

## LATROBE MAGNESIUM SIGNS BINDING MoU WITH SLN FOR SUPPLY OF FERRO NICKEL SLAG FOR 100,000 TPA PLANT

### Highlights:

- \* Latrobe Magnesium is executing a Pre-Feasibility Study (PFS) for its 100,000 tpa magnesium plant. The PFS is being completed by Bechtel, a global engineering, construction, and project management company.
- \* Latrobe Magnesium is holding discussions with potential joint venture partners who wish to participate in its project.
- \* Bechtel will complete the PFS – A study phase by the end of September 2022, which will evaluate strategic options to leverage and develop the 100,000tpa plant and will select between two overseas locations.
- \* Latrobe Magnesium and Société Le Nickel have executed a binding MoU for the supply of 450,000 tonnes per annum of ferro-nickel slag for 20 years for its 100,000tpa magnesium plant as its feedstock.
- \* Société Le Nickel produces some 40,000 mtpa of ferro nickel and is one of the largest ferro-nickel producers in the world. It is 100% owned by Eramet SA (ERA.PA), a listed French company with some Euro 2.4B market capitalisation

**12 September 2022, Sydney Australia:** Latrobe Magnesium Limited (ASX: LMG) is pleased to announce the signing of a binding MoU with Société Le Nickel (SLN), for the supply of 450,000 tonnes per annum of ferro-nickel slag for 20 years for its 100,000tpa magnesium plant as its feedstock.

LMG will need in the order 600,000tpa of ferro nickel per annum to produce 100,000tpa of magnesium. SLN with its present port facilities can handle the loading of 450,000 tpa and it is considering expanding these facilities for its own reasons. As and when the proposed expansion is undertaken, SLN has advised LMG that they will be able to cater for an additional 150,000 tpa of ferro-nickel slag. In the event SLN do not expand its port facilities, LMG will source additional supply from another ferro-nickel producer. There are some 20 plus ferro-nickel slag producers in the areas of Indonesia or Philippines.

The chemistry of the SLN ferro-nickel slag is 33%MgO, 55%SiO and 9%Fe<sub>2</sub>O<sub>3</sub>. LMG has been able to make magnesium, high grade amorphous silica, hematite and its supplementary cementitious material from this feedstock. The feedstock has nearly twice the Magnesium Oxide (MgO) content as Yallourn brown coal fly ash. This means that LMG can process less material to achieve the same amount of magnesium when compared to fly ash. It takes 10 tonnes of fly ash, dolomite or magnesite to make 1 tonne of magnesium. It only takes 6 tonnes of ferro-nickel slag to make 1 tonne of magnesium.

SLN's facility is one of the largest ferro nickel production plants in the world and makes 1.7m tonnes of ferro nickel slag per annum and have a slag heap of some 28m tonnes on the island of New Caledonia. See the map below showing the location relative to Australia and the slag heap relative to the port. New Caledonia contains approximately 20% of the worlds nickel ore reserves, facilitating Ferronickel (and Ferronickel slag) production for decades to come.



## **Bechtel**

Bechtel is a global engineering, construction, and project management company with over 70 years of mining, metals, and minerals processing experience, which encompasses over 160 major projects and 1,300 studies covering all aspects of the ferrous, nonferrous, precious metals, and energy minerals industries. Bechtel has been working on the PFS-A study since July 2022.

The PFS-A study should be finished by the end of September 2022. This study will compare the appropriate locations in the Middle East and South-East Asia where the 100,000tpa plant will be located. LMG expect that the PFS-A study will form the basis upon which a decision can be made on plant location which will then allow the PFS-B phase to commence bringing the project definition to a PFS level.

**David Paterson**  
Chief Executive Officer

12 September 2022

## About Latrobe Magnesium

Latrobe Magnesium is developing a magnesium production plant in Victoria's Latrobe Valley using its world first patented extraction process. LMG intends to extract and sell magnesium metal and cementitious material from industrial fly ash, which is currently a waste resource from Yallourn brown coal power generation.

LMG has completed a feasibility study validating its combined hydrometallurgical / thermal reduction process that extracts the metal. Construction has commenced on its initial 1,000 tonne per annum magnesium plant with commissioning targeted to commence end of Q2 2023. A commercial plant will then be developed, with a capacity of +10,000 tonne per annum magnesium, shortly thereafter. Further plant capacity expansion will be considered once the 10,000 tonne per annum is operating successfully. The plant will be in the heart of Victoria's coal power generation precinct, providing immediate access to feedstock, infrastructure, and labour.

LMG plans to sell the refined magnesium under long-term contracts to USA and Japanese customers. Currently, Australia imports 100% of the 8,000 tonnes annually consumed.

Magnesium has the best strength-to-weight ratio of all common structural metals and is increasingly used in the manufacture of car parts, laptop computers, mobile phones, and power tools.

The LMG project is at the forefront of environmental benefit – by recycling power plant waste, avoiding landfill and is a low CO<sub>2</sub> emitter. LMG adopts the principles of an industrial ecology system.