

# Delivering power to the people

ASX RELEASE ASX:AFR

29 January 2016

# **QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2015**

### **HIGHLIGHTS**

- First Quantum Minerals Limited (FQM) increased their interest in the Sese Integrated Power Project to 53%, having spent A\$1.3M (beyond the initial A\$8M investment) on the Sese Project to date.
- During the quarter, Sese JV focused on advancing the permitting of Sese Project
  - A Land Lease agreement for the Sese Project was signed and is currently being registered with the Botswana Deeds Office. The land lease will provide surface rights over the project area for 50 years.
  - Commenced negotiations with Botswana Ministry of Finance for a Manufacturing Development Approval Order for the Sese Project. African Energy is undertaking financial modelling of Sese Project to assist FQM with the Development Approval Order negotiations.
- Executed an agreement for the sale of Mmamantswe Coal and Power project to TM Consulting for US\$20 million, subject to certain conditions being met.
- The following project development programmes commenced at the Mmamabula West project:
  - A programme of four large diameter core holes and subsequent analytical work to derive a power station fuel specification for each coal seam;
  - Amendments to the Environmental and Social Impacts Assessment (ESIA) and Environmental Management Plan (EMP) to include 300MW + 300MW of power generation and grid connection;
  - Hydrogeological modelling for ESIA baseline studies;
  - o Preparation of submissions for surface rights and water allocation, and
  - o A preliminary grid integration study.
- At the Annual General Meeting, shareholders passed a resolution for the Company to undertake an on-market share buyback. 8,646,573 shares were acquired during the quarter at an average price of 5.2 cents.
- At 31 December 2015, the Company had cash reserves of AU\$6.68M.



# **OUTLOOK FOR NEXT QUARTER**

### Sese Integrated Power Project (47% AFR, 53% FQM)

- Complete coal supply agreement and submit a mining license application covering enough coal for the initial Sese Integrated Power Project and potential future expansions.
- Complete Water Supply Agreement
- Submit an application to Botswana Ministry of Finance for a Manufacturing Development Approval Order for the Sese Project.
- FQM have committed to invest a further A\$11M in Sese by 15 July 2016 to acquire an additional 24% interest in the project.
- Continue to assess power market opportunities in the southern African region suitable for expansions of the Sese Integrated Power Project.

# Mmamantswe Power Project (100% AFR, operated by TM Consulting)

Assist TM Consulting prepare the work programmes to deliver a formal submission in response to South Africa's coal-fired, cross-border independent power project procurement programme.

# **Mmamabula West Project (100% AFR)**

- Continue discussions with potential project development partners for mine-mouth power generation opportunities.
- Completion of large diameter core analyses to provide the basis for determination of a power station fuel specification for each coal seam.
- Ongoing hydrogeological modelling for the ESIA baseline study.
- Ongoing amendment of the ESIA and EMP to include 300MW + 300MW of power generation plus grid connection.
- Commence grid integration study.

### Corporate

Continue on-market share buyback. A further A\$550,477 may be spent in 2016.



### **PROJECTS**

# Sese JV, Botswana (AFR 47%, FQM 53%)

### 1.1 Sese JV Administrative

- FQM spent US\$279,615 in the quarter and has spent US\$976,723 to date since their initial investment on January 2015.
- FQM increased their interest in the Sese Integrated Power Project to 53%, having spent A\$1.3M (beyond the initial A\$8M investment) on the Sese Project to date.
- FQM can increase their interest in Sese Integrated Power JV to 75% by investing a further A\$10.7M by 15 July 2016. This investment will be used to fund the evaluation and development of the proposed Sese Integrated Power Project.
- Once FQM has reached a 75% project interest, AFR's ongoing 25% interest in all projects undertaken in the Sese JV will be loan carried through to commercial operation, with the loan to be priced on the same terms as FQM's weighted average cost of long-term debt, and repaid from AFR's share of operating surplus cash flow.

### 1.2 Permitting

- A mining license application covering enough coal for the initial Sese Power Project and potential future expansions is currently being prepared. This requires completion of an arm's length coal supply agreement between the proposed mine and power station.
- A Land Lease agreement for the Sese Project was signed during the quarter and is now being registered as a Deed in Botswana. The Land Lease Agreement provide guaranteed surface rights over the project area for 50 years.
- A formal Water Supply Agreement is being finalized for execution.
- The Environmental and Social Impact Assessment for the Sese Integrated Power Project has been approved by the Department of Environmental Affairs (DEA). This covers an initial 300MW power station, associated coal mine and related infrastructure, including an access corridor to the main A1 highway and regional transmission grid.
- The Sese (PL96/2005) and Sese West (PL197/2007) prospecting licenses are valid until 31 December 2016.
- An application for the first renewal and 50% area reduction of the Foley North industrial minerals prospecting license (PL004/2013) was submitted.
- Commenced negotiations with Botswana Ministry of Finance for a Manufacturing Development Approval Order for the Sese Project. AFR is providing assistance to FQM for these negotiations, including financial modelling of project cash flows to various stakeholders and compiling advice on various options for efficient and fair tax structuring.



#### 2 Mmamantswe Integrated Power Project, Botswana (AFR 100%)

### 2.1 Binding Term Sheet

In December the Company executed a binding Share Sale Agreement under which the Company's wholly owned subsidiary, Botswana Energy Solutions Ltd (the Seller), will sell the Mmamantswe Coal and Power project to TM Consulting (the Developer) for US\$20 million, subject to certain conditions being met.

The material terms and conditions of the Share Sale Agreement (SSA) are:

- The Developer will form a bid consortium which is responsible for sole funding the preparation and submission of a bid in response to a Request for Proposals in respect of South Africa's Coal Baseload Independent Power Producer Procurement Program (SAIPPPP). This must include completion of an agreed work program to keep the Mmamantswe Prospecting License in good standing.
- African Energy is not required to provide any funding to keep the project in good standing or make the bid submission.
- If the Developer is notified by South Africa's Department of Energy that it has achieved preferred bidder status, or if the Developer waives this condition, the Developer must, within 15 days, provide a bank guarantee for an amount of US \$20 million in favour of the Seller.
- The Developer must pay \$20 million to the Seller on completion of the sale.
- Other Conditions Precedent are:
  - The RFP being issued within 12 months of the date of the SSA (unless waived by the Seller and Buyer).
  - o Financial Close being achieved within 18 months of the date of the SSA. This may be extended by 12 months if all other Conditions Precedent have been met or waived.
  - Approval for the Share Sale under the Competition Act 2009, Botswana (if required).
  - o Approval for the transfer of beneficial ownership of the Prospecting License by the Minister for Minerals Energy and Water Resources, Botswana.
  - o Approval for the transfer of the purchase price to the Seller by the Financial Surveillance Department of the South African Reserve Bank.

### 2.2 Integrated Power Project

- South Africa's Department of Energy has issued a broad Request for Proposals ("RFP") to developers of projects for the first bid window of a 2,500MW coal baseload IPP procurement programme. This first bid window is for 1,600MW, of which up to 600MW can come from cross border projects (i.e. those physically located outside South Africa's border).
- It is expected that specific qualifying criteria for the cross-border projects will be released under an amended RFP in Q1 2016.
- The Mmamantswe project is only 20km from the border with South Africa and has been previously evaluated by Eskom for integration into the South African grid.
- Prospecting licence (PL069/2007) has been granted an extension until 31st December 2016.



#### 3 Mmamabula West Project, Botswana (AFR 100%)

# 3.1 Project Development Plan

The Mmamabula West project contains two ~5m thick coal seams which provide a variety of developments options as either a stand-alone integrated power project, a stand-alone export coal mine (for coal exports to South Africa or into the seaborne global market), or a combination of the two.

- AFR is currently only pursuing the power development opportunities for this project.
- The following project development plan was approved by the AFR board and commenced during the quarter:
  - o Large diameter drilling programme to derive a power station fuel specification this will de-risk the project from a power developer's perspective and provide valuable inputs into the project financial model.
    - Four HQ3 slim-line pilot holes each with a twinned large diameter (122mm core) hole were completed in the quarter.
    - The HQ3 pilot holes were spaced approximately 2km apart providing broad coverage across the proposed mining study area.
    - A total of 614.88m was drilled in the slim-line holes, with core samples collected from both coal seams in each hole. Seam thicknesses varied from 5.07m to 6.66m in the uppermost K-Seam (average 5.75m), and 4.10m to 5.04m in the lower A-Seam (average 4.41m).
    - Core samples from the slim-line cores (48 samples of HQ3 core) have been sent to ALS Witlab for proximate analyses. The results from these analyses will be used to plan a washing test work program.
    - Samples of roof and floor material adjacent to each seam have been submitted to the Company's environmental consultants for studying the potential for acid mine drainage. Samples of each coal seam (product and wash rejects) will also be analysed as part of this assessment.
    - The four large diameter holes were drilled as close as possible to each slim-line twin hole. Cores were sampled from each of the two coal seams in each hole, and included 0.5m to 1.0m of roof and floor material adjacent to each seam.
    - A programme of physical test work, including particle size distribution analysis, ultimate analysis, hardness testing and abrasion testing will be undertaken on the large diameter core.
    - These studies will provide information allowing a power station fuel specification and coal processing flowsheet to be derived for each coal seam.
  - o Hydrogeological (aquifer) modelling will be undertaken for preliminary ESIA baseline studies. The initial model will be constructed using existing borehole information.
  - Amend the ESIA/EMP documentation to include 300MW + 300MW of power generation plus grid connection to BPC's Isang sub-station. A revised project scope has been prepared, and community consultations will commence in February 2016.



- o Surface rights application for project, project access corridor and grid connection corridor.
- o A preliminary (desktop) grid integration study to determine the optimal grid connection point for supply of power into the Botswana grid and into South Africa. The scope for the grid integration study has been completed and distributed to service providers for quote.
- Completion of these elements plus the existing mine pre-feasibility study completed by African Energy in March 2014 will provide a solid technical and commercial platform to attract development partners and investors into the project.
- Mmamabula West (PL56/2005) has been granted an extension to 31 March 2017.



# **Global Resources for African Energy's Coal Projects in Botswana**

Sese Project: Resource Summary (Raw coal ADB, 53% FQM, 47% AFR)									
Resource Zone	In-Situ Tonnes*	CV (MJ/kg)	CV (kcal/kg)	Ash %	IM%	VM%	FC%	S %	
MEASURED (Bk-C)	333 Mt	17.6	4,200	30.2	7.9	20.6	41.4	2.1	
MEASURED (Bk-B)	318 Mt	16.0	3,820	34.8	7.4	20.4	37.4	1.7	
INDICATED	1,714 Mt	15.3	3,650	38.9	6.6	18.7	35.8	2.0	
INFERRED	152 Mt	15.0	3,600	39.1	6.4	19.5	34.9	2.2	
TOTAL	2,517 Mt								

Sese West Project: Resource Summary (Raw coal ADB, 53% FQM, 47% AFR)								
Resource Zone	In-Situ Tonnes*	CV (MJ/kg)	CV (kcal/kg)	Ash %	IM%	VM%	FC%	S %
INFERRED	2,501 Mt	14.6	3,500	40.2	6.1	19.8	31.9	2.0
TOTAL	2,501 Mt							

Mmamabula West Project: Resource Summary (Raw coal ADB, 100% AFR)								
Resource Zone	In-Situ Tonnes*	CV (MJ/kg)	CV (kcal/kg)	Ash %	IM%	VM%	FC%	\$ %
INDICATED	892 Mt	20.2	4,825	25.5	6.0	26.0	41.0	1.5
INFERRED	1,541 Mt	20.0	4,775	25.5	5.7	25.9	41.2	1.7
TOTAL	2,433 Mt							

Mmamantswe Project: Resource Summary (Raw coal ADB, 100% AFR)								
Resource Zone	In-Situ Tonnes*	CV	CV	Ash	IM%	VM%	FC%	S
		(MJ/kg)	(kcal/kg)	%				%
MEASURED	978 Mt	9.5	2,270	56.5	3.9	15.8	21.8	2.0
INDICATED	265 Mt	7.9	1,890	62.3	3.3	14.2	18.1	2.1
INFERRED	N/A							
TOTAL	1 2/13 M+							

<sup>\*</sup> In-Situ tonnes have been derived by removing volumes for modelled intrusions, burnt coal and weathered coal and then applying geological loss factors to the remaining Gross In-Situ Tonnes

The Coal Resources quoted for the Sese, Mmamabula West and Mmamantswe Projects in the table above have been defined in accordance with the practices recommended by the Joint Ore Reserves Committee (2004 edition of the JORC Code). Sese West is reported as per the 2012 edition. There have been no material changes to any of the resources since they were first announced.

**Dr. Frazer Tabeart Managing Director** 



#### Mining tenements held at the end of the quarter and their location 5

	Interest at beginning of quarter	Interest at end of quarter	Location	Commodity
PL096/2005 (Sese)	49%	47%	Botswana	Coal, U
PL197/2007 (Sese West)	49%	47%	Botswana	Coal, U
PL004/2013 (Foley North)	49%	47%	Botswana	Industrial
PL069/2007 (Mmamantswe)	100%	100%	Botswana	Coal
PL056/2005 (Mmamabula West)	100%	100%	Botswana	Coal
12634-HQ-LML (Chirundu ML)	100%	100%	Zambia	U
13265-HQ-LPL (Chirundu PL)*	0%	0%	Zambia	U
13642-HQ-LPL (Munyumbwe)	100%	100%	Zambia	U
19800-HQ-LPL (Kariba Valley)	100%	100%	Zambia	U
20612-HQ-LPL (Sinazongwe)	0%	100%	Zambia	Coal
16566-HQ-LPL (Sinazongwe Central)	100%	100%	Zambia	Coal
16775-HQ-LPL (Sinazongwe South)*	0%	0%	Zambia	Coal

<sup>\*</sup>Renewal of Sinazongwe South and Chirundu prospecting licenses are under application

Full details for all projects including location maps, tenement schedules and technical descriptions may be found on the African Energy Resources website at: www.africanenergyresources.com

The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The information contained in this announcement was prepared under the JORC Code 2012. References to "Measured, Indicated and Inferred Resources" are to those terms as defined in the JORC Code (2012 edition).

Information in this report relating to Exploration results, Mineral Resources or Ore Reserves is based on information compiled by Dr Frazer Tabeart (an employee and the Managing Director of African Energy Resources Limited) who is a member of The Australian Institute of Geoscientists. Dr Tabeart has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Tabeart consents to the inclusion of the data in the form and context in which it appears.

For any queries please contact the Company Secretary, Mr Daniel Davis on +61 8 6465 5500



# **Appendix 5B** Mining exploration entity quarterly report

Name of entity

African Energy Resources Limited		

ARBN Quarter ended ("Current Quarter")

123 316 781 31 December 2015

### Consolidated statement of cash flows

Cash f	lows related to operating activities	Current Quarter \$US'000	Year to date (6 months) \$US'000
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for:		
	(a) exploration and evaluation	(278)	(307)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(294)	(677)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	3	96
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Refund of Botswana VAT	-	171
	Net Operating Cash Flows	(569)	(717)
	Cash flows related to investing activities		
1.8	Payment for purchases of:		
	(a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	-
1.9	Proceeds from sale of:		
	(a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other (Payments for Share buyback)	(328)	(328)
	Net investing cash flows	(328)	(328)
1.13	Total operating and investing cash flows	(897)	(1,044)



1.13	Total operating and investing cash flows (carried forward)	(897)	(1,044)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	-	-
1.15	Cost of the Issue	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other (provide details if material)	-	-
	Net financing cash flows	-	-
	Net increase (decrease) in cash held	(897)	(1,044)
1.20	Cash at beginning of quarter/year to date	5,540	6,240
1.21	Exchange rate adjustments to item 1.20	224	(329)
1.22	Cash at end of quarter	4,867	4,867

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities.

		Current quarter \$US'000
1.23	Aggregate amount of payments to the parties included in item 1.2	179
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

US\$145,856 – director remuneration payments

US\$33,136 – payments for administrative staff, technical staff and provision of a fully serviced office

# Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

Nil

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Nil

### Financing facilities available

		Amount available \$US'000	Amount used \$US'000
3.1	Loan facilities	-	-
3.2	Credit standby arrangements	-	-



# Estimated cash outflows for next quarter

		\$US'000
4.1	Exploration and evaluation	301
4.2	Development	-
4.3	Production	-
4.4	Administration	307
	Total	608

# **Reconciliation of cash**

consc	nciliation of cash at the end of the quarter (as shown in the plidated statement of cash flows) to the related items in the unts is as follows.	Current quarter \$US'000	Previous quarter \$US'000
5.1	Cash on hand and at bank	824	832
5.2	Deposits at call	4,043	4,708
5.3	Bank overdraft	-	-
	Total: Cash at end of quarter (item 1.22)	4,867	5,540

# Changes in interests in mining tenements

6.1	Interests in mining
	tenements relinquished,
	reduced or lapsed

6.2	Interests in mining
	tenements acquired or
	increased

Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
PL096/2005 (Sese) PL197/2007 (Sese West) PL004/2013 (Foley North)	Sese JV Sese JV Sese JV	49% 49% 49%	47% 47% 47%
20612-HQ-LPL (Sinazongwe)	Direct	0%	100%



# Issued and quoted securities at end of current quarter

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	Preference <sup>+</sup> securities	-	-		- Iote 3) (cents)
7.2	Changes during quarter	_	-	_	-
7.3	+Ordinary securities	611,355,195	611,355,195	-	-
7.4	Changes during quarter			-	-
	Decrease through on- market buyback	8,646,573	8,646,573		
7.5	<sup>+</sup> Convertible debt securities	-	-	-	-
7.6	Changes during quarter	-	-	-	-
7.7	Options/Rights	13,800,000	-	Options exercisable at A\$0.10 and expiring on 27 November 2017  Performance rights subject to various vesting hurdles and expiry dates	
		11,266,666	-		
7.8	Issued during quarter	-			
7.9	Exercised during quarter	-			
7.10	Expired during quarter	36,605,900 options exercisable at A\$0.15			
7.11	Debentures (totals only)	-	-		
7.12	Unsecured notes (totals only)	-	-		



### **Compliance statement**

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

**Mr Daniel Davis** 

Company Secretary
Date: 29 January 2016

### **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 wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, AASB 1022: Accounting for Extractive Industries and AASB 1026: Statement of Cash Flows apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.