



## Noosa Mining Conference 10 November 2022

**Our Vision:** Leading the world in the sustainable supply of superior quality industrial minerals and advancement of nanotechnologies

### ASX:ADN

#### www.andromet.com.au



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#### **Mineral Resources and Ore Reserves Estimates**

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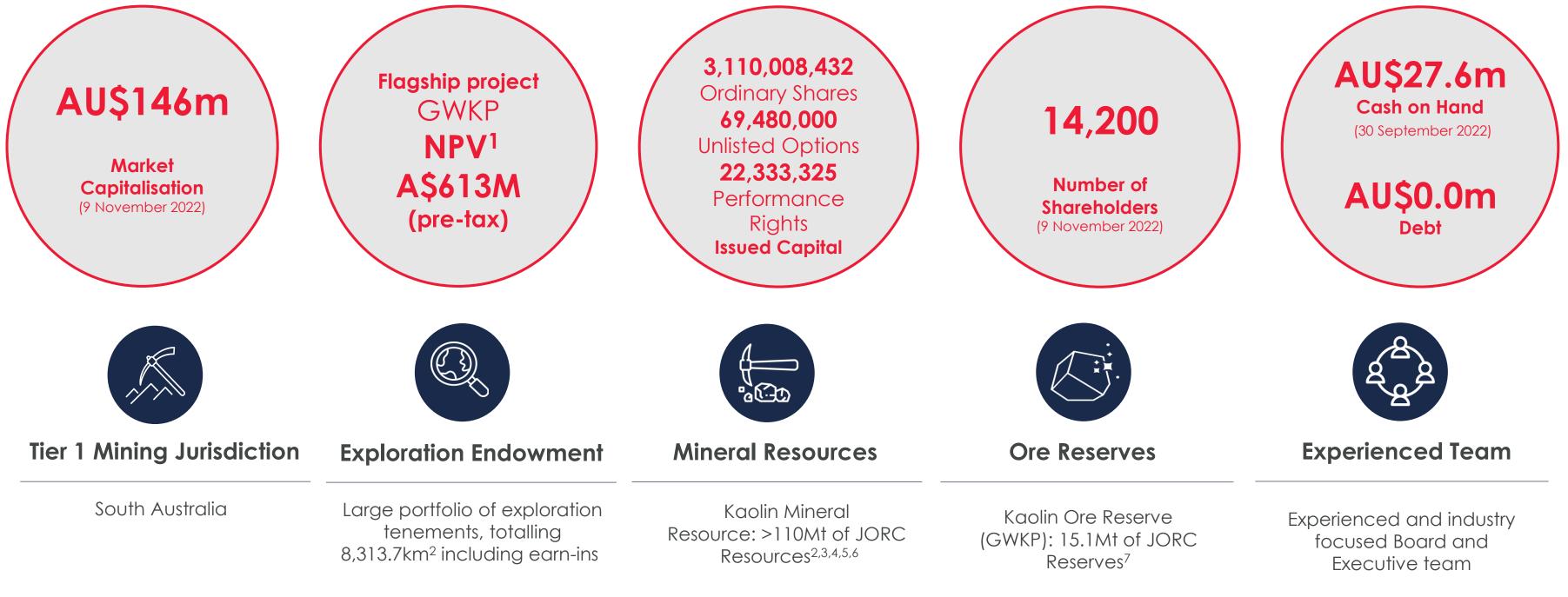
Information that relates to Mineral Resources estimates has been previously announced to ASX on 23 December 2019, "Significant increase in Mineral Resource for the Poochera Kaolin Project", 29 September 2020, "New mineral resource estimate for Hammerhead Halloysite-Kaolin Deposit" and 11 August 2020, "New Mineral Resource for the Mount Hope Kaolin project", all available at <a href="https://www2.asx.com.au/markets/company/adn">https://www2.asx.com.au/markets/company/adn</a>. Andromeda confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. Andromeda confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

#### **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.

## Andromeda (ASX: ADN)

A near-term mining producer well placed for growth



- ASX 6 April 2022 Great White Kaolin Project Definitive Feasibility Study
- ASX 23 December 2019, "Significant increase in Mineral Resource for the Poochera Kaolin Project".
- ASX 29 September 2020, "New mineral resource estimate for Hammerhead Halloysite-Kaolin Deposit".
- ASX 11 August 2020, "New Mineral Resource for the Mount Hope Kaolin project"
- "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.'
- ASX 23 March 2022, Maiden Tiger Kaolin Resource and Regional Rare Earth Element Potential. Halloysite reported with kaolinite
- ASX 6 April 2022 Great White Kaolin Project Definitive Feasibility Study

## Ideally positioned to meet growing global demand



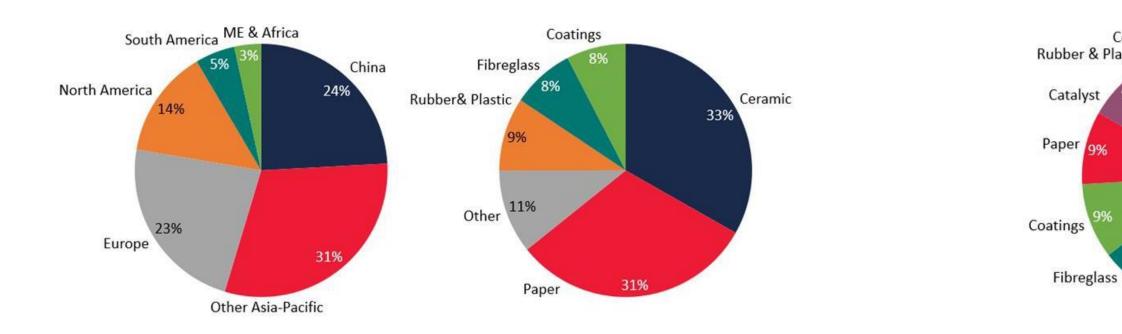
Estimated Size of Global Kaolin Market US\$9.0 billion<sup>1</sup> in 2023 (41Mt)

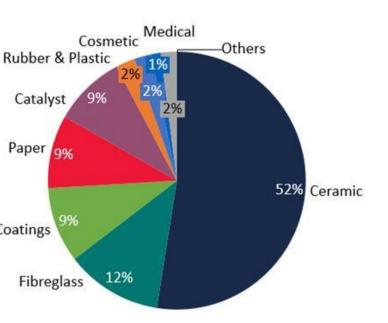


Estimated Growth of Global Kaolin Market **11.1% p/a<sup>1</sup>** 2020-2027 CAGR (Asia Pacific)

### Global kaolin demand by end use and region in 2021

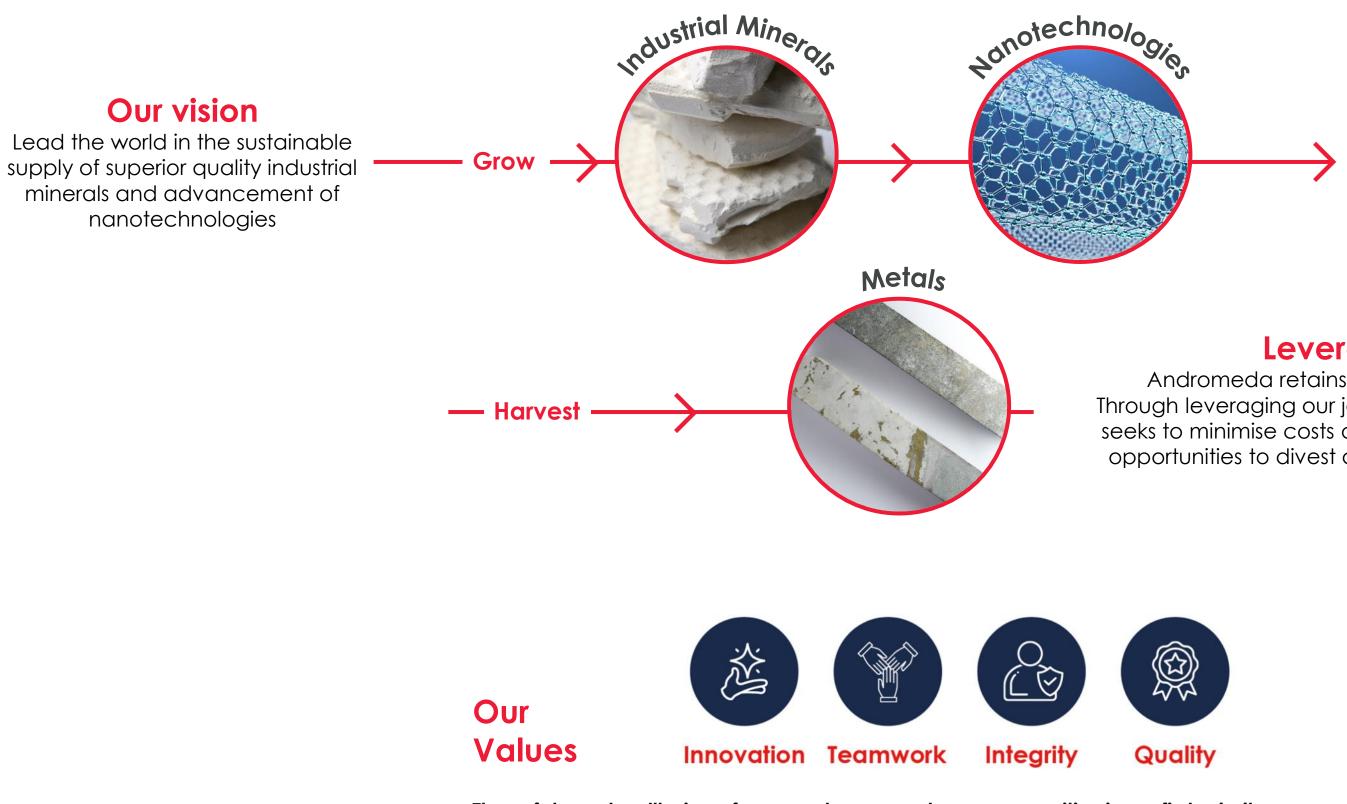
### Chinese kaolin demand by end use in 2021





### Our purpose

Through the use of our halloysite-kaolin and nanotechnologies we strive to enrich the lives of people by improving the environment, creating prosperity for our shareholders and delivering value for our stakeholders



The safety and wellbeing of our employees and our communities is our first priority

### **Our mission**

To mine and process industrial minerals for supply, together with advancing nanotechnologies, to a global customer base by leveraging our unique natural resources and intellectual property portfolio

### Leverage for growth

Andromeda retains legacy gold and copper assets. Through leveraging our joint venture partnerships, Andromeda seeks to minimise costs and management time, while seeking opportunities to divest and reinvest funds in growth projects

Our Projects

80E

### Why Andromeda? Completed over last 12 months **Mining Approval** Granted **Minotaur Acquisition** Completed **Natural Nanotech** 100% Owned DFS Released **Binding Offtakes** Four Binding offtake agreements signed Team Expert and dedicated team built PEPR Environmental Management Plan submitted for approval Land acquired Agreements signed to acquire land covered under Mining Lease

### Halloysite - Kaolin

- Rare world class resource
- Halloysite is the highest value form of kaolin
- Developed significant in-house knowledge base



### New High Value Product Opportunities

Developing new high value products including High Purity Alumina (HPA) and a concrete additive for existing markets

Nanotechnologies	Strategic research relationship with
	University of Newcastle

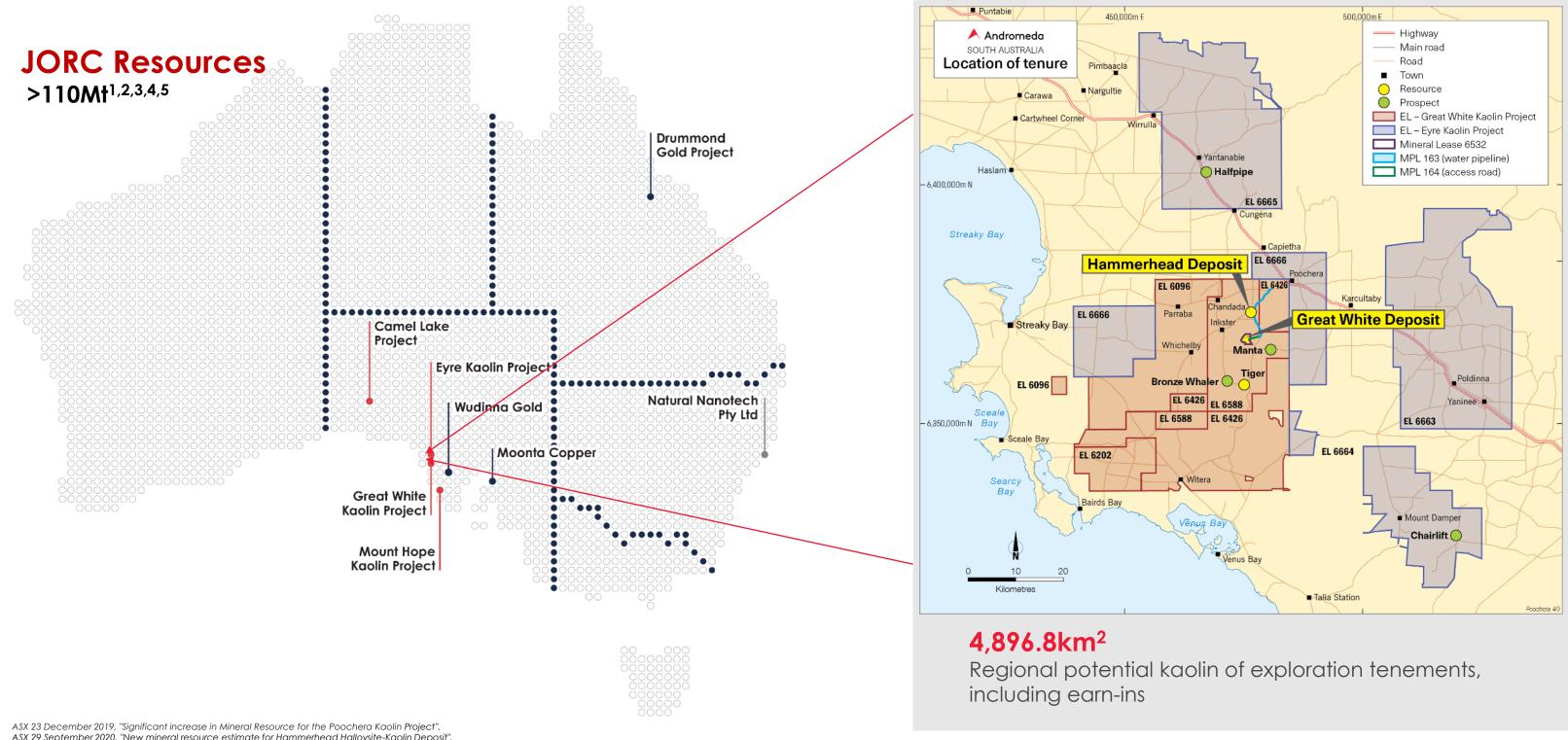
Intellectual Property

#### Building our IP portfolio

- Carbon capture international patent application filed
- Carbon dioxide conversion
  provisional patent application filed
- HPA production process provisional patent application filed
- HRM approved for use in concrete

## Halloysite - Kaolin Resources & Exploration

Exploration efforts by our experienced Geological Team to grow the market base for value products



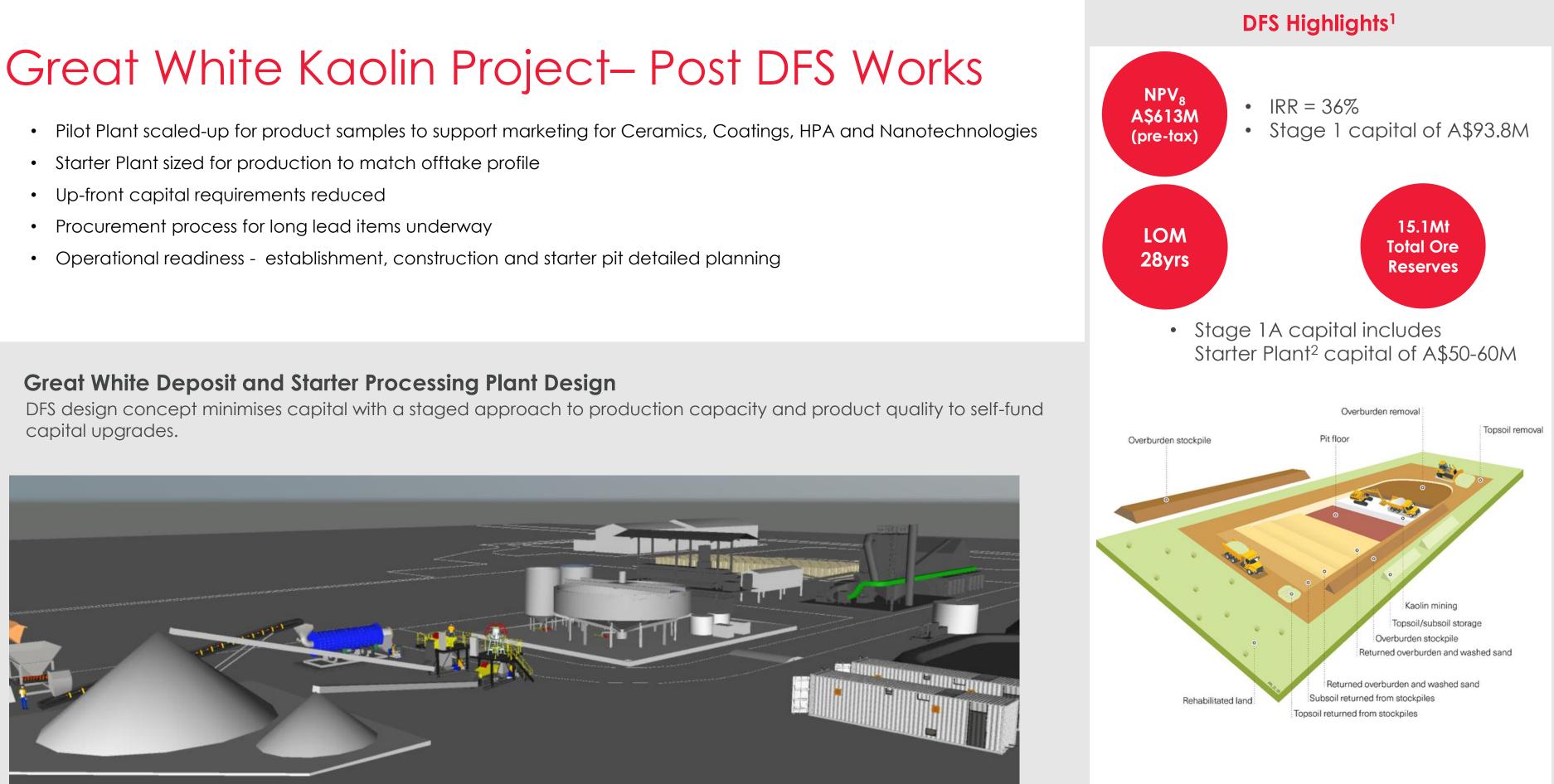
ASX 29 September 2020, "New mineral resource estimate for Hammerhead Halloysite-Kaolin Deposit".

ASX 11 August 2020, "New Mineral Resource for the Mount Hope Kaolin project"

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ASX 12 August 2021, "Andromeda enters new kaolin Joint Venture on the Eyre Penninsula, SA".

- Starter Plant sized for production to match offtake profile •
- Up-front capital requirements reduced
- Procurement process for long lead items underway
- Operational readiness establishment, construction and starter pit detailed planning



3D elevation of Great White Kaolin Project – Stage 4 capacity plant

ASX 6 April 2022 Great White Kaolin Project - Definitive Feasibility Study 2

ASX 26 August 2022 Andromeda Commencing Procurement of Long Lead Time Items for Great White Kaolin Project

# Great White Kaolin Products & Marketing

Andromeda is developing four high-grade Kaolin products with a Kaolin Concentrate, 'Great White KCM,' the first of a phase of a releases.

#### **Concentrate Product** Great White KCM<sup>™</sup>90

A semi-refined high-quality kaolin for direct use, further refinement or upgrade of resources

#### **Concrete Product** Great White HRM<sup>™</sup>

A refined kaolin for sale for use as a concrete and building product additive

A fully refined product for the highend ceramics market



- Highly consistent premium grade
- Halloysite optimised
- Suitable as feed for HPA

2 Binding Offtakes signed for minimum 66,000t during first 3 years with remaining capacity under negotiation



- Decarbonisation of concrete
- Performance improvements
- Cost and labour savings

LOI Signed with IMCD the World's largest additives distributer and conversion to a Binding Offtake in progress



- World class grade

Binding Offtake for 5,000t/pa

#### **Ceramic Product** Great White CRM<sup>™</sup>

## Great White PRM<sup>™</sup>

A fully refined product for the coatings and polymers markets

**Coatings Product** 

• High whiteness and translucency Good green and fired strength



- World class grade
- Ultra-high brightness
- Cost savings

Binding Offtake for 70,000t/pa

# High Purity Alumina (HPA) - Adding value through research

#### **Subject Matter Experts Directly Engaged**

- Research and Development
- Market Analysis
- Scaling
- Commercialisation •

#### **Intellectual Property**

 Provisional Patent Application filed for HPA production process

#### Estimated size & growth of global synthetic sapphire market

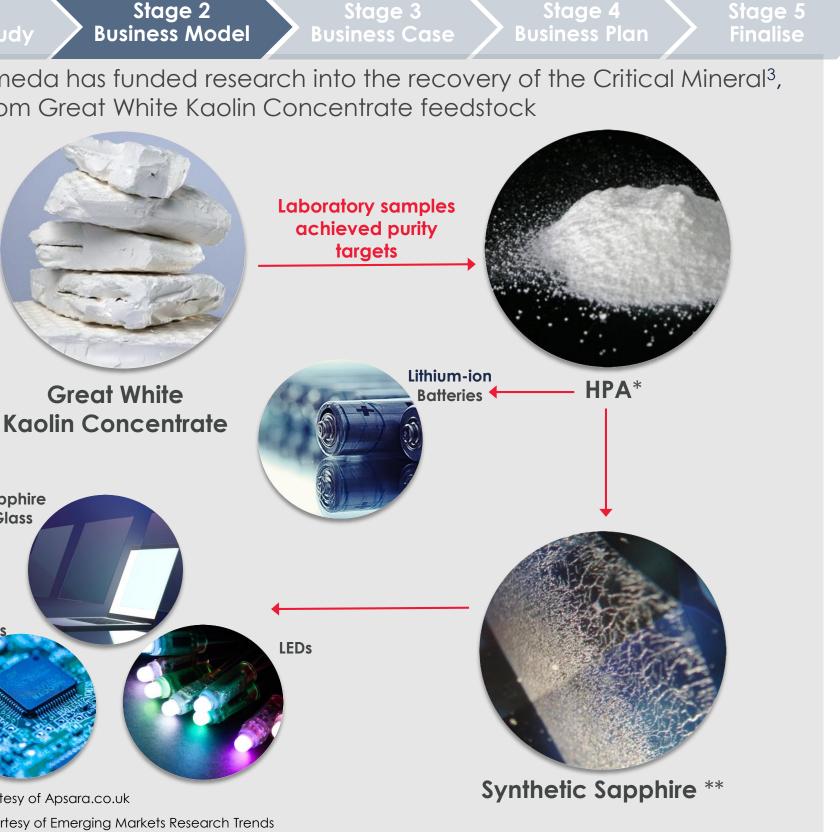
**US\$6.0B**<sup>1</sup> In 2020

7.0% p/a<sup>1</sup> 2020-2027 CAGR

#### Estimated size & growth of global lithium-ion battery market

**US\$41.1B**<sup>2</sup> 12.3% p/a<sup>2</sup> In 2021 2021-2030 CAGR

Stagel Concept Study





THE UNIVERSITY OF NEWCASTLE AUSTRALIA

**Carbon Capture Pilot** 

Plant designed, manufactured (Height 5.0m)

and in Newcastle,

Australia

# Nanotechnologies - Adding value through research

#### **Research & Development**

Strategic partnership with Global Innovative • Centre for Advanced Nanomaterials (GICAN)

#### **Intellectual Property**

- International (PCT) Patent Application filed for carbon capture
- Provisional Patent Application filed for carbon dioxide conversion

#### Estimated size of global nanomaterials market

### **US\$8.0B**<sup>1</sup>

In 2020

#### Estimated growth of global nanomaterials market

14.1% p/a<sup>1</sup> 2020-2027 CAGR

Stage1 Concept Study

Stage 2 **Business Model** 



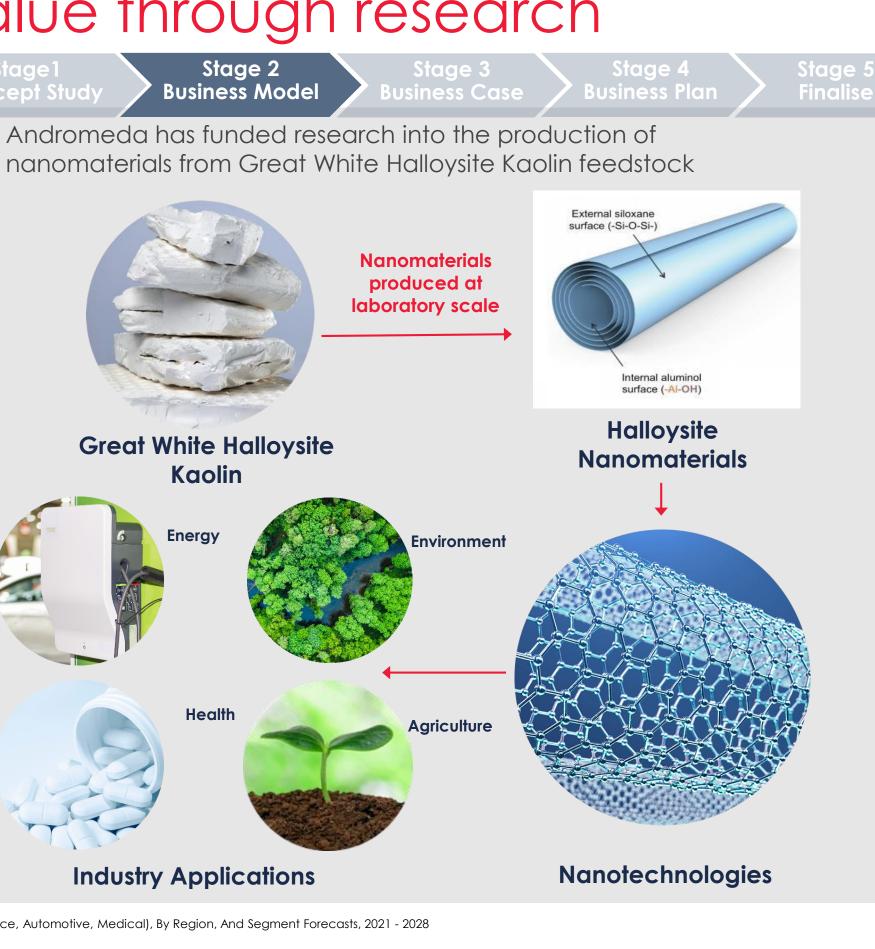
#### **Great White Halloysite** Kaolin





#### **Industry Applications**

1 Grand View Research: Nanomaterials Market Size, Share & Trends Analysis Report By Product (Gold, Silver, Iron, Copper), By Application (Aerospace, Automotive, Medical), By Region, And Segment Forecasts, 2021 - 2028



# **Operational and Corporate Readiness**





**Agreements** 

Preparation of agreements to establish site infrastructure and operations

**Policies & Procedures** 

Developed new policies and procedure to support sustainable operations

## Next Steps - Future catalysts

	In Progress	
→	Agreements	Drafting to establish site infrastructure and operations
-	Pilot Plant	Upgrade in progress with installation of centrifuge
-	Binding Offtakes	Remainder of planned capacity under negotiation
-	PEPR	Application with South Australia Government awaiting approval
-	Logistics	Multiple port facility options with individual attributes remain open
<b>→</b>	Suppliers	Long lead items procurement is underway
-	Funding	Various funding options under consideration to fully fund DFS Stage 1 flows funding future expansion to stage 2, 3 & 4
-	High Growth Opportunities	HPA, Carbon Capture/Conversion and Nanotechnologies progressin

1, with cash

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