

---

## LATROBE MAGNESIUM SUCCESSFUL COMMERCIAL TESTS IN CHINA SMELTER

---

**5 November 2014, Sydney Australia:** Latrobe Magnesium Limited (ASX:LMG) has successfully processed its bulk sample of beneficiated fly ash (BFA) to produce magnesium metal and cementitious material in its first full scale commercial smelter tests in China. The BFA was prepared using LMG's unique hydromet patented process.

The test work involved smelting three charges of some 150kg each through a commercial retort at the Wu Long's magnesium plant in Shanxi province. This work was managed and supervised by LMG's Chinese construction partner, BTE Engineering Co. Ltd.

Based on initial data, magnesium recoveries are in the range between 80% and 90%. The final numbers will be determined once more comprehensive assaying has been completed, upon the materials return to Australia.

At the lower end of the range, the magnesium recoveries are already 5% higher than the average magnesium recovery levels of Chinese plants that process dolomite. These higher recoveries reflect an advantage of LMG's unique BFA feedstock.

This work replaces pilot plant tests that might otherwise have been required and has addressed directly any scale-up risks using BFA as a feedstock in a full scale commercial operation.

By mid-November the magnesium crowns and the cementitious material from each test will be returned to LMG in Australia for further chemical and mineralogical analyses.

The large amount of cementitious material generated will enable large-scale cement tests to be completed. Previous test work will be replicated to confirm the earlier results, together with a full suite of cement tests to determine the specific properties and advantages of this cementitious material. This work will take 56 days to complete, although 80% of data is expected to be available within 28 days. Initial results should be available late December with the full tests results due by the end of January 2015.

Following the completion of the cement tests, LMG will be able to commence its bankable feasibility study and its negotiations with potential customers who have expressed interest in entering into long term supply agreements.



**David Paterson**  
Chairman

## **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. Production from its initial 5,000 tonne per annum magnesium plant is due to start in the middle of 2016. 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 and American 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 is a low CO<sup>2</sup> emitter.