

TECHNICAL DEVELOPMENT PROGRAM TO PRODUCE SCANDIUM-RICH MASTER ALLOY AT LOW-COST

14 DECEMBER 2018

HIGHLIGHTS

- **Agreement with Metalysis Ltd to assess the technical and commercial viability of utilising their solid state technology to produce master alloy**
- **Owendale scandium oxide to be tested for the production of a scandium-rich master alloy containing 15X the amount of scandium compared to the conventionally available product**
- **Potential to significantly reduce the cost of producing the master alloy with a lower environmental footprint compared to traditional melting processes**
- **Significant cost saving benefits to the end user by offering scandium rich master alloy**
- **Strategic initiative part of an overall strategy to produce superior master alloy and accelerate the development of the advanced-stage, Owendale scandium project**

Platina Resources Limited (Platina or the Company) is pleased to announce it has signed a Memorandum of Understanding (“MOU”) with Metalysis Limited (“Metalysis”), a UK technology company focused on the development of metal alloy powders, to assess the technical and economic feasibility of using its innovative solid-state process to produce a scandium rich master alloy.

Platina is developing one of the largest and highest-grade scandium deposits in the world. The recently completed Definitive Feasibility Study has demonstrated the viability of constructing a low capital expenditure open-cut mining operation and processing facility producing scandium oxide at the Platina Scandium Project in New South Wales, Australia. The process for producing the scandium oxide has been extensively tested through a pilot program which processed 6-tonnes of ore and produced 99.99% scandium oxide. The Company is now actively focused on market development and securing off-take, and assessing options to reduce the production costs of making value-added scandium products including master alloys.

Metalysis has developed a modular, electrochemical technology which can produce a scandium-rich master alloy feedstock, used to make aluminium-scandium alloys. Currently, the traditional industry process route involves producing a 2% aluminium-scandium master alloy by melting scandium oxide powder with aluminium metal (see Figure 1). The master alloy is further diluted with molten aluminium to less than 0.5% scandium metal for use in the end product. Metalysis’ technology allows the production of a master alloy addition, which is 15X higher in scandium content using scandium oxide and alumina oxide. The process can produce a wide range of alloy powders at lower cost and environmental footprints than the traditional melting processes.

Scandium rich master alloys produced by Metalysis’ process are in demand from industries including aerospace, automotive and additive manufacturing (3D printing). While the solid oxide fuel cell industry has been the dominant consumer of scandium in recent years, scandium’s greatest value

lies in the functional properties it imparts as an alloy in aluminium. When used in combination with other common aluminium alloys, scandium can produce stronger, heat tolerant, weldable aluminium products. These products are being increasingly incorporated into transportation applications for light-weighting (electric vehicles) and lowering fuel efficiency requirements.

The MOU contemplates using Owendale scandium oxide to produce a scandium-rich master alloy utilising Metalysis' process, and assessing the technical and economic feasibility of utilising the technology within potential development scenarios at Owendale. The program will also produce samples of the scandium rich alloy for testing by customers in the aluminium and alloy industries. Platina will provide Metalysis with refined scandium oxide produced from Owendale during the pilot program completed earlier in 2018.

The Company will negotiate a technology licencing agreement with Metalysis once the initial test work programs have been successfully completed.

Managing Director Corey Nolan commented, *"The Company now has two development initiatives underway to assess the potential development of a low-cost process for the production of value-added, aluminium-scandium master alloy.*

In September 2018, the Company announced it was developing a process technology that could be provided to the downstream alloy manufacturers to fast-track the path towards integrating aluminium-scandium alloys in their production lines and utilising scandium oxide from Owendale.

The MOU with Metalysis represents another innovative way of potentially producing scandium rich master alloy at potentially lower cost than the traditional melting processes.

The aim of the initiatives is to accelerate the development of the Owendale scandium oxide project by facilitating technology solutions to fast-track the use of scandium oxide in the high-strength, light-weight alloying sector".

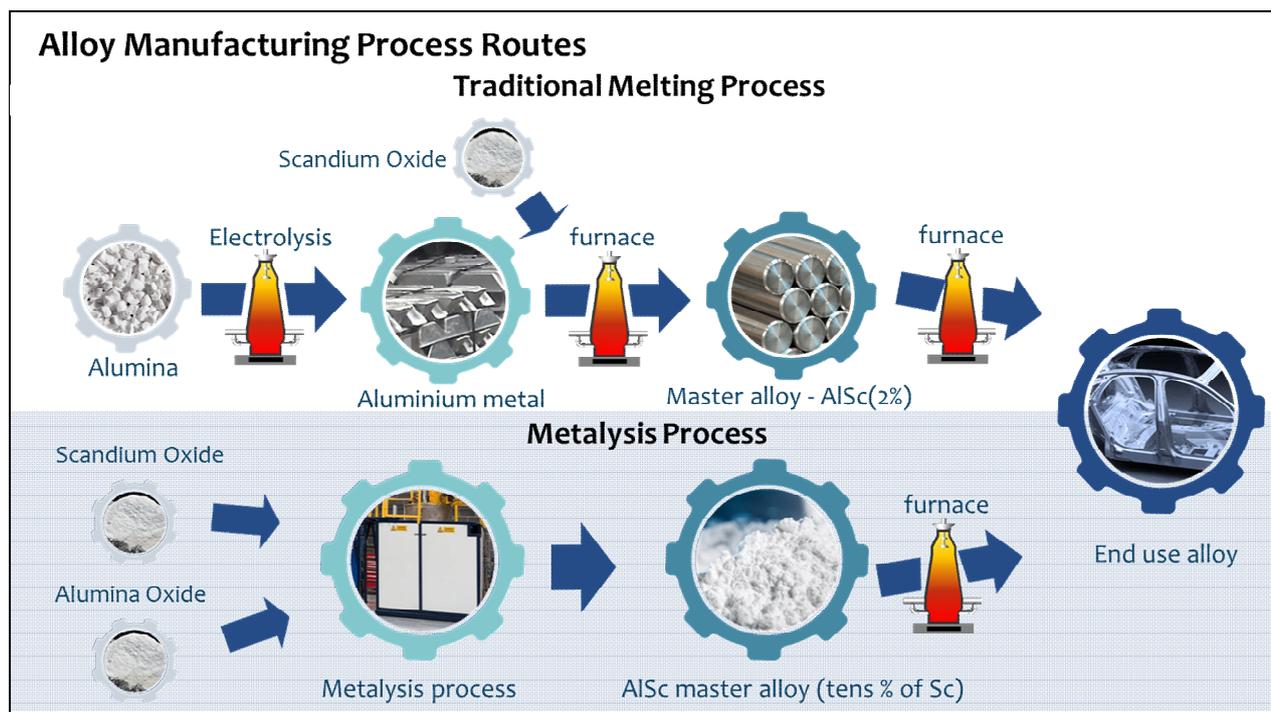


Figure 1: Diagrammatic representation of the two processes for making master alloy



Figure 2: Metalysis’ R&D scale production facility and metal powder produced using its innovative, solid state production process

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About Platina Resources Limited

Platina Resources Limited (ASX: PGM) is an Australian-based exploration and development company focused on precious and specialty metals, particularly platinum group metals (“PGM”) and the strategic metal scandium.

The Company’s flagship project is Owendale in central New South Wales, one of the largest and highest-grade scandium deposits in the world, which has the potential to become Australia’s first scandium producer with cobalt, platinum and nickel credits. A Definitive Feasibility Study is underway and due for completion in late 2018.

The Company also has interests in two gold-platinum group metal projects, including:

- Skaergaard (100% interest) - One of the world’s largest undeveloped gold deposits and one of the largest palladium resources outside of South Africa and Russia, located in Greenland; and
- Munni Munni (30% interest) - Situated in the Pilbara region of Western Australia, the Munni Munni Complex is one of Australia’s most significant PGM occurrences. Munni Munni also has potential for conglomerate hosted gold and is a joint venture with Artemis Resources Limited.

For more information please see: www.platinaresources.com.au

Statements regarding Platina Resources’ plans with respect to its mineral properties are forward-looking statements. There can be no assurance that Platina Resources’ plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that Platina Resources’ will be able to confirm the presence of additional mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of Platina Resources’ mineral properties.