

# Delivering power to the people

ASX RELEASE ASX:AFR

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# **QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 30 SEPTEMBER 2020**

#### **HIGHLIGHTS:**

- Business development activities continued in China and southern Africa related to pursuing project development partners, EPC/OEM contractors and additional power offtake customers for the Sese JV Power Project.
- The Company's Mmamabula West coal prospecting licence in Botswana has been renewed for a further two years until 30 September 2022.
- African Energy submitted applications for exploration licences covering three project areas
  considered prospective for large porphyry-style Cu-Au deposits or intrusion related orogenic Au
  deposits in the South West Terrane of Western Australia.
- These applications represent a diversification from the Company's focus on coal and power projects in Botswana and complement African Energy's previous investment in ASX-listed Caravel Minerals, which owns a large porphyry Cu-Mo deposit in Western Australia.

## **PROJECTS:**

#### 1. Regional Energy Crisis in Southern Africa

- Southern Africa is currently experiencing a major energy crisis due to a combination of thermal power generation plant failures in South Africa, and severe drought-induced low river flows reducing hydro-electric output in Zambia and Zimbabwe. This has resulted in widespread load shedding, often between 2,000MW (Stage 2 Load Shedding) and 6,000MW (Stage 6 Load Shedding) in South Africa, with a flow through impact in neighbouring countries which import a significant proportion of their power from South Africa.
- This supply-side crisis is driving strong interest in the low-cost baseload power that can be delivered by the Sese Project.
- Many major mining and smelting projects, which are critical to their national economies, are highly
  dependent on stable power supply. A number of new builds and expansion plans for such projects
  are contingent on securing long-term power supply at suitable prices.
- The Sese Project is therefore receiving strong interest from potential buyers and is well placed to satisfy this demand and provide a valuable addition to the southern African energy market.



# 2. Sese JV (AFR 33.3%, FQM 66.7%)

African Energy owns 33.3% of the Sese Joint Venture, which is developing the Sese Project.

First Quantum Minerals Ltd (FQM) own the remaining 66.7% interest in the Sese Project and are the manager. The parties contribute pro rata to ongoing costs, however FQM is obliged to loan fund AFR's equity contribution once a development decision has been formalised.

The Sese JV has completed several technical studies covering mining, coal preparation and power generation. These studies have established the operating costs, capital costs and a robust financial model for a power project and the associated coal mine and coal processing facilities and have demonstrated that power from Sese could be delivered to the large power consumers in the Zambian Copperbelt.

The Sese JV has secured all key licences, permits and stakeholder approvals that are required for such an operation including:

- A large-scale mining licence has been granted for an initial period of 25-years over an area of approximately 51 km2 which contains 650Mt of coal.
- A Development Approval Order which sets the fiscal framework for the project, including a 5year tax holiday from the commencement of commercial operations followed by a 15% corporate tax rate.
- Land Rights and an associated 50-year Land Lease Agreement.
- Water extraction rights from Shashe Dam.
- Environmental approval for the project for up to 500MW of power generation and the associated coal mining and coal processing volumes.
- **Electricity Generation and Export Licence**

Sese JV has executed power sales agreements with Kalumbila Minerals Limited (Zambian subsidiary of FQM) and a Term Sheet with Zimasco (Pvt) Ltd, which together would consume the full output of the initial 300MW power station for a period of 15 years.

Sese JV is in discussions with several additional parties throughout southern Africa. A second 300MW unit can be considered if suitable demand and associated power sales agreements can be established.

### **Outlook:**

The Sese Joint Venture is engaged with prospective partners for financing and construction of the Sese Project and is progressing these negotiations. Negotiations to date have focussed on an initial installed capacity of 300MW gross (2 x 150MW units), which would produce



approximately 260MW of net power available for sale and which would satisfy the initial requirements under the Kalumbila Minerals Power Sales Agreement and the Zimasco Term Sheet.

## Continue negotiations for:

- o Conversion of the Zimasco Term Sheet to a Power Sales Agreement
- Engagement with international power industry partners regarding potential participation in development and financing of the Sese Project.
- Engagement with OEM and EPC contractors that could provide the equipment and build the proposed power station at Sese.
- Negotiations with Botswana Power Corporation (BPC) for a Connection Agreement to the Botswana transmission grid
- o Negotiation with BPC for a Use of System Agreement related to use of Botswana transmission grid
- o Negotiation for Wheeling Agreements (i.e. commercial agreement and costs to transmit the power through third party countries such as Zimbabwe).

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

PL56/2005 (Mmamabula West Prospecting Licence) contains 2.9BT of thermal coal and has just been renewed for a further two years, expiring on 30 September 2022. African Energy is seeking a partner who is prepared to buy a majority equity stake in the project as an export option for coal into South Africa.

#### **Outlook:**

- Update the mining prefeasibility study to reflect coal specification to meet Eskom power station requirements, a revised LOM mining schedule and current capital and operating cost estimates.
- Further negotiations with potential partners seeking to invest in the project.
- Finalise the Environmental and Social Impact Assessment submission for an integrated coal mine and power station of up to 600MW with the Department of Environmental Affairs.
- Finalise Land Rights approvals.



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

Mmamantswe contains 1.24Bt of thermal coal close to the South African border. The coal quality and coal geometry is suitable for the development of a mine-mouth power station and integrated coal mine, but requires a large off-taker for ~600MW to be viable. African Energy has engaged with potential partners who have the ability to develop such a project.

The Botswana Department of Mines issued a three-year extension of the Mmamantswe Prospecting Licence PL69/2007 in March 2019. The licence is valid until 31 December 2021.

### **Outlook:**

- Continue with the application for Land Rights over the project area, project access corridor and grid connection corridor.
- Review project development plan against draft update to South Africa's Integrated Resource

### 5. New Exploration Licence Applications in Western Australia

Applications have been submitted for five new exploration licences in the highly prospective South West Terrane of Western Australia.

These applications cover three project areas which are considered prospective for large porphyry-style Cu-Au deposits or intrusion related orogenic Au deposits. Preliminary evaluation of open file data indicates very limited historical exploration has been undertaken in these areas.

These applications have been made as part of an internal project generation program and represent a diversification from the Company's focus on coal and power projects in Botswana and complement African Energy's previous investment in ASX-listed Caravel Minerals, which owns a large porphyry Cu-Mo deposit in Western Australia.

The project generation has utilised open-file geophysical and geological data sourced from the Geological survey of Western Australia (GSWA), and where available, geochemical data from the CSIRO/CRC-LEME Laterite Geochemical Database for the Southwest Yilgarn Craton.

The Sunnyside-Mayanup and Tarin Rock projects are located close to major crustal scale lineaments believed to represent palaeo-subduction zones that may be spatially related to large-scale porphyry deposits such as Boddington and Caravel. The Kondinin Project straddles a major N-S fault zone which links a palaeo-subduction zone with the terrane boundary between the South West Terrane and the Youanmi Terrane, and which is considered prospective for intrusion related orogenic gold mineralisation (refer Figure 1).



# **Outlook:**

- Preliminary examination of open file data indicates that minimal to limited modern exploration has been undertaken on the tenement application areas. Extensive cover of laterite, residual soils, and in some places recent colluvial to alluvial cover is present.
- Once the exploration licences have been granted the Company will undertake reconnaissance mapping and geochemical sampling of the project areas to confirm their prospectivity and define targets for further follow-up.

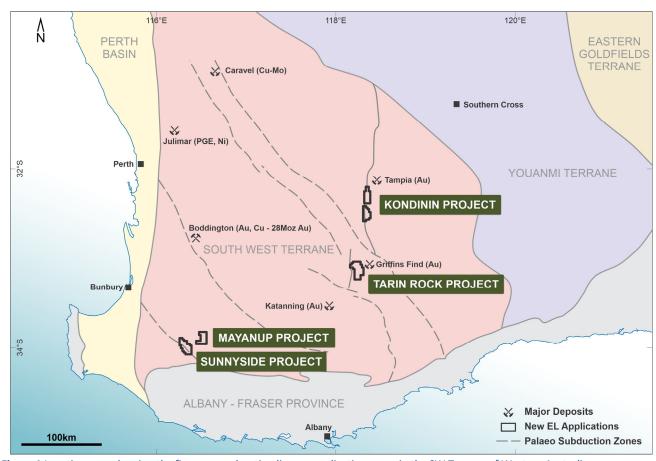


Figure 1 Location map showing the five new exploration licence application areas in the SW Terrane of Western Australia.



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

	Interest at beginning of quarter	Interest at end of quarter	Location	Commodity
ML2016/42L (Sese ML)	33%	33%	Botswana	Coal, U
PL096/2005 (Sese PL)	33%	33%	Botswana	Coal, U
PL197/2007 (Sese West)	33%	33%	Botswana	Coal, U
PL004/2013 (Foley North)	33%	33%	Botswana	Industrial
PL069/2007 (Mmamantswe)	100%	100%	Botswana	Coal
PL056/2005 (Mmamabula West)	100%	100%	Botswana	Coal

## 7. Corporate

At the date of this report, the Company had;

- > 622,960,630 shares on issue
- > 31,124,532 unlisted options exercisable at A\$0.02 expiring 20 July 2022 on issue
- Cash reserves of A\$1.20M
- Investments in ASX-listed companies valued at A\$1.65M
- ➤ Nil debt

Due to the advanced nature of the Companies projects, no substantive mining exploration activities occurred during the quarter.

US\$19,000 of exploration and evaluation expenditure expensed during the quarter predominantly comprised:

- > Staff costs of exploration data review and project generation; and
- Consultancy fees for advising on the Mmamabula West renewal

There were no substantive mining production and development activities during the quarter.

The aggregate amount of payments to related parties and their associates during the quarter of US\$65k (refer Item 6 of the accompanying Appendix 5B) comprises the following:

- Director fees (US\$59k); and
- Mitchell River Group serviced office (\$6k)



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

Authorised for release by Frazer Tabeart, Executive Director of African Energy.

For any further information, please contact the Company directly on +61 8 6465 5500

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.