

# ASX ANNOUNCEMENT



18 July 2023

## Andromeda Metals Limited

ABN: 75 061 503 375

### Corporate details:

ASX Code: ADN

Cash (31 March 2023): \$19.6m

Issued Capital:

3,110,270,932 ordinary shares

24,760,000 unlisted options

18,596,711 performance rights

### Directors:

**Mick Wilkes**

Non-Executive Chair

**Bob Katsioularis**

CEO & Managing Director

**James Marsh**

Executive Director, Sales & Marketing

**Melissa Holzberger**

Non-Executive Director

**Austen Perrin**

Non-Executive Director

### Company Secretary

**Sarah Clarke**

### Contact details:

Level 10

431 King William Street,  
Adelaide SA 5000

Tel: +61 8 7089 9800

[ir@andromet.com.au](mailto:ir@andromet.com.au)

[www.andromet.com.au](http://www.andromet.com.au)

## Presentation at Noosa Mining Conference

Andromeda Metals Limited (ASX: **ADN**) (**Andromeda**, the **Company**) is pleased to advise that its CEO & Managing Director, Bob Katsioularis, will be presenting at the Noosa Mining Conference.

A copy of the presentation is included in this announcement,

Details for the conference, including how to register to access the online webcast, are as follows:

**Date:** 20 July 2023

**Time:** 1:50pm AEST (1:20pm ACT)

**Webcast:**

<https://us06web.zoom.us/meeting/register/tZcpdOCvrjojGNRNvi5lkdF0LnApKU11g-4Q#/registration>

*This ASX announcement has been approved for release by the Board of Andromeda Metals Limited.*

For more information about the Company and its projects, please visit our website, [www.andromet.com.au](http://www.andromet.com.au) or contact:

### Manager, Investor Relations & Corporate Affairs

Patrick Sinclair

T: 08 7089 9819

M: 0403 708 431

e: [Patrick.Sinclair@andromet.com.au](mailto:Patrick.Sinclair@andromet.com.au)



## About Andromeda

Andromeda Metals (ASX: ADN) is an ASX-listed emerging industrial minerals producer. Our vision is to lead the world in the sustainable supply of superior quality industrial minerals.

We see 2023 as a transformational year for Andromeda. Following which we anticipate becoming a globally significant producer of halloysite-kaolin products. Having received all major regulatory approvals, we are progressing towards early-stage construction of Stage 1A Processing Plant, while also advancing funding discussions aimed at enabling a final investment decision to be made.

From there, we aim to leverage the uniqueness of our Great White Project resources to grow through meeting the growing long-term demand for kaolin, expanding our range of high-margin kaolin-based products and developing many new technologies at the forefront of science, and essential to building a more sustainable future.

Andromeda's kaolin deposits are located in South Australia's Eyre Peninsula, a Tier 1 mining jurisdiction, and contain some of the highest purity kaolin ever discovered. Kaolin has been used in ceramics production for centuries because of its unique properties as a bright white inert mineral with very fine particle size. In addition to ceramics, today, kaolin can be found in a range of everyday products, including ceramic tiles, porcelain tableware, cosmetics, paint, rubber, medicines, paper, pesticides, orthodontics, orthopedics, and plastics. Every modern home and car contains kaolin in some form.

Using a novel flowsheet, we also have the potential to use our high-quality kaolin as a feedstock to produce the critical mineral High-purity Alumina (HPA).

Our large, high-quality deposits also contain a rare form of kaolin called halloysite, a naturally occurring nanotube. Halloysite is highly desirable in some applications where it attracts a premium price. Halloysite-kaolin can be used in emerging high-tech nanotechnologies and applications, such as carbon capture, soil remediation, water purification, hydrogen storage, medicine delivery and renewable energy.





# Andromeda

## Noosa Mining Conference

Noosa

20 July 2023

ASX:ADN

[www.andromet.com.au](http://www.andromet.com.au)





## Disclaimer and compliance statement

This Presentation has been prepared by Andromeda Metals Limited (ACN 061 503 375) (**Andromeda or Company**). By accessing this Presentation, you acknowledge that you have read and understood the following statement.

The information contained in this Presentation is of a general nature and is for information purposes only. This Presentation has been prepared without taking into account any particular person's objectives, financial situation or needs; does not purport to identify the nature of specific market or other risks associated with any investments described within it and does not constitute any legal, taxation, investment or accounting advice. All information in this Presentation is indicative, is based on certain assumptions and current market conditions and is subject to change without notice. No information contained in this Presentation constitutes a prediction or forecast as to the performance of any investments. Assumptions upon which financial illustrations are based may differ from actual circumstances. No reliance should be placed on the information in this Presentation and any investment decision should be based only on a person's own due diligence, inquiry, assessment and professional advice.

## Forward-looking statements

This Presentation contains or may contain certain “forward-looking statements” and comments about future events, that are based on Andromeda management's beliefs, assumptions and expectations and on information currently available to management as at the date of this Presentation. Often, but not always, forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "plan", "believes", "estimate", "anticipate", "outlook", and "guidance", or similar expressions, and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and production potential, product quality estimates of future Mineral Resources and Ore Reserves.

Where Andromeda expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and on a reasonable basis. No representation or warranty, express or implied, is made by Andromeda that the matters stated in this presentation will in fact be achieved or prove to be correct. Except as required by law and ASX Listing Rules, the Company undertake no obligation to provide any additional or updated information or update any forward-looking statements whether on a result of new information, future events, results or otherwise.

Readers are cautioned against placing undue reliance on forward-looking statements. These forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of Andromeda, the directors, and management of Andromeda. These factors include, but are not limited to difficulties in forecasting expected production quantities, the potential that any of Andromeda's projects may experience technical, geological, metallurgical and mechanical problems, changes in market prices and other risks not anticipated by Andromeda, changes in exchange rate assumptions, changes in product pricing assumptions, major changes in mine plans and/or resources, changes in equipment life or capability, emergence of previously underestimated technical challenges, increased costs, and demand for production inputs.

To the maximum extent permitted by law, neither Andromeda nor its related corporations, Directors, officers, employees or agents, nor any other person, accepts any liability, including, without limitation, any liability arising from fault or negligence, for any loss arising from the use of this presentation or its contents or otherwise arising in connection with it. Andromeda is under no obligation to release any updates or revisions to the information in this presentation to reflect any change in expectation or assumptions and disclaim all responsibility and liability for these forward-looking statements (including without limitation, liability for fault or negligence).

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.

## No investment advice and investment risk

The information contained in this Presentation does not constitute investment or financial product advice (nor taxation or legal advice) and is not intended to be used as the basis for making an investment decision or as a recommendation to acquire shares and does not take into account the reader's personal circumstances.

An investment in Andromeda's securities is subject to investment and other known and unknown risks, some of which are beyond the control of Andromeda including loss of income and principal invested.

## No warranty

While care has been taken in preparing the information in this Presentation, no representation or warranty, express or implied, is made as to the currency, accuracy, reliability, completeness or fairness of the information, opinions and conclusions contained in this Presentation. The information in this Presentation has been obtained from or based on sources believed by Andromeda to be reliable. This includes references to test results and reports completed by external parties.

No member of Andromeda or any person with a direct or indirect interest in Andromeda or any of their respective directors, officers, employees, affiliates, partners, consultants, agents, representatives or advisers (including, without limitation, advisers and their related bodies corporate, shareholders or affiliates, and any of their respective officers, directors, employees, affiliates, partners, representatives, consultants, agents or advisers, together the Advisers) guarantees or makes any representations or warranties, express or implied, as to or takes responsibility for, the currency, accuracy, reliability, completeness or fairness of this Presentation nor the information, opinions and conclusions contained in this Presentation.

## Mineral Resources and Ore Reserves Estimates

As an Australian company with securities listed on the Australian Securities Exchange (ASX), Andromeda is subject to Australian disclosure requirements and standards, including the requirements of the Corporations Act and the ASX. Investors should note that it is a requirement of the ASX listing rules that the reporting of ore reserves and mineral resources in Australia comply with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the **JORC Code**) and that the Ore Reserve and Mineral Resource estimates underpinning the production targets in this presentation have been prepared by a Competent Person in accordance with the JORC Code.

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 <https://www2.asx.com.au/markets/company/adn>. 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.



# Acknowledgement of Country

On behalf of Andromeda, I respectfully acknowledge that we are meeting on Sunshine Coast Country, home of the Kabi Kabi peoples and the Jinibara peoples, the Traditional Custodians, whose lands and waters we all now share.

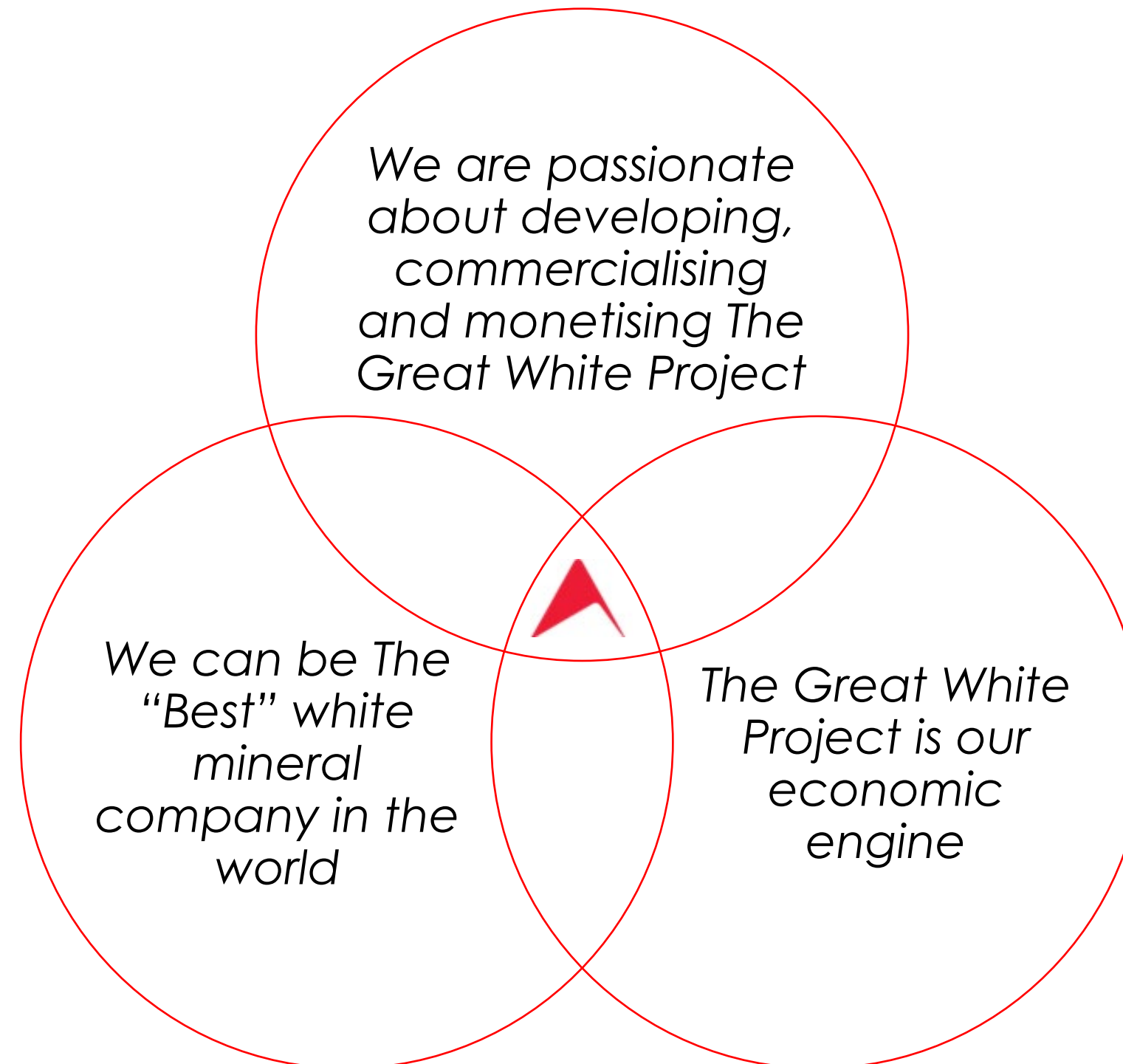
Andromeda operates on the lands of the Kaurna people of the Adelaide Plains and the Wirangu people of South Australia's Eyre Peninsula.

We pay our respects to their Elders both past and present, and extend that respect to Elders from other communities who may be present today.



# Our Vision and Strategic Intent

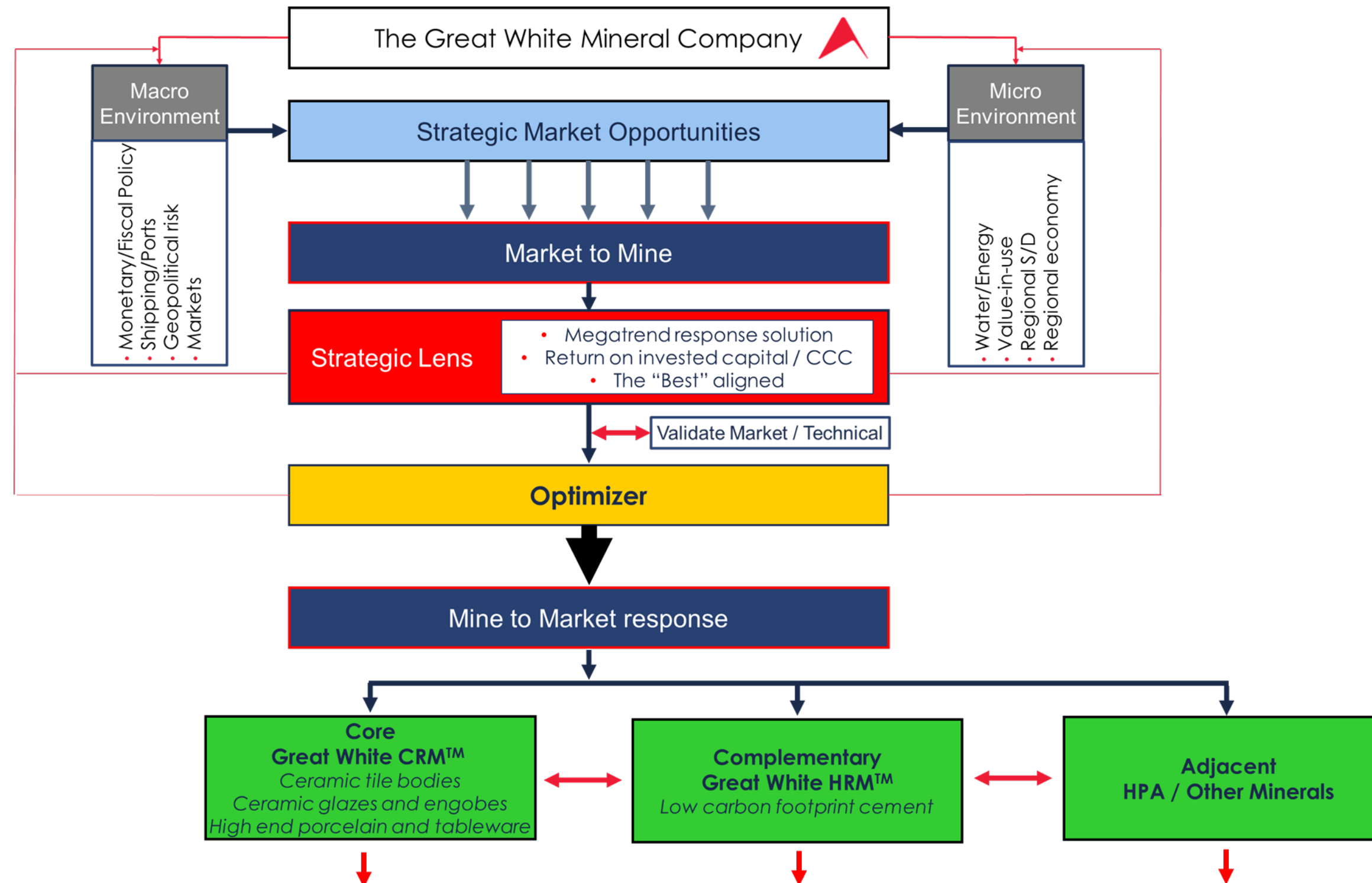
## To be The Great White Mineral Company





# Go To Market Methodology – Strategy Map

Execute with a focus on Core and Complementary

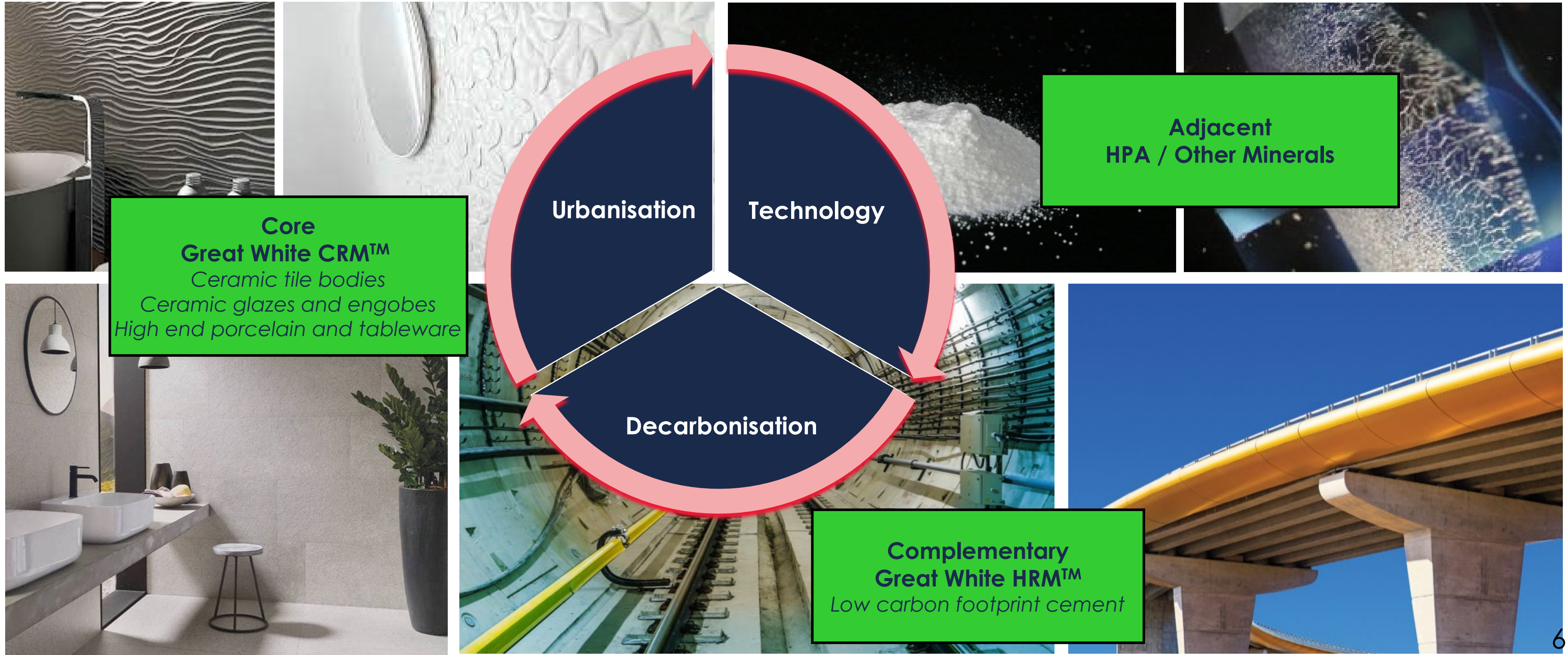






# Our Products

Positioned to respond to megatrends







# LOI received from IberoClays<sup>1</sup>

Results confirm above market value-in-use for Great White CRM™ in fastest growing ceramics segments

## Great White CRM™ properties and applications<sup>2</sup>

✓ **Top 3 Iron/Aluminium ratio**  
(Fe<sub>2</sub>O<sub>3</sub>/Al<sub>2</sub>O<sub>3</sub>) of global  
kaolin samples

✓ High brightness is retained in high temperatures,  
with very good colour evolution, which is valued  
in **high quality porcelain and ceramic tiles**

✓ Very high dry mechanical  
strength is highly-valued in  
**large format porcelain tiles**

**Porcelain and ceramic large format tiles and glazes**  
Positioned to offer exceptional value-in-use

<sup>1</sup> Refer to ADN ASX dated 10 July 2023, titled *Letter of Intent received from IberoClays for exclusive distribution to the Mediterranean region*, in which IberoClays confirms its intention for an exclusive distribution agreement covering Spain, France, Italy, Portugal, Morocco, Egypt and Turkey with targeted volumes of 15,000 - 20,000 tonnes per annum (tpa) during the first 3 years of production and pre-payment until 30 September 2025.

<sup>2</sup> As determined by testing conducted on Great White CRM™ by IberoClays (May/June 2023)



# Global Ceramic Tile Market

Asia-Pacific market to grow by over 3% CAGR<sup>1</sup>

## Production

### WORLD

**18,340** mln sqm 2021 **21,537** mln sqm 2026 **+3.3%**  
CAGR 2022-2026

EU	1,384	mln sqm	⇒	1,474	mln sqm	+1.3%
Other Europe	741	mln sqm	⇒	720	mln sqm	-0.6%
NAFTA	377	mln sqm	⇒	398	mln sqm	+1.1%
South America	1,360	mln sqm	⇒	1,643	mln sqm	+3.9%
Middle East	757	mln sqm	⇒	868	mln sqm	+2.8%
Far East	12,828	mln sqm	⇒	15,164	mln sqm	+3.4%
Africa	893	mln sqm	⇒	1,270	mln sqm	+7.3%

## Consumption

### WORLD

**18,209** mln sqm 2021 **21,339** mln sqm 2026 **+3.2%**  
CAGR 2022-2026

EU	1,069	mln sqm	⇒	1,105	mln sqm	+0.7%
Other Europe	721	mln sqm	⇒	716	mln sqm	-0.1%
NAFTA	603	mln sqm	⇒	699	mln sqm	+3.0%
South America	1,448	mln sqm	⇒	1,817	mln sqm	+4.6%
Middle East	1,008	mln sqm	⇒	1,132	mln sqm	+2.3%
Far East	12,158	mln sqm	⇒	14,217	mln sqm	+3.2%
Africa	1,202	mln sqm	⇒	1,653	mln sqm	+6.6%

<sup>1</sup> Compound Annual Growth Rate  
Source: Ceramic Tile Market Forecast Analysis – Trend 2022-2026, MECS, 2022

Figures shown are millions of square metres (mln sqm).





# Global Ceramic Tile Market – Asia Pacific

Market driven by strong trends in growth drivers

## Macroeconomic Indicators


 GDP GROWTH 2026  
**+4.0%**

 GDP PER CAPITA  
**6,894€**

 LOGISTIC PERF. INDEX  
**3.0/5**

 POPULATION  
**4,051,588,280**

 POP. GROWTH RATE 2026  
**+0.6%**

 URBANISATION RATE  
**50.1%**

## Construction Investment

 CONSTR. INVESTMENT 2021  
**3,917.3 bln €**

 RESIDENTIAL  
**1,192.2 bln €**

 MCP INDEX  
**3.6%**

*MCP Index forecasts annual construction industry trends to 2025 by crossing ten international indicators*

## Asia-Pacific 2022-26 CAGR<sup>1</sup>

4.0%

0.6%

1.5%

5.0%

4.1%

### Growth drivers:

- Economic growth
- Population growth
- Increasing urbanisation
- Higher levels of wealth (per capita)

} Increasing need for safe, hygienic and durable building materials

} Increasing demand for high-end fashion/designer 'look and feel'

- Construction investment

→ Focus on sustainability – durability and substitution away from marble and stone

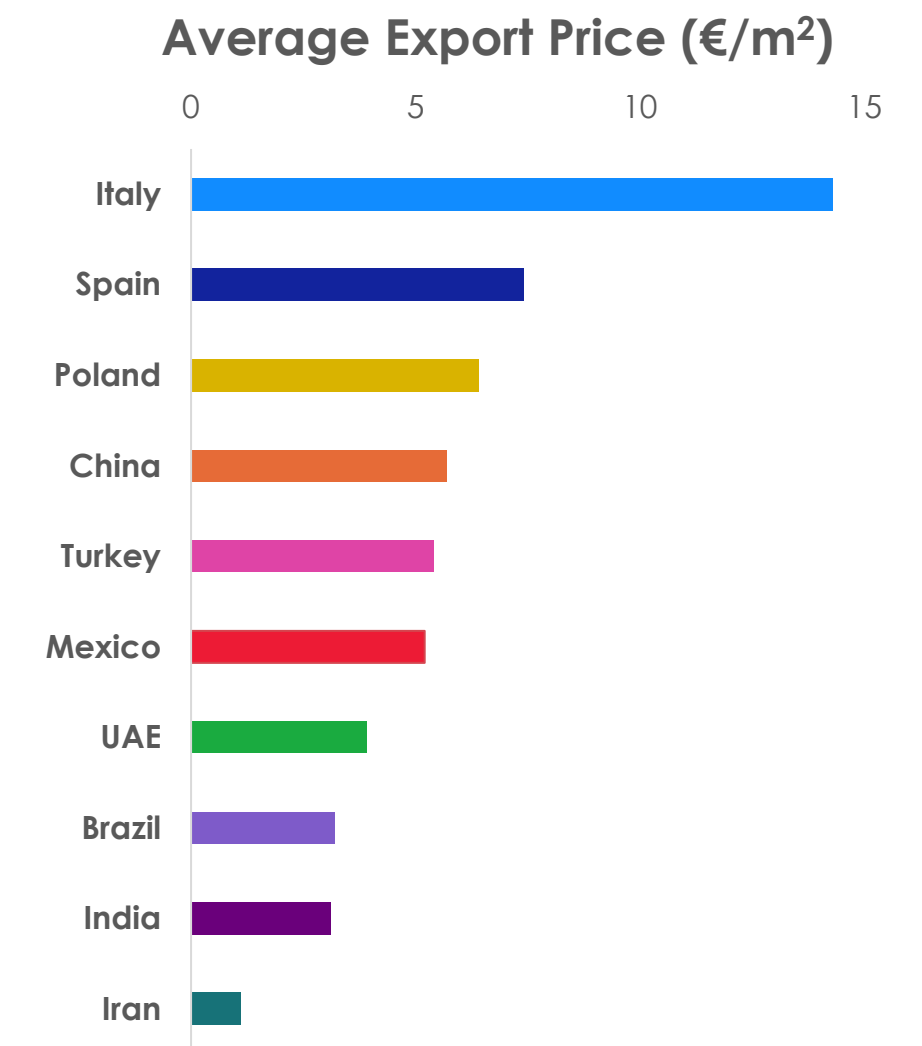
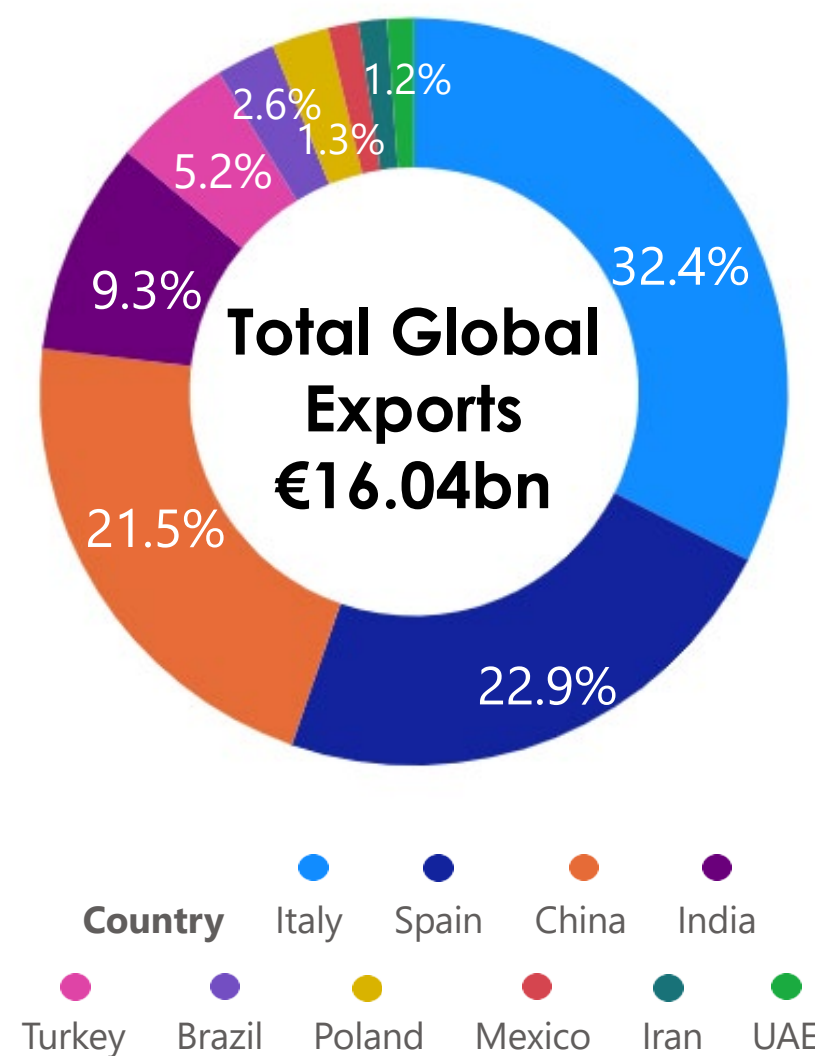


# Global Ceramic Tile Export Market

Top 4 export leaders are China, Spain, Italy and India, representing 76% of market at over 3 billion m<sup>2</sup> of global exports

**China Spain, India and Italy** represent:

- Over 86% of export value (in €) by the Top 10
- **Italy and Spain are leaders** in average export € value, with Italy exceeding China by ~2.5 times







# Great White CRM™ – Key high value-in-use markets

Focused on key markets in Asia that are growing and where our high-quality products are in demand

		Import						
		EU	Other Europe	NAFTA	South America	Asia	Africa	Oceania
Export	EU	532.7	109.9	112.1	56.1	130.0	101.2	8.4
	Other Europe	68.9	65.1	36.8	0.5	57.5	6.3	0.3
	NAFTA	0.0	0.1	37.1	7.6	0.2	0.0	0.0
	South America	1.3	0.4	29.5	148.8	0.3	2.6	0.2
	Asia	44.4	37.3	64.2	82.1	996.5	147.8	41.2
	Africa	2.0	0.5	0.5	0.0	20.3	62.0	0.1
	Oceania	-	-	0.0	-	0.0	-	0.0
TOTAL		649.4	213.3	280.2	295.1	1,204.9	319.9	50.2
		TOTAL						
		1,050.6						

➤ Europe represents 35% of global exports, focused on high value-in-use segments

➤ Asia accounts for 47% of global exports, of which 70% is to other Asian countries





# Ceramics Tiles – Key Urban Trends

Increasing demand in Consumer & Commercial segments

## Consumer Preferences

- Consumers are experimenting with design, colors, and patterns
- Looking for unique look to set themselves apart

## Ceramic Tiles

- Residential – Increasing adoption in halls, lobbies and bedrooms due to low cost, low maintenance and durability
- Commercial – Increasing usage as a cost-effective alternative to conventional stone (eg. granite, marble) in corporate offices, hotel lobbies, and museums

## Ceramic Wall Tiles

- Rapidly replacing traditional wall coverings, such as paint, wallpapers and wooden panels.
- Increased usage driven by durability, stain & scratch resistance, and low maintenance properties.







# Interim Results received from ITC

## Great White CRM™ validation program

### ➤ Stage 1: Basic Characterisation – COMPLETED

- Instituto de Tecnología Cerámica (ITC), located at the University of Castellón in Spain, is progressing with technical evaluation and formulation at pilot plant level
- Interim results received on testing of suitability for ceramic glazes, confirmed and validated the work done with IberoClays
- Benchmarking work comparisons to alternative European kaolins, validated previous results

### ➤ Stage 2: Complementary use in glazes

- Comparative benchmarking will be finalised

### ➤ Stage 3: Complementary use in sanitaryware

- Expanding work already done into a new end use segment

### ➤ Stage 4: Pilot Trial

- Pilot production trial will be conducted at a frit and glaze producer in Spain

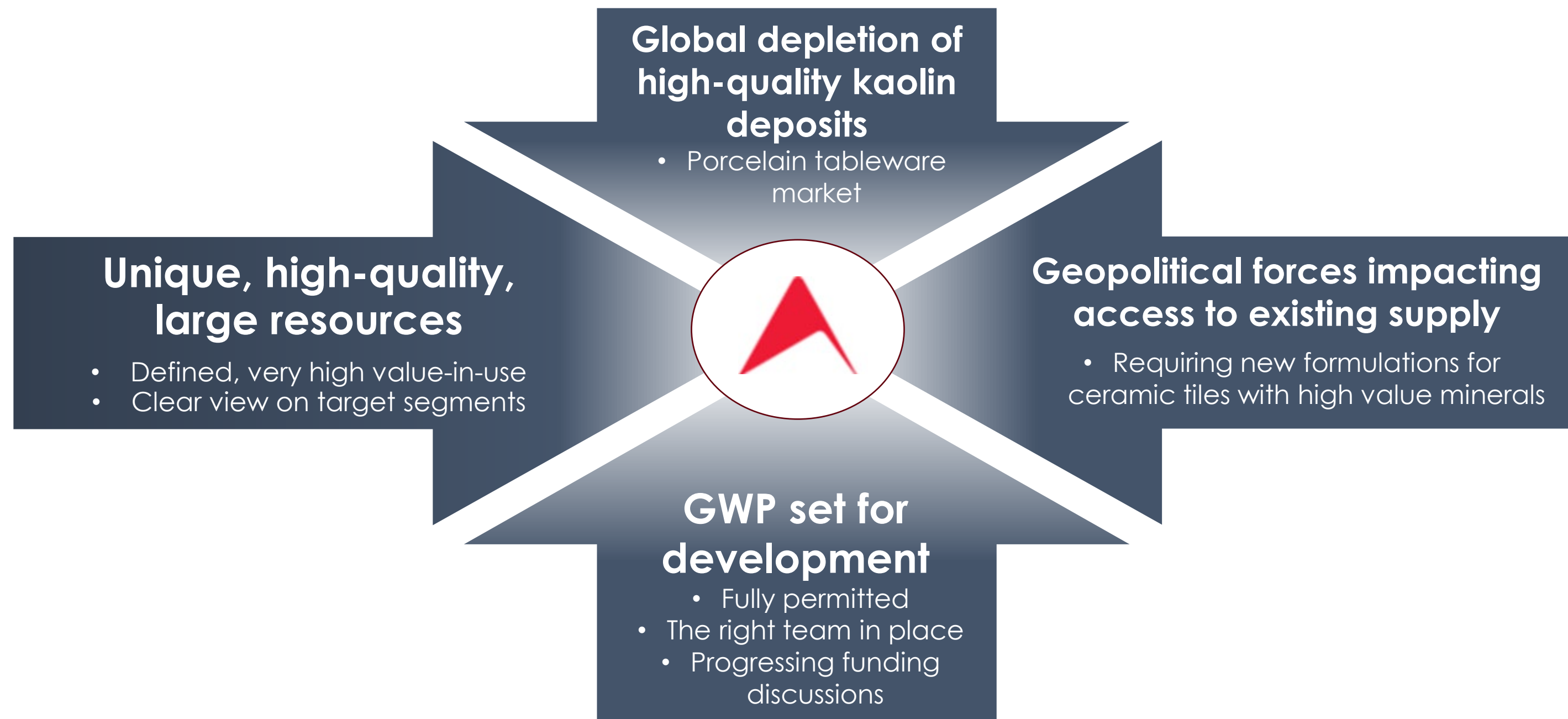
**Stages 1-3:**  
Results to be  
included in  
uDFS



# Why now?

Forces making now the right time for developing GWP

The confluence of numerous forces means the time to develop The Great White Project is now!







# Stage 1A Processing Plant

Design and procurement readiness ahead of planned construction

**Long lead items** - Procurement progress in line with first shipment in October 2024

- |                      |                                 |
|----------------------|---------------------------------|
| ➤ Dryer – ordered    | ✓ Ordered                       |
| ➤ Thickener          | ✓ Ordered                       |
| ➤ Drum washer        | ✓ Ordered                       |
| ➤ Filter press       | } To be ordered in coming weeks |
| ➤ Filter cake feeder |                                 |
| ➤ Noodler            |                                 |

All items scheduled to arrive according to revised anticipated schedule for **first shipment in October 2024**



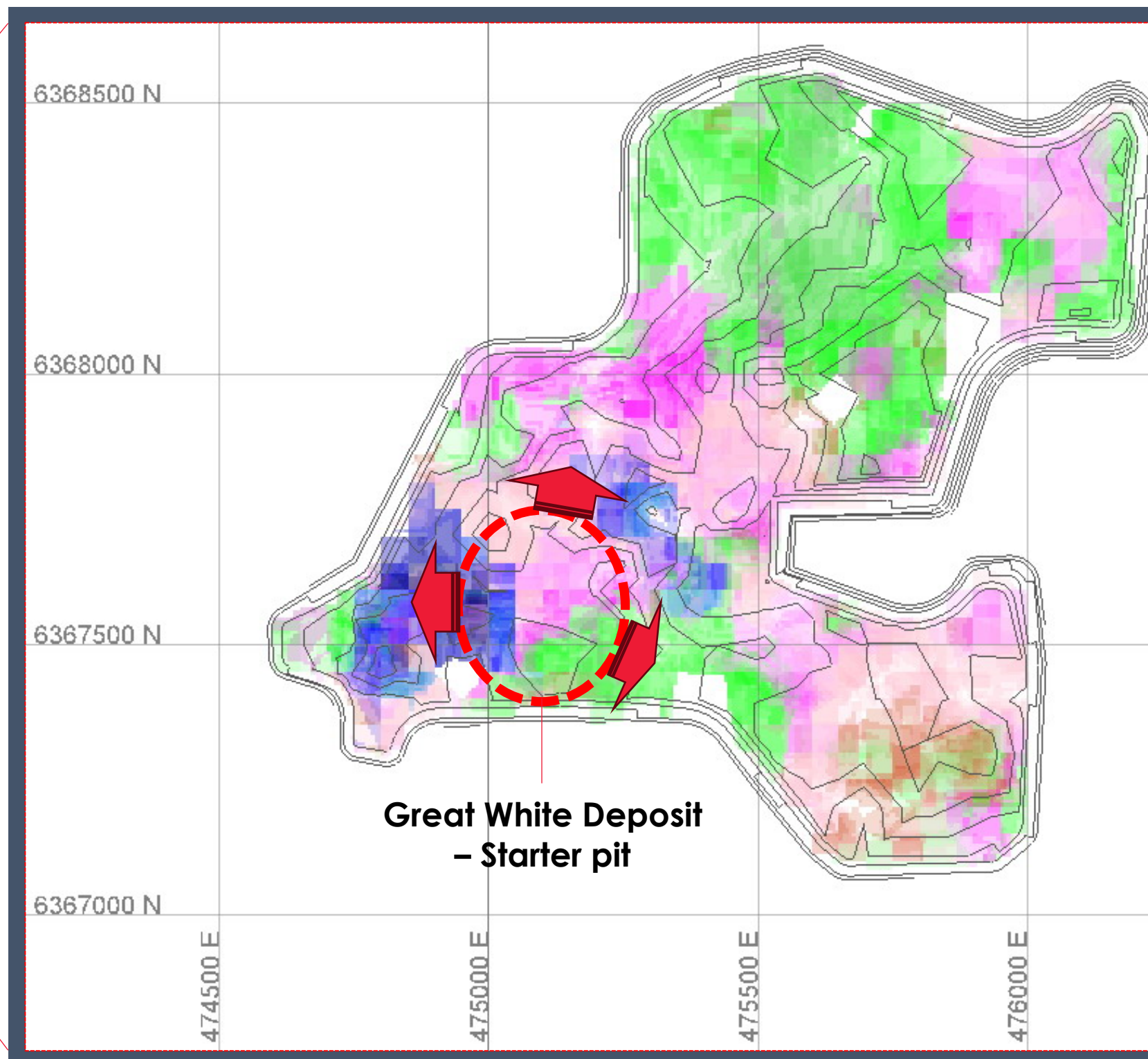
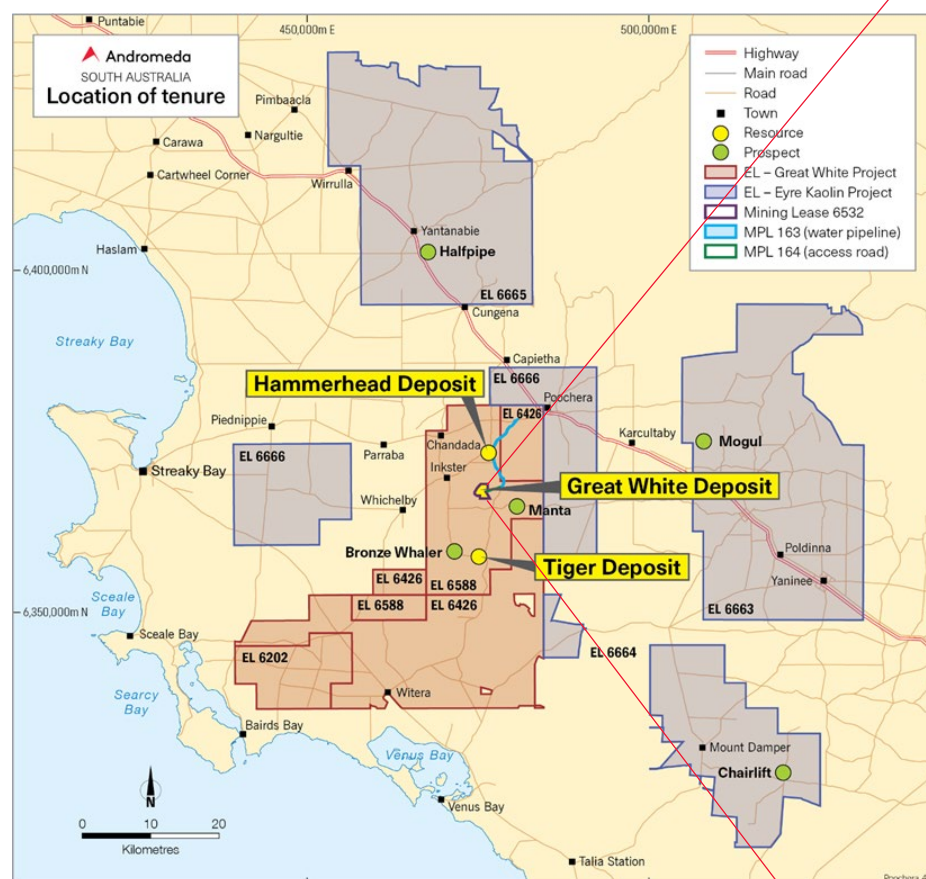




Andromeda

# The Mine-to-Market Response

Ideal optionality to address and grow our core segments aligned with our Commercial Strategy



## Great White Deposit by Product

Product	Colour	Grade
Great White HRM™ – Concrete	Light Green	Low
	Yellow	Medium
	Red	High
Great White CRM™ – Tableware	Light Green	Low
	Yellow	Medium
	Red	High
Great White CRM™ – Tiles	Light Green	Low
	Yellow	Medium
	Red	High





# Next Steps



## Activities

### Commercial

- ITC Stages 2 & 3 to be completed by end of July (Stage 1 was completed on time)
- Follow-up on China demand and sample requests post-June trip
- Spain/Italy trip for CERSAIE (22-25 Sept) and preparations for commercial discussions
- Great White HRM™ validations are ongoing

### Operations

- Progressing with procurement of long-lead items
- Earthworks planned to commence in early October
- Streaky Bay Pilot Plant to recommence producing large scale samples production by late-July

### Funding

- Updated DFS on-track for delivery mid-August
- Formal offtake agreements to be finalised with Foshan Gaoming (120kt) and IberoClays (15-20ktpa)
- Progressing discussions with debt investors with access to data room
- Board to consider and determine appropriate debt funding proposals
- Meetings with investors in Sydney and Noosa this week (with Melbourne & Perth to follow)
- Non-deal roadshow for Asian and Australian investors (August – September)



# Andromeda

## The Great White Mineral Company

ASX:ADN  
andromet.com.au

Level 10, 431 King William Street, Adelaide, South Australia 5000 +61 8 7089 9800  
Authorised for release by the Board of Andromeda Metals Ltd