



ALLUP SILICA

Allup Silica (ASX:APS) Introduction to McLaren Mineral Sands Project

On the Fast Track to Production
and Unlocking Global Demand

October 2024



Disclaimer & Important Notices

DISCLAIMER

The following disclaimer applies to this investor presentation (Presentation) and you are therefore advised to read this disclaimer carefully before reading or making any other use of this Presentation or any information contained in this Presentation. By accepting this Presentation, you represent and warrant that you are entitled to receive this Presentation in accordance with the restrictions, and agree to be bound by the limitations, contained within it.

ISSUER AND PURPOSE

This presentation has been prepared by Allup Silica Limited ACN 163 173 224 (Allup, Allup Silica or the Company) for the purpose of providing information about the Company.

SUMMARY INFORMATION

This Presentation contains summary information about Allup Silica and its activities which is current only as at the date of this Presentation. The information in this Presentation is of a general nature and does not purport to be complete nor does it contain all the information which a prospective investor may require in evaluating a possible investment in Allup Silica or that would be required in a prospectus or other disclosure document prepared in accordance with the requirements of the Corporations Act 2001 (Cth) (Corporations Act). Certain market and industry data used in connection with this Presentation may have been obtained from research, surveys or studies conducted by third parties, including industry or general publications. Neither Allup Silica nor its representatives have independently verified any such market or industry data provided by third parties or industry or general publications and no representation or warranty, express or implied, is made as to its fairness, accuracy, correctness, completeness or adequacy.

NOT AN OFFER

This Presentation is not a Prospectus or other disclosure document under the Corporations Act and will not be lodged with the Australian Securities and Investments Commission. This Presentation is for information purposes only and is not an invitation or offer of securities for subscription, purchase or sale in any jurisdiction. The distribution of this Presentation (including an electronic copy) outside Australia may be restricted by law. If you come into possession of this Presentation, you should observe such restrictions and should seek your own advice on such restrictions. Any noncompliance with these restrictions may contravene applicable securities laws.

NOT INVESTMENT ADVICE

The information contained in this Presentation is not investment or financial product advice or any recommendation to acquire Shares. This Presentation does not and will not form any part of any contract for the acquisition of Shares. Each recipient of this Presentation should make its own enquiries and investigations regarding all information in this Presentation. This Presentation been prepared without taking into account your investment objectives, financial situation or particular needs. Before making an investment decision, you should consider whether it is a suitable investment for you in light of your own investment objectives, financial situation and particular needs and having regard to the merits or risks involved.

FUTURE PERFORMANCE

This Presentation contains forward looking statements and comments about future events, including Allup Silica's expectations about the performance of its business. Forward looking statements can generally be identified by the use of forward looking words such as, "expect", "anticipate", "likely", "intend", "should", "could", "may", "predict", "plan", "propose", "will", "believe", "forecast", "estimate", "target" and other similar expressions. Indications of, and guidance or outlook on, future earnings or financial position or

performance are also forward looking statements. You are cautioned not to place undue reliance on any forward looking statement. While due care and attention has been used in the preparation of forward looking statements, forward looking statements, opinions and estimates provided in this Presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends which are based on interpretations of current market conditions. Forward looking statements including projections, expectations, guidance on future earnings and estimates concerning the timing and success of strategies, plans or intentions are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance and may involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Allup Silica. A number of important factors could cause Allup Silica's actual results to differ materially from the plans, objectives, expectations, estimates and intentions expressed in such forward looking statements. Actual results, performance or achievements may vary materially from any forward looking statements and the assumptions on which statements are based. Allup Silica disclaims any intent or obligation to update publicly any forward looking statements, whether as a result of new information, future events or results or otherwise. The forward looking statements are based on information available to Allup Silica as at the date of this Presentation. Except as required by law or regulation, Allup Silica undertakes no obligation to provide any additional or updated information whether as a result of new information, future events or results or otherwise.

COMPETENT PERSON STATEMENT

The information in this Presentation that relates to mineral resources, exploration results and exploration targets for the silica sand Projects is based on and fairly represents information and supporting documentation compiled by Richard Maddocks who is a full-time employee of Auranmore Consulting and is a Fellow of the Australasian Institute of Mining and Metallurgy. Auranmore Consulting has been engaged as an independent consultant to the Company and Richard Maddocks has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves (JORC Code). Auranmore Consulting consents to the inclusion of the information in this Presentation that relates to mineral resources, exploration results and exploration targets for the silica sand Projects in the form and context in which it appears.

The information in this report that relates to Heavy Mineral Resources is based on, and fairly reflects, information compiled by Mr David Williams, a Competent Person, who is an employee of ERM and a Member of the Australian Institute of Geoscientists (RPGEO). Mr Williams has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Williams consents to the disclosure of information in this announcement in the form and context in which it appears.

The information in this report that relates to Metallurgical results is based on, and fairly reflects, information compiled by Mr Mitch Ryan, a Competent Person, who is an employee of IHC Mining. Mr Ryan has sufficient experience relevant to the Metallurgical test work that was undertaken to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Ryan consents to the disclosure of information in this announcement in the form and context in which it appears.

The Company confirms that there is no new information or data that materially affects the mineral resource estimates announced on 30 June 2022 and 5 August 2024, and that all assumptions underpinning the estimate continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

This presentation has been approved by the Board of Directors

Corporate Snapshot



Campbell Smyth

Non-Executive Chairman

Campbell's professional career has been in the provision of advice to fund management, capital markets and the corporate finance sector. This experience has been with most major markets, primarily the ASX, and listed and unlisted companies in North America and Europe.



Simon Finnis

Managing Director

Simon is a mining professional with 35+ years experience, including 10 years operating in the minerals sands industry. He led the Pooncarie Mineral Sands Project from feasibility to production and was CEO of the US\$650m Grand Cote Mineral Sands Project in Senegal. Simon also served as CEO of Metro Mining, overseeing delivery of the Bauxite Hills Project in Queensland.



Peter Secker

Non-Executive Director

Peter is a Mining Engineer with 40+ years experience, overall developing five greenfield projects in Australia and globally, including building, commissioning and operating the TiWest Mineral Sands project Project at Cooljarloo, WA. Peter has been a CEO of public companies since 1990 and has raised more than \$2Bn of debt and equity.



Gavin Ball

Non-Executive Director

Gavin is a business manager who adds strength to each of the companies with whom he works. He has 30+ years of hands-on skill and intellectual expertise in the start-up, commercial development, growth and ongoing management of businesses. Gavin has proven management, financial and accounting skill sets, with a strong sales and marketing focus.



Andrew Haythorpe

Executive Director

Andrew is a venture capitalist with nearly 30 years' experience establishing start-up enterprises in a variety of sectors. He has held a number of Company Chair and Board positions, as well as being CEO of several successful listed minerals and resources organisations.

Capital Structure

Cash (Q3 2024 as at 30 June 2024)	A\$1.1m
Shares on Issue	93.76m
Options and Performance rights	7,999,999
Share Price (as 04/09/2024)	A\$0.039
Market Capitalisation	A\$3.6m

Share Price Performance



Accelerating Growth: Focused on Titanium/Heavy Minerals



New Core Focus:

- Transitioning from silica sand to **Heavy Mineral Sands (HMS)**, specifically targeting titanium minerals for key industrial applications.



McLaren Mineral Sands Project, WA:

- Flagship project with inferred and indicated resource of **280Mt @ 4.8% Heavy Mineral** deposit.
 - Positioned to meet the growing requirement for Titanium Minerals.
 - **Pre-Feasibility Study (PFS)** underway, targeting completion during Q2 2025.



New Leadership Team:

- Assembled an experienced team with a proven track record in developing and delivering large-scale mineral sands projects globally.
- Focused on fast-tracking McLaren into production, leveraging deep expertise in mining operations and project management.



Strategic Positioning:

- Well-placed to capitalise on the growing global demand for feedstock into the pigment (TiO₂) market, particularly in Asia.

McLaren Mineral Sands Project, WA - Highlights

Large Heavy Mineral Sands Deposit:

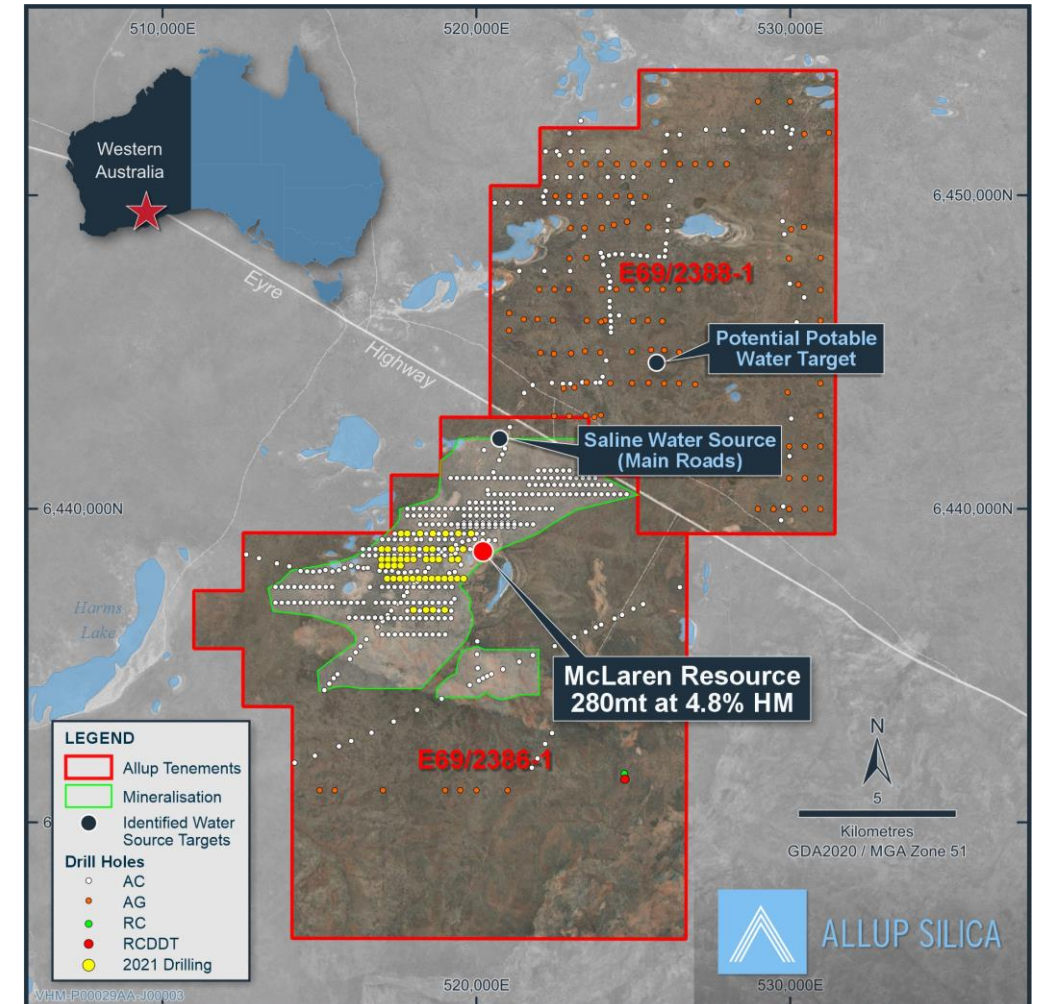
- Inferred and indicated resource of 280 Mt @ 4.8% Heavy Mineral Resource
- Topsoil/subsoil <1m then mineralisation - 15 to 35m thickness
- Deposit likely to be compatible with high tonnage mining strategy, with potential for low-cost operations through contracted services.
- Previous drilling - no induration or water encountered.

Strategic Location, Crown Land:

- E69/2386 and E69/2388 cover 333 km² with widespread mineralisation outside the known resource.
- Located 5km south of the Eyre Highway, 420km by road to Esperance Port
- 40km west of Balledonia Roadhouse – accommodation & meals, airstrip

Separation Technology:

- Previous test work on 14t bulk sample undertaken by IHC in 2018
- Traditional separation techniques appropriate for McLaren, including:
 - Feed Preparation: Hydro Cyclones and thickeners for efficient slimes removal.
 - WCP (Wet Concentrator Plant): Spirals using gravity to separate heavy minerals.
 - CUP (Concentrate Upgrade Plant): Magnetic separation to produce two concentrate streams.



McLaren Project: Significant Resource Already Defined

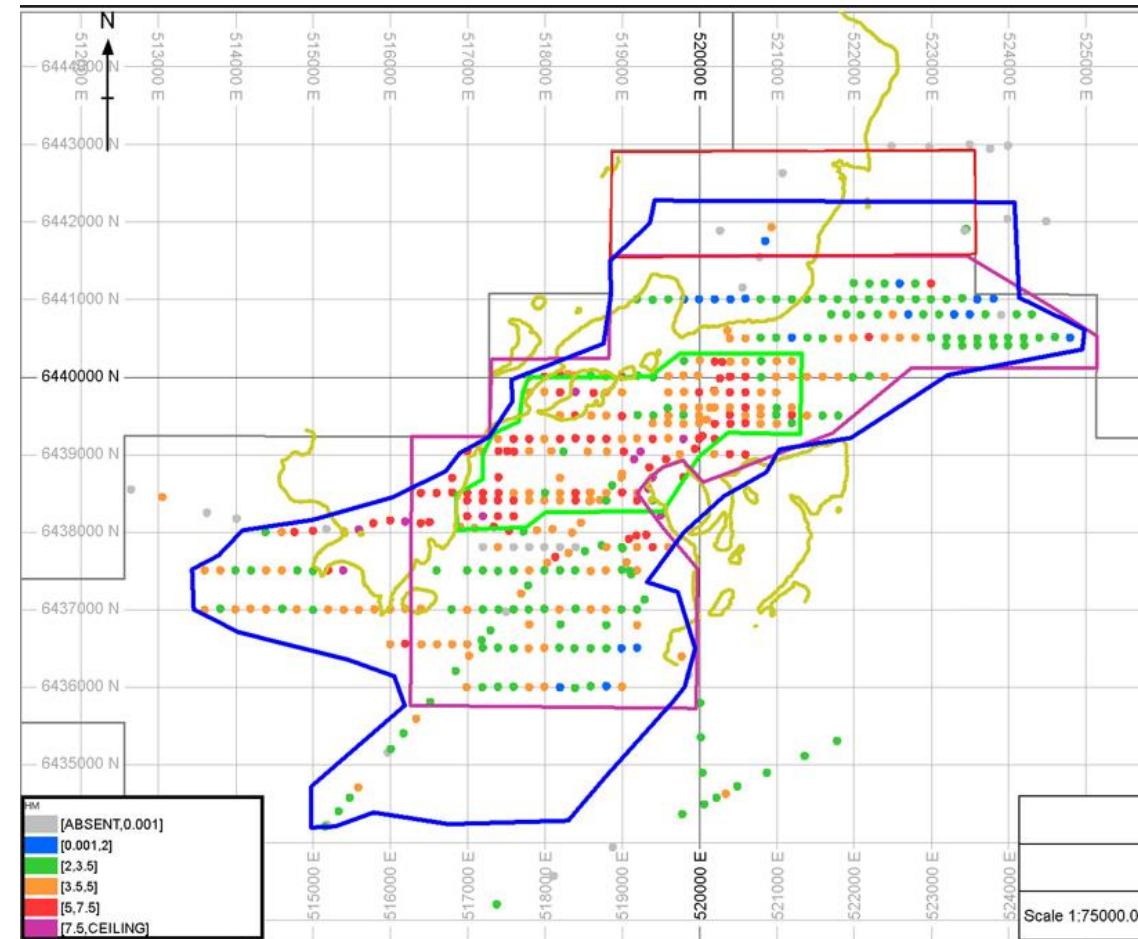
- **280 Mt @ 4.8% Heavy Mineral** Indicated and Inferred JORC Resource (CSA Global), 2% cutoff
- Key minerals are **Ilmenite**, with lesser amounts of **Rutile**, **Leucoxene** and **Zircon**
- Mineralisation from surface - 15 to 35m thickness
 - Exceptional grade continuity and thickness at >2%
 - 48%+ TiO₂ quality Ilmenite

JORC classification	Tonnes (Mt)	HM grade (%)	In-situ HM tonnes (Mt)	Slimes (%)	Ilmenite (% of HM)	Rutile (% of HM)	Leucoxene (% of HM)	Zircon (% of HM)
Indicated	79	6.0	4.7	25.0	30.4	0.7	1.9	0.6
Inferred	201	4.4	8.8	25.4	29.0	0.7	2.1	0.6
Total	280	4.8	13.5	25.3	29.4	0.7	2.0	0.6

JORC classification	Tonnes (Mt)	HM grade (%)	Ilmenite tonnes (in situ) (kt)	Rutile tonnes (in situ) (kt)	Leucoxene tonnes (in situ) (kt)	Zircon tonnes (in situ) (kt)
Indicated	79	6.0	1,440	32	90	26
Inferred	201	4.4	2,550	60	182	54
Total	280	4.8	3,980	92	272	80

ERM Australia Consultants Pty Ltd (ERM), formerly CSA Global prepared a Mineral Resource estimate update for the McLaren heavy mineral sands (HMS) deposit. The purpose of the Mineral Resource estimate update was to incorporate assay and mineralogical analysis results received since the previous Mineral Resource estimate was completed in 2015. The Mineral Resource estimate is presented in Table 1 reported above a cut-off grade of 2% Heavy Mineral (HM) and less than 30% Slimes. The model has been classified as Indicated and Inferred in accordance with the JORC Code. The Mineral Resource estimate is an update to the Mineral Resource estimate prepared by CSA Global in 2015. Refer to ASX announcement dated 5 August 2024.

Footnote
Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).



McLaren Development Strategy



Pre-Feasibility Study:

Company target to develop a Resource of 200Mt in the JORC Indicated category, with following characteristics:

- Simple dozer and trap mining planned
- Medium sized, 10Mtpa spiral concentration plant to produce up to 400,000tpa of ilmenite in concentrate.
- Focus is on a lower-cost Capex design to fast-track mine development.

Key Focus Areas:

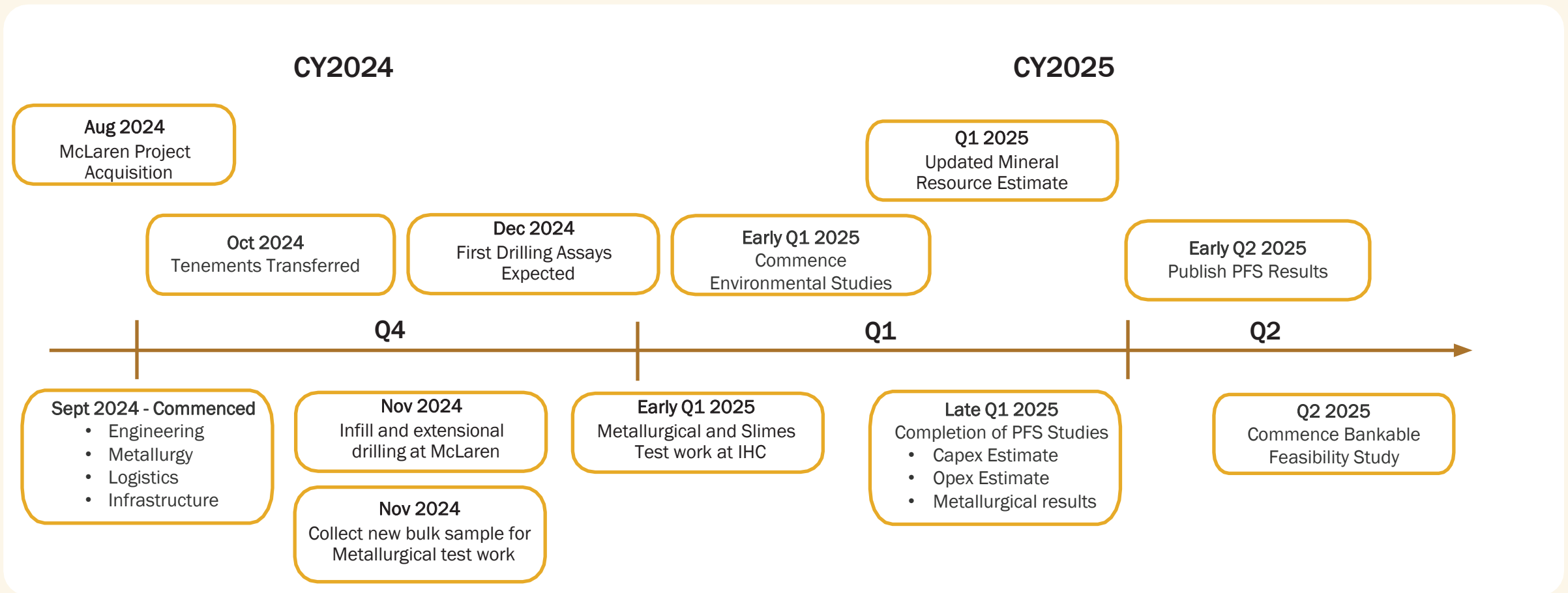
- **Test Work:** Slimes test work to develop a conceptual management system.
- **Engineering:** Develop flowsheet for separation efficiency
- **Water Source:** Identification of suitable water sources, saline or fresh, for processing
- **Infrastructure:** Determine transport routes, accommodation needs, and other infrastructure requirements
- **Offtake Discussions:** Early discussions with potential buyers.



Image: Machinery shown in the picture does not belong to Allup Silica – photograph courtesy of Piacentini & Son



Fast-Tracking McLaren: Key Milestones to Unlock Titanium Production



Ilmenite: A Key Driver in TiO₂ Production

What is Ilmenite?

Primary Source of TiO₂: Ilmenite is a titanium-iron oxide mineral and the main source of titanium dioxide (TiO₂), essential for many industrial applications.

Key Applications :

- **Pigment Production:** Used to produce TiO₂ pigments, used in paints, coatings, plastics, and paper for their brightness and opacity.
- **Titanium Metal:** Essential for aerospace, automotive, and medical industries due to its high strength-to-weight ratio and corrosion resistance.
- **Welding:** Used in the production of welding electrodes and rods.
- **Steel Processing:** Used in high-performance steel alloys.

Global Market Overview:

- **Major Producers:** Australia, India, Mozambique, and Ukraine are among the top producers of high-grade ilmenite, with TiO₂ content ranging from 46% to 58%.*
- **Top Exporters:** Australia's Iluka Resources, Rio Tinto, and India's VV Minerals, among others.*

Market Outlook:

- **Price Increases:** is expected to reach **USD 15.61 billion by 2030**, expanding at a CAGR of 3.9% from 2023 to 2030, according to a new report by Grand View Research, Inc.**
- **Growing Demand:** As industries expand, especially in the Asia-Pacific region, the demand for ilmenite and titanium dioxide is projected to increase significantly, driven by:
 - **Urbanisation and Industrialisation:** Particularly in emerging markets, leading to greater demand for paints, coatings, and industrial materials.
 - **Aerospace and Automotive:** The growing need for lightweight, durable materials in high-performance applications.
 - **Supply Deficits Expected:** Despite increasing production efforts, declining grades and stockpiles, combined with rising demand, could lead to supply deficits, further driving up prices and creating opportunities for new entrants in the market.

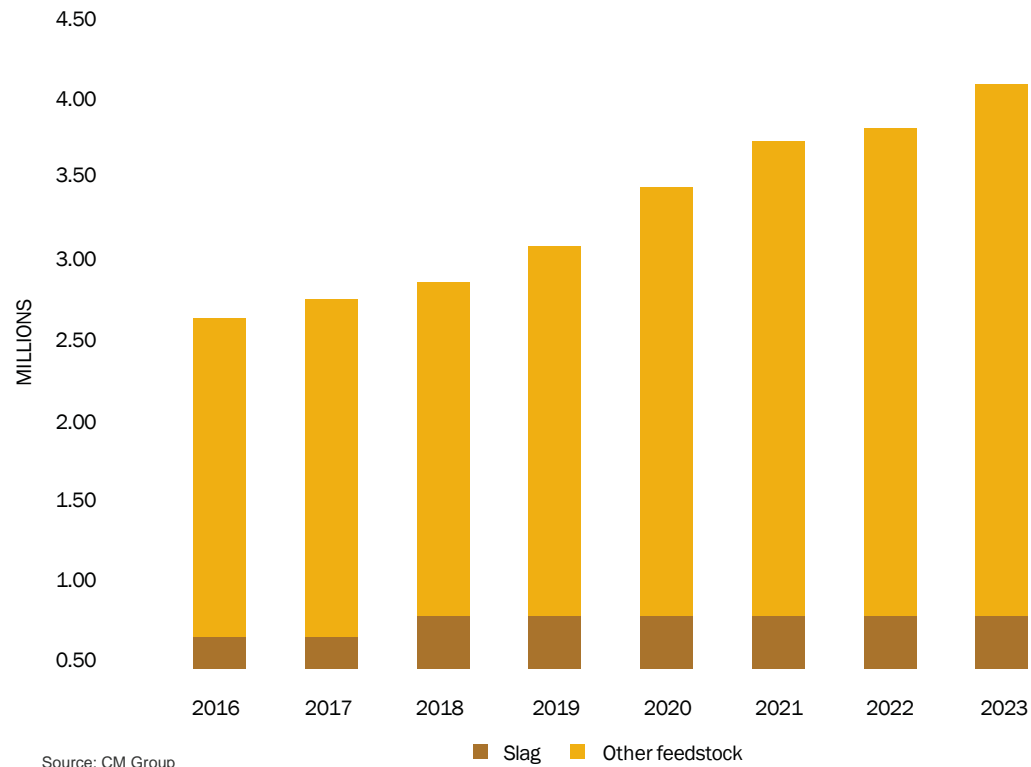
*Source: CM Group

** Source: [Ilmenite Market Growth & Trends](#)



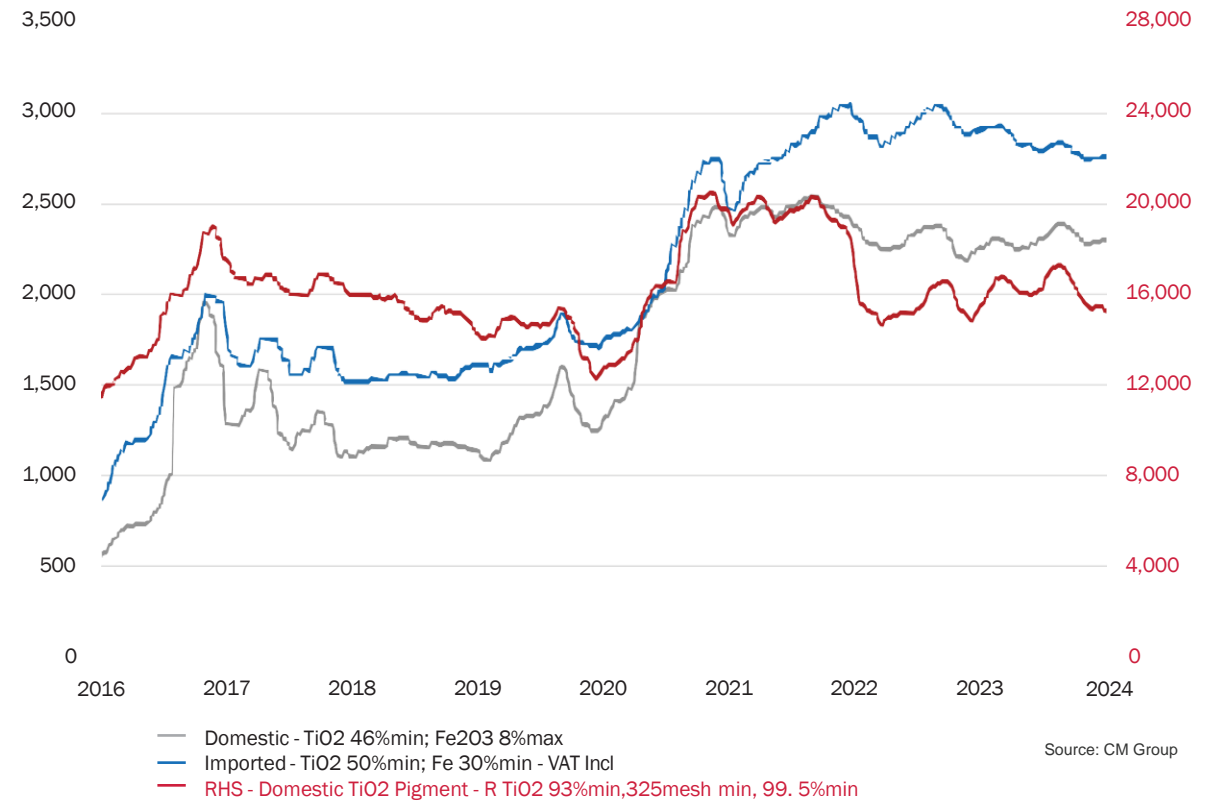
Global mineral sands market: Growth and Price appreciation underway

Tonnes of Chinese TiO₂ Pigment Production

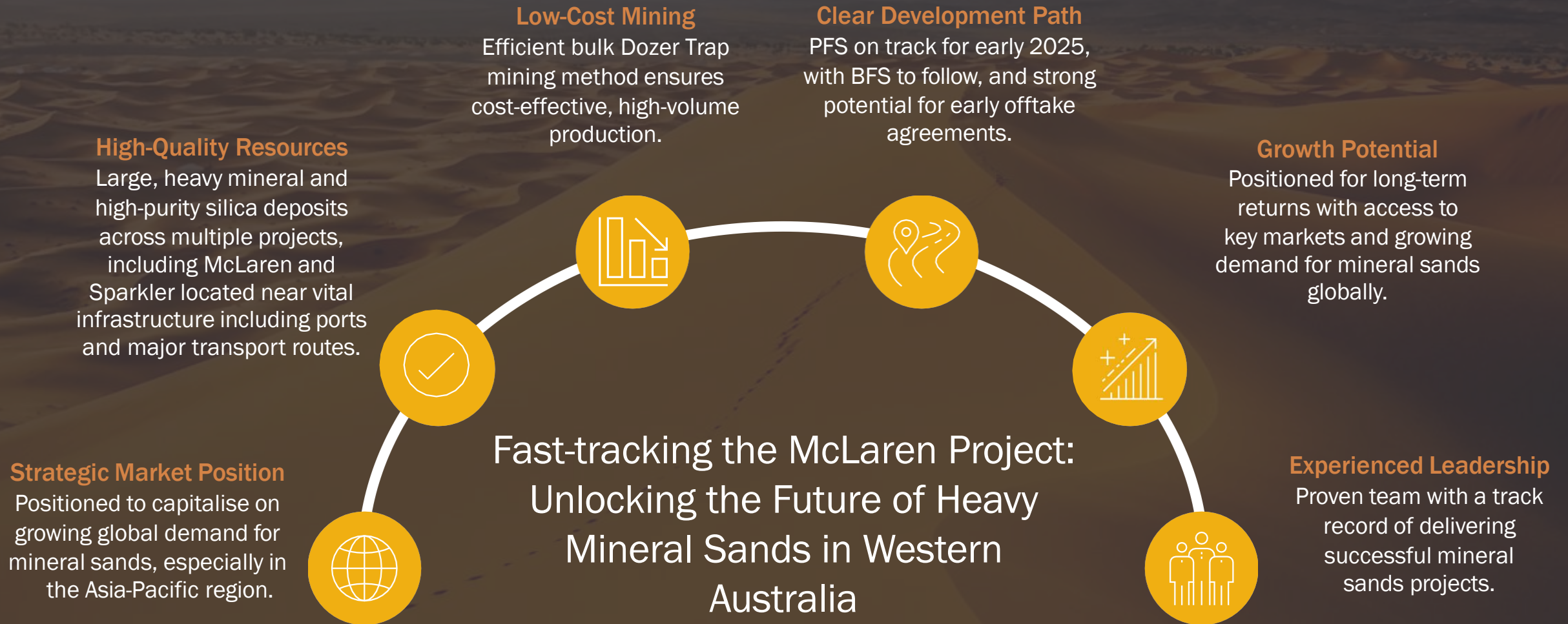


Ilmenite Concentrate and TiO₂ Pigment Price

(2016 - 2024 YTD, RMB/t, VAT Incl)



Investment Summary



Contact us



ALLUP SILICA

Simon Finnis

Managing Director

t: +61 418 695 138

e: simon.finnis@allupsilica.com

Paul Clausen

Commercial Manager

t: 0413 261 972

e: ah@allupsilica.com

Registered Office

C/- Argus Corporate Partners Pty Ltd

Level 4, 225 St Georges Terrace Perth WA
6000

e: team@allupsilica.com

Media and Investor Relations

Kristin Rowe

t: 0404 889 896

e: kristin@nwrcommunications.com.au



Additional Slides

Silica Sands Projects, Western Australia



*ASX Announcement 30 June 2022
 ** ASX Announcement 28 March 2024

- Multiple project locations with high quality resources
- Economical distance to ports with potential export capacity

Sparkler Highlights

- In-situ grades up to 99.3% SiO₂*
- Bulk Sample beneficiated to 99.8% SiO₂ and 100 ppm Fe₂O₃**
- **70 million inferred tonnes at 96.84% SiO₂ and 0.34% (3400ppm) Fe₂O₃ in-situ bulk mineral resource.***
- **37 million inferred tonnes at 99.66% SiO₂ and 0.02% (200ppm) Fe₂O₃ in sand fractions (0.106mm – 0.6mm).***
- **25 million inferred tonnes at 99.67% SiO₂ and 0.03% (300ppm) Fe₂O₃ in coarse sand fractions (+0.6mm). ***
- **4 million inferred tonnes at 97.70% SiO₂ and 0.41% (4,100ppm) Fe₂O₃ in fine sand fractions (+0.45mm – 0.106mm).***

Dune Buggy

- 15km from Esperance Port
- Unique silica sand and calcium carbonate

Pink Bark

- 100km from Esperance Port by Road
- Opportunities for silica sand, kaolin and rare earths (REE), including Uranium

Cabbage Spot

- Easy access to Highway 1 and to Port
- High quality silica up to 99.4% SiO₂ in situ. Elevated Low Fe₂O₃