

FEASIBILITY STUDY DELIVERED TO ESKOM AND FINAL BURN TEST NEARING COMPLETION

Highlights

- Eskom Feasibility Study delivered
- Final bulk sample burn test presently underway
- Final Coal Supply Agreement negotiations continue

The Waterberg Coal Joint Venture Partners (**WCJVP**) are pleased to report that they have completed a Feasibility Study (**Study**) into the development of an opencast mining operation to produce 10 million tonnes of coal (**Product**) per annum for Eskom for an initial term of 30 years.

The reported Mineral Resources and Ore Reserves are consistent with, and extracted from the previous announcement “*Substantial JORC Resource Expansion Highlights World Class Project*” dated 24 October 2013; and WCC’s *quarterly activities report dated 31 January 2014* (together, the **Announcements**). WCJVP is also required to advise that: “*This information was prepared and first disclosed under the JORC Code 2004. It had not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*”

WCJVP confirms that all material assumptions underpinning the production target as stated in the Announcements continue to apply and have not materially changed. However, in satisfaction of ASX Listing Rules 5.16 and 5.17, WCC restates these assumptions and includes other assumptions relating to the relevant production target.

Permitting

The Study has been carried out on the resources that reside within two tenements; Smitspan 306LQ and Massenburg 305LQ. They are two of four tenements held under a Mining Right that the South African Department of Mineral Rights granted in a NOMR reference LP 30/5/1/1/2/184MR to Sekoko Coal Pty Ltd in terms of Section 23(1) of the Mineral & Petroleum Resources Development Act (**MRPDA**) over farms Smitspan 306LQ, Massenburg 305LQ, Minnasvlakte 258LQ and Hooikraal 315LQ on 17 August 2011.

Resources and Reserves

In compliance with ASX Listing Rule 5.16; the Announcements detailed the JORC Compliant Resource Statement as representing a substantial increase in the coal resource of the Waterberg Coal Project Properties. This JORC Compliant Resource Statement doubled the resource of the measured resource to 2.070 billion tonnes with total resources of 3.883 billion tonnes being covered under the tenements under a Mining Right.

About Firestone Energy

Firestone Energy Limited is an independent, Australian exploration and development company listed on the Australian Stock Exchange Ltd (ASX) and the Johannesburg Stock Exchange (JSE). Firestone Energy has entered into a Joint Venture with Sekoko Resources (Pty) Ltd through which Firestone Energy has acquired the right to 60% participation interests in the Waterberg Coal Project located in Lephalale area, Limpopo Province, South Africa.

The first stage of the project is to develop the Smitspan mine which has a substantial measured thermal coal resource and to develop the Vetleegte mine which is a substantial metallurgical coal deposit.

Firestone Energy is committed to becoming a profitable independent coal and energy producer at its projects in South Africa, thereby making a substantial contribution to the social and economic development of the Lephalale area and South Africa.

Corporate Details

ASX: FSE
JSE: FSE

Issued Capital:
3,549 million ordinary shares

Major Shareholders:
The Waterberg Coal Company Ltd

Directors and Officers

Non Executive Directors:
Brian McMaster
George Oupa Magashula

Officers:
Mr Stephen Miller CEO and Executive Director
Ms Amanda Matthee CFO
Mr Jonathan Hart Company Secretary

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All of the coal deposits the subject of the Study comprise successions of Beaufort and Ecca Coal Measures. In the Study, SRK Consulting (Pty) Limited (December 2012) declared a coal resource of 1.183 billion tonnes (GTIS) on the two farms Smitspan 306LQ and Massenberg 305LQ only, of which 1.004 billion tonnes was in the Measured category. This Resource estimate is compliant with both the JORC and SAMREC codes and has been signed off by Competent Person: Mr SelloNzama, PrSciNat (SACNASP) (**SRK Consulting**).

The resource has been modified from a total of 1,042.57 Mt, consisting of 981.81 Mt within the Measured and 60.76 Mt in the Indicated category. This was based on an area covering the whole of Smitspan and the northern section of Massenberg.

The first modification was to limit the resource area to a boundary that had been laid out with consideration to statutory mining boundaries as well as allowing room for mine infrastructure such as: railway line, service road and water-supply lines. A total of 36.5 m was left on the eastern boundary for infrastructure requirements.

Production Target

The Study has been undertaken in accordance with the requirements of the memorandum of understanding entered into with Eskom Holdings Limited (**Eskom**) dated 23 March 2012 (as amended) wherein, inter-alia, the WCJVP is to deliver 10 million tonnes per annum of Product (as specified by Eskom) on a take or pay basis for an initial period of 30 years. The Study was prepared by SRK Consulting of Johannesburg, South Africa. In developing the Study (and production targets) to produce the Product and tonnages required by Eskom, the following assumptions have been made:

- a mining loss of 6%, contamination of 2% and external moisture of 2% were applied to the resource to modify into a Mineable Reserve of 896.02 Mt in the Proved category and 55.45 Mt in the Probable category. Coal blocks with yield percentage of less than 25% will not be sent to the plant for processing. This is to minimise the quantity of feed stock required to achieve the desired product tonnes. In order to derive Product tonnages, the geological modelled theoretical yield was discounted for external contamination and a Plant modifying Factor of 90% efficiency was applied;
- the production target is developed from the Mining Schedule applied to the Proved and Probable Ore Reserves;
- all the material assumptions underpinning the production target as stated in the Announcements continue to apply and have not materially changed;
- the Mining schedule for the Study targeted the production of a ≤ 30.0 % ash percentage (air dried) and a sulphur percentage of ≤ 1.2 % (air dried); and
- The estimated Proven Reserves contained within the Study are 283.75 million tonnes of Product and the Probable reserves of 18.07 million tonnes of Product. These Reserve estimates have been signed off by Competent Person Eddy Rikhotso, PrEng (ECSA) (**SRK Consulting**).

Mining

The geotechnical investigation, concluded by Coffey Mining, included the geotechnical aspects of both the mining and infrastructure for the Study. The report focused on the geotechnical aspects relevant to mining and included the following:

- all available existing relevant information;
- geotechnical logging of existing drill core and dedicated geotechnical boreholes;
- laboratory testing on core samples;
- geotechnical slope design for the open pit mine based on the terrace mining method;
- geotechnical input into the mine design and mining strategy; and
- geotechnical studies for the rail siding and infrastructure.

The production volume requirements of the WCJVP mine dictate that a massive mining method be applied. Due to the nature of the coal reserve, underground methods cannot supply the required tonnages economically. A “total extraction” mining method is necessary in order to maximise the recovery of the resource to meet the 10 Mtpa (product), 30-year life-of-mine project requirement. “Terrace Mining” is the preferred mining method as it can supply the required tonnages and it is already being successfully applied at the neighbouring Exxaro’s Grootegeluk operation. The method is most applicable, as the 24 benches of the pit will not allow immediate waste dumping directly over the pit (as is the case with a dragline and strip mining), and hence necessitate the use of trucks to haul and dump the waste material on a designated area outside the pit footprint.

The mining operations will take place within Smitspan and Massenberg farms. A 36.5 m servitude including a railway line, water supply pipeline runs along the eastern borders of Smitspan and Massenberg and Hooikraal farms. Statutory 9 m servitude (boundary pillar) is allowed for around the pit where no surface structure exists.

The rock mass analysis and design proposed is valid for an open excavation and is valid to maximum depth corresponding to the depth of the deepest geotechnical borehole logged. The maximum planned depth of the bottom coal seams along the northern boundary of Smitspan is at 240m below surface. Rock mass characterization was conducted per geotechnical unit, and the slope design evaluated per defined geotechnical sector. This Study is therefore considered to be adequate for a level 3 study as defined in the Guidelines for Open Pit Slope Design (2009).

The Project will employ a truck and shovel fleet for waste and coal mining. Two types of fleet will be employed. A smaller sized fleet will be used for mining benches with thicknesses less than 3 m and for Top Soil removal (e.g. CAT 740B ADT's matched with CAT 390DL backhoe's), and larger sized fleet (e.g. Cat 797F Trucks matched to Cat 6090FS Shovels and CAT 789D Trucks with CAT 994FS Loaders), will be used for mining benches with thicknesses of greater than 3 m, and bulk coal removal.

In the Study, SRK used estimates supplied for Caterpillar equipment from Barloworld Equipment for similar projects. The equipment estimates are based on conditions as stipulated in the Original Equipment Manufacturer (“OEM”) handbook and experience from both SRK and the Barloworld team.

Processing

- As per Eskom’s request, the Top Coal zone is to be kept separate from the Bottom Coal Zone.

- The coal quality data indicates that full wash is required for the top zone and a partial wash (deshaling) will suffice for the bottom zone.
- A conventional coal density separation beneficiation plant is to be built capable of beneficiating up to 23.5 million tonnes of raw Run of Mine Coal. Based on the latest mine schedule requirements, at peak production four coal preparation modules are required; each rated at 825t/h.

The Plant will consist of:

- four x 825 t/h coal preparation modules including high gravity separation utilising dense medium cyclones;
- spirals for fine coal beneficiation (0.63 x 0.15mm);
- ultra-fine coal (0.15mm) is dewatered in a tailings thickener;
- small and fine coal products will be dewatered with vibrating basket centrifuges;
- tailings to thickener;
- filter plant to dewater thickener underflow; and
- water clarification and reticulation system.

The plant capacity is designed to achieve:

- raw coal feed rate of 22,000,000 t/a (air-dry tonnes/annum).
- plant utilisation (“on coal”) of 6,600 hours per year (550 hr/month).

As previously advised, the Study was completed pursuant to the Memorandum of Understanding (**MOU**) with Eskom for the proposed Coal Supply Agreement (**CSA**), and is confidential.

The WCJVP are presently updating the Study which will be released as a full Bankable Feasibility Study (**BFS**) on completion.

A condition precedent of the CSA is for Eskom to complete a burn test on a bulk sample of approximately 200,000 tonnes of Product. Eskom has now taken delivery of this bulk sample for this purpose, from Exxaro's Waterberg Grootegeluk Mine. It is expected that this Product testing will be completed over the next few weeks.

Discussions between the WCJVP and Eskom as to the terms of the CSA are well advanced.

Yours sincerely

Stephen Miller
Chief Executive Officer

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