

**31 October 2017****QUARTERLY ACTIVITIES REPORT****For period ending 30 September 2017****HIGHLIGHTS****Goulamina Lithium Project**

- Phase 2 geochemical auger drilling program identified significant anomalies, including three new pegmatite zones - Yando, Danaya and Sabali.
  - Yando is more than 1.5km long and may contain several mineralised pegmatites.
  - Danaya, located approximately 350m west of Sangar, is more than 600m long. No outcrop has been located.
  - Sabali remains open to the west, north and south.
  - Sangar pegmatite extends a further 500m beyond the current resource area.
- An initial program of reverse circulation (RC) drilling planned for October (and since commenced) will test several of the newly-identified geochemical anomalies.
- Pre-Feasibility Study (PFS) confirms potential technical and economic viability of Goulamina.
  - Revised PFS to be issued following completion and assessment of RC and auger drilling programs and further cost optimisation work.

**Massigui Gold Project**

- Viper and N'tiola Areas of Interest surrendered.
- Government approvals process well advanced.
- Completion Fee of US\$1 M payable following Ministerial assent.
- Mining and processing anticipated to commence in early 2018.

**Corporate**

- Corporate Review finalised and remedial actions taken.
- Change of Company auditor.

The September quarter was a transformative period for Birimian Limited (ASX: **BGS**; **Birimian** and the **Company**), marked by significant new pegmatite discoveries at Goulamina, extensive internal reforms and a reinvigorated approach to promoting Birimian following completion of the Company's corporate review and reinstatement of Birimian's securities to trading on 31 August 2017.

## 1. LITHIUM – Goulamina Project

### 1.1. New Pegmatite Zones

On 5 September 2017, Birimian announced that the Company had received assay results of bottomhole samples collected during the Phase 2 geochemical auger drilling program completed on 11 August 2017, as well as rock chip sampling of outcropping pegmatites at Goulamina Lithium Project (*BGS 5 Sept 2017*). The program defined significant anomalies, including three new pegmatite zones named Yando, Danaya and Sabali. Yando, the largest anomalous zone, was more than 1.5km long and could contain several mineralised pegmatites.

A total of 562 holes averaging 8m deep (Fig. 1) were drilled during the Phase 2 program, bringing the total number of auger holes drilled at Goulamina to 967. Bottomhole samples were visually logged, analysed using portable XRF and despatched to ALS Bamako for sample preparation and analysis using a fusion digest and ICP-MS finish. Standards and blanks were included after every 20 bottomhole samples.

The Phase 1 and 2 programs defined several geochemically anomalous zones, the biggest of which were named Yando and Danaya (Fig. 1). Yando is more than 1.5km long and could contain multiple pegmatites (Fig. 1). Evidence of Li mobility (depletion) was noted in the lateritised near surface material, so deep drilling will be required to establish the width,  $\text{Li}_2\text{O}$  grade and orientation of these pegmatites. Analyses of rock samples collected from outcropping spodumene-bearing pegmatite confirmed potentially economic  $\text{Li}_2\text{O}$  grades (Table 1).

The Danaya anomaly is located 350m west of Sangar and anomalous Li has been detected on three auger lines over 600m. Geochemical anomalies to the north and south of the Sangar zone indicated that the Sangar pegmatite extends at least 500m beyond the RC drilled limits of this deposit.

A fourth anomaly, Sabali, occurs in the south-western portion of the auger grid and remains open to the west, north and south. Additional auger drilling will be required to further define Sabali (and a contract for this work has since been awarded). Several other anomalies, particularly those to the east of the resource area, suggest the possibility of a number of additional mineralised pegmatites.

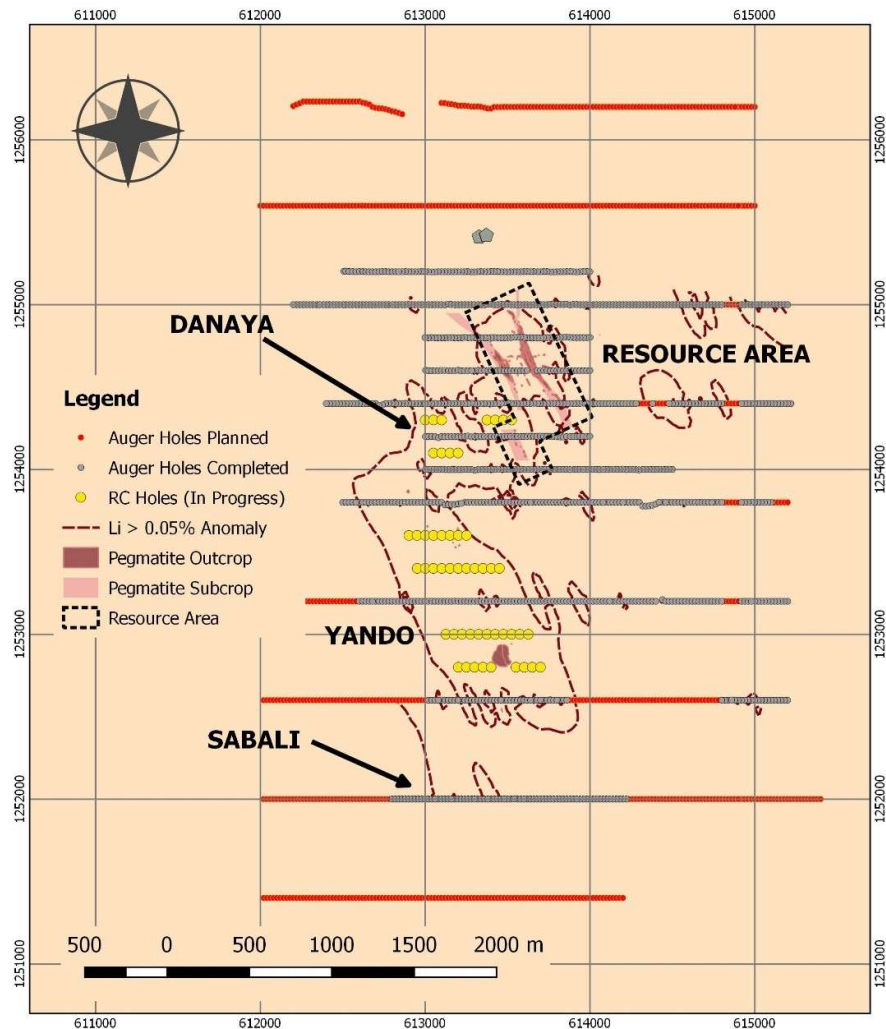


Figure 1: Location of planned RC and auger drilling in relation to the outline of the  $\text{Li}_2\text{O} > 0.5\%$  anomaly and current resource area

Systematic traversing reported in June (BGS 22 June 2017) identified a number of outcropping and previously unknown pegmatites. Many of these pegmatite outcrops were sampled and the samples despatched to ALS in Bamako for sample preparation and analysis. The same analytical scheme was used as for the auger samples. Analyses of 14 samples of outcropping pegmatite are reported in Table 1. Twelve of the 14 samples returned potentially economic levels of  $\text{Li}_2\text{O}$ , with a maximum value of 3.96%  $\text{Li}_2\text{O}$  recorded at Sangar. Eleven of the samples were from within the Yando auger anomaly, confirming the presence of a significant Li-mineralised body or bodies.

SampleID	Anomaly/Zone	East	North	Li <sub>2</sub> O%	Fe <sub>2</sub> O <sub>3</sub> %	Rb ppm
BG163421	Yando	613200	1253616	3.19	1.32	433
BG163422	Yando	613201	1253632	2.24	1.07	175
BG163423	Yando	613014	1253654	0.47	2.52	160
BG163425	Yando	613439	1252819	0.26	2.03	1,115
BG163426	Yando	613412	1252844	3.10	1.72	171
BG163427	Yando	613419	1252868	2.82	1.16	332
BG163428	Yando	613431	1252893	2.56	1.42	659
BG163434	Yando	613528	1252975	1.23	0.73	569
BG163436	Yando	613530	1252821	3.44	1.04	281
BG163437	Sangar	613600	1254110	2.60	0.99	355
BG163438	Sangar	613513	1254204	3.96	1.12	150
BG163439	Sangar	613537	1254275	2.86	1.14	390
BG163440	Yando	613501	1252872	2.54	1.23	589
BG163441	Yando	612896	1253866	2.63	0.77	232

Table 1: Li, Fe and Rb content of spodumene-bearing pegmatites from outcrop.

An initial program of RC drilling was announced for October (and has commenced) to test these geochemical anomalies in order to establish Li grades, pegmatite width, depth and geometry and to prioritise the geochemical anomalies for a resource drilling program planned for commencement later in the year.

## 1.2. Pre-Feasibility Study

The Goulamina Project Pre-Feasibility Study (**PFS**) completed in late September and announced by the Company in early October 2017 (*BGS 4 Oct 2017*) confirmed the potential technical and economic viability of Goulamina. The PFS was commenced in January 2017 (*BGS 31 January 2017*), before the potential scale of the resource was known or understood. This study was critically restricted due to the limited resource inventory available to it; its initial scope and the lack of understanding of the potential underlying resource base.

Because of these restrictions and the anticipated additions (during planned and future drilling programs) to the Goulamina resource inventory, Birimian anticipates revising the Project PFS as soon as practicable in the first half of 2018.

The PFS did not define a single preferred development option (*BGS 5 Sept 2017*), but detailed five possible development scenarios. Four mining schedule scenarios were analysed:

1. Smaller pit at 1.0 Mtpa (base case);
2. Larger pit at 2.0 Mtpa for LOM;
3. Smaller pit at 1.0 Mtpa for the first three production years and 2.0 Mtpa thereafter; and
4. Larger pit at 1.0 Mtpa for the first three production years and 2.0 Mtpa thereafter.

These scenarios assume the sale of a 6% Li<sub>2</sub>O spodumene concentrate. A fifth scenario was also considered, involving the secondary processing of approximately half (56%) of the available spodumene concentrate from Scenario 2 to produce battery grade lithium carbonate

for sale and sale of the residual spodumene concentrate. This scenario was based on a concept study undertaken into the secondary processing of spodumene to lithium carbonate. The PFS development and commissioning schedule includes an eighteen-month construction period.

The PFS envisaged a Project operational mine life of 9 to 14 years, processing between 14.0Mt at 1.39% Li<sub>2</sub>O and 20.6Mt at 1.31% Li<sub>2</sub>O. This projection was based solely on the Indicated component of the Mineral Resource Estimate announced in June 2017 (*BGS 22 June 2017*). The plant would produce a 6% Li<sub>2</sub>O concentrate production at an average recovery of 80.7%, demonstrated by metallurgical testwork.

The estimated capital cost ranges from US\$86.9M to US\$142.0M, including contingency. The PFS estimated that the Project has an NPV at a 10% discount rate (NPV<sub>10</sub>) of between US\$85.6M and US\$126.4M for the concentrate-only scenarios. Inclusion of secondary processing lifts Project NPV<sub>10</sub> to US\$637.9M for an estimated additional capital cost of US\$221.0M.

The Project is sensitive to scale therefore expansion of the existing Mineral Resource may be expected to increase NPV<sub>10</sub>.

Following announcement of the PFS (*BGS 4 Oct 2017*), the Company held a scheduled general meeting of shareholders on 6 October 2017 and released a presentation providing context and clarification of the parameters used in the PFS. A summary of the five possible development scenarios showed that Scenario 5 demonstrates the best economic outcome for the Project.

DESCRIPTION		Capex*	NPV <sub>10</sub> **	IRR	EBIT
		US\$M	US\$M	%	US\$M
1	Base case: small pit at 1.0 Mtpa	86.9	87	21	447
2	Large pit at 2.0 Mtpa for life of mine	126.3	136	25	556
3	Small pit at 1.0 Mtpa for first 3 yrs & 2.0 Mtpa thereafter	139.7	92	22	393
4	Large pit at 1.0 Mtpa for first 3 yrs & 2.0 Mtpa thereafter	142.0	126	22	649
5	Large pit at 2.0 Mtpa for life of mine	412.0	638	39	2,030
*	Capex includes contingency				
**	NPV <sub>10</sub> is post tax				

Scenario 5 combines Scenario 2, under which 2.0Mtpa would be processed to produce 353kt spodumene concentrate annually, with a further (secondary) processing of approximately half (198kt) of the spodumene concentrate to produce battery grade lithium carbonate, with a combined transport weight of 168kt of product.

Transport and logistics costs of US\$173.75/t, which the PFS bases on a proposed road and rail model for concentrate shipment to the Port of Abidjan in Côte d'Ivoire, account for approximately half the operating cost for Scenario 2, therefore significant financial benefits are generated by secondary processing:

- Weight reduction factor is ~15.
- Much higher value product.
- Marketing flexibility – higher up the supply chain.

Scenario 5 would produce 155.2kt of spodumene and 13.2kt of lithium carbonate annually. The capital cost of US\$412M includes all capital costs for mining, infrastructure and both the primary and secondary processing plants, including contingency. The 198kt of spodumene concentrate for processing at site would be produced at a cost of US\$193/t. Scenario 5 would produce an NPV<sub>10</sub> of US\$638M post tax and an IRR of 39%, with a life of mine of 10.3 years - with further optimisation possible after follow-up drilling to further delineate the Goulamina resource base.

The Company also addressed key drivers of the PFS NPV<sub>10</sub>, which include commodity price estimates and capital & operating costs.

### Commodity Pricing

The Goulamina PFS used an independently-determined and conservative pricing model for spodumene concentrate, including US\$446/t in first year of operation. This compares, for example, with Kidman Resources Limited, which has a published spodumene concentrate average price of US\$685/t. Using this price in the BGS model increases the NPV<sub>10</sub> of Scenario 2 from US\$136M to US\$273M.

Commodity	Period						
	2021	2022	2023	2024	2025	2026	Rest
6% spodumene FOB, \$/t	446	500	523	591	665	729	729

### Costs

The PFS has used independently determined and conservative cost estimates, with scope for significant improvement.

- Power (11.3% of total operating costs) assumes high-cost diesel generation and not alternatives such as hydro-electricity, which are potentially available in Mali.
- Transport and logistics (50% of total operating costs) costs are not yet optimised – detailed work to refine these costs will be undertaken as part of the revision of the PFS in order to better inform the Definitive Feasibility Study (**DFS**) on a critical cost element.
- High-end capital equipment items (ball mill, screens etc) have been selected for early capital estimate.

Birimian advised that it would prioritise revision of the PFS, which together with completion and evaluation of the planned drilling program to refine the project resource inventory, would result in a single development option for consideration in the DFS.

### 1.3 Tenement Status

The June Quarterly Activity Report (*BGS 31 July 2017*) noted that during the due diligence process, a gap was identified between the tenements at Goulamina, such that the Company's holdings were possibly not contiguous. This did not impact the existing published resources, nor any known exploration targets, but could affect Birimian's ability to fully exploit the potential of the Project area. Consequently, an application for an amendment was made to the Direction Nationale de la Géologie et des Mines (Department of Geology and Mines) (**DNGM**) for any area required to make the tenement holding contiguous. Subsequent discussions with the DNGM have established that it is common practice in Mali to leave a gap between adjoining tenements held by different parties. DNGM acknowledged that this is not the case at Goulamina and undertook to amend the tenement coordinates as a technical adjustment, in accordance with Company's request.

All tenements at Goulamina (and elsewhere in Mali) are in good standing.

## 2. GOLD – Massigui

### Morila Option Agreements on Viper and N'tiola Deposits

Progress was made during the quarter towards concluding the two option and purchase agreements (**Option Agreements**) signed on 4 November 2016 by Birimian Gold Mines SARL (**BGM**) with Société des Mines de Morila SA (**Morila**), operator of the Morila gold mine in southern Mali. Morila mine is nearing the end of its economic life and the transactions will extend its operational life, while enabling Birimian to realise economic value from its Massigui Gold Project without the need for capital investment.

The arrangement will allow Morila to access the Viper and N'tiola gold deposits (referred to as the **Areas of Interest**), located on the Finkola (PR 13/640) and N'tiola (PR 14/715) permits, following the surrender by BGM of the Areas of Interest from its permits. Extension of Morila's existing exploitation (mining) permit will enable Morila to mine these areas which adjoin its own mining lease.

Morila exercised the options on 24 April 2017 (*BGS 28 April 2017*), following completion of an initial evaluation drilling program. The Option Agreements provided Morila with a six-month option to complete feasibility study on the two deposits. The parties subsequently agreed to extend the timeframe for completion of the transactions to 30 November 2017.

Birimian's announcement in mid-August 2017 updating shareholders on the outcome of the internal corporate review conducted into the Company's affairs (*BGS 16 August 2017*) detailed various previously undisclosed risks to the Company arising from the way the transaction with Morila had been structured. These risks related to the satisfaction by BGM of conditions precedent to the Option Agreements; the security of tenure of the Areas of Interest and the impact of possible government imposts arising from the transactions.

The announcement also acknowledged the rights which the local firm La Société Hanne General Trading SARL (**Hanne**) held in the N'tiola tenement. Birimian met with Hanne in September to address this matter. Hanne has indicated support for the Option Agreement and Birimian anticipates the parties will soon enter into an agreement to confirm their relationship.

BGM submitted applications to the Government for relinquishment of the Areas of Interest. The Government authorised the surrender of the Finkola Area of Interest on 10 August 2017. On 11 September 2017, the Government renewed BGM's N'tiola exploration permit and authorised the surrender of the Area of Interest from that tenement.

Morila applied to the Government for an extension of its mining permit to include the Areas of Interest in late September and this application is currently is being processed by the Direction Nationale de la Géologie et des Mines in Mali prior to receiving Ministerial assent. Birimian will receive a US\$500,000 Completion Fee in respect of each transaction and a Net Smelter Return of up to 4% on gold produced from Viper and N'tiola, subject to the satisfaction (or waiver) of the conditions precedent.

Birimian met with Randgold – operator of Morila - in London in late September to discuss finalising the agreement and operational procedures once mining commences. A follow-up visit by Birimian to the Morila treatment plant is planned.

Morila has commenced open pit mining at a satellite deposit at Domba village, located some six kilometres from Morila's treatment plant. Morila anticipates mining Domba until the end of January 2018. Subject to obtaining consent from the Malian Minister of Mines, Morila intends to extend its haul road from Domba to Viper and N'tiola, which are located about 25 km north-west of Morila's treatment plant. Subject to the completion of Domba, Morila anticipates commencement of sequential mining at Viper and N'tiola in the first half of 2018.

### **3. CORPORATE**

#### **3.1. Change of Auditors**

Further to its ASX release of 29 June, the Company received approval from the Australian Securities and Investments Commission to change its auditors. Accordingly, the Company accepted the resignation of Grant Thornton Australia Limited and appointed Pricewaterhouse Coopers as Birimian's auditor.

#### **3.2. Annual Report**

The Company issued its Annual Report incorporating the financial statements for the year ended 30 June 2017, which included restatement of a number of matters for prior years. These matters were disclosed in the findings of the Review (refer section 3.4 below).

#### **3.3. Appointment of Joint Company Secretary**

On 29 September, the Company announced the appointment of Mr Nicholas Longmire as Joint Company Secretary. Ms Beverley Nichols resigned as Company Secretary effective as of 31 October 2017.



### 3.4. Corporate Review

Birimian announced an internal corporate review (the **Review**) in early April (*BGS 4 April 2017*). The initial stage of the Review brought to light numerous issues which led Birimian to seek a trading halt (*BGS 27 April 2017*) and then a voluntary suspension (*BGS 1 May 2017*). Birimian detailed the preliminary findings of the Review to shareholders in early May (*BGS 2 May 2017*).

Findings of the Review were announced to ASX on 16 August 2017, with re-instatement of the Company's securities taking place on 31 August 2017. This followed shareholder information sessions held in Perth, Brisbane, Sydney and Melbourne.

The Board advised that issues identified in the Review would be further investigated and appropriate steps taken to rectify these matters. This process was ongoing throughout the quarter, with further related matters arising requiring analysis and resolution.

### 3.5. Corporate Awareness Campaign

#### Industry Participation

Birimian participated in the 15th Africa Down Under (**ADU**) Conference, held in Perth during 6-8 September 2017. The Company presented on the Goulamina Lithium Project on the opening day of the conference and maintained a booth during the conference.

In September, Birimian renewed its membership of Australia-Africa Minerals & Energy Group (**AAMEG**), the peak council representing Australian companies engaged in the development of Africa's resource industry. AAMEG works at State and Federal levels to engage Governmental cooperation on mining related activity in Africa and provides a forum for exchange of information and collaboration on a range of issues including political and social risk; security and health; anti-bribery and corruption and foreign law and regulation.

The Company will also participate in the 7<sup>th</sup> International Mali Mining and Petroleum Conference and Exhibition (JMP'17) which will be held in Bamako, Mali during 21-23 November 2017. The Company will make a presentation and maintain a booth during the conference, which is organised by the Ministry of Mines in Mali.

### 3.6. Government and Community Relations

The Company met the Malian Minister for Mines, Prof. Tiémoko Sangaré, and Ministerial officials in Perth on 7 September 2017, during the Minister's visit to Perth to attend the ADU conference. Birimian briefed the Minister on the Company's progress with the Goulamina Lithium Project and progress towards applying for a mining licence in early 2018. Prof. Sangaré expressed keen interest in the project and indicated the Malian Government's strong support for the development of Goulamina, which aligned with its objective of diversifying the country's mining sector.

A site visit by senior management was made to Mali during 10-22 September. This included inspection visits to Goulamina and Massigui Projects. Meetings were held with the village

chiefs and elders of Goulamina and Mafélé villages, located near the Goulamina Project. Both chiefs expressed the strong support of their villages for the Project and pledged cooperation during the development phase.

Two meetings were held with Digby Wells Environmental field staff in Mali to advance the Company's Social Development Plan, which will be presented by Birimian and Digby Wells to local communities and governmental officials in December. This is a key step in the environmental approvals process.

The UK-based security firm, Field Security Services Group (**FSS**), was engaged to carry out a security risk assessment in Mali. FSS is a global risk management consultancy that provides security, medical and support services in emerging markets, frontier and hostile environments. FSS will provide Birimian with a comprehensive security assessment and risk management report and recommend appropriate security arrangements.

### **3.7. Femima**

The Company's announcement on the Review findings (*BGS 16 Aug 2017*) noted that at the time Timbuktu Ressources SARL was granted the Torakoro permit over the Goulamina Project, it had entered into a heads of agreement arrangement with La Société Cooperative Femima (**Femima**), which is a women's mining cooperative in Mali. Femima was a previous holder of rights over the ground that is now the subject of the Torakoro permit. It was noted that, while the heads of agreement contemplated the parties entering into a more formal agreement, this formality had not been completed. The Company met with senior representatives of Femima during the September visit to Mali and is well advanced towards finalising a formal agreement with the cooperative.



**Greg Walker**  
Executive Director and Chief Executive Officer  
Birimian Limited

## Tenement Holdings and Location

Tenement Holder	Tenement Location	Tenement Designation	Tenement Number
<b>Birimian Gold Mali SARL</b>			
Within "circle" of Bougouni	Southern Mali	Finkola	PR 13/640
		N'tiola	PR 14/715
	Southern Mali	Diokele Bougou	PR 13/639
		Tiorola	PR 13/638
Within "circle" of Kati		Makano	PR 13/637
		Mana Bougou	PR 13/641
		Songoria	PR 13/636
<b>Timbuktu Ressources SARL</b>			
Within "circle" of Bougouni	Southern Mali	Diokelebougou-Nord	PR 13/671
		Finkola-Sud	PR 13/622
		Torakoro	PR 16/840
Within "circle" of Dioila	Southern Mali	Batouba Sud	Application
Within "circle" of Kati	Southern Mali	Sanankoroni	PR 16/805
<b>Sudquest SARL</b>			
Within "circle" of Bougouni	Southern Mali	Finkola Nord Mafele Sud Nkemene	Applications

### Forward Looking Statements

Statements regarding plans with respect to the Company's mineral properties are forward looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as expected. There can be no assurance that the Company will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.

### Competent Persons' Statement

There is information in this announcement relating to previously reported Exploration Targets and Exploration Results at the Goulamina Project, announced to ASX on 5 September 2017 'Goulamina Lithium Resource Expansion and Project Update'. The Company confirms that it is not aware of any other new information or data that materially affects the information included in the original announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement. The original announcement is available on the Company's website at [www.birimian.com](http://www.birimian.com).

There is information in this announcement that relates to previously reported Mineral Resources at the Goulamina Project, announced to the ASX on 22 June 2017 'Goulamina Lithium Resource Expansion and Project Update'. The Company confirms that it is not aware of any other new information or data that materially affects the information included in the original announcement, and that all material assumptions and technical parameters underpinning the estimates in the original announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement. The original announcement is available on the Company's website at [www.birimian.com](http://www.birimian.com).

There is information in this announcement relating to the Goulamina PFS and Production Target, announced to ASX on 4 October 2017 'Goulamina PFS'. The Company confirms that all the material assumptions underpinning the Production Target and the forecast financial information derived from the Production Target in the original announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement. The original announcement is available on the Company's website at [www.birimian.com](http://www.birimian.com).