

Media Release

Mr Tim Pallas MP

Treasurer

Minister for Industrial Relations

Minister for Economic Development

Minister for Trade



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BACKING NET-ZERO MINERALS REVOLUTION, JOBS AND INVESTMENT

A critical minerals startup is conducting a groundbreaking study with support from the Andrews Labor Government that could lead to the world's first net-zero magnesium foundry being built in Victoria with technology developed by the CSIRO.

National science agency the CSIRO has developed a patented low-emission process for creating high-purity, high-value magnesium, which if proven commercially viable would make Victoria and Australia a major player in a \$7 billion global industry and set new benchmarks for clean production.

Minister for Economic Development Tim Pallas today visited the CSIRO's base in Clayton and alongside leaders of the startup Magnium announced the Government was co-funding the feasibility study.

Magnesium is used in small amounts to add strength to aluminium alloys used in parts casting (cars, gearboxes, seat frames), aerospace manufacturing, laptops and other electronic goods.

China accounts for 85 per cent of the world's magnesium production using high-energy and labour-intensive methods, sourcing magnesite ore from countries including Australia. Magnium's clean, green strategy would enable the processing of Australian ore here, eliminating carbon-intensive shipping of ore overseas and back.

The CSIRO's patented MagSonic nozzle hypersonically cools molten magnesium into a fine powder of greater than 99.8 per cent purity, which can be pressed into ingots for transport. The study will explore ways for Magnium to scale-up the technology and build a magnesium refinery in Victoria.

The company forecasts a Victorian foundry could produce up to 120 kilotons per year of magnesium for export – more than 10 per cent of global supply – creating \$1 billion in annual earnings at current prices.

Investment to build a next-generation magnesium foundry would create hundreds of construction jobs and involve capital investment of hundreds of millions of dollars while an estimated 350 ongoing jobs would be supported.

A new sovereign manufacturing process would also increase certainty for local manufacturers by reducing Australia's reliance on the international mineral processing supply chain.

The feasibility study is expected to be completed early in the new year and will consider site locations, infrastructure planning, renewable energy usage, environmental and community impact, community engagement, engineering process flows and planning permit requirements.

Given Magnium's secured magnesite tenements in South Australia, and the potential for the process to refine high purity magnesium from brine, Magnium does not expect to conduct new mining exploration in Victoria.

Quotes attributable to Minister for Economic Development Tim Pallas

"We're backing this study because the science is exciting and so is the potential for jobs and investment."

"Net zero, large-scale production of magnesium would make Victoria a global export leader, secure supply of a critical mineral for Australian manufacturers and create hundreds of jobs."

Quote attributable to Magnium Chief Executive Officer Shilow Shaffier

"We are grateful for the ongoing support and foresight from the Victorian Government which enables the creation of companies like ours, building on local research to create new future industries here in Australia."

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