

QUARTERLY ACTIVITIES REPORT

30 September 2017

LATROBE MAGNESIUM PROJECT

1. Fast Cycle Retorts

LMG and its engineers have designed a new fast cycle vertical retort and furnace (FCR).



It is believed that this FCR will be superior to existing horizontal retorts in the following areas:

- The retort charge will be larger;
- The reduction time will be greatly reduced;
- The energy usage will be less due to more efficient heat transfer within the retort;
- The use of better quality material in the retort should greatly increase the retorts life.
- fast cycle furnaces (FCR) offer a competitive advantage over other vertical retort designs.

These benefits should produce reduced capital and operating costs for the project

The initial furnace, retort and condensers have been built in Melbourne and should be operational by the end of next week. (week finishing 3 November 2017).

A large sample of dolomite and RWE Power's fly ash has been produced and will be processed through the FCR to produce magnesium and supplementary cementitious material. The results should be available by the end of November.

2. Ash Supply

LMG is currently in discussions to investigate the possibility of using two additional fly ash sources in the Latrobe Valley and one in Germany for both its initial plant and expanded plant.

3. Feasibility Study

With the successful completion of the FCR test work, LMG's engineers will be in the position to finalise LMG's bankable feasibility study.

4. Project Timeline

Once the bankable feasibility study and ash supply agreement(s) have been completed, LMG will be in a position to submit its grant application to the State Government in the first quarter of 2018.

Construction of the initial plant will then start in the second quarter of 2018.

5. Funding

In October 2017, LMG executed a \$750,000 lending facility with RnD Funding Pty Ltd for a period of 12 months. The loan will be repaid from its Research and Development rebate expected to be received from the Commonwealth Government based upon LMG's research and development expenditure for the year ending 30 June 2018. Total funding available is in the order of \$1.45 million



David Paterson
Chief Executive Officer

27 October 2017

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 stream from brown coal power generation.

LMG has completed a pre-feasibility and an adjustment study validating its combined hydromet / thermal reduction process that extracts the metal. Construction is estimated to start on its initial 3,000 tonne per annum magnesium plant in the second quarter of 2018 year with production commencing 12 months later. The plant will then be expanded to 40,000 tonne per annum magnesium 18 months later. 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 Australian and overseas 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 CO₂ emitter. LMG adopts the principles of an industrial ecology system.