

**QUARTERLY ACTIVITIES REPORT  
TO 31 DECEMBER 2011**

**LATROBE MAGNESIUM PROJECT**

**1. Pre-feasibility Study Results**

LMG with the assistance of GHD Pty Ltd completed its prefeasibility study and released it on 13 October 2011. With the confidence gained from the study results, the LMG Board resolved that LMG should progress towards a bankable feasibility study. GHD recommended that LMG should first undertake an adjustment study to refine the capital and operating costs data supplied in the Tieforce report and conduct further test work to confirm design and feedstock assumptions used in the study.

Since then LMG and Clarke & Marron / Beijing Tieforce Engineering Co Ltd have been working together to clarify the operating and capital costs of the project.

The project will begin with a 10,000 tonnes per annum magnesium commercialisation plant using fly ash from the Latrobe Valley and be expanded to 40,000 tonnes in the second stage. The revised estimates of operating costs and income per tonne per tonne for the 40,000 tonnes per annum plant are:

	\$/tonne
Revenue from magnesium, cement, carbon credits & char	5,300
Cash operating costs	<u>3,800</u>
Operating surplus	1,500
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With a \$300 million capital cost for the 40,000 tonne plant, the revised study concludes the project's net present value is in the range between \$51 million and \$112 million.

The plant when operating is expected to employ 300 people in Victoria's Latrobe Valley.

LMG will raise approximately \$100 million to build the 10,000 tonne plant with initial funding being a combination of government grants, equity and debt.

**2. Yallourn Agreement**

On 18 October 2011, LMG extended its exclusivity agreement with TRUenergy Development Pty Ltd ("TRUenergy") for an additional six months until 31 March 2012.

TRUenergy is the owner of the Yallourn power station in the Latrobe Valley and the agreement enables further testing of magnesium content in the power station's fly ash and efficiencies in extracting that magnesium.

Since 1 April 2011, LMG has investigated the intended area that Yallourn will mine up until 2030. The chemical analyses of the bore holes indicate that the MgO contained in the fly ash should be sufficient for LMG to process.

LMG and TRUenergy have agreed on a detailed test work program up to 31 March 2012. At the end of this period, LMG expects to know whether its Hydromet Process is adaptable and suitable to process the Yallourn fly ash to produce magnesium metal and other products.

### **3. Iron Removal**

On 8 December 2011, LMG announced that it had achieved up to 32% iron removal from its initial tests conducted at CSIRO in Western Australia using gravity separation technology. Test work is continuing to determine whether this recovery can be increased.

LMG has achieved up to 55% iron removal using its hydromet process. Gravity separation is a lower cost solution when compared to chemical removal. However, if the removal processes are accretive, the processes may be combined.

Increased iron removal means lower operating costs, better feed stock and magnesium recoveries in the thermal reduction process.

LMG is investigating alternative iron removal methods so that it's process can cater for higher iron contained fly ash as in the Yallourn and RWE brown coal seams.

## **CAPITAL RAISINGS**

On 16 November 2011, the Company announced a placement of 17.5 million shares at 2.3 cents per share to raise \$401,500 from a group of sophisticated investors.

On 16 December 2011, the Company also announced a share purchase plan at 2.3 cents per share. The plan closed in December and raised \$461,636.

The total capital raised in this quarter amounted to \$863,136. These funds will be used to finance the Company's working capital requirements and its bankable feasibility study.

The information in this statement that relates to the laboratory results is based on information compiled by Mr Kevin Torpey, who is a member of the Australasia Institute of Mining and Metallurgy. Mr Torpey is a Director of Latrobe Magnesium Limited and has sufficient experience which is relevant to the style of mineralization and type of deposit and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Torpey consents to the inclusion in this statement of the matters based on his information in the form and context which it appears.

**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 from industrial fly ash, which is currently a waste stream from brown coal power generation.

LMG recently completed a pre-feasibility study validating its combined hydromet / thermal reduction process that extracts the metal. Construction of the production plant is due to start in March 2013 with production to begin a year later. The plant will be in the heart of Victoria's coal power generation precinct, providing immediate access to feedstock.

LMG plans to sell the refined magnesium under long-term contracts to Australian users. Currently, Australia imports 100% of the 10,000 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 as a low CO<sup>2</sup> emitter.