



P R E S S R E L E A S E

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Low Cost, Environmentally Friendly, Aluminium Smelting Process Passes Key Milestone

Today, the Melbourne-based, early stage company, Calsmelt Pty Ltd, announced that it had completed a “concept proof” stage of technology development for its Thermal™ process. Calsmelt holds an exclusive world-wide license to the novel carbothermic smelting technology for aluminium production developed by the Australian company Thermal IP Pty Ltd.

Calsmelt co-founder and interim CEO, Dr. Greg Smith, described Thermal™ technology as a significant breakthrough for the production of aluminium at a significantly lower cost, and in a much more environmentally friendly manner.

“Calsmelt is delighted that its work on the Thermal™ technology has now been proven to the point that within a couple of years we will be ready to build a first small, but commercially viable plant”, Dr. Smith said. “Such a plant will allow the global industry to fully appreciate the economic and environmental benefits offered by Thermal™ technology”.

Calsmelt’s Chief Scientist, co-founder and technology inventor, Dr. Yaghoub Sayad-Yaghoubi, commented: “for around 70 years now, the aluminium industry has been searching for a suitable carbothermic technology to smelt aluminium in a similar manner to the way steel is produced. Such a technology would help it overcome the well-known limitations of the industry’s current, pervasive electro-chemical approach. While some promising approaches were considered over the last two decades, these were found to have significant shortcomings that prevented their commercial introduction. Our Thermal™ technology overcomes all of these limitations and finally creates real potential for the industry move to carbothermic smelting for aluminium – at a time when the industry is under economic and environment pressure.”

Dr. Sayad-Yaghoubi added: “We believe that Thermal™ technology will insure a competitive future for the aluminium industry by drastically reducing the costs and environmental footprint of metal production. Capital costs will be reduced by 77% to 80%, while the operational cost will be lowered by about 40%. Power consumption will be about 40% lower. The currently troubling fluoride emissions found in the electrochemical process will be completely eliminated and the quantity of generated gases will be significantly lower. Thus, the Global Warming Potential (GWP) of the Thermal™ process will be 40-60% lower than in the current electrochemical process.”

Calsmelt has completed a very detailed manuscript in which all of the experimental and theoretical work conducted on Thermal™ technology to date is drawn into one, well-organized document. This now forms a significant part of the Thermal™ technology package. Smith and Sayad-Yaghoubi are currently marketing the technology with a view to forming strategic partnerships with aluminium industry majors who can assist it to build the semi-commercial demonstration smelter.

For further information, please contact: Dr. Greg Smith, Interim CEO, Calsmelt Pty Ltd.