ANDROMEDA METALS LTD (Andromeda, ASX: ADN)

28 September 2021

Andromeda



Andromeda Metals Limited ABN: 75 061 503 375

Corporate details:

ASX Code: ADN

Cash (21 Sept 2021): \$46.41 million Issued Capital:

2,461,552,016 Ordinary Shares 85,495,000 Unlisted Options 23,139475 Performance Rights

Directors & Officers:

Rhod Grivas

Non-Executive Chairman

James Marsh

Managing Director

Joe Ranford Operations Director

Andrew Shearer

Non-Executive Director

Melissa Holzberger Non-Executive Director Andrea Betti

Company Secretary

Contact details:

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Andromeda Metals Investor Presentation Clarification and Amendment

Andromeda Metals Limited (ASX Code: ADN, Andromeda, the Company) released an Investor Presentation – Virtual Resources Conference this morning (Announcement) and would like to make the following clarifications and amendments:

- Slide 2 the left hand side and right hand side axes are now properly labelled
- Slide 3 the original slide has been retracted and removed
- Slide 4 (now slide 3 in the amended presentation) the reference to the JORC resource of 100Mt has been properly referenced to the original ASX announcements where the JORC resources were originally disclosed and noting that the Company is not aware of any new information or data that materially affects the information in the relevant market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.
- Slides 14-15 this are additional slides with the required JORC resource tables providing the resource category, grade and tonnage.

The Company reiterates that it is retracting Slide 3 in the original presentation and further advises that this slide should be disregarded and not be used as the basis for an investment decision regarding the Company.

This announcement has been approved by James Marsh, Managing Director of Andromeda Metals Ltd.

For more information about the Company and its projects, please visit our website www.andromet.com.au or contact:

James Marsh Managing Director Andromeda Metals Ltd E: james.marsh@andromet.com.au

Andromeda Metals Ltd | ABN 75 061 503 375 | 69 King William Road Unley SA, 5061

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Andromeda

Great White Kaolin Project Eyre Peninsula, South Australia Sep 28, 2021

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An emerging industrial minerals producer with numerous value chains

Corporate overview

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Andromeda's core assets



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KAOLIN and HALLOYSITE-KAOLIN



Great White JV (75% ADN:25% MEP) Mount Hope 100% Eyre Kaolin 100%

– All in South Australia

>100Mt of JORC Resources1,2,3,4

Natural Nanotech (50:50 JV)

- 1. ASX 23 December 2019, "Significant increase in Mineral Resource for the Poochera Kaolin Project".
- 2. ASX 29 September 2020, "New mineral resource estimate for Hammerhead Halloysite-Kaolin Deposit".
- 3. ASX 11 August 2020, "New Mineral Resource for the Mount Hope Kaolin project"
- 4. The Company is not aware of any new information or data that materially affects the information in the relevant market announcements. All material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

Great White Kaolin Project

Primary project focus – Halloysite-Kaolin

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Primary Project Focus – Halloysite-Kaolin

- Operations scheduled to start in 2022 for the first project
- Legally Binding Offtakes underpinning the business
- Current demand exceeding initial planned production
- Located close to essential infrastructure
- New high-value concrete industry opportunity
- De-risked High Purity Alumina (HPA) project
- Multiple Nanotechnology opportunities

Binding off-takes in place

Initial business already underwritten

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Ceramic Product - Fired Brightness Off The Scale

- Binding Offtake signed for 5,000t/pa with Japanese customer @ A\$700/t
- Total Japanese market estimated at 45,000t/pa
- Total Chinese market estimated at ~ 600kt/pa Offtake discussions ongoing
- Approval testing in progress throughout Europe, Middle East & Asia
- Global supply shortage is growing

Paint Product - Out Performs The World's Best Kaolin Products

- Binding Offtake signed for 70,000t/pa of premium paint grade into China
- Price fixed for three years and higher than A\$700/t
- Significant global opportunities for this product



New concrete application

Halloysite rheology modifier (HRM™) in construction products

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Potential Benefits

- Carbon footprint reductions
- Cost reductions
- Performance improvements
- Handling improvements
- Safety improvements





Commercial testing and bulk sampling in progress



Australian Concrete Industry Standard Passed

ATENT FILED



Only **1kg in 3 tonnes** of concrete required



Huge potential high-value market with true global reach

Halloysite & nanotechnology

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- Most researched clay mineral in the world
- Use only constrained by supply shortage
- The Natural Nanotech JV is spending >\$1M/pa on R&D leading to commercialisation

- Great White Kaolin Project halloysite-kaolin is already working at 40% purity
- This is only going to get better as purity increases
- Bulk sample exercise in progress targeting high-purity halloysite
- Also collecting a large amount for cosmetic product approval testing



Carbon Dioxide Capture/Storage & Conversion to Fuels



Plant under



Batteries & Super-Capacitors



Water Purification





Patent Filed

Natural Nanotech (NNT) R&D in Progress



Agriculture \$2.4M Gov Funding



Drugs





Hydrogen Storage and Transport

Remediation of Contaminated Soils

Pilot Plant to Demonstrate Carbon Capture & Conversion Commerciality

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Our Aim: Demonstrate Direct Air Capture or Flue Gas Capture achievable at or below A\$20/t CO₂

High purity alumina project

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High Purity Alumina (HPA) is recognised as a key
component in the Lithium-Ion Battery supply Chain

- Annual demand is set up to quadruple between 2020 and 2028 causing a significant shortfall in supply
- Current 4N (99.99%) HPA pricing is approx. US\$24,000/t and 5N (99.999%) up t US\$50,000/t
- HPA is also used extensively in LED lights and Smartphone Glass



- Andromeda has proven premium quality kaolin feed for HPA production
- Very High end 4N purity was repeatedly achieved with only one stage of purification
- MoU signed with Advanced Energy Minerals for exclusivity to their technology in Australia and New Zealand
- AEM has the only globally operating commercial facility capable of producing HPA from kaolin
- AEM is currently designing a UK plant with support from the UK government
- This improved modular design planned to be duplicated in Australia by Andromeda
- Andromeda has engaged a world class international team of metallurgists to develop process optimisations

What's next?

What's on the horizon for Andromeda

2022

First Commercial Products to Market by late 2022

- Sell the Phase 1 plant 100% out
- Release Definitive/Bankable Feasibility Studies
- Secure debt funding
- Mining Approval
- High Purity Halloysite resource and/or purification
- Concrete product commercial agreement
- Additional Resources
- Nanotechnology Commercialisation
- High Purity Alumina feasibility studies
- DSO opportunity
- Sand sales opportunity



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Thank you

Andromeda

James Marsh

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STATEMENTS

Cautionary Statements

The preliminary feasibility study (Pre-Feasibility Study, PFS) referred to in this announcement has been undertaken to study a range of options to produce high-quality halloysite-kaolin product from the Kaolin Resource at Poochera in South Australia in order to provide Andromeda Metals with a basis for more detailed Definitive Feasibilities Studies for the Project. It is a technical and economic study to identify preferred mining, processing and infrastructure requirements but it has not finalised these. The PFS work has advanced assessments of environmental and socio-economic impacts and requirements, but these are also not finalised.

The Production Target referred to in this announcement is based on this PFS and supported mainly by Measured and Indicated Resources and only minor Inferred Resources. Andromeda Metals has concluded that it has reasonable grounds for disclosing a Production Target, however there is no certainty that the Production Target or the economic assessment will be realised.

The PFS is based on the material assumptions outlined elsewhere in this announcement. These include assumptions about the availability of funding. While Andromeda Metals considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the PFS will be achieved.

To achieve the range of outcomes indicated in the PFS, funding in the order of A\$28M, inclusive of working capital, is likely be required. Investors should note that there is no certainty that Andromeda Metals will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Andromeda Metals' existing shares. It is also possible that Andromeda Metals could pursue other 'value realisation' strategies to provide alternative funding options.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the PFS. This announcement includes forward looking statements. For further information on forward looking statements please refer to the end of this release.

Forward Looking Statements

Some of the statements contained in this report are forward looking statements. Forward looking statements, include, but are not limited to, statements concerning estimates of tonnages, expected costs, statements relating to the continued advancement of Andromeda's projects and other statements that are not historical facts. When used in this report, and on other published information of Andromeda, the words such as 'aim', 'could', 'estimate', 'expect', 'intend', 'may', 'potential', 'should' and similar expressions are forward looking statements. Although Andromeda believes that its expectations reflected in the forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

Various factors could cause actual results to differ from these forward-looking statements include the potential that Andromeda's project may experience technical, geological, metallurgical and mechanical problems, changes in market prices and other risks not anticipated by Andromeda. Andromeda is pleased to report this summary of the Study in a fair and balanced way and believes that it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any mining of mineralised material, modifying factors, production targets and operating cost estimates.

This announcement has been compiled by Andromeda from the information provided by the various contributors. All financial assumptions and estimates are quoted in Australian Dollars ('A\$' or 'AUD') only, unless indicated otherwise heading.

Competent Person's Statements

Information in this announcement has been compiled by Mr. James Marsh a member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr. Marsh is an employee of Andromeda Metals Limited who holds shares and options in the company and has sufficient experience, which is relevant to the style of mineralisation, type of deposits and their ore recovery under consideration and to the activity being undertaking to qualify as Competent Persons under the 2012 Edition of the 'Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). This includes Mr. Marsh attaining over 30 years of experience in kaolin processing and applications. Mr. Marsh consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

JORC Resource Reference Tables 1

Table of Resources – Clay <45µm

		-															
			RED RESOUR	Æ	INDICATED RESOURCE					INFERR	ED RESOURC	E	TOTAL RESOURCES				
	ANDROMEDA INTEREST	TONNES	PSD		HALLOYSITE	TONNES	PSD		HALLOYSITE	TONNES	PSD		HALLOYSITE	TONNES	PSD	KAOLINITE	
	(%)	(Mt)	<45µm	(%)	(%)	(Mt)	<45µm	(%)	(%)	(Mt)	<45µm	(%)	(%)	(Mt)	<45µm	(%)	(%)
2020																	
Great White ^{1,2}	50																
Hammerhead	-																
Mount Hope	-																
Total (100%)	-																
- Total 2020 (Andromeda share)	-																
2021																	
Great White ^{1,3,4}	75	2.9	83.9	78.8	13.8	7.3	82.8	82.3	9.9	7.2	83.3	81.7	9.9	17.4	83.2	81.5	10.5
Hammerhead ^{1,4,5}	75									27.1	82.2	81	12.3	27.1	82.2	81	12.3
Mount Hope ^{1,4,6}	100									7.5	82.2	81.4	3.3	7.5	82.2	81.4	3.3
Total (100%) ¹	-									41.8	82.4	81.2	10.3	52	82.5	81.2	10.4
- Total 2021 (Andromeda share) ¹	-									33.2	82.4	81.3	9.9	40.9	82.5	81.2	10.1

Table of Resources – Clay <45µm continued

		MEASURED RESOURCE				INDICATED RESOURCE				INFERRED RESOURCE				TOTAL RESOURCES			
	ANDROMEDA INTEREST	TONNES	Al ₂ O ₃	Fe ₂ O ₃	Ti0 ₂	TONNES	Al ₂ O ₃	Fe ₂ O ₃	Ti0 ₂	TONNES	Al ₂ O ₃	Fe ₂ O ₃	Ti0 ₂	TONNES	Al ₂ O ₃	Fe ₂ O ₃	TiO ₂
	[%]	(Mt)	(%)	(%)	(%)	(Mt)	(%)	(%)	(%)	(Mt)	(%)	(%)	(%)	(Mt)	(%)	(%)	(%)
2020																	
Great White ^{1,2}	50																
Hammerhead	-																
Mount Hope	-																
Total (100%)	-																
Total (Andromeda share)	-																
2021																	
Great White ^{1,3,4}	75	2.9	36.7	0.52	0.32	7.3	36.6	0.51	0.5	7.2	36.4	0.51	0.45	17.4	36.5	0.51	0.45
Hammerhead ^{1,4,5}	75									27.1	37	0.63	0.71	27.1	37	0.63	0.71
Mount Hope ^{1,4,6}	100									7.5	35.3	0.51	0.62	7.5	35.3	0.51	0.62
Total (100%) ¹	-									41.8	36.6	0.59	0.65	52	36.6	0.6	0.61
- Total (Andromeda share) ¹	-									33.2	36.5	0.58	0.65	40.9	36.5	0.6	0.6

JORC Resource Reference Tables 2

Table of Reserves - Clay

			P	ROBABLE RESERVE			TOTAL RESERVE						
		WHO	ILE ROCK	WIT	HIN ≤45µm FRACT	10N	WHO	OLE ROCK	WIT	10N			
	ANDROMEDA INTEREST (%)	TONNES (Mt)	RECOVERY <45µm FRACTION (%)	HALLOYSITE (%)	Kaolinite (%)	HALLOYSITE + KAOLINITE (%)	Tonnes (Mt)	RECOVERY <45µm FRACTION (%)	HALLOYSITE (%)	Kaolinite (%)	HALLOYSITE + KAOLINITE (%)		
2020													
Great White													
Total (100%)													
Total (Andromeda share)													
2021													
Great White ^{1,12,13,14}	75	12.5	52	15	78	93	12.5	52	15	78	93		
Total (100%)	-	12.5	52	15	78	93	12.5	52	15	78	93		
Total (Andromeda share) ¹	-	9.4	52	15	78	93	9.4	52	15	78	93		

1 Figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

- 2 ASX 23 December 2019, "Significant increase in Mineral Resource for the Poochera Kaolin Project".
- 3 ASX 26 November 2020, "Updated mineral resource for the Great White Kaolin JV Deposit".

4 ISO brightness (R457) cut-off of at 75 in the <45µm size fraction.

5 ASX 29 September 2020, "New mineral resource estimate for Hammerhead Halloysite-Kaolin Deposit".

6 ASX 11 August 2020, "New mineral resource for the Mount Hope Kaolin Project".

7 ASX announcement released 8 May 2019 "Increased ounces in updated Wudinna Gold Project Mineral Resource".

8 The Wudinna Gold Project Mineral Resources estimates have been reported at a 0.5 g/t gold cut-off grade to reflect extraction by open pit mining.

9 ASX release dated 15 August 2019 "Substantial initial copper resource – Moonta Project, inferred ISR copper resource of 114,000 tonnes contained copper".

10 Figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

11 Environmental Copper Recovery Pty Ltd earning a 75% interest.

12 ASX release dated 10 July 2020 "Maiden Ore Reserve for Carey's Well Deposit".

13 Great White Reserve estimated based off the 2019 Great White Resource estimate (refer ADN ASX release dated

23 December 2019 "Significant Increase in Mineral Resource at Poochera").

14 The maiden Ore Reserve Estimate is drawn from the PFS released in June 2020 (refer ADN ASX announcement dated

1 June 2020 titled "Pre-Feasibility Study further improves Poochera Halloysite-Kaolin Project Economics").

15 Ore Reserves have been reported from Measured and Indicated Resources only.