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## **SESE MEASURED RESOURCE EXCEEDS 650MT COAL**

### **Highlights:**

- Initial Measured Resource at Sese calculated at 651Mt coal.

<b>Sese Coal &amp; Power Project: Resource Summary (Raw coal on an air-dried basis)</b>					
<b>Resource Zone</b>	<b>Total Tonnes in-situ*</b>	<b>CV (MJ/kg)</b>	<b>CV (kcal/kg)</b>	<b>Ash %</b>	<b>S %</b>
MEASURED (Block-B)	318 Mt	16.0	3,820	34.8	1.7
MEASURED (Block-C)	333 Mt	17.6	4,200	30.2	2.1
INDICATED	1,714 Mt	15.3	3,650	38.9	2.0
INFERRED	152 Mt	15.0	3,600	39.1	2.2
<b>TOTAL</b>	<b>2,517 Mt</b>				

\* Gross In-Situ tonnes of un-weathered coal less all applicable geological losses

- The Measured Resource in Block-C is an ideal source of raw coal to fuel the Sese Integrated Power Project and future expansions. It also has potential to produce an export product.
- The Measured Resource in Block-B contains higher washing yields that are favourable for export products and regional sales.
- The Company is continuing its feasibility studies (both mine and power station) and environmental and social impact assessments for the Sese Integrated Power Project, a 300MW power station and associated 1.5Mtpa coal mine.
- The Company is also progressing rail studies on its Sese Export Project.
- The Prospecting Licence in which the deposit occurs has been renewed by the Hon. Minister for Minerals Energy and Water Resources.

### **Introduction:**

The Sese Coal & Power Project occurs approximately 60km south of Francistown in eastern Botswana (see Diagram 1). The project has been sub-divided into two key focus areas:

1. The Sese Integrated Power Project; an initial 300MW power station and 'captive' 1.5Mtpa coal mine to be pursued as a stand-alone project. Feasibility studies and environmental and social impact studies are underway for this project and its potential expansion.
2. The Sese Export Project which is planned to export coal to regional markets and to Asia. Marketing studies and an assessment of rail and port options are currently underway for this project.

### **Resource Update:**

The Sese coal deposit was discovered in mid-2010, since which time African Energy has completed three campaigns of drilling to delineate a series of coal resources. The final campaign of resource drilling was undertaken on a 500m x 500m grid in the northern section of Block-B and Block-C with the goal of delineating measured resources in these two areas and predominantly Indicated Resources on the remainder of the project which was drilled to a 1km x 1km grid. To date, a total of 435 drill holes have been completed, of which 278 are diamond core holes, and the remaining 157 are reverse circulation percussion holes (Diagram 2).

Resource modelling by the Company's consultants has now been completed, and the Company is pleased to announce the following results:

<b>Sese Coal &amp; Power Project: Resource Summary (Raw coal on an air-dried basis)</b>								
<b>Resource Zone</b>	<b>In-Situ Tonnes*</b>	<b>CV (MJ/kg)</b>	<b>CV (kcal/kg)</b>	<b>Ash %</b>	<b>IM%</b>	<b>VM%</b>	<b>FC%</b>	<b>S %</b>
MEASURED (Block-B)	318 Mt	16.0	3,820	34.8	7.4	20.4	37.4	1.7
MEASURED (Block-C)	333 Mt	17.6	4,200	30.2	7.9	20.6	41.4	2.1
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
<b>TOTAL</b>	<b>2,517 Mt</b>							

\* The in-situ tonnes represent the Gross In-Situ tonnages of coal after removal of weathered coal, coal affected by dolerite dykes and sills and applicable geological loss factors

The resources in the above table represent a combination of the tonnages for the Sese Main seam, which comprises four plies: the uppermost SSU; the central SST, the lower SS and the thin, basal SSL (Diagram 3). Details of the seams in the Measured Resource areas are provided in the following sections.

### **Block-B Measured Resource:**

Details of the Block-B Measured Resource are provided in the table below. Coal in the Block-B Measured Resource is slightly shallower than Block-C, and is in places only 15m below surface, with a maximum depth to the top of the coal of 76m (average 28.2m). Total seam thickness is up to 24m, with an average of 13.6m. Proposed open-pit strip ratios for Block-B are thus very low.

Coal in Block-B Measured Resource is of interest for the Sese Export Project due to its potential for low strip ratio, higher in-situ calorific value and higher washing yields than other parts of the deposit. Washing yields for export products in the 21-23 MJ/kg (5,000 to 5,500 kcal/kg) range are up to 65% for Block-B SS Seam.

<b>Block-B Resource Summary by Seams (air-dried basis)</b>							
<b>Resource Zone</b>	<b>In-Situ Tonnes</b>	<b>CV (MJ/kg)</b>	<b>Ash %</b>	<b>IM %</b>	<b>VM %</b>	<b>FC %</b>	<b>S %</b>
Block-B Measured SS	178.5	18.8	26.4	8.4	21.4	43.9	1.8
Block-B Measured SSU	33.8	13.7	41.9	6.5	20.4	31.2	1.9
Block-B Measured SST	97.4	11.6	47.6	6.2	18.4	27.8	1.2
Block-B Measured SSL	7.9	16.1	36.9	6.3	20.4	36.4	1.5
<b>TOTAL</b>	<b>317.6</b>	<b>16.0</b>	<b>34.8</b>	<b>7.4</b>	<b>20.4</b>	<b>37.4</b>	<b>1.7</b>

### **Block-C Measured Resource:**

Details of the Block-C Measured Resource are provided in the table below. Block-C coal is at a similar average depth to Block-B (average depth is 28.3m), and is marginally thinner (average thickness 12.7m) and therefore has a slightly higher stripping ratio. This coal is favoured as the source of fuel for the Sese Integrated Power Project due to its proximity to existing infrastructure and proximity to solid basement for the power station footings. Block-C coal can be used as a raw coal feedstock for a power station, or can be washed to produce an export product and a middling for use in power stations.

<b>Block-C Resource Summary by Seams (air-dried basis)</b>							
<b>Resource Zone</b>	<b>In-Situ Tonnes</b>	<b>CV (MJ/kg)</b>	<b>Ash %</b>	<b>IM %</b>	<b>VM %</b>	<b>FC %</b>	<b>S %</b>
Block-C Measured SS	281.6	18.3	28.1	8.1	20.6	43.2	2.2
Block-C Measured SSU	17.2	14.9	38.9	6.8	21.5	32.9	1.8
Block-C Measured SST	33.1	13.3	42.4	6.7	20.1	30.8	1.0
Block-C Measured SSL	1.0	9.9	57.2	4.6	16.7	21.5	1.1
<b>TOTAL</b>	<b>332.9</b>	<b>17.6</b>	<b>30.2</b>	<b>7.9</b>	<b>20.6</b>	<b>41.4</b>	<b>2.1</b>

**JORC DISCLAIMER:**

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.

The information in this report that relates to Coal Resources for the Sese Coal Deposit is based on coal resource estimate completed by Mr Coenraad Daniël van Niekerk, a full time employee of Gemecs (Pty) Ltd. Mr van Niekerk is a member of the South African Council for Natural Scientific Professions (SACNASP No. 400066/98) as well as a Member and Fellow of the Geological Society of South Africa. He has more than 36 years' experience in the Southern African Coal and Minerals industries. Mr van Niekerk 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 by the 2004 Edition of the 'Australasian Code of Reporting of Exploration Results, Mineral Resources and the Ore reserves. Mr van Niekerk consents to the inclusion in the ASX release of the matters based on his information in the form and context in which it appears.

For any further information, please refer to the Company's website or contact the Company directly on +61 8 6465 5500.

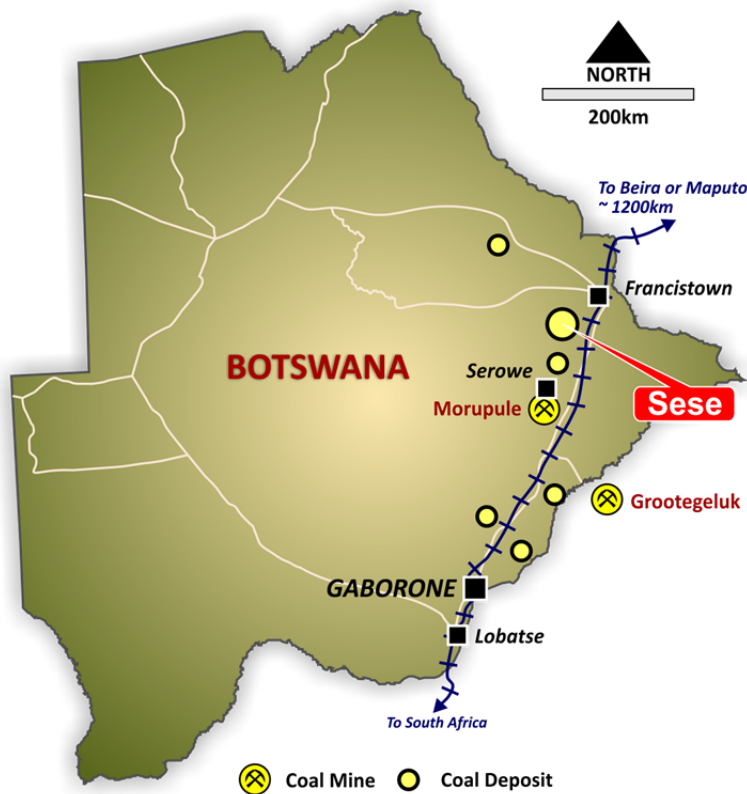


Diagram 1. Location of Sese Coal & Power Project in eastern Botswana

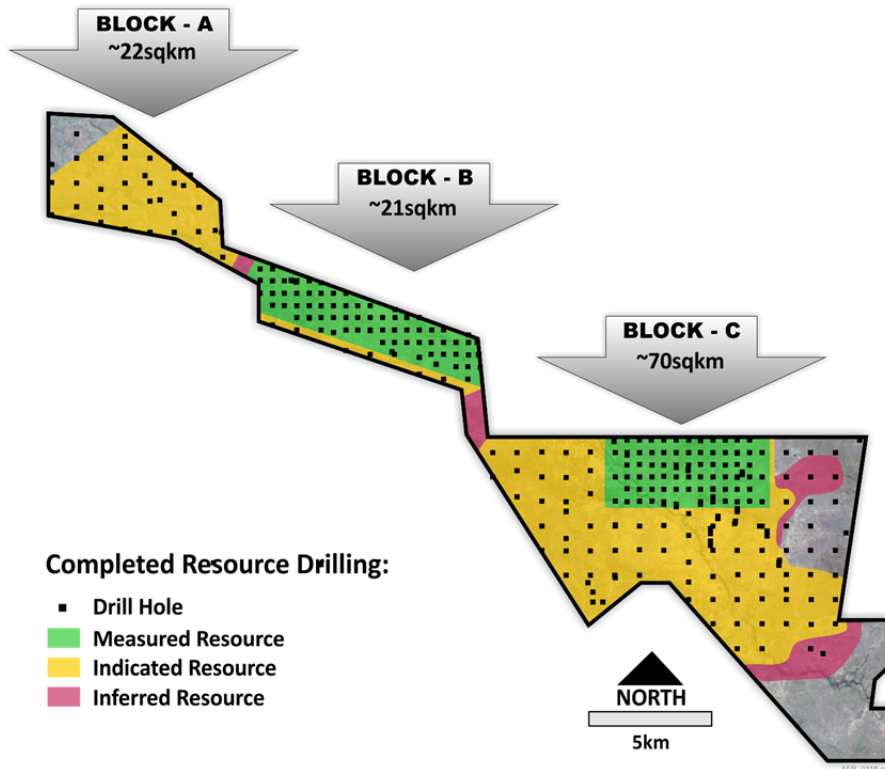


Diagram 2. Sese coal deposit showing resource blocks referred to in the text

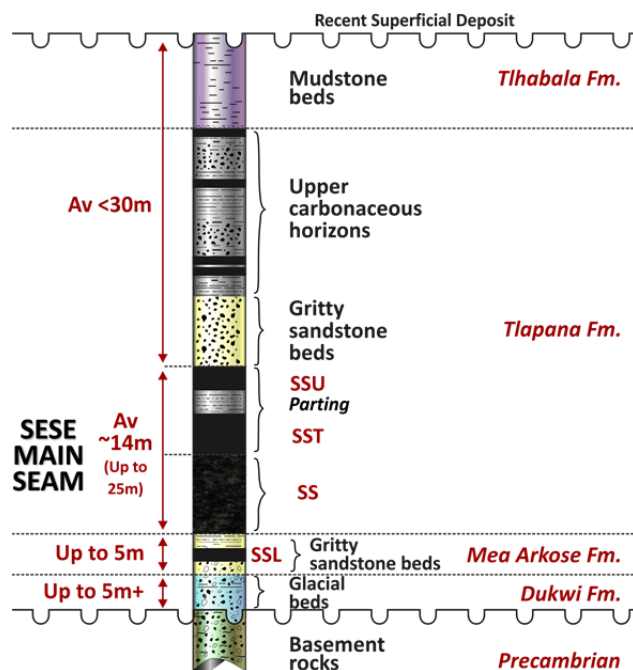


Diagram 3. Generalised stratigraphic section for the Sese project

## APPENDIX A: RESOURCE ESTIMATION METHODOLOGY

### Field Data Collection

- A total of 435 drill holes were used in the resource modelling, of which 278 were diamond drill holes and 157 were RC percussion drill holes. Most of these holes were drilled vertically and due to their short nature (16-115m end of hole depth range) were not deemed to need down-hole surveying.
- In all blocks, diamond drilling was undertaken on a 1km x 1km grid, and locally a 500m x 500m grid, allowing a higher core sampling density, and as a result the vast majority of resource has been classified as an Indicated Resource (1km grid) or Measured Resourced where the 500m grid was used.
- All drill holes have been surveyed for collar position using differential GPS, and all available holes have been logged with a down-hole geophysical probe to collect data at 2cm intervals on natural gamma, density and hole diameter (caliper reading).
- All drill holes have been geologically logged, with the down-hole geophysical data used to assist correlation of the geology between holes.
- Senior consultants from Gemecs (Pty) Ltd assessed field procedures during multiple site visits in the second half of 2011.

### Analytical Data

- Samples of coal from diamond drill cores were selected for analysis on the basis of geological interval logging and correlations with the geophysical logs, with a maximum sample length of 2m.
- The coal samples were tested at ALS Global's coal laboratory in Witbank, South Africa. Proximate analyses (Calorific Value, Inherent Moisture, Ash Content, Volatile Matter, Fixed Carbon and Total Sulphur) were undertaken on all submitted samples.
- Samples from selected holes were then composited into 1 to 2.5m intervals for washing tests at RD intervals of 1.4, 1.5, 1.6, 1.7 and 1.8 – or 1.5, 1.6, 1.7, 1.8 and 1.9.
- Density data for the coal was also measured at ALS Witlab and compared to the densities derived from the down-hole geophysical logging.

### Data Processing

- All available borehole and analytical data were imported in GBIS (an industry standard geological borehole database software developed by Micromine), and validated accordingly.

### Geological Modelling

- The verified data set was used to construct a new geological model from base principles using the Gemcom Minex™ geological modelling software. A geological structural and coal quality model was built using Gemcom Minex™ modelling software using Gemcom General Gridding algorithm. Minex provides the best geology and mine planning tools for coal and other stratified deposits, ensuring resources are evaluated accurately and mined efficiently.
- The following surfaces were modelled for each of the mineable coal seams:
  - Seam Floor and Roof Elevations;
  - Seam Thickness;
  - Raw Air Dried Coal Qualities;
  - Topography – Using borehole collars
  - Limit of Weathering;
  - Dolerite sills

- All the potential resource coal seams, namely Sese Seam Upper (SSU), Sese Seam Top (top selection SST), Sese Seam (main selection SS) and Sese Seam Lower (bottom selection SSL) have been modelled, as well as the major dolerite sills. The resource boundaries are based on the occurrence and specific cut-offs of these individual seams. Total seam thickness of the SSU, SST, SS and SSL selected horizons were used in the modelling process.
- Modelling was undertaken on a mesh size of 100m x 100m across the whole project area. A surface grid of the topography was created using borehole collars. A weathering surface determined by the limit of weathering as recorded in each borehole, was also created. This is a very important surface because it defines the sub-outcrop limits and lateral extent of the seams. No coal resources are estimated between the surface grid (TOPS) and the limit of weathering surface (LOW).
- Quality grids for raw as well as washed coal qualities and yields have been modelled. All the reported coal qualities, i.e. CV (Calorific Value MJ/Kg), Ash (Ash %), VM (Volatile Matter %), FC (Fixed Carbon %), IM (Inherent Moisture %), TS (Total Sulphur %) and yield were modelled for each seam (ply) to enable raw and washability reporting. All coal qualities are on an air-dried basis.

### **Coal Resource Estimation Methodology**

- GEMEC's estimates of Coal Resources use the terms and definitions as proposed by JORC Code.

### **Resource Cut-off Parameters**

- The following criteria were used to define the seam limits of the in situ resources:
  - Minimum seam thickness of 0.5m un-weathered coal to define seam limits.
  - A cut-off parameter of 18% air-dried raw Volatile Matter is used to exclude burnt coal as a result of dolerite intrusions.
  - Prospecting Permit boundaries.
- Principally, the main criteria for classification is based on the number of boreholes intersecting a particular coal seam(s) within a specified area and the confidence in projecting the coal quality across each seam based on the analysis performed on samples taken from the cores of the individual borehole intersections.
- Classification was guided by the following:
  - Borehole density;
  - Geological and grade continuity;
  - Geological structure and its influence on mining;
  - Complexity of the geology.
- Geological loss factors were applied to all seams. Losses are expected to occur mainly as a result of intersection of dolerite dykes and weathering in the shallower areas.