LAMBOO RESOURCES

. . . developing high purity flake for new technologi

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Hengda Update

- **Hengda merger unable to be completed as Hengda equity ownership materially different and undisclosed details of further loan terms discovered, significantly altering the benefits of a merger**
- **Hengda being re structured with extended facilities and remains a key flake processor**
- **LMB's is in advanced discussions to secure repayment of the deposit and possibly its costs**
- **Joint venture proposal under consideration with key high technology flake graphite anode producer.**

Processing of specific raw flake graphite material into battery materials (usually the anode) is a highly skilled and technical process. It consequently attracts a significant mark up in value from the raw material. Demand for processed specific flake and resultant products such as anode's, spherical anodes, super capacitors, cathode ribbons and flake graphite strips has increased dramatically in response to the growth of the electric vehicle and renewable energy markets (See Appendix 1). This growth, and the enormous revenue potential the growth brings was the logic behind the merger with Hengda.

As previously reported, technical, commercial and valuation diligence into Hengda yielded positive results. Runge in particular gave very good feedback on Hengda mines, operations and processing facilities.

However, on the 29th of October 2014, LMB discovered that the loan position of Hengda was substantially different from what had been represented.

In particular, Lamboo could not determine that the principal owner of the equity of Hengda actually fully owned what he had contracted to sell to LMB and as a result, LMB sought suspension of trading in its shares. LMB has spent the past few weeks seeking clarification of the position with Hengda and its banks and other lenders. LMB understands that with the support of the provincial banks, Hengda has received extended capital terms. The supply arrangement with LMB remains critical to Hengda's business and remains intact.

In the light of these developments, LMB is unable to complete acquisition of Hengda's shares as proposed, since the main counterparty does not fully own the equity it had contracted to sell and failed to fully disclose existence of and details regarding its debt position and secured loans. Due to these factors, LMB is in advanced discussions regarding the return of its deposit and possibly its costs.

The ongoing operational development program of the McIntosh and Guemam flake graphite projects (see separate ASX release today) is progressing and will not need immediate additional funding, subject to LMB receiving a refund of the Hengda deposit.

Progressing Lamboo's downstream strategy

LMB is disappointed with the outcome of its attempt to merge with Hengda, but its Directors believe the strategy of fast tracking production at McIntosh and Guemam and linking the unique raw materials with processing capability will maximise value for shareholders.

Due to LMB’s proven flake purity, a number of alternative high technology processors of battery grade flake and anode materials have proposed commercial relationships with LMB, because of the growing demand for quality materials. LMB intends to pursue those opportunities.

One of these opportunities is a proposal for a joint venture to collaborate on end product revenues, customers and the supply of high purity flake graphite material.

Drivers for LMB's downstream strategy

Flake graphite and its uses

LMB is a niche, high purity, technology-focused flake graphite developer. Flake graphite, unlike many commodities is not fungible. Rather, its uses and its market value vary widely, depending upon the ability to meet product specific characteristics. LMB’s Australian and South Korean deposits have been proven to fit the specifications for high tech battery and storage material. LMB remains one of the few to have demonstrated this through actual product testing not merely processing.

LMB’s focus for growth is initially in the Asian markets. With port access agreements and logistics in place (again uniquely), access to all key Asian markets is secure. ‘The Electric Vehicles Initiative’ (Ref: EV outlook 2013) has suggested China’s EV market will grow at rates several times that of the US, up to 2020. Pike Research (2014) have stated strong demand in China, Japan and other Asian countries, along with the various national-level initiatives and programs to promote the awareness on electric vehicles, will help the Asia-Pacific region to surpass 1.4 million EV units per annum in next five years. The report notes that China will be the largest Asia Pacific market for PEVs (Plug in Electric Vehicles) over the next five years, representing 53% of the region's total sales during that period. The vast majority of China's PEV fleet will be battery electric vehicles (BEVs), driven by a strong push behind this category by the central government. In contrast, plug-in hybrid electric vehicles (PHEVs) will be the largest category in Japan, which is expected to be the region's second-largest market for all PEVs.

At the same time, sources of pure battery grade natural flake anode material in China has declined substantially in 2014 on top of similar declines in 2012-2013. This represents a major commercial opportunity for those material suppliers with proven battery grade flake compatibility (note LMB has demonstrated this in the leading Chinese research institute, Wuhan University, as well as the leading domestic labs (ASX VSPC Release 17/3/2014).

In addition, renewable energy is predicted to represent up to 65% of the $7.7 trillion in new power plant investments in Asia/worldwide and 60% of all new capacity additions expected over the next 15 years (**Bloomberg New Energy Finance's (BNEF) 2030 Market Outlook).** This initiative requires substantial quantities of high purity anode material.

Lamboo's Strategy

Having regard to the characteristics of the flake graphite market, LMB's clear strategy is to enter into a commercial relationship that will leverage LMB's unique relative advantages to afford LMB access to the higher margin, value added end of the market. This strategy underpinned its Hengda transaction and underpins the opportunities LMB is now seeking.

Appendix 1

[Technology Metals Research and Benchmark extracts]

The battery market currently represents 25% approximately of the global flake graphite market (source: Benchmark minerals) yet is the fastest growth segment (source:Industrial Minerals). This is primarily driven by the electric vehicle ("EV") market (Motorbikes, cars, busses etc) and increasingly the energy storage markets, with the latter expected to overtake the EV markets.

Both the EV and storage markets are expected to grow faster in Asia than the rest of the World and in China in particular, driven by environmental issues, a more willing consumer and government drivers both as a consumer in it's own right and also through generous subsidies to private consumers (source: TMR).

Producing battery-grade flake graphite

As with any natural resource, the quantity and grade of any given graphite deposit is important, but the type and distribution of the flake, their purity and their amenability to processing dictate the quality of any given project.

Graphite ore is mined from the deposit and is subject to standard beneficiation processes, such as crushing, milling and flotation. The higher the initial head grade, the cheaper this process will generally be, all other things being equal, although other factors such as type of rock are critical cost factors. The resulting graphite concentrate, known as run-of-mine, or ROM concentrate, is typically sold directly to end-users in a number of sectors. Some junior mining companies are planning to upgrade a portion of that ROM concentrate internally for specific applications, such as the high-purity graphite used in the production of battery anodes.

Battery-grade graphite necessitates high purity levels, typically >99.9% carbon-as-graphite (Cg). This material also needs to be spheroidized using processes that convert the flat graphite flakes into potato-like shapes, which pack much more efficiently into a given space. The high purity levels and the enhanced "tapping" density (to >0.9 kg/m^3) are important for producing the high electrical conductivity that is required during anode operation. It is not effective, however, if the purity is low or the natural flake contains non removable deleterious elements.

"Spheroidizing the graphite flakes also reduces their size, a process known as micronization. Standard battery-grade materials require an average diameter of approximately 10-30 µm, so feedstock materials with flake sizes greater than 30 µm (+400 mesh) could be used. However, starting purity levels tend to decrease with flake size, so flake material with an average diameter of 150 µm (+150mesh) or greater is typically used. This is, of course, a double-edged sword, since the larger the flakes used, the more energy will be required to reduce the average size of the flakes to the desired 10-30 µm. Smaller particles are preferred, as this makes it easier for the lithium ions in the electrolyte to diffuse between graphite particles."

It is important to note that LMB has already performed these steps

"One other important factor in the production of battery-grade materials, is wastage. The standard spheroidizing and micronizing processes used in China waste up to 60-70% of the mass of total graphite flakes present during processing. Therefore, for every one tonne of spheroidal graphite produced in China, approximately three tonnes of feedstock materials might be required."

"Graphite may be purified before or after spheroidizing and micronizing, depending on the manufacturer. The low-cost approach typically used in China is to leach the impurities from the graphite with acid, with the associated environmental concerns that this brings. Alternatively (and far more acceptable in Western jurisdictions), a thermal process can be applied. This typically involves the use of halogen gases to cause chemical reactions at high temperatures with the impurities, which covert the resulting compounds into gases too and eliminate them from the bulk graphite material. The higher the starting purity levels of the graphite after initial concentration at the mine site, the lower the cost will be for purification. This can make a substantial difference when comparing concentrate feedstocks with different starting purity levels. "

"The final step for preparing spheroidal graphite for anode production is the application of a coating to the particles to reduce their specific surface area. This is important, as reducing the specific surface area will increase the long-term capacity of the battery cell. Intercalation of the electrolyte solvent into the graphite and its reaction with it causes expansion of the graphite, with the potential for delamination and a lowering of the life expectancy.

During the first charge of the battery cell, an initial, irreversible chemical reaction occurs between the electrolyte and the graphite in the anode, resulting in the formation of a so-called surface electrolyte interphase (SEI) layer. Once formed, this layer reduces further decomposition of the electrolyte and actually protects the graphite anode from exfoliating.

With too large a specific surface area, the formation of the SEI layer can reduce the graphite's ability to subsequently hold and to release the lithium ions in the electrolyte, thus reducing lifetime capacity for the battery. Coating the graphite prior to anode production reduces this effect and helps to maintain the maximum capacity possible for the battery. The coating can also reduce the chances of a runaway chemical reaction in the battery.

Such coatings are typically carbon- (not graphite) based; uncoated spheroidal graphite typically sells for $3,000-4,000/metric tonne (t); coated spheroidal graphite typically sells for $9,000-10,000/t (this is for the material only). Battery manufacturers typically apply these coatings, though some traders will buy uncoated materials and apply coatings before selling the finished product to the battery manufacturers." These are the raw materials not the anode products.

The current value for spherical anodes is approximately $20,000-30,000/t