

Opinion

FROM THE CAPITAL

Seeking lithium and graphite clarity

Product pricing a key metric for producers – and those betting on a boom

John Robertson

Consultancy firm Benchmark Mineral Intelligence is doing its bit to pull the veil from lithium and graphite pricing as companies in the two emerging product segments remain coy about disclosing price outcomes. Investor pressures will add to demands for transparency.

While most miners wait on China's GDP report each quarter for a hint about their prospects, graphite and lithium producers are looking elsewhere. Electric motor vehicles, mobile phones, residential and commercial storage batteries and an expanding array of other electronic gadgetry and mobile devices are driving demand even in the most slowly growing advanced economies.

Over the long term, other metals may prove adequate substitutes for lithium, but, for the time being, battery makers are moving speedily toward making lithium batteries the norm. Graphite is even more secure as the dominant anode material in the modern battery.

Miners operating in this lithium-graphite space are, naturally enough, emphasising the outstanding growth prospects of both materials. Their investment presentations almost always include charts showing demand for graphite and lithium outstripping supply over the next five-to-10 years as they hold out the prospect of a price boom.

One thing is certain: the imbalance cannot happen. The amount used will not exceed the amount that is produced. Supplies might – against all odds – grow unexpectedly fast. Battery makers might cut their growth plans. Research might speed the adoption of alternative materials. And, as this is happening, prices could rise or fall. Investors will need to make judgments about where returns are most likely to accrue as these factors interact to balance the amount wanted with how much can be bought.

Already, there is evidence of a profitless boom in the lithium industry. Lithium carbonate prices in excess of US\$7,000/t have been reported this year. Reports have referred to prices up to \$10,000/t for spot lots of lithium hydroxide. Recently established industry information consulting firm Benchmark Mineral Intelligence put average prices 20% higher than the 2014 average in its June quarter report, leaving lithium well ahead of the commodity price performance pack.

Meanwhile, the share price of lithium producer Orocobre is 33% lower than it was a year



Orocobre's Salar de Olaroz lithium operation in Argentina ... production is below expectations

ago. US-based FMC Corporation reported a 15% drop in September-quarter revenue from a year earlier in its lithium division.

Orocobre should have been producing at a 17,000 tonnes per annum but could eke out only 50tpa of saleable lithium carbonate in September. FMC lost ground because it could not source enough third-party supplies for processing without the Orocobre output. Ironically, Orocobre will be more profitable than it had anticipated, once it gets its production going properly sometime in 2016, for having flubbed its start-up so comprehensively.

Users of lithium are becoming more sensitive to the importance of supply chain management as these events play out. Signs of more aggressive bargaining reflect end users more realistically appraising the industry in which they are operating.

For investors in mainstream equity markets, graphite and lithium pricing regimes are far less transparent than those for other prominent metals and raw materials. To meet their disclosure obligations, companies are required to inform markets about their production and shipments. They are allowed to be less forthcoming about prices.

In its second quarter earnings report, Albe-Marle simply described pricing for battery-grade lithium in the second half of 2015 as "improved". FMC Corporation went no further in its September-quarter earnings report than saying "pricing trends continue to be favourable". Orocobre has described prices as "steadily increasing to over \$6,000/t".

The reluctance of mainstream lithium producers to divulge transaction prices has been made easier by their diversified business models. Investment analysts and investors have also been used to treating them as specialty chemical manufacturers.

Mining industry investors, on the other hand, are used to frequently reported commodity prices driving decision making. Pressure to change how graphite and lithium prices are disseminated will come from the miners'

need to attract and maintain strong investment followings.

Some cracks in the pricing edifice are already apparent. Once Orocobre begins to ship meaningful quantities of product, it will have to disclose its revenue along with its production or shipment volumes. At that point, the veil will have been stripped from lithium prices.

Insights into graphite pricing are going to be more difficult. A wide range of flake sizes and end users with specific requirements allow for more pricing variation. Investors will want to monitor, with the co-operation of companies, the varying composition of their product ranges as well as the matching price schedules.

Investors will be seeking to understand the terms of new deals as they arise. Most likely, companies will want to assert a right to confidentiality, but that will come at an investment market cost without external guideposts to help discern market conditions and the direction of business profitability. Insufficient clarity on pricing raises the risk of surprises, which always warrants a discounted market value.

Benchmark Minerals Intelligence is helping to fill the void in the knowledge of investors about both lithium and graphite prices. It aims to produce global pricing standards for both industries.

The group's recently launched monthly graphite price index is derived from its own surveys of buyers, sellers and industry intermediaries. The index, weighting the various graphite product grades by the volume of sales, has fallen over 40% since its peak value in early 2012. Benchmark Minerals Intelligence is currently seeing CIF prices for medium flake graphite into Europe sitting between \$750/t and \$850/t, while large flake prices are around \$1,000/t for 94-95% purity.

Graphite-pricing arrangements will remain among the most complex in mining, but a consistently constructed index is a logical step in the evolution toward the price transparency the growing number of graphite miners will need to maximise their investment potential. ▼

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