

MAGNUM SECURES PATHWAY TO HISMELT LICENSE

HIGHLIGHTS

- Agreement to secure a conditional license to build and operate a HIsmelt pig iron plant
- Tripartite agreement includes plant construction support from Molong and SDM
- The licence will be ratified upon the completion of a feasibility study
- The agreement is not binding until post feasibility study negotiations are completed

Magnum Mining & Exploration (ASX: MGU, "Magnum" or "the Company") is delighted to announce that it has entered into a tripartite agreement ("Agreement") with Shandong Molong Petroleum Machinery Co Ltd ("Molong") and Shandong Province Metallurgical Engineering Co. Ltd ("SDM") under which Magnum is to be granted with a conditional HIsmelt patent application license. Molong and SDM will provide high level technical support for the Buena Vista Green Iron Project in Nevada, and the West Virginia Green Iron Project, USA.

The conditional licence covers the construction of a HIsmelt plant to produce high grade pig iron in an environmentally sustainable way. The plant to use renewable biochar as a reductant in the plant.

The granting of the HIsmelt licence would be ratified on the completion of a Feasibility Study ("FS") on one or both projects. Magnum would ensure that all regulatory requirements for constructing the HIsmelt plants are met as part of the FS. Full commercial terms and payments to also be finalised on completion of the Feasibility Study. The company does not have a specific timeframe for the completion of the feasibility study at this time.

Magnum has agreed to pay a royalty for the licence(s) to be final negotiated once the project is finalised, and which is to be conducted between the parties in an amicable manner, based on a spirit of co-operation and further project scope development. The royalty includes payment for technical patents and intellectual property. Magnum is not under any obligation to pay a royalty until such negotiations are completed.

The purpose of the non-binding Agreement is for the parties to show their general intention to negotiate in good faith, future agreements relating to the granting of a HIsmelt construction and operating licence. The Agreement does not contain any details about terms of future agreements and all terms are subject to further contract and negotiations between the parties.

ABOUT HISMELT

HIsmelt is a world-leading, innovative ironmaking process and technology. Molong has completed technological research and development and achieved large-scale industrial production application of the HIsmelt process since 2017. After six years of actual production process and testing, the technology has been shown to be stable and the applied equipment demonstrated to be reliable.

Molong is continually developing enhancements of the HIsmelt technology. A six-metre diameter HIsmelt plant with a designed pig iron output of up to 600,000 tonnes per annum has been built and operated by Molong at Shouguang, Shandong Province of the PRC. Over the past six years of operations and development, with involvement and assistance of SDM, the applied research has resulted in over 160 technical innovations, 24 national and 21 international invention patents for new technology, as well as 90 newly developed patents. Importantly, operational expertise, capabilities, and experience have been developed by Molong from such stable and long term operations. Molong continues to pursue capacity expansion and environmental performance.

Exceptional advantages of the HIsmelt technology include:

- Direct use of iron feeds without the need for pelletising or agglomeration
- Use of most carbon sources as a reductant, being particularly suited to biochar fines. Coal and coking are not required
- Improves environmental performance with a significant reduction of CO₂ emissions
- Replaces blast furnaces with a lower operational cost
- Fully utilises the inherent energy in magnetite – an energy that's lost through the alternative sintering and pelletising processes



- Effectively deals with deleterious elements (P, V, Ti) to produce a higher quality, lower silica pig iron than the traditional blast furnace
- Considerably lower capital requirement as sinter, pellet, and coking plants are not required
- Produces pig iron of exceptional purity with particularly low silica content that attracts a pricing premium

ABOUT MOLONG AND SDM

Molong is based in Shangdong Province, PRC. It is a machinery manufacturer that is active in supplying pipelines and equipment to the petroleum industry. Molong is the sole intellectual property holder of the HIsmelt smelting reduction metallurgical process and technology in the world.

Tel: 03 9666 3326 Email: info@mmel.com.au Web: www.mmel.com.au SDM is also based in Shandong, PRC. It is the licensed HIsmelt engineer for Molong and is also Molong's global strategic partner.

Mr Neil Goodman, CEO of Magnum stated "This conditional grant of the HIsmelt licence from Molong to Magnum and agreement for the Feasibility Study are instrumental to advancing the Buena Vista Project's development. Molong is presently the world-leader in the application of HIsmelt technology for ironmaking and SDM is one of the most experienced HIsmelt engineering companies in the world having worked on several plants in Australia, China, South East Asia. I would like to thank the entire board and team for assisting with securing these agreements with Molong and SDM."

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CAUTIONARY STATEMENTS

FORWARD LOOKING STATEMENTS

This release contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to studies, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current development activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of metals; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information.

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BY ORDER OF THE BOARD

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