



## SDM SIGNS LANDMARK AGREEMENT WITH MAGNUM

---

### HIGHLIGHTS

---

- Shandong Province Metallurgical Engineering (SDM) enters into agreement with Magnum.
  - SDM will undertake a Feasibility Study for the HIs melt Plant at Magnum's Buena Vista Green Iron Project in Nevada, USA
  - SDM is a leading EPC company with over 1100 staff, SDM is the Authorised Engineer for HIs melt technology
  - HIs melt technology is being pursued by Magnum to deliver green steel using its magnetite resources at the Project
  - The Study, expected to take three months, is a critical step to realising a green iron operation at Buena Vista
- 

Magnum Mining & Exploration (ASX: MGU, "Magnum" or "the Company") wishes to announce that it has entered into an agreement with Shandong Province Metallurgical Engineering Co. Ltd ("SDM") to perform a Feasibility Study for a HIs melt Plant at the Buena Vista Green Iron Project in Nevada, USA.

The agreement covers all aspects of the Feasibility Report including:

- Plant overview and HIs melt technical configurations
- Project necessity, guideline and principle, background and development status, construction condition, market analysis and projection, construction scale and product matrix
- Plant layout and infrastructure
- Material balance and flowsheet
- Raw materials requirements
- Plant and equipment details
- Power requirements
- Fuel and energy balance
- Site preparation
- Project planning
- HR requirements during construction, commissioning and operation
- Capital costs
- Operating costs
- Financial analysis

The Feasibility Study is expected to be completed within three months

Mr Neil Goodman, CEO of Magnum stated “This agreement for the Feasibility Study will advance the Buena Vista Project’s development. SDM are 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 this agreement with SDM.”

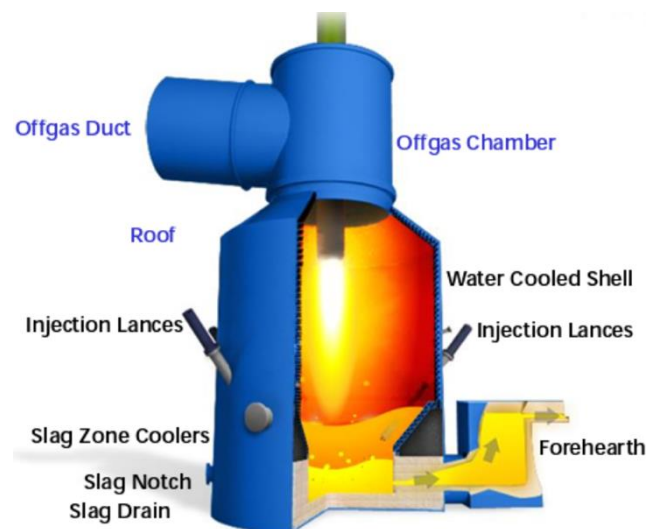
## HISMELT – A GAME CHANGING TECHNOLOGY

Hismelt is a maturing technology leading the way in green pig iron production. Exceptional advantages of the technology include:

- Uses iron concentrate directly without the need for pelletising or agglomeration
- Can use any carbon source and is particularly suited to biochar fines – coal and coking are not needed
- Significantly improves environmental performance with a promising reduction of CO<sub>2</sub> emissions
- Replaces blast furnace with a lower operational cost
- Easily deals with deleterious elements (P, V, Ti) to produce a higher quality 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

Hismelt plants are successfully operating in China. The technology continues to evolve and expand.

The use of magnetite concentrate, compared with haematite, drives productivity increases in Hismelt plants.



## 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.

Neither the Company, nor any other person, gives any representation, warranty, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. Except as required by law, and only to the extent so required, none of the Company, its subsidiaries or its or their directors, officers, employees, advisors or agents or any other person shall in any way be liable to any person or body for any loss, claim, demand, damages, costs or expenses of whatever nature arising in any way out of, or in connection with, the information contained in this document. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.



### BY ORDER OF THE BOARD

**John Dinan**

Company Secretary

Email: [info@mmel.com.au](mailto:info@mmel.com.au)

Phone: +61 438 014 304

**Evan Smith**

Investor Relations

[evan.smith@advisir.com.au](mailto:evan.smith@advisir.com.au)

Phone: +61 431 176 607