

---

## LATROBE MAGNESIUM GRANTED PATENT FOR ITS UNIQUE HYDROMET PROCESS IN INDIA

---

**11 January 2019, Sydney Australia:** Latrobe Magnesium Limited (ASX:LMG) wish to advise that it has been granted a patent for India for its unique hydromet process.

The Australian, EU, USA, China and Indonesian patents have already been granted for 20 years starting from 25 August 2011. The process involves the treatment of the spent fly ash from brown coal-powered electricity generation using chemicals to reduce sulphur, iron and silicon to acceptable levels so that the beneficiated material can be used as a feedstock in the thermal reduction process.

The result is an efficient and novel means of producing magnesium and supplementary cementitious material production extracted from voluminous tailings of industrial fly ash from some of the world's brown coal electricity generators.

The process is 100% owned by LMG.

All these countries are known to have large lignite / brown coal deposits. To date LMG has concentrated its activities on the Latrobe Valley and Germany. In addition, LMG is in discussion with interested parties from other EU states and China.

India has a dependency on brown coal and is committed to reducing its greenhouse gas emissions in both its car and power generation industries. In making magnesium, LMG's hydromet process produces at least 60% less carbon emissions than Chinese magnesium.

Now that the patent has been granted in India, LMG will investigate its potential licencing opportunities.



**David Paterson**  
**Chief Executive Officer**

### **About Latrobe Magnesium**

Latrobe Magnesium is developing a magnesium production plant in Victoria's Latrobe Valley using its world-first patented extraction and fast cycle retort processes. LMG intends to extract and sell magnesium metal and supplementary cementitious material from industrial fly ash, which is currently a waste stream from brown coal power generation.

LMG is currently finalising a bankable-feasibility study to validate 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 last quarter of this 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, Japanese and United States 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 CO<sub>2</sub> emitter. LMG adopts the principles of an industrial ecology system