

ASX Announcement

By eLodgement

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DFS Supports Graphite Micronising at Collie with Cashflow in 18 Months

HIGHLIGHTS

- A new definitive feasibility study (**DFS**) supports plans for a A\$12.5m graphite micronising plant at Collie.
- The plant will be one of the first of its kind in Australia and is expected to be operational in Q3-2024.
- Micronising is the first step in the production of battery anode material (**BAM**) and has its own industrial markets.
- Operating costs for micronised products average US\$1,980 per tonne with current sales pricing exceeding US\$3,000 per tonne.
- Early product sales will generate brand recognition, market credibility and processing experience while growing a market for future micronised fines, a by-product from production of spheroidised graphite in BAM production.

International Graphite Limited (**ASX: IG6**) (**IG** or the **Company**) has released a DFS demonstrating the technical, financial and sales potential of building and operating a nominal 4,000tpa graphite micronising facility in Collie, Western Australia.

The plant, which could be installed in mid-2024 and operational in Q3 2024, would be one of the first of its kind in Australia. The DFS has been completed to an Association for the Advancement of Cost Engineering (**AACE**) Class 3 level of accuracy by BatteryLimits Pty Ltd.

International Graphite has already demonstrated its ability to produce micronised product at pilot scale from its existing facilities in Collie and has ordered “qualification-scale” micronising processing equipment which is due for delivery and installation at the Collie site in June. The qualification plant will be used to produce material for customer qualification and acceptance commencing in Q3 2023 and to confirm a final investment decision on the commercial scale operation.

Managing Director and CEO Andrew Worland said a low capex graphite micronising facility would enable the Company to generate early cashflow as it continued building a fully integrated battery anode material capability, with its planned mine at Springdale and downstream processing at Collie.

“Strategically, a commercial micronising plant will help us launch into the graphite marketplace, build brand recognition, and develop operational skills in the milling phases of the future BAM production line,” Mr Worland said.

“Micronised graphite is the critical first stage in the production of BAM and also a by-product from the graphite spheroidising process - building a market for it will significantly enhance our future BAM operations.”

“There is also widespread demand for micronised graphite, as a cathode additive for lithium-ion batteries, and in industrial markets for its application in lubricants, engineered products, polymers and plastics.

“Establishing a commercial operation is the next step in building a new and significant international business in Collie that will play a critical role in battery supply for global decarbonisation.

“We are extremely pleased with the leadership and support the Western Australian Government is providing to help transition the Collie economy and assist new businesses, like ours, to establish there.”



Picture 1:
International Graphite’s R&D and pilot processing facility in Collie, Western Australia.

International Graphite has completed the DFS for a nominal 4,000tpa graphite micronising facility in Collie, Western Australia. Proposed production rates have significantly expanded compared with an initial feasibility study prepared in 2020, which was the basis for the Company’s approved \$2M funding from the Western Australian State Government’s Collie Futures Industry Development Fund.



Picture 2: South West Development Commission CEO Mellisa Teede and International Graphite Chairman Phil Hearse inspect IG’s Collie BAM R&D facilities.

Key DFS findings include:

- The nominal plant capacity of 4,000tpa includes micronising mills capable of producing up to 5,000tpa of micronised product depending on the final mesh specifications of the product.
- Sales prices and operating costs vary depending on the grade of feedstock and grade and sizing of finished products. The DFS assumes products will be manufactured in various sizes and at both 95% and 99% graphite purity. The average operating cost, including the cost of importing concentrate feed to Collie, is estimated at US\$1,980 per tonne for micronised product¹ with the average sales prices for micronised product, based on independent market sources, currently exceeding US\$3,000 per tonne. The qualification process will be used to confirm, refine and optimise the final product mix.
- The existing BAM R&D facilities at Collie will be expanded to accommodate the proposed new graphite micronising facility.
- Installed capital cost, including contingency (15%), is estimated at A\$12.5M.
- Ten months from order has been allowed for equipment manufacture and installation.
- Initially, the facility will treat third party imported graphite concentrates and will be available to treat a portion of graphite concentrates from the Springdale Graphite Project, once its operations begin.
- The micronising plant will facilitate market development for micronised products including micronised by-products from the future planned Collie BAM facilities.

A final investment decision for the Collie graphite micronising facility will be made during product qualification operations. The Company is currently exploring several non-dilutionary forms of capital to finance construction of the Collie graphite micronising facility.

This announcement has been authorised for release by the Board of International Graphite Limited.

Andrew Worland
Managing Director & CEO

¹ Assuming a USD:AUD exchange rate of \$0.70

About International Graphite



Figure 3: Location of International Graphite Projects

International Graphite is an emerging supplier of processed graphite products, including battery anode material, for the global electric vehicle and renewable energy markets. The Company is developing a sovereign Australian ‘mine to market’ capability, with integrated operations wholly located in Western Australia. The Company intends to build on Australia’s reputation for technical excellence and outstanding ESG performance with future mining and graphite concentrate production from its 100% owned Springdale Graphite Project and commercial scale downstream processing at Collie. International Graphite is listed on the Australian Securities Exchange (ASX: IG6) and Tradedate and Frankfurt Stock Exchange (FWB: H99, WKN: A3DJY5) and is a member of the European Battery Alliance ([EBA250](#)) and European Raw Minerals Alliance ([ERMA](#)).

For more information please contact:

Robert Hodby
 CFO/Company Secretary
 robert.hodby@internationalgraphite.com.au
 +61 407 770 183

Marie Howarth
 Media and Communication
 marie.howarth@internationalgraphite.com.au
 +61 412 111 962