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# QUARTERLY ACTIVITIES REPORT TO 30 SEPTEMBER 2011

## LATROBE MAGNESIUM PROJECT

# **Pre Feasibility Study**

During the past quarter, Latrobe Magnesium has concentrated on completing its prefeasibility study on its Hazelwood magnesium project.

The study was finalised in October with an announcement on 13 October 2011.

With added confidence from the pre-feasibility study results, the LMG Board announced that the Company will progress towards a bankable feasibility study.

#### GHD recommended that LMG:

- undertake an adjustment study to verify the capital and operating costs data supplied in the Tieforce Report, and
- conduct further test work to confirm some elements of the design data used in the study.

Latrobe Magnesium accepted these recommendations and has started working on them.

GHD advised "...the above test work should take up to 6 months to complete and then a Bankable Feasibility study can be initiated. The Bankable Feasibility study including engineering and costing will require around 12 months to complete."

#### **Additional Test Work**

Latrobe Magnesium has conducted additional hydromet trials and retort work to:

- achieve reduced iron in its beneficiated fly ash
- provide physical performance data for the pre-feasibility study
- test the impact of briquetting on the thermal reduction performance of beneficiated fly ash, and
- optimise the reaction time and recovery of magnesium in the thermal reduction stage.

The Company is being assisted by CSIRO, Monash University, Amdel and its own consultants.

# **Yallourn Power Agreement**

On 18 October 2011 Latrobe Magnesium announced the extension of its Exclusivity Agreement with TRUenergy Development Pty Ltd, the owner of the Yallourn Power Station, for a further six months.

This is to continue to investigate the suitability of the Yallourn fly ash for the hydromet process to produce magnesium metal and other commodities. Given the iron content of this fly ash can be removed, the Yallourn fly ash will have a very high grade of MgO.

# **RWE Agreement**

24 October 2011 the Company signed a confidentiality agreement with RWE Power AG to investigate whether the LMG hydromet process is suitable to process brown coal fly ash in Germany to produce magnesium metal and other products.

LMG has identified one RWE Power brown coal mine near Cologne that it believes has the required MgO grade. The chemistry of the fly ash is comparable to the Hazelwood fly ash and better on some measures.

The Cologne mine produces about 100 million wet tonnes of coal per annum. The three mines in the Latrobe Valley produce about 80 million wet tonnes per annum. If the fly ash is suitable, this mine may have the capacity to produce over 36,000 tonnes of magnesium per annum.

German automobile parts manufacturers are world leaders in increasing use of magnesium in cars. Last year Georg Fischer Automotive AG used magnesium to substitute four aluminium parts in the new Porsche resulting in 40% weight reduction for those parts.

RWE Power AG is part of the RWE Group in Germany. The RWE Group is a top 20 company listed on the German Stock Exchange (DAX). RWE Power is one of the leading energy production and generation companies in Germany. It uses a broad energy mix of brown coal, black coal, hydro, nuclear power and natural gas fired power stations together with wind farms. RWE Power is also a driver of innovation for coal fired power stations and CO2 avoidance. RWE Power employs about 15,000 people with operating profit of about €3.6 billion in 2009.

## ERRIDA CREEK RARE EARTHS PROJECT

The exploration licence for Errida Creek was awarded in September. Latrobe Magnesium is engaging a team to develop an exploration program and commence work on this area.

## **COMPANY FUNDING**

Since 30 September 2011 Latrobe Magnesium has received its research and development tax offset moneys and its quarterly GST refund totalling \$301,000. The Company has available funds of some \$372,300. With the Company proceeding towards a bankable feasibility study for it Latrobe Magnesium Project, it will need to raise additional funds of up to \$2 million within the next six months. The Company is in discussions with a number of parties interested in assisting with this capital raising.

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 Australian Institute of Mining and Metallurgy. Mr Torpey is a Director of Latrobe Magnesium Limited and has sufficient experience relevant to the style of mineralisation 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 working to develop a magnesium production plant in Victoria's Latrobe Valley using its own patented extraction process. LMG intends to harvest magnesium metal from industrial fly ash which is currently a waste product of brown coal power generation.

LMG has recently completed a pre-feasibility study into the economics behind using a world-first process of combined hydromet/thermal reduction to extract the metal. The production facility will be in the heart of Victoria's coal power generation precinct, providing direct and constant access to feedstock.

Construction of the plant is due to start in March 2013 with initial production to begin a year later.

LMG plans to sell the refined product 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 being increasingly used in the manufacture of car parts, laptop computers, mobile phones and power tools.

The LMG project is at the forefront of environmental sustainability – by recycling power plant waste that is otherwise discarded in landfill and by being a low CO2 emitter.