

# Scandium International Mining Corp. Signs Letter of Intent with AML Technologies to Test Scandium Alloys in 3D Printing Applications

written by Raj Shah | January 16, 2018



January 16, 2018 ([Source](#)) – Scandium International Mining Corp. (**TSX: SCY**) (**“Scandium International” or the “Company”**) is pleased to announce that it has signed a Letter of Intent (**“LOI”**) with AML Technologies (**“AML”**), an Adelaide,

Australia based start-up company with proprietary technology for applying aluminium alloys to additive layer manufacturing processes, also commonly referred to as 3D printing. The LOI calls for the Company to supply aluminium-scandium alloys (**“Al-Sc”**), as wire, in relatively small amounts, for testing by AML in their proprietary metal additive manufacturing process, referred to as the WAM™ process. AML intends to report the results of the testing program utilizing scandium-containing alloys, as does SCY, upon completion of the testing period, which extends a minimum of 6 months.

## **LOI AGREEMENT HIGHLIGHTS:**

- **LOI defines work program to test scandium alloys in 3D printing applications,**
- **AML employs a wire-feed system, capable of making larger parts than typical,**

- SCY to contribute scandium-containing alloys to the program, as wire,
- Al-Sc alloys have been made by SCY, as part of its Al-Sc development programs,
- AML has an excellent 3D printing platform to test scandium-containing alloys,
- Test results will be shared with SCY, and
- Successful test work program forms basis for future use of scandium alloy by AML.

## **DISCUSSION:**

AML Technologies is commercializing a 3D printing metal additive manufacturing process, designed to operate at a speed that will enable manufacture of medium to relatively large engineered metal parts and structures at low cost. The WAM™ process combines an electric arc heat source with a wire-feed system, and a specifically programmed welding robot to manufacture parts from 3D computer-aided drawings. This is a near-net shape system, where final parts are then machine finished.

In June 2017, AML Technologies was recognized by the Australian Government with a A\$500,000 funding grant for furtherance of its work in this specific area of large parts metal print manufacturing. Both SCY and AML recognize the unique role scandium may well play in printing metal parts with aluminium feedstocks. After reviewing a number of technologies in this area, SCY has engaged with AML in its first testing program to follow this opportunity.

AML will utilize Al-Sc alloys that have already been manufactured for SCY. These sample alloys are part of the Company's ongoing marketing research into aluminium alloys with scandium, and display the Company's ability to make samples available for specific testing regimes and market applications. As SCY reported in our December 14, 2017 News Release, SCANDIUM

INTERNATIONAL – SALES AND MARKETING UPDATE, we believe the work initiated in 2017 to specifically understand scandium's effects on aluminium alloys and to be able to offer alloy samples to key potential customers is a key step in promoting customer interest in our scandium feedstock products from the Nyngan Scandium Project in Australia.

**George Putnam, CEO of Scandium International Mining Corp. commented:**

“3D printing represents an emerging application for aluminium-scandium alloys. Currently there are many application providers using differing technologies, each with challenges to the use of conventional aluminium feedstocks. Scandium will help in addressing some of these challenges, and we are pleased to engage with AML to demonstrate this claim. AML is working to further develop their technology to address the economic challenges of 3D printing, particularly with regard to improving the speed and range of printing larger aluminium based parts. AML will also benefit from recent initiatives by the Australian Government to encourage defence manufacturing activities in South Australia. The timing is right to initiate our interest in additive manufacturing in this growing hub of activity and technical development.”

#### **QUALIFIED PERSONS AND NI 43-101 TECHNICAL REPORT**

Nigel J. Ricketts, BAppSc (Metallurgy), PhD (Chemical Engineering), MAusIMM CP (Metallurgy), holds the position of VP Projects and Market Development, Australia in the Company, is a qualified person for the purposes of NI 43-101, and has reviewed and approved the technical content of this press release on behalf of the Company.

**ABOUT SCANDIUM INTERNATIONAL MINING CORP.**

The Company is focused on developing its Nyngan Scandium Project, located in NSW, Australia, into the world's first scandium-only producing mine. The project has received all key approvals, including a mining lease, necessary to proceed with project construction.

The Company filed a NI 43-101 technical report in May 2016, titled ["Feasibility Study – Nyngan Scandium Project"](#). That feasibility study delivered an expanded scandium resource, a first reserve figure, and an estimated 33.1% IRR on the project, supported by extensive metallurgical test work and an independent, 10-year global marketing outlook for scandium demand.

*This press release contains forward-looking statements about the Company and its business. Forward looking statements are statements that are not historical facts and include, but are not limited to statements regarding any future development of the project. The forward-looking statements in this press release are subject to various risks, uncertainties and other factors that could cause the Company's actual results or achievements to differ materially from those expressed in or implied by forward looking statements. These risks, uncertainties and other factors include, without limitation risks related to uncertainty in the demand for Scandium in 3D printing applications; the possibility that results of test work by AML will not fulfill expectations and realize the perceived market utilization and potential of scandium alloys that may be developed for sale by the Company.*

*Forward-looking statements are based on the beliefs, opinions and expectations of the Company's management at the time they are made, and other than as required by applicable securities laws, the Company does not assume any obligation to update its forward-looking statements if those beliefs, opinions or*

*expectations, or other circumstances, should change.*