
LATROBE MAGNESIUM (LMG) CORPORATE AND OPERATIONS UPDATE

24 June 2024, Sydney Australia: Latrobe Magnesium Limited (ASX:LMG) is pleased to announce:

- * **The Stage 1 Demonstration Plant Project continues to make positive progress with no reportable Health, Safety or Environmental (HSE) incidents to date.**
- * **During the commissioning trial, the Stage 1 Demonstration Plant Project successfully produced Magnesium Oxide (MgO), meeting the required quality specification.**
- * **Following the successful commissioning trial, the Demonstration Plant will now progress towards continuous operation of MgO production with revenue from sales expected in the near term.**
- * **LMG is continuing detailed planning works to complete full construction and commissioning of the Demonstration Plant ahead of production of magnesium metal.**
- * **The Stage 2, 10,000tpa Commercial Plant workstreams are currently focused on location identification and vertical retort furnace design.**
- * **Strong balance sheet position following completion of the \$12M placement (before costs), with a further \$6m (before costs) to be received in July from LMG's underwritten rights issue, which is currently open to shareholders. LMG paid down a significant \$12.9m of existing debt following receipt of its ATO R&D rebate in May 2024.**
- * **A number of Stage 2 and Stage 3 project funding options are being considered, including the combination of a partial sale of site land and the sale and leaseback of the demonstration plant site to raise up to \$15M.**

1. Stage 1 Demonstration Plant Progress Update

1.1 Engineering & Procurement

Engineering is limited to vendor performance warranty claims and supporting minor upgrades to the process plant to improve operability and efficiency.

1.2 Construction & Commissioning

Stage 1A – MgO Production

With the successful completion of the ore commissioning trial, MgO plant construction is nearing **practical completion**, with the next step an official handover to operations personnel to move into continuous operations at a production equivalent to 1,000 tpa of magnesium.

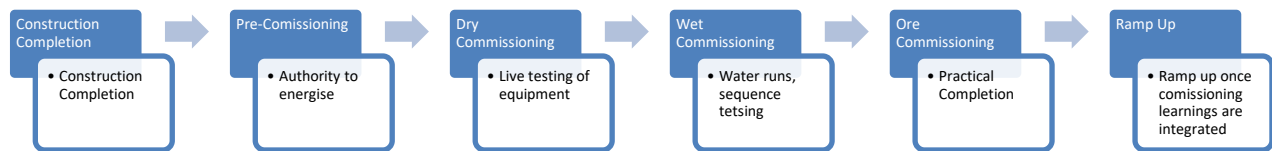


Figure: LMG stages of commissioning

With major construction for MgO production finished, 154 of 180 identified construction and commissioning punch list items have been completed since mid-May 2024. These tasks included modifications to minor equipment, installation of additional instrumentation, completion of access structures, dismantling of scaffolding, and other post-trial equipment replacements.

To ensure workforce productivity and efficiency, a dedicated construction/commissioning team is diligently working through the remaining approximately 26 punch list items over the next few weeks.

The remaining work to be completed include:

- Punch list item closeout.
- Labelling of valves/instrumentation/piping.
- Final epoxy painting/coating.
- Spray Roaster insulation works.

Additionally, some of these items include improvements to the process plant that were identified during the commissioning trial. Identifying improvements to the process design or correcting minor deficiencies is very common during the commissioning of new or novel processes. These changes are limited and include:

- Installation of additional instrumentation such as flowmeters and control valves to enhance operability.
- Agitator repair and optimisation.
- Installation of new recycle and bypass piping to optimise process efficiency.
- Reconfiguration of piping to reduce the risk of blockages.

The MgO produced during the ore commissioning trial was over 80% pure MgO. This is a positive result and in-line with expectations, particularly given that the Spray Roaster was processing an understrength magnesium solution. This gives the commissioning team significant confidence that the Spray Roaster will be able to achieve even higher quality MgO in its operational phase.

Stage 1B – Magnesium Metal Production

Construction of the remaining plant to produce magnesium metal has been temporarily paused to allow the project team to update and finalise the strategy, schedule, and budget for the remaining works to ensure optimal resource allocation and project efficiency.

Work has progressed during the completion of the commissioning and construction punch lists, which was to ensure the workforce remained productive, with the following items completed:

- Installation of Plant Standby Generator
- Erection of SCM Silo & Dust Collector
- Earthworks and placement of Quicklime Isotainers
- Erection of Ferrosilicon Bag Breaker
- Civil Works for Briquetting Ball Mill

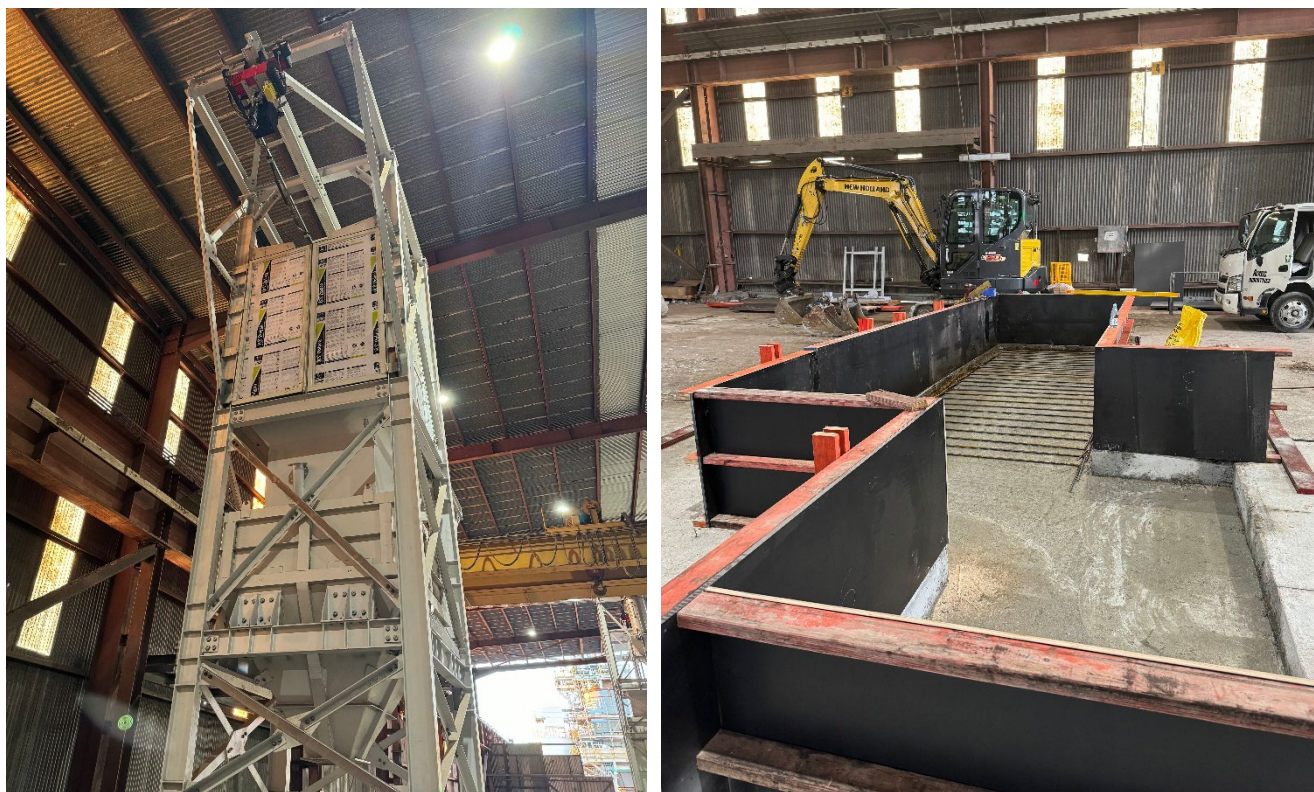


Figure: Ferrosilicon Bag Breaker erection (left) and Briquetting Ball Mill civil works (right)



Figure: SCM silo erection



Figure: Quicklime Isotainers



Figure: Emergency Standby Generator installed



Figure: Acid resistant epoxy coating for Spray Roaster (left) and SCM Dust Collector & Stack installed (right)

1.3 Operations

Once the residual works for the MgO production phase are completed, the project will move into continuous operations, producing MgO at an equivalent of 1,000 tpa of magnesium metal production.

A longer-term crushed and screened stockpile of ash is being developed at Yallourn to provide consistent feedstock to the process plant. This plan is being implemented by LMG's mining contractor, RTL.

Two employment forums will be held in the Latrobe Valley to outline opportunities for local workers to join LMG, the type of culture we want to build, and the roles that the company will be hiring for.

LMG is also proceeding with the recruitment of management personnel to ensure systems and processes are in place before the restart, which is targeted within a month.

2. Stage 2, 10,000tpa Commercial Plant Update

Whilst the focus is on handing over the first phase of the Demonstration Plant to Operations as well as finalising a planning phase for the remaining Stage 1 plant scope, it is important to keep activities moving forward on Stage 2 to keep to the overall timeframe. The transition from the Demonstration Plant to the Commercial Plant is vital to LMG's long-term production ambitions.

2.1 Project Site

Three locations have been evaluated for the Stage 2 Commercial Plant, namely the existing Demonstration Plant site, the Yallourn power station site, and Opal's Australian Paper site in Maryvale. The existing site is limited in space and presents a timing challenge with respect to establishing sufficient natural gas and water to site. Developing easements and approvals for gas pipelines is becoming more and more challenging for industry.

Discussions have been held with both Energy Australia about locating the plant at Yallourn, close to the mine, and with Opal about options at its Maryvale site. There are pros and cons with each approach and this selection work is being finalised with a preferred location to be announced in a future update. Site selection is crucial before LMG commences its Commercial Plant Feasibility Study.

2.2 Commercial Plant Funding

LMG is investigating the combination of a sale of part of site land and the sale and leaseback of the site where the Demonstration Plant is in situ. It is expected that the combination of this approach could release a value for the site of up to \$15M. These funds could then be used to assist with the financing of the Stage 2 mine planning work, bankable feasibility study, further test work and funding costs for the Commercial Plant.

2.3 Mine Plan

As previously outlined, work has been planned with GHD to develop a geotechnical plan, understand the hydrogeology, develop a rehabilitation plan after mining of ash has ceased in the future and ultimately develop a JORC resource/reserve for the ash resource. Discussions are underway to finalise the resources determination component, with the aim of commencing work as soon as possible.

2.4 Vertical Retorts

LMG is proposing to implement its own vertical retort design as part of Demonstration Plant. The base design of the vertical retorts is being finalised through testwork at CSIRO, before a final mechanical design is developed. This final design will be presented to furnace vendors for engineering during the upcoming Feasibility Study. All testwork to date has shown good performance from the vertical retorts.

The vertical retort is being designed to:

- increase production capacity of the retort.
- reduce energy consumption, thereby reducing costs and CO2 emissions.
- reduce the footprint of the furnaces, thereby reducing capital costs of the equipment.
- reduce the maintenance costs by improving the material to make the retorts and ensuring an even heat through the retorts.

3. Corporate Update

LMG has recently raised \$12M in a placement and is currently completing a proposed fully underwritten entitlement offer of \$6M. These funds will be used to complete the development of the Demonstration Plant.

LMG's 2023 tax rebate was approved by the Australian Tax Office (ATO) in May 2024 for \$12.9M. Given that the ATO now understands LMG's Demonstration Plant process, the Company expects that the ATO will approve the 2024 tax rebate in a shorter timeframe, with receipt estimated before end of calendar year. LMG estimates that its 2024 tax rebate will be greater than \$16M, given the projected capital costs of the Demonstration Plant as at 30 June 2024. This tax rebate should pay back LMG's debt financier in full.

LMG has commenced discussions for the debt funding of its Commercial Plant with Societe Generale, as well Australian government finance agencies who have indicated initial interest in supporting the Commercial Plant. LMG will also be making grant applications under existing programs from the Federal and USA governments during the next 6 months.

Should you have any queries in relation to this announcement please do not hesitate to contact the Company.



David Paterson
Chief Executive Officer

24 June 2024

About Latrobe Magnesium

Latrobe Magnesium (**LMG**) is developing a magnesium metal Demonstration 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 brown coal power generation.

LMG has completed a feasibility study validating its combined hydrometallurgical / thermal reduction process that extracts the metal. The Demonstration Plant has now produced magnesium oxide with the full plant being commissioned in the second half of calendar year 2024.

A Commercial Plant will be also be developed by LMG, with a capacity of 10,000 tonne per annum of magnesium metal, with completion targeted for the first half of calendar year 2026. The plant will be in the heart of Victoria's coal power generation precinct, providing access to feedstock, infrastructure, and labour.

LMG will sell the 10,000 tonne per annum of refined magnesium metal under long-term contracts to LMG's US-based distributors.

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.

LMG's projects are at the forefront of ESG best-practice by recycling power plant waste, avoiding landfill, encouraging a circular economy, and by being a low CO₂ emitter.