

Delivering power to the people

ASX RELEASE ASX:AFR

31 October 2013

## **QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 30 SEPTEMBER 2013**

## **HIGHLIGHTS**

- African Energy Resources Limited ("African Energy" or "Company") executed a Joint Development Agreement ("JDA") with ACWA Power International ("ACWA Power") for the development of a power project to be located at the Company's Sese coal deposit in Botswana.
- African Energy and ACWA Power, as a consortium, submitted an Expression of Interest to the Government of Botswana to build, own and operate a 300 MW coal fired power generation plant at AFR's Sese coal deposit.
- African Energy and Asenjo Energy ("Asenjo") executed a binding agreement under which African Energy has agreed to acquire the 2.4 billion tonne Mmamabula West Coal Project in south-east Botswana for cash consideration of US\$2.5m, subject to certain conditions.
- African Energy executed a binding letter of intent with Karoo Exploration Corp to sell its portfolio of Zambian uranium licences. Subject to certain conditions, African Energy will receive a cash payment of US\$2m, and the receipt of an equity package consisting of shares and share purchase warrants with a value of US\$0.5m.
- The Company submitted a Request for Registration and Information to the Republic of South Africa's Department of Energy for the development of a 300MW power station and captive coal mine to supply energy to the South African electricity grid.
- The Company also completed the acquisition of the 1.3 billion tonne Mmamantswe Coal Project in south-east Botswana for a cash consideration of AU\$3.5m from Aviva Corporation ("Aviva").
- On completion of the acquisitions of Mmamantswe Coal Project and Mmamabula West Coal Project, African Energy will have increased its total in-situ resources to 6.2 billion tonnes of thermal coal in Botswana.
- Mr Ian Hume was appointed as a Non-Executive Director of the Company on 13 September.
- Mr Yan Zhao was appointed as Alternate Director to Mr Hume.
- The cash position at 30 September 2013 was US\$4.56 (30 June 2013: US\$5.62m).



## OUTLOOK

## **Sese Coal & Power Project**

- The company will be continuing to progress its power development programme at Sese with the following activities:
  - o A formal response from the Government of Botswana on the Expression of Interest lodged by the African Energy and ACWA Power consortium is expected.
  - o Commencement of a Definitive Study on the Sese Integrated Power Project.
  - o Advancement of other power supply opportunities in the Southern African region.
  - o Continuation of permitting and environmental programmes necessary for the development of an integrated power project.

## **Mmamantswe Coal Project**

Commencement of coal and power marketing studies and an associated economic appraisal of the project

## **Mmamabula West Coal Project**

- Transfer of Prospecting License to African Energy to satisfy the conditions for the first cash payment to Asenjo.
- Commencement of scoping and terms of reference for the Environmental and Social Impact Assessment for an underground export coal mine.
- Commencement of a feasibility study to assess the economic viability of an underground export coal mine.
- Continue assessment of export infrastructure options (rail, port, off-take).

## **OTHER CORPORATE**

During the guarter 2,036,594 new shares were issued:

- 863,095 shares were issued to Directors in lieu of cash salary.
- 340,167 shares were issued to staff in lieu of cash salary under the employee share plan.
- 733,332 shares were issued to Directors upon vesting of performance rights.
- 100,000 shares issued to staff upon vesting of performance rights.



### **PROJECTS**

## Sese Coal and Power Project, Botswana

## 1.1 Sese Integrated Power Project (100% AFR)

#### 1.1.1 **Background**

- The Sese Integrated Power Project will comprise one or more 300MW power stations, each with a dedicated ~1.5mtpa coal mine plus all related infrastructure required to deliver electricity into the Southern African Power Pool grid.
- Coal for the power stations will be provided from Sese Block-C which currently contains 330Mt of coal in measured resources and is thus capable of supporting multiple power projects.
- African Energy has executed a JDA with ACWA Power for the development of a 300 MW power station and integrated coal mine ("Project") to be located at the Company's Sese coal deposit in Botswana.
- ACWA Power is a highly regarded international power generation and water desalination developer, investor, co-owner and operator. Its headquarters are located in the Kingdom of Saudi Arabia with projects spread globally. AFR and ACWA Power have agreed to co-operate as a single consortium for:
  - The preparation and submission of an Expression of Interest (EOI) for the 300 MW Greenfield Tender Request announced by the Government of Botswana (see below).
  - The preparation and submission of a joint bid in response to a request for proposals issued by the Government of Botswana, or any other proposal requested by the Government of Botswana for the award of the Project; and
  - To develop and implement the Project in accordance with the terms of the JDA if the consortium is successful in any bid process.

#### 1.1.2 **Botswana Tender Opportunity**

- In August the Ministry of Minerals, Energy and Water Resources (MMEWR), on behalf of the Government of the Republic of Botswana, released a Tender Notice and Invitation for the EOI for the development of a Greenfield 300 MW coal-fired power station.
- African Energy and ACWA Power as a consortium submitted an EOI to the Government of Botswana to build, own and operate a 300 MW coal fired power generation plant to be located at AFR's Sese coal deposit with the ability to deliver power into the grid as early as 2016, and no later than 2019.
- MMEWR expects to determine its IPP procurement process shortly, however it has indicated that the information provided may allow it to identify projects that could be engaged earlier.
- Sese Power has potential to be one of the lowest cost power producers in southern Africa by virtue of its low mining cost and simple coal processing requirements.

## South Africa 300MW submission in response to a Request for Registration and Information

African Energy has prepared and successfully submitted a Request for Registration and Information (RFRI) to the Republic of South Africa's Department of Energy (RSA) for the development of a 300MW power station and captive coal mine to supply energy to the South African electricity grid. The key aspects of the submission are as follows:



- In December 2012, in support of its Integrated Resource Plan for Electricity 2010-2030, RSA added close to 11,000MW of new generating capacity to its forward procurement programme.
- Of this, 2,500MW has been reserved for base-load coal-fired generation, including domestic and imported energy from Independent Power Producers.
- AFR has registered its interest in supplying 300MW in conjunction with a South African BEE partner.
- The off-take party would be South African utility Eskom.

## 1.1.4 Other Power Off-take Negotiations

Discussions with other regional electricity off-takers are continuing to progress.

## 1.1.5 Feasibility Studies

• A Definitive Feasibility Study for a 300MW power station and captive ~1.5mtpa coal mine has been scoped with work to commence shortly.

## 1.2 Sese Export Project (100% African Energy)

## 1.2.1 Background

- Over the past twelve months the Company's export business focus has continued on infrastructure and logistics evaluation.
- The existing railway, approximately 25km to the east of Sese provides direct access to the Matola coal terminal in the port of Maputo in Mozambique and is suitable for initial volumes of approximately 2mtpa requiring only minimal track improvement.
- A recently completed prefeasibility study into rail/port infrastructure has concluded that significant capacity increases to 10-20 million tonnes are possible for this line with a series of staged capital injections.
- During the last quarter Morupule Coal Mines (MCM), the only operating coal mine in Botswana, continued to export coal through the ports of Durban (rail via South Africa) and Maputo (rail via Zimbabwe and Mozambique, on the existing line referred to above).
- MCM expect to initially export at an annualised rate of 150,000 tonnes, but this is likely to increase over the next 12 months.
- Rail capacity for Botswana coal through South Africa has been reported as approximately 10mtpa, which combined with the 10-20mtpa on the Francistown-Maputo line indicate existing rail infrastructure could evacuate up to 30mtpa from Botswana once its coal industry has been expanded through the development of new mines.

## 1.2.2 Ongoing Work Programme

- African Energy will continue with discussions to inform stakeholders of the outcomes of its studies of export logistics.
- This will include meetings with the three relevant railway companies (Botswana Railways, National Railways of Zimbabwe and CFM, Mozambique), who are now all involved with the Morupule export programme. These meetings will include discussions on rail tariffs appropriate to incentivize large-scale coal export operations.
- Meetings will also be requested with the appropriate Government Ministries.



#### 2 Mmamantswe Coal Project, Botswana (100% AFR)

#### 2.1.1 Background

- The Mmamantswe Coal Project is in south-eastern Botswana (see Diagram 1), and comprises a Measured and Indicated Resource of 1.3 billion tonnes of thermal coal, including 895Mt of Probable Reserves.
- A 2009 Scoping Study completed by SRK concluded that a 10Mtpa open-pit mining operation could produce 2.4Mtpa of washed export coal (22MJ/kg, <20% ash) and 2.1Mtpa of middlings suitable for power station fuel (15.3MJ/kg, 38% ash) at a ROM (run-of-mine) cash cost of \$9.10 per tonne for a total capital cost of \$350M on an owner-operated basis.
- An Environmental Impact Assessment was approved for the project by the Government of Botswana in October 2012, and an 8 Gl/year water bore-field has been delineated and secured for the project, providing sufficient water for mining and processing and for a 300MW minemouth power station.
- The Company acquired the Mmamantswe Coal Project from Aviva Corporation in July 2013 for AU\$3.5m. Aviva had invested approximately AUD \$12m in the project prior to disposal.
- All project data is being assimilated into African Energy's database and will be used to finalise the project plan for the next 12 months.

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

#### 3.1.1 **Background**

- In early October, African Energy and Asenjo executed a binding agreement under which African Energy agreed to acquire the 2.4 billion tonne Mmamabula West Coal Project in south-east Botswana for cash consideration of US\$2.5m, subject to certain conditions.
- Mmamabula West contains 892Mt of Indicated Resource and 1,541 Mt of Inferred Resource at an average in-situ raw CV of 4,800kcal/kg (20.1 MJ/kg). The majority of the coal occurs in two coal seams which are 4-6m thick and 100-150m below surface.
- A preferred area of approximately 25km<sup>2</sup> within the Indicated Resource contains higher quality coal that can produce a 6,100 kcal/kg export product at theoretical yields of 75%. This area requires further detailed studies to confirm its potential for an underground export coal mine.
- African Energy will pay an initial US\$1m to Asenjo once the transfer of title of the relevant prospecting licence has been approved, and a further US\$1.5m once a retention licence has been granted over the project.

#### 3.1.2 **Resource Estimate**

- Mmamabula West has been delineated by 87 holes drilled by Asenjo between 2008 and 2011, plus 52 historical drill holes drilled before 2006. The deposit contains three coal seams:
  - o K-Seam: 5.7m thick (0.5m to 9m), 47-122m deep (average 105m)
  - o Parting 20-30m
  - A-Seam: 4.6m thick (0.5m to 6.5m), 70-210m deep (average 130m)
- Parting 15-25m



E-Seam: 1.5m thick (0.5m to 3.2m), 85-230m deep (average 155m)

In situ resource tonnages and raw coal qualities (air-dried basis) are given below:

		Raw Coal Quality (adb)						
Resource	Seam Thickness	TTIS*	CV	CV	ASH	IM	VM	TS
Category	(m)	(Mt)	(MJ/kg)	Kcal/kg	(%)	(%)	(%)	(%)
Seam K	5.43	405	19.8	4,730	27.3	5.7	28.0	1.78
Seam A	4.97	486	20.6	4,925	24.0	6.3	24.3	1.34
Seam E	1.10	1	24.1	5,760	13.6	5.9	29.9	2.51
Total Indica	ted	892	20.2	4,825	25.5	6.0	26.0	1.54
Seam K	5.13	758	19.7	4,700	27.4	5.4	27.8	1.90
Seam A	4.23	752	20.2	4,825	23.8	6.0	23.9	1.40
Seam E	1.84	31	20.7	4,950	22.0	5.7	25.7	1.38
Total Inferred		1541	20.0	4,775	25.5	5.7	25.9	1.65
Total Resource 2		2433						

Table 1: Total tonnage estimates (in-situ) for Mmamabula West PL56/2005, Gemecs, February 2013

The resource estimates presented in Table 1 above were extracted from a Competent Persons Report (CPR) prepared for Asenjo by Gemecs (Pty) Ltd in February 2013. The report was prepared using the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code – 2004 edition) as a guide as well as the Australian Guidelines for Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves (2003 edition).

#### 3.1.3 **Preferred Area For Mining Studies:**

Washability test-work was also completed on 480 core samples from across the project by Inspectorate M&L (Pty) Ltd of Middleburg, South Africa, a certified laboratory for coal analysis. Gemecs generated cumulative wash tables for each seam using the industry standard Micromine GBIS cumulative module (refer to Appendix A for cumulative wash tables for each seam). The washability results generally indicate that the coal quality can be materially improved through washing.

Detailed inspection of the drilling information, proximate analyses and washability tables has led to the identification of a coherent 25km2 area (defined by 21 drill holes) within the indicated resource that has higher quality coal capable of producing high CV products at high yields. This area was the subject of a high level desktop study completed by Mining Consultancy Services (Pty) Ltd in December 2011. This study

<sup>\*</sup> Total tonnes in-situ are derived by applying a geological loss factor of 10% (inferred) to 15% (indicated) to the estimated gross tonnes in-situ



assessed an underground bord and pillar mining operation to extract A-seam only, and "highly recommended" that further more detailed studies were undertaken on this preferred area.

Indicative coal quality for the preferred area, based on a 1.7 RD wash is as follows:

	Av. Seam Thickness	Theoretical Yield %	CV (MJ/kg)	CV (kcal/kg)	Ash %	IM %	VM %	TS %
K-Seam	5.56m	71.79	24.85	5,950	16.66	6.94	30.57	0.76
A-Seam	4.58m	77.38	26.24	6,250	13.09	7.86	26.02	0.41
Average		74.32	25.48	6,100	15.04	7.35	28.52	0.60

Table 2: Indicative coal quality (adb, wash RD 1.7), in the preferred area within the Indicated Resource

African Energy believes that this preferred area from within the Indicated Resource could form the basis of a stand-alone underground export coal mine. Further, more detailed work, including infill drilling, coal processing studies, mining studies and financial modeling are required to validate this.



Diagram 1: Location of Botswana Coal Projects

**Dr. Frazer Tabeart** 

**Managing Director** 



# 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 has been presented in accordance with the JORC Code and references to "Measured, Indicated and Inferred Resources" are to those terms as defined in the JORC Code.

Information in this report relating to Exploration results, Exploration Targets and 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 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 under the 2004 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



Quarter ended ("Current Quarter")

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

Name of entity

ARBN

AFRICAN ENERGY RESOURCES LIMITED

123 316 781 30 SEPTEMBER 2013

## Consolidated statement of cash flows

Cash fl	lows related to operating activities	Current Quarter \$US'000	Year to date (3 months) \$US'000
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for:		
	(a) exploration and evaluation	(570)	(570)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(455)	(455)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	7	7
1.5	Interest and other costs of finance paid	(80)	(80)
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)	-	-
	Net Operating Cash Flows	(1,098)	(1,098)
	Cash flows related to investing activities		
1.8	Payment for purchases of:		
	(a) prospects	(3,232)	(3,232)
	(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 (provide details if material)	-	-
	Net investing cash flows	(3,232)	(3,232)
1.13	Total operating and investing cash flows (carried forward)	(4,330)	(4,330)



1.13	Total operating and investing cash flows (carried forward)	(4,330)	(4,330)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	3,224	3,224
1.15	Cost of the Issue	(11)	(11)
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	(3,213)	(3,213)
	Net increase (decrease) in cash held	(1,117)	(1,117)
1.20	Cash at beginning of quarter/year to date	5,626	5,626
1.21	Exchange rate adjustments to item 1.20	56	56
1.22	Cash at end of quarter	4,565	4,565

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	332
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\$134k – director remuneration payments

US\$198k - 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

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

## Financing facilities available

		Amount available \$US'000	Amount used \$US'000
3.1	Loan facilities	5,000	5,000
3.2	Credit standby arrangements	-	-



## Estimated cash outflows for next quarter

		\$US'000
4.1	Exploration and evaluation	1,093
4.2	Development	-
4.3	Production	-
4.4	Administration	520
	Total	1,613

## **Reconciliation of cash**

consc	nciliation of cash at the end of the quarter (as shown in the olidated 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	1,223	970
5.2	Deposits at call	3,342	4,656
5.3	Bank overdraft	-	-
	Total: Cash at end of quarter (item 1.22)	4,565	5,626

## 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
8301-HQ-LPL (Matonda)	License holder	100%	0%
PL69/2007 (Mmamantswe)	License holder	0%	100%



## Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per	Amount paid up
		Total Humber	Number quoteu	security (see note	per security (see
				3) (cents)	note 3) (cents)
7.1	Preference +securities	-	-	-	-
7.2	Changes during quarter	-	-	-	-
7.3	<sup>+</sup> Ordinary securities	429,577,474	429,577,474	-	-
7.4	Changes during quarter (a) Increases through				
	issue of new shares (b) Increases through	33,911,596	33,911,596		
	conversion of rights	833,332	833,332		
7.5	<sup>+</sup> Convertible debt securities	-	-	-	-
7.6	Changes during quarter (a) Increases (b) Decreases	-	-	-	-
7.7	Options/Rights		No. of options	Strike Price	Expiry Date
	Unquoted options	30,899,304	375,000	AUD \$0.125	31-Dec-13
			250,000	AUD \$0.70	31-Dec-13
			2,225,000	AUD \$0.80	31-Dec-13
			1,500,000	AUD \$0.90	31-Dec-13
			1,500,000	AUD \$1.10	31-Dec-13
			1,500,000	AUD \$1.30	31-Dec-13
			782,499	AUD \$0.625	25-July-14
			22,766,805	AUD \$0.21	31-Dec-14
	Unquoted rights	6,916,668	Performance righ expiring 30 Septe	ts subject to various v mber 2017	esting hurdles and
7.8	Issued during quarter	-	-	-	-
7.9	Exercised during quarter	833,332	Vested performan	nce rights converted t	o ordinary shares
7.10	Expired during quarter	1,166,667	Performance righ	ts	
7.11	<b>Debentures</b> (totals only)	-	-		
7.12	Unsecured notes (totals only)	-	-		
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## **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: 31 October 2013

## **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.