b>	Current quarter \$A'000
6.1 Aggregate amount of payments to these parties included in item 1.2	248
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

Directors' remuneration and consulting fees.

7. <b>Payments to related entities of the entity and their associates</b>	Current quarter \$A'000
7.1 Aggregate amount of payments to these parties included in item 1.2	-
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

## Mining exploration entity and oil and gas exploration entity quarterly report

<b>8. Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities	-	-
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

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<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	(125)
9.2 Development	-
9.3 Production	-
9.4 Staff costs	(150)
9.5 Administration and corporate costs	(250)
9.6 Financing, product marketing and business development	(330)
<b>9.7 Total estimated cash outflows</b>	<b>(855)</b>

<b>10. Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-	-	-	-
10.2 Interests in mining tenements and petroleum tenements acquired or increased	-	-	-	-



### **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.

Sign here: [By Electronic Lodgement]  
Company Secretary

Date: 30 January 2020

Print name: Howard Rae

### **Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly 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 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.