



4 June 2013

GRAPHITE INDUSTRY AND BALAMA MARKETING UPDATE

Highlights:

- China graphite mines' supply constrained due to declining mineral resources, relatively low grades and high cost operations
- Demand for graphite forecast to grow with rising steel use and emerging and expanding technologies (particularly lithium ion batteries)
- Industrial Minerals (industry consulting and publishing group) forecast a graphite deficiency of approximately 235,000 tonnes (base case scenario) or around 528,000 tonnes (bullish scenario) by 2016
- Balama Graphite Project (Syrah 100%) perfectly positioned to capitalise on this situation with projected sales of 220,000 tonnes of graphite to be sold in year 1 at US\$1,500 a tonne
- Significant marketing efforts over the past 9 months have generated a very positive response to Balama graphite with more substantial samples of representative product despatched recently
- Offtake agreements for Balama graphite expected to be significantly advanced over coming months
- Given Balama's expected low mining and production costs, additional substantial carbon markets will continue to be investigated and targeted going forward.

Syrah Resources Ltd (ASX: SYR) is pleased to provide an update on the graphite market and Syrah's current progress in securing offtake commitments.

SIZE OF GLOBAL GRAPHITE MARKET

Roskill and Industrial Minerals, two of the research groups which cover the graphite industry have estimated that the current size of the natural graphite market is around 1 million tonnes per annum.

During November 2012, Syrah appointed Mr Sait Uysal as Global Marketing Manager. Mr Uysal and other company representatives have held discussions with major graphite buyers internationally over the past 9 months. Based on feedback from potential graphite buyers regarding the amount of graphite they

ASX Code SYR

Current Corporate Structure

Ordinary Shares

Issued Shares: 147,767,623

Options

Exercisable at \$0.26:	3,101,967
Exercisable at \$2.21:	500,000
Exercisable at \$3.87:	1,000,000

Major Shareholders

Basapa PL	9.55%
National Nom Ltd	7.74%
Copper Strike Ltd	7.44%
Kitara Inv PL	6.91%

Board of Directors

Mr Tom Eadie
Non-Executive Chairman

Mr Paul Kehoe
Managing Director

Mr Tolga Kumova
Executive Director

Mr Michael Chester
Non-Executive Director

Ms Melanie Leydin
Company Secretary

Key Projects

Balama Graphite Project (Mozambique) and Nachingwea Graphite Project (Tanzania)

Balama is the largest and one of the highest grade flake graphite and vanadium projects globally. Balama is mainly medium to coarse flake and Nachingwea is fine to coarse flake.

Tanzania Mineral Sands

A very prospective portfolio of mineral sands licence areas, some of which have drill results up to 28% heavy minerals.

Website

www.syrahresources.com.au

purchase, Syrah is confident that the quantum of the graphite market is well in excess of 1 million tonnes per annum.

THE IMPACT OF CHINA

China is estimated to supply approximately 77% of the world natural graphite market and has been able to dominate the world graphite market by virtue of its relatively low costs (particularly labour), enabling producers to undercut non-Chinese producers on price. Furthermore, China had ample graphite resources located near infrastructure to meet global demands. Recently, Syrah representatives visited China and viewed Chinese mines and processing plants. The following information comes from field observations from the trip, discussions with Chinese graphite mine owners, discussions with graphite buyers and public data sourced from Roskill and Industrial Minerals.



Figure 1 – The largest graphite mine in Shangdong Province, China. The rocks likely grade at 2-3% TGC and no visible graphite is obvious. Impurities in the deposit are a problem and need to be removed with acids. The mine is now relatively deep >60m and water ingress is a major problem.

Most of China's flake graphite production comes from two Chinese provinces. The first is Shandong Province which is situated along the Chinese coastline in northeast China. Qingdao, the capital of Shandong Province is approximately 670km south east of Beijing. Many of China's graphite processing facilities are located in Shandong Province. Most of the mines in Shandong are believed to be nearly exhausted. Mines are typically deep and water ingress is a major problem (Figure 1). Furthermore the grade is very low at 2-3% TGC (Total Graphitic Carbon). The graphite is associated with clays and processing is costly and environmentally damaging because mines use acids in the process of treatment. In the past, acid rich tailings were deposited direct into local river systems. Mines in Shandong Province are considered to struggle to make a profit with the operating costs at mine gate generally estimated to be approximately US\$900 a tonne (based on discussions with Chinese mine owners).

Several Chinese mine owners choose to transport their graphite ore approximately 2,000 kilometres from Heilongjiang Province in far northeast China to the processing plants in Shandong Province. Heilongjiang is subarctic in climate with cold summers and long and frigid winters (Figure 2). In January, temperatures average -31°C to -15°C . This extreme cold weather can continue for up to 6 months restricting any graphite mining activity and transport during that period. The graphite ore at Heilongjiang is of good grade at 12-18% TGC, but the quality of the material is problematic with abundant clays being a commonly reported issue. Graphite buyers purchase graphite supplies in advance prior to the onset of the Chinese winter months due to the paucity of supply from Heilongjiang during this period. Buyers generally report frustration at the extra inventory cost (warehousing, insurance etc) this entails. As the quality is low and many graphite deposits in China are small, buyers must place orders with several Chinese producers in order to obtain the required quantity and quality of graphite.

As much of Chinese flake graphite is poor quality it is often sold to US or Europe based specialist companies which upgrade Chinese graphite (with a concentrate grade of about 80-85%) to a commercially viable concentrate $>92\%$ through the use of acid and thermal treatment.

Based on these observations and feedback from graphite buyers, Syrah does not consider that the Chinese producers have enough flake graphite in low cost accessible areas to meet the anticipated rising global demand, or even steady state demand. This is partly the reason that graphite prices have risen from about US\$800 a tonne in 2005 to about US\$1,450 a tonne currently (based on flake graphite, 94-97% C, + 80 mesh, average).



Figure 2 – Winter vista in Helongjiang Province. [Source: China Daily Newspaper]

In China, amorphous graphite is mainly mined from Hunan Province in Southern China. The graphite is mined underground with tunnels extending up to 2,000 metres in length. However, the grade is exceptionally good at 80-85% carbon.

Due to the commitment to environmental reform, China is cutting back on graphite production with reports of more than 200 graphite mines being closed. Also, China has imposed a 20% graphite export tax and a 17% value added tax, along with an export licencing system. It is believed that the Chinese Government is concerned about the declining supplies of graphite. Also, it is possible that the Chinese Government may decide to further limit exports of graphite in order to focus on downstream processing and value added graphite products within China.

International graphite buyers report extreme concern that this possible outcome may curtail graphite exports further. Large refractory brick manufacturers have businesses potentially worth many hundreds of millions of dollars that could be severely adversely impacted should supply be restricted in this way.

GLOBAL GRAPHITE DEMAND PROJECTIONS

Graphite's main use is in steel furnace refractories which account for about 39% of flake graphite demand. Although China's steel consumption has softened in 2013, many forecasters expect rising demand in future years. In recent weeks, both BHP Billiton and Rio Tinto have predicted rising Chinese steel demand in the near term and beyond. In its March 2013 World Refractories report, market research firm The Freedonia Group forecast that global refractory demand will expand at an annual rate of 3.4% over the next three years.

The fastest growing market for graphite is batteries with growth estimated at between 15%-25% per annum driven by lithium ion battery demand (Industrial Minerals Natural Graphite Report 2012). Industrial Minerals project a base case demand for natural graphite of 1.235 million tonnes in 2016 and a bullish case demand of 1.528 million tonnes in 2016. Even if the conservative base case scenario were to prevail, the world would require an additional 235,000 tonnes of graphite by 2016. As noted, Syrah believes it is unlikely that this additional supply will come from China.

BALAMA'S POTENTIAL POSITION IN THE GLOBAL GRAPHITE INDUSTRY

Balama is the world's largest graphite deposit with 1.15 billion tonnes of ore grading at 10.2% TGC (117 million contained tonnes of graphite). The size of the deposit is believed to exceed the rest of the world's reserves as calculated by the USGS (77 million tonnes) as at 2012. The high grade zones at Balama West and Balama East have an Inferred Resource of 306 million tonnes at 16.1% TGC. The Ativa Zone at Balama West has a Inferred Resource of 21 million tonnes at 20.8% TGC and this is planned to be the first area to be mined.

Only a small part of the Balama deposit has been explored to date (Figure 3).

Balama currently has over enough graphite to supply the world for well over 100 years assuming it supplied even 100% of global demand. Initial production will be from the high grade areas and particularly the Ativa zone at >20% TGC. These high grade zones are expected to supply enough graphite for several decades worth of estimated global demand.

Also, Balama graphite is exceptionally high quality with simple flotation producing a concentrate grade of >97% carbon. It has very low sulphur content (0.008%) and thus is expected to be in high demand for steel applications which require a low sulphur content.

The climate in northern Mozambique is also conducive to year round mining and distribution. This will solve the current dilemma faced by buyers sourcing product out of Heliongjiang Province which has restricted mining and distribution over 6 months of the year.

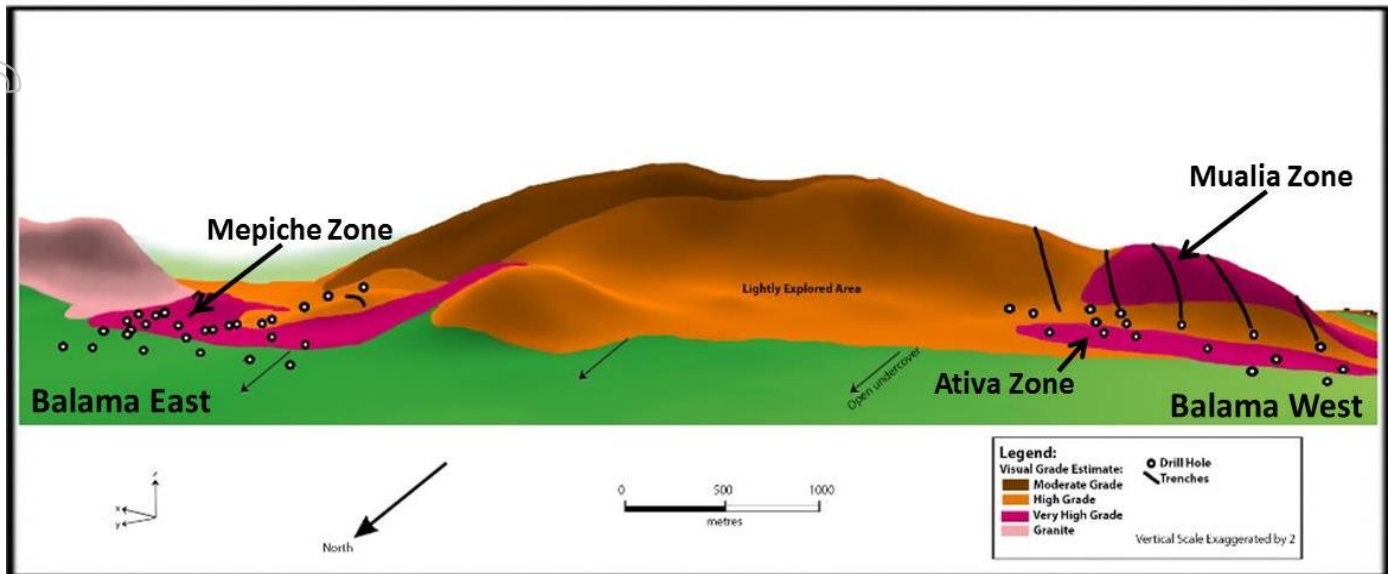


Figure 3 - A 3-Dimensional model of the surface of the Balama Graphite and Vanadium Deposit (looking SE), showing the location of Balama East and Balama West including drill hole and trench locations, and illustrating that these zones represent a small portion of the Balama Deposit, most of which is yet to be drilled. The very high grade Mepiche Zone is also highlighted as are the high grade Ativa and Mualia Zones at Balama West.

GRAPHITE PRICING

As noted, the Chinese mines are believed to produce graphite for around US\$900 a tonne. TSX listed companies with scoping or feasibility studies report mine gate costs between around US\$500 to \$1,000 per tonne of concentrate. This doesn't incorporate transport to suitable shipping facilities or to market in most cases.

Syrah expects that Balama could be the lowest cost producer of graphite in the world (including China). This is mainly due to the superior qualities of the deposit such as very high grade, soft and thick ore outcropping at surface producing a high grade concentrate (>97% C) as well as low costs in Mozambique. Balama Scoping Study numbers are due in June 2013. As the mine life of operations in China is diminishing, the Balama deposit provides an excellent graphite product replacement opportunity.

In terms of the Balama Scoping Study, Syrah has used an average selling price of US\$1,500 per tonne. This takes in to account the different graphite size fractions expected to be produced at Balama referenced to the Industrial Minerals published selling prices of those fractions over the average of the last three years. This has also been cross checked with feedback from graphite buyers regarding the expected price for Balama graphite once a mine is brought into production.

DEMAND FOR BALAMA GRAPHITE

Following discussions with graphite buyers, Syrah is confident of selling 220,000 tonnes in the first year of production (2015). As noted, Industrial Minerals expects increased demand of graphite of about 235,000 tonnes (base case scenario) or about 528,000 tonnes (bullish scenario) by 2016. Even if none of these forecasts were to be met, Syrah anticipates that a significant amount of current demand can be substituted as a result of buyers outside of China requiring security of supply. Also, Balama graphite is significantly higher quality than most Chinese graphite and Syrah can supply bulk quantities from the one deposit, without the supply constraints that China experiences over its winter months in the Heliogjiang region.

Syrah is in currently discussions with 25 potential customers, with offtake allocations varying between 5,000 tonnes per annum to 50,000 tonnes per annum. Non-disclosure agreements have been signed with several major graphite buyers and traders. Based on conversations with these buyers and traders, Syrah expects to fill its initial 220,000 tonnes of product sales in the first year. Based on the size of the Balama deposit, Syrah is confident of being in a position to further increase production as demand for graphite grows in accordance with industry projections.

PROGRESS ON OFFTAKE AGREEMENTS

Discussions with potential graphite buyers have been in progress for approximately 9 months. A representative sample of Balama ore was processed to graphite concentrate for distribution to graphite buyers recently. Syrah expects to be significantly advanced in securing offtake agreements in the coming months. Previous ore samples provided to potential graphite customers produced similar or superior results to that generated by Syrah from its metallurgical testwork to date.

OTHER CARBON MARKETS

As Balama is expected to have such a low cost of production and there are substantial graphite resources at Balama, Syrah has been identifying and analysing other large potential carbon markets. It has been shown that flake graphite can substitute into such markets. A summary of these is below:

- Amorphous graphite and vein graphite – Published market size of 700,000 metric tonnes and US\$500 million per year
- Graphite electrodes (Figure 4) (usually made from synthetic graphite at the present time) - current market size over 1 million tonnes and US\$3.5 billion per year
- Calcined Petroleum coke - Market size of 7 million tonnes and US\$4 billion per year
- Anode grade petroleum coke for the aluminium industry - Market size over 13 million tonnes and estimated over US\$7 billion per year.

The 220,000 tonne sales projections for the Scoping Study are based on on traditional flake graphite markets only. These new markets mentioned above will be further investigated and targeted going forward.



Figure 4 - Graphite electrodes. Source: Qingdao Sino Carbon Co Ltd



Figure 5 – Calcined petroleum coke, Source: Zhuhai ShinLaiTe Chemical Co Ltd

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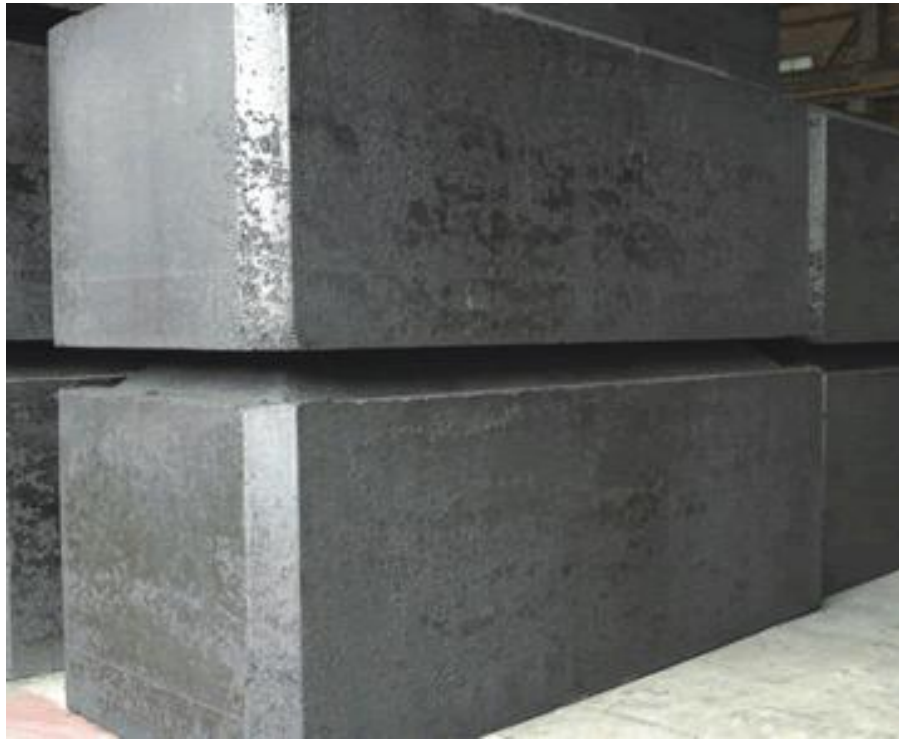


Figure 6 – Anode petroleum brick for aluminium reduction, Source: Baotou Aluminum (Group) Co Ltd

Furthermore, Balama will also be in a perfect position to become a significant participant in the spherical graphite market. Spherical graphite is used in lithium ion batteries. Based on discussions with major battery manufacturers, Syrah understands that only natural graphite is used to manufacture spherical graphite used in hybrid and electric vehicles. The spherical graphite used in consumer electronics such as iphones, ipads etc needs characteristics that can only be currently obtained from spherical graphite made from synthetic graphite.

LMC Automotive, a market leader of automotive production, sales forecasts and automotive industry market intelligence have highlighted that sales of the electric car, Tesla Model S (4,750 units), outperformed that of the Mercedes-Benz S-Class (3,077 units), BMW 7 Series (2,338 units) and the Audi 8 (1,462) in the United States of America in the first quarter of 2013. The hybrid Toyota Prius was the world's third largest selling car in 2012. It was the best-selling car in Japan in 2012 and the best-selling car in California in the first quarter of 2013. All major car manufacturers have electric or hybrid cars in production or planned for near term release. The Nikkei business daily reported on 19 May 2013 that Toyota Motor Corp is planning to increase production of lithium-ion batteries by six times, as the automaker prepares to use them in their hybrid Prius. An average hybrid electric vehicle requires over 10 kg of graphite, while an average electric vehicle requires 70 kg.



Figure 7 – Spherical graphite processing facility , Source: Shengzhou Hi-Tech Powder Engineering & Equipment Co., Ltd.

According to a report in The Japan Times dated 20 May 2013, Japan is gearing up to launch fuel cell vehicles as the next generation of environmentally sensitive cars. A fuel cell vehicle reportedly only needs three minutes to recharge with 5 kg of hydrogen that will allow it to travel more than 500 km. Toyota Motor Corporation, Vice Chairman Takeshi Uchiyamada, noted that it was possible that fuel cell vehicles might replace electric vehicles. Toyota and Honda plan to release mass-market fuel cell vehicles in 2015, and Nissan Motor Co. will follow suit in 2017. Reports suggest that about 80kg of graphite is used in a cell fuel vehicle.

The information in this report as it relates to geology, geochemical, geophysical and exploration results was compiled by Mr Tom Eadie, FAusIMM, who is a Competent Person and Chairman of Syrah Resources Ltd. Mr Eadie has more than 20 years experience in the activities being reported on and has sufficient expertise which is relevant to the style of mineralisation and type of deposit under consideration. He consents to the inclusion of this information in the form and context in which it appears in this report.

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About Syrah Resources

Syrah Resources (ASX code: SYR) is an Australian resource company with a diversified exploration portfolio located in southeast Africa. The Company is rapidly progressing its core Balama Graphite and Vanadium Project in Mozambique to production. Balama is a 106km² granted prospecting licence located within the Cabo Delgado province in the district of Namuno in northern Mozambique. The project is approximately 265km by road west of the port town of Pemba. Pemba Port is a deep-water container port, and the third largest in Mozambique. The Balama project site is accessible by a sealed, main road, running directly from the airport and Pemba Port. The main road is located 1km from the airport.

Syrah's exploration portfolio also includes a strategic mineral sands portfolio in Tanzania, comprising eight tenement areas, some with high grade heavy mineral intersections, and the Nachingwea graphite project in Tanzania.