Iluka Resources Limited

Macquarie Western Australia Forum 2021

Tom O'Leary, Managing Director

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This document provides an indicative outlook for the Iluka business in the 2021 financial year. The information is provided to assist sophisticated investors with the modelling of the company, but should not be relied upon as a predictor of future performance. The current outlook parameters supersede all previous key physical and financial parameters.

This information is based on Iluka forecasts and as such is subject to variation related to, but not restricted to, economic, market demand/supply and competitive factors. It is Iluka's approach to modify its production settings based on market demand, and this can have a significant effect on operational parameters and associated physical and financial characteristics of the company.

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Non-IFRS Financial Information

This document contains non-IFRS financial measures including cash production costs, non production costs, Mineral Sands EBITDA, Underlying Group EBITDA, EBIT, free cash flow, and net debt amongst others. Iluka management considers these to be key financial performance indicators of the business and they are defined and/or reconciled in Iluka's annual results materials and/or Annual report. Non-IFRS measures have not been subject to audit or review.

All figures are expressed in Australian dollars unless stated otherwise.

Mineral Resources and Ore Reserves Estimates

As an Australian company with securities listed on the Australian Securities Exchange (ASX), Iluka 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 2012.

Information that relates to Mineral Resources estimates has been previously announced to ASX on 25 February 2021 in 2020 Annual Report, on 18 February 2020 in Eneabba Mineral Sands Recovery Project Ore Reserve Estimate, 24 July 2019 in *Eneabba Mineral Sands Recovery Project Updated Mineral Resource Estimate,* and on 20 February 2017 in *Updated Mineral Resource and Ore Reserve Statement,* all available at www.iluka.com/investors-media/asx-disclosures. Iluka 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. Iluka 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.

Production outlook

Production outlook and the basis thereof are noted within the relevant disclosure. The outlook included in this presentation is indicative only and should not be construed as guidance. The information is subject to changes in market and operating conditions; political risk; and any significant unplanned operational issues.

Iluka’s commitment to sustainability

Key Pillars of Iluka’s Sustainability Approach

- Health and Safety
- Our People
- Our Communities
- Environmental Stewardship
- Governance and Integrity
- Value Creation

Board Sustainability Committee established

Rehabilitated site, Jacinth-Ambrosia, South Australia

Fifth consecutive year

Member of Dow Jones Sustainability Indices Powered by the S&P Global CSA

MSCI ESG RATINGS A

CCC | B | BB | BBB | A | AA | AAA

Fifth consecutive year

FTSE4Good

2021 YTD[1] TRIFR 1.4
(2020 TRIFR 2.8)

TCFD alignment
Year 3 of 3

28%
Indigenous employment at Jacinth-Ambrosia

319ha
Rehabilitated in H1 2021

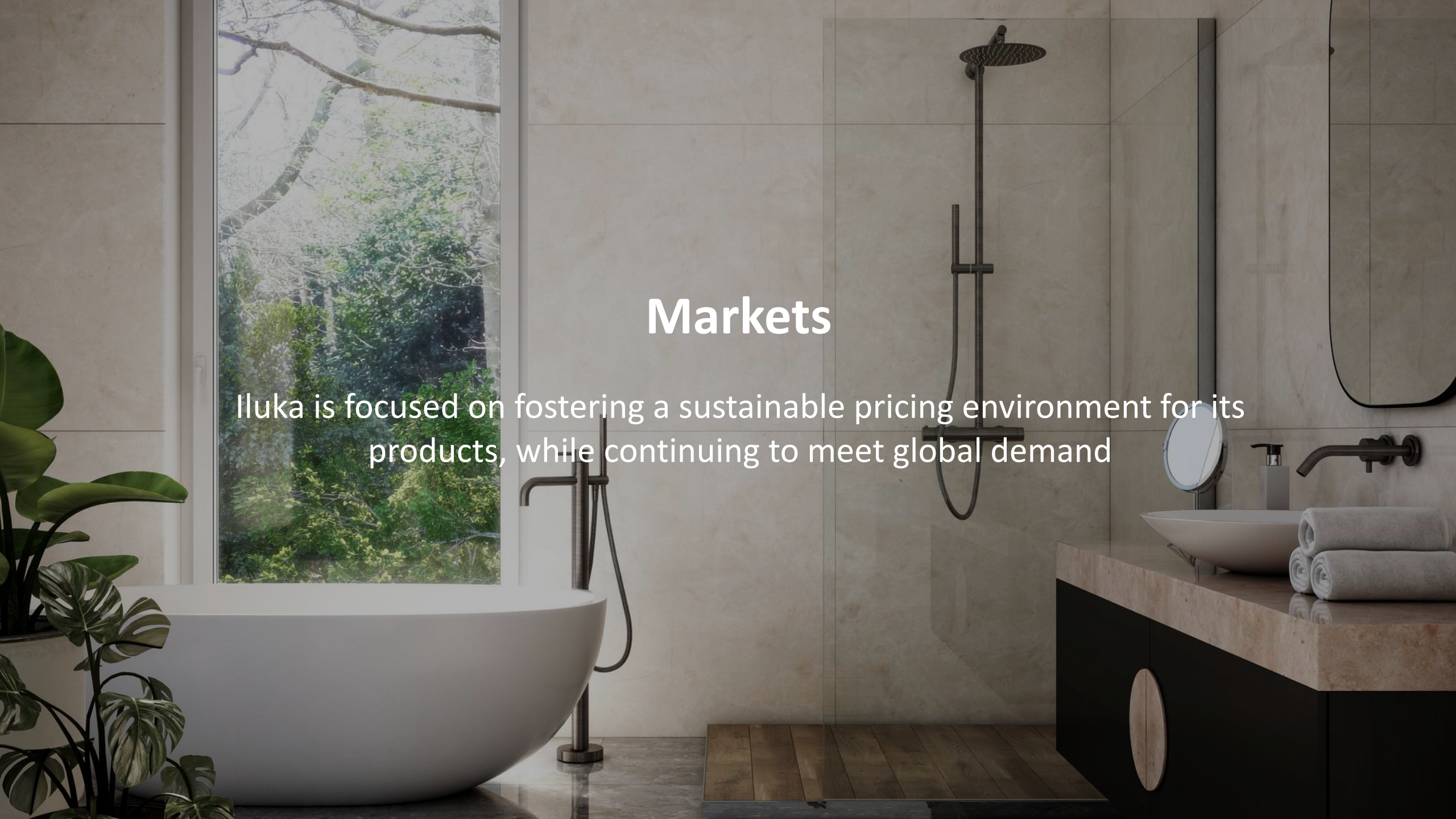
20%
Reduction in Serious Potential Incidents (2020:61)

Female representation

25% Executive

43% Board

Note: 1. As at 31 October 2021



Markets

Iluka is focused on fostering a sustainable pricing environment for its products, while continuing to meet global demand

Zircon

Ongoing tightness of supply, with customers across multiple geographies and industries seeking volumes greater than their allocations

Result

- Q3 21 YTD sales 266kt (Q3 20 YTD: 142kt)
  - Q3 sales of 89kt (+40% YoY) after Q2 sales of 91kt
- Demand in key markets reflecting a return to pre-pandemic production levels

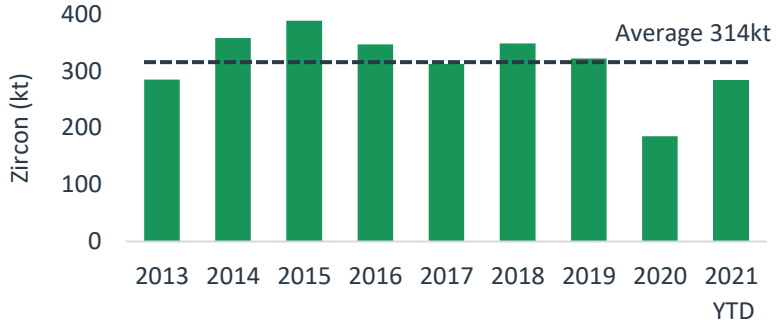
Pricing

- Q3 21 weighted average received zircon (premium and standard) price US$1,487/t
- Zircon sand prices increased US$125/t in Q3, with a further US$120-$170/t increase effective 1 October. Iluka price increases have been fully accepted by customers
  - continued focus on delivering sustainable pricing environment

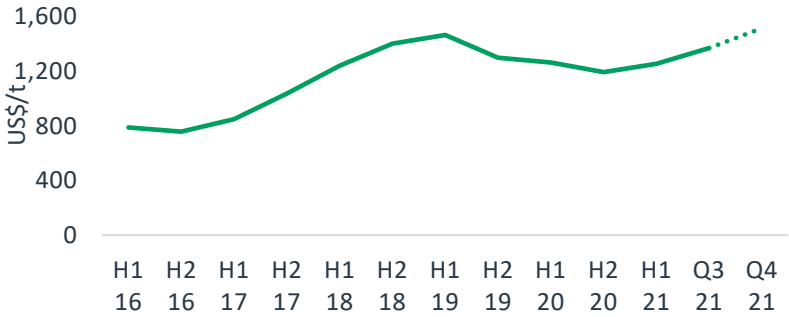
Supply/Demand

- Q4 zircon sales fully committed
  - volumes in line with Q3, with a higher proportion of zircon-in-concentrate
- All of Iluka's zircon customers are on 'allocation', with customers across multiple geographies and industries seeking volumes greater than their allocations
- Longer term industry challenges associated with grade decline at existing operations and higher U+Th levels from new supply remain. Iluka is progressing technical solutions to enable ceramics producers to continue to deliver high-quality products
- Overall, the ceramics industry is experiencing sustained growth in sales. However, profitability is being challenged by increasing costs throughout the supply chain

Iluka annual zircon production



Zircon net realised FOB price[1,2]



Note: 1. Zircon prices reflect the weighted average price for zircon premium, zircon standard and zircon in concentrate. The prices for each product vary considerably, as does the mix of such products sold period to period. In Q3 year-to-date 2021 the split of zircon sand and concentrate by zircon sand-equivalent was approximately 82%:18% (2020 full year: 78%:22%). 2. Q4 zircon sand price estimate assumes the mid-point of the US$120-170/t price increase effective 1 October, as announced in the September 2021 Quarterly Review

High-grade titanium feedstocks

All of Iluka's synthetic rutile and natural rutile is under contract for the remainder of 2021

Result

- Q3 21 YTD sales 410kt (Q3 20 YTD: 209kt)
  - Q3 sales of 129kt after Q2 sales of 152kt
- Demand in all regions outpacing supply

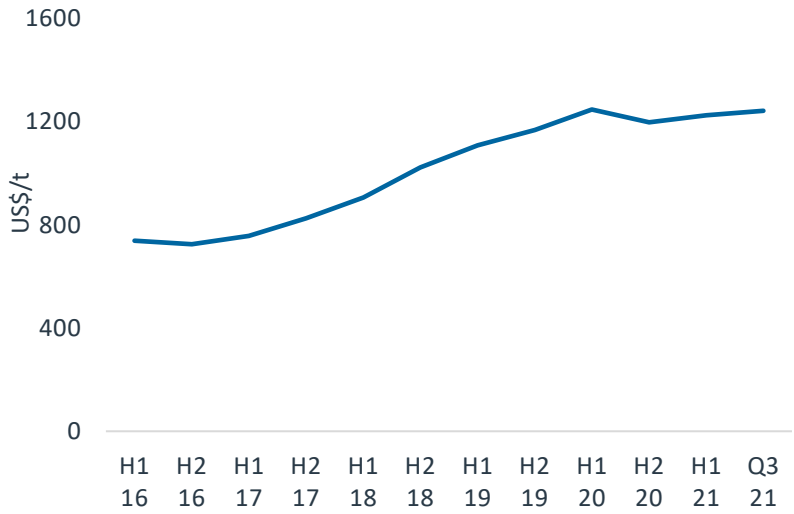
Pricing

- Q3 21 rutile price up 1.5% to US$1,242/t[1]
- Pigment pricing momentum continues with increases of US$175-200/t announced by all major producers for Q4

Supply/Demand

- Chinese production of pigment and titanium dioxide feedstocks impacted by unprecedented container shortages, increasing delivered cost of pigment
- Pigment inventories well below seasonal norms and long lead times persist as North American and European pigment producers continue to face shortages of chlorine
- Pigment producers are increasingly looking to boost head grades in order to reduce requirements for chlorine, driving increased demand for high grade feedstocks such as synthetic rutile and natural rutile
- All of Iluka's synthetic rutile and natural rutile is under contract for the remainder of 2021

Rutile net realised FOB price



Note: 1. Excluded from sales prices is a lower value titanium dioxide product, HYTI, that typically has a titanium dioxide content of 70-90%. This product sells at a lower price than rutile, which typically has a titanium dioxide content of 95%

Rare earths

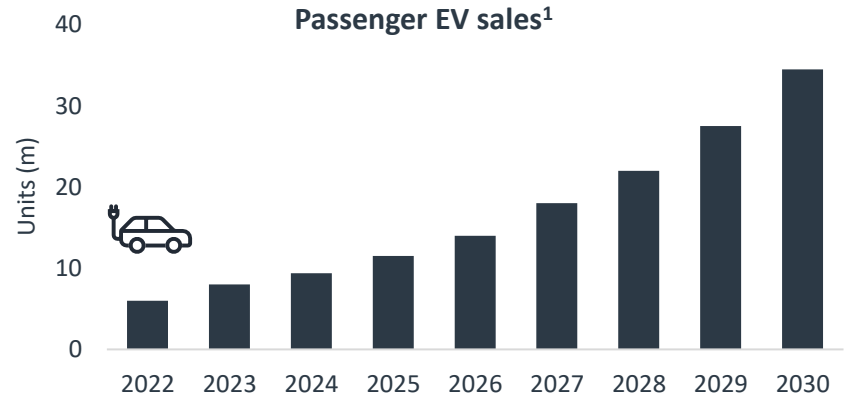
Increasing global demand as the world moves towards a low carbon future

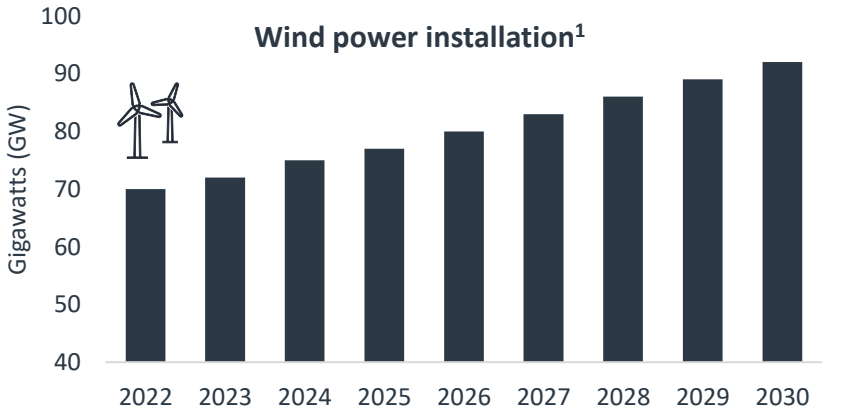
2020

- By volume permanent magnets accounted for 42% of global TREO consumption in 2020
- By value permanent magnets accounted for over 90% of TREO consumption and market commentators expect this to increase over time

Supply/Demand[1]

- Strong end market demand growth from electric vehicles and wind turbines
  - EVs currently ~6% of passenger vehicle sales, forecast ~40% by 2030 or ~30.5 million new EVs requiring ~30,000 tonnes of NdPr, equal to 30% of 2025 demand
  - 2022 to 2030 forecast additional 35.7 GW installed turbines, equivalent to ~6,000 tonnes of NdPr
- NdPr projected to be in supply deficit from 2022 onwards





Source: 1. Adamas Intelligence, UBS. 2. Adamas Intelligence.

Operations and Projects

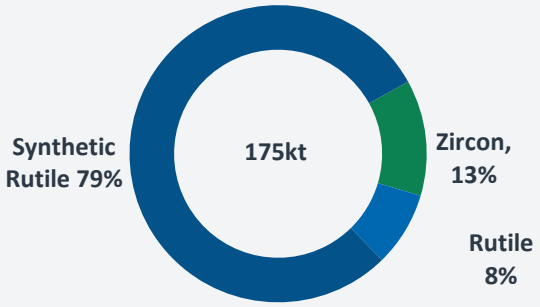
Iluka is positioned to lead the response to market and industry conditions, both near and longer term, through the company's marketing approach and product suite, operations and development pipeline

Operational overview

Cataby / South West

Large chloride ilmenite rich mine, commissioned in 2019. Ilmenite feeds synthetic rutile kiln with material zircon and rutile production.

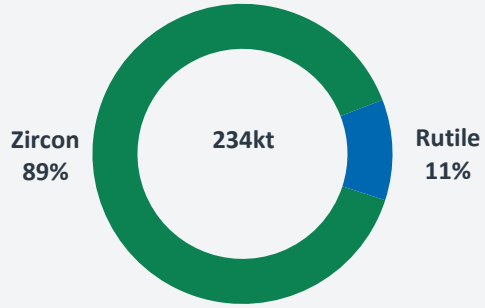
Q3 21 YTD production[1]



Jacinth-Ambrosia / Mid West

Jacinth-Ambrosia is one of the world's largest zircon mines, discovered and developed by Iluka and operating since 2009. Narngulu mineral separation plant processes Jacinth-Ambrosia and Cataby non-magnetic products.

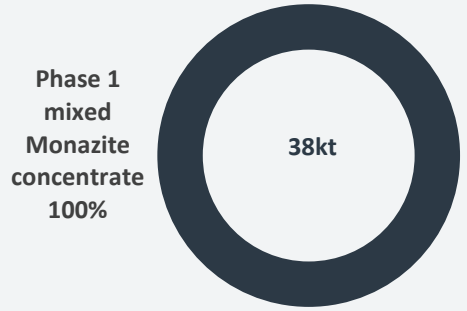
Q3 21 YTD production[1]



Eneabba

Highest grade rare earths operation globally. Processing of strategic monazite stockpile. Phase 1 operations began April 2020. Phase 2 commissioning scheduled for mid 2022. Phase 3 feasibility study to be completed early 2022.

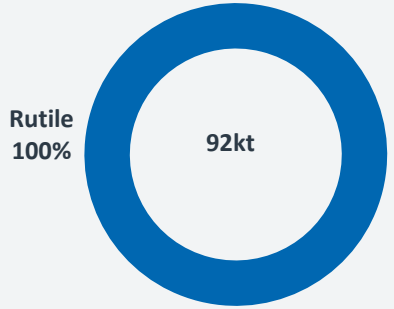
Q3 21 YTD production[1]



Sierra Leone

World's largest rutile mine, operating since 1960s. Acquired by Iluka in 2016 with expansion projects completed in 2019.

Q3 21 YTD production[1]



Notes: 1. Production amounts reflect Q3 21 YTD production volumes for Z/R/SR by operating segment

Jacinth-Ambrosia, South Australia

Improved operating performance driving higher production at Jacinth-North; move to Ambrosia is planned for H2 2022

Operational overview

- Jacinth-Ambrosia is the world's largest zircon mine
- Located ~280km's north west of Ceduna
- ~209kt of zircon production Q3 21 YTD
- Indigenous employment of 28%

Recent developments

- Strong operating performance with higher HMC production a result of increased ore treatment volumes, ore grade and recovery
- Commissioned first solar farm in September 2021

Outlook for H2 2021

- Mining at Jacinth-North deposit will continue as planned before a move to Ambrosia in H2 2022

3.5MW
solar farm

1460MW hours
forecast for November and December 2021

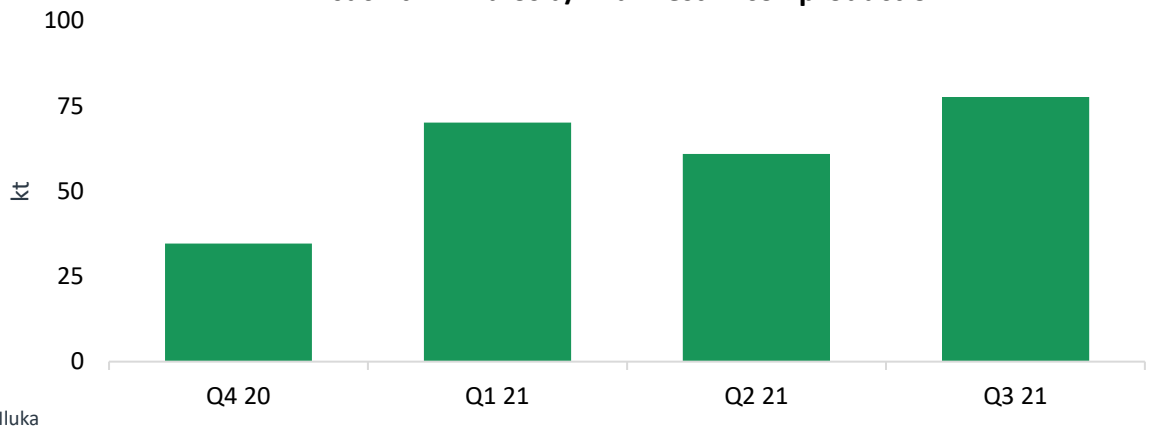
Energy from waste
(exhaust recovery)

ETC technology
(electric turbo compounding)

~18%
of consumed power at Jacinth-Ambrosia

5,500 tonnes
of CO_2 expected to be reduced per annum

Jacinth-Ambrosia/Mid West zircon production



Source: Iluka


Jacinth-Ambrosia, South Australia

Project pipeline

The company develops and progressively gates projects towards execution subject to: improving confidence and satisfaction with the risk-return attributes; continued strategic alignment; and sequencing to take advantage of economic and market outlook

Region	Mineral Resource[1]	ASSESS Scoping Study	SELECT Preliminary Feasibility Study	DEVELOP Definitive Feasibility Study	EXECUTE Project execution	PRODUCING Operate and maximise
Eucla Basin	345Mt @ 4.8% HM for 16.6Mt In Situ HM		Atacama			Jacinth-Ambrosia
Murray Basin	1,570Mt @ 6.4% HM for 101Mt In Situ HM		Euston, Wimmera	Balranald		
Mid West / South West WA	986Mt @ 5.6% HM for 54.9Mt In Situ HM		South West Deposits, Eneabba (Phase 3)		SR1 Kiln Restart, Eneabba (Phase 2)	Eneabba (Phase 1), Cataby
Sierra Leone	715Mt @ 1.1% Rutile for 7.9Mt In Situ Rutile		Sembehun			Lanti, Gangama
	Stage description:	*Determine what it could be*	*Determine what it should be*	*Determine what it will be*	*Deliver the project*	*Grow and improve*
	Estimate Accuracy Range (at end of phase):	*-30% to +60%*	*-15% to +30%*	*-10% to +15%*	*n/a*	*n/a*

Resource estimate Reserve estimate Other

Notes: 1. Refer to the 2020 Annual Report for additional information. The Mineral Resource (MR) information on this indicative growth pipeline summary is extracted from the company's previously published MR statements and are available at: www.iluka.com.au . Iluka confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Iluka 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. All Mineral Resource figures are estimates. This slide should be read in conjunction with disclaimers and compliance statement on slide 2.

Synthetic Rutile Kiln 1 (SR1) restart, Western Australia – in execute

SR1 and SR2 kilns and SR2 stack, Capel, Western Australia

A capital efficient, incremental synthetic rutile production response, to deliver increased high grade titanium dioxide feedstock in a supply constrained market

Project overview

- SR1 kiln is located at Capel, Western Australia, the same site as SR2
- SR1 has been on care and maintenance since 2009
- Restarting SR1 represents a low capital expenditure, low risk opportunity to produce an additional 110ktpa of synthetic rutile, with speed to market in light of industry supply constraints
- Initial SR1 campaign (18-24 months) ilmenite feedstock secured from internal and external sources

Recent developments

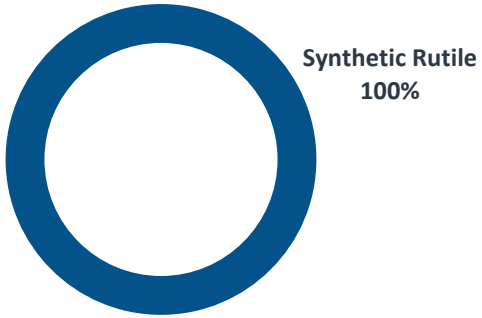
- Board approval to execute project received in August
- Equipment ordered for refurbishment, engineering for restart complete

Outlook for H2 2021

- Verify detailed planning and design of refurbishment scope and commence works
- Advance engagement with customers

Parameters	
Production rates	~110ktpa synthetic rutile
Capital expenditure	~$38 million Payback period of < 1 year
Timing	Upgrading feedstock in Q4 2022

Indicative annual production mix



Balranald, New South Wales – definitive feasibility study


Balranald, New South Wales

Third technology trial completed and confirmed effectiveness of the underground mining method; definitive feasibility study (DFS) underway

Project overview

West Balranald is a rutile-rich deposit in the northern Murray Basin, New South Wales. Owing to their relative depth, Iluka is assessing the potential to develop these deposits via a novel, internally developed, underground mining technology

Recent developments

$23 million DFS funding approved by Board in August

Iluka completed the third trial (T3) of the underground mining method in late 2020. The trial confirmed the effectiveness of the method and validated key elements of the mining unit design. Growing confidence in the application of the underground technology was a key factor in DFS decision

Outlook for H2 2021

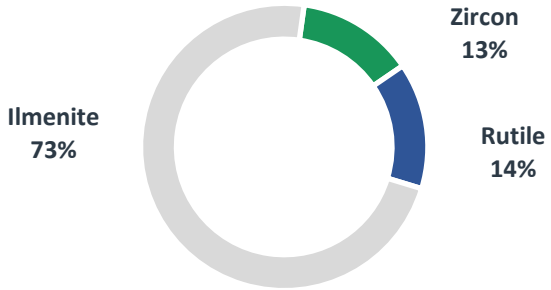
Awarding of DFS engineering contracts

Engagement with local stakeholders

DFS parameters and basis of design

Production rate	Iluka aims for each mining unit to produce ~180-200ktpa HMC[1,2]
Mine life	Anticipated to be 8-14 years (pending production scale-up time)[1,2]
Capex	DFS to determine capex requirements in advance of any execute decision
Timing	FID H2 2022 Potential commissioning 2024

Resource assemblage (VHM)



Notes: 1. HMC production subject to study outcomes, mine plan and HM grade. 2. The Mineral Resource for West Balranald has been previously announced to the ASX on 20 February 2017 in the announcement "Updated Mineral Resource and Ore Reserve Statement". Iluka 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 has not materially changed.

Wimmera, Victoria – resource declaration; preliminary feasibility study

Globally significant mineral resource of 1.4Bt declared, containing 67Mt of heavy mineral (HM)

Project overview

The Wimmera region in Western Victoria has the potential to be a multi-decade future source of critical minerals, in particular zircon and rare earths.

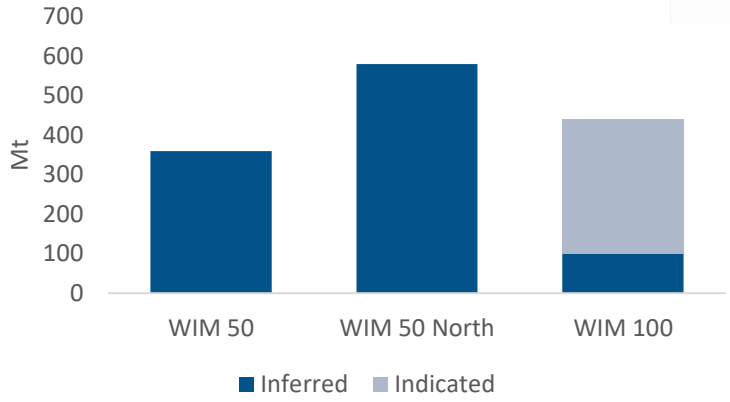
The WIM100 deposit is the initial, primary focus of Iluka's Wimmera project, which is currently the subject of a preliminary feasibility study. Iluka also holds tenure over other similar deposits in the Wimmera region.

One characteristic shared by the fine grained mineral sands deposits located in Western Victoria (those held by Iluka and other project proponents) is higher levels of impurities in their zircon. Absent a processing solution to remove these impurities, the zircon is ineligible for sale into most end-markets, including the ceramics market which accounts for approximately 50% of global demand.

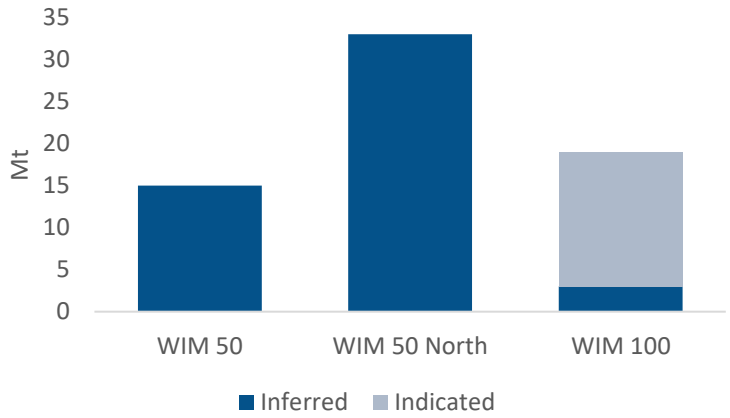
Key details

- **WIM100**
  - Indicated Mineral Resource estimate of 340Mt grading 4.7% HM for 16Mt of contained HM
  - Inferred Mineral Resource estimate of 100Mt grading 3.4% HM for 3.4Mt of contained HM
- **WIM50**
  - Inferred Mineral Resource estimate of 360Mt grading 4.1% HM for 15Mt of contained HM
- **WIM50 North**
  - Inferred Mineral Resource estimate of 580Mt grading 5.7% HM for 33Mt of contained HM

Wimmera resource[1]



Wimmera in situ heavy mineral[2]



Notes: 1. Mineral resources are reported at a cut-off grade of 1.0% HM. 2. A dry density of 1.7t/m^3 is used. 3. The mineral assemblage is given as a percentage of the HM content

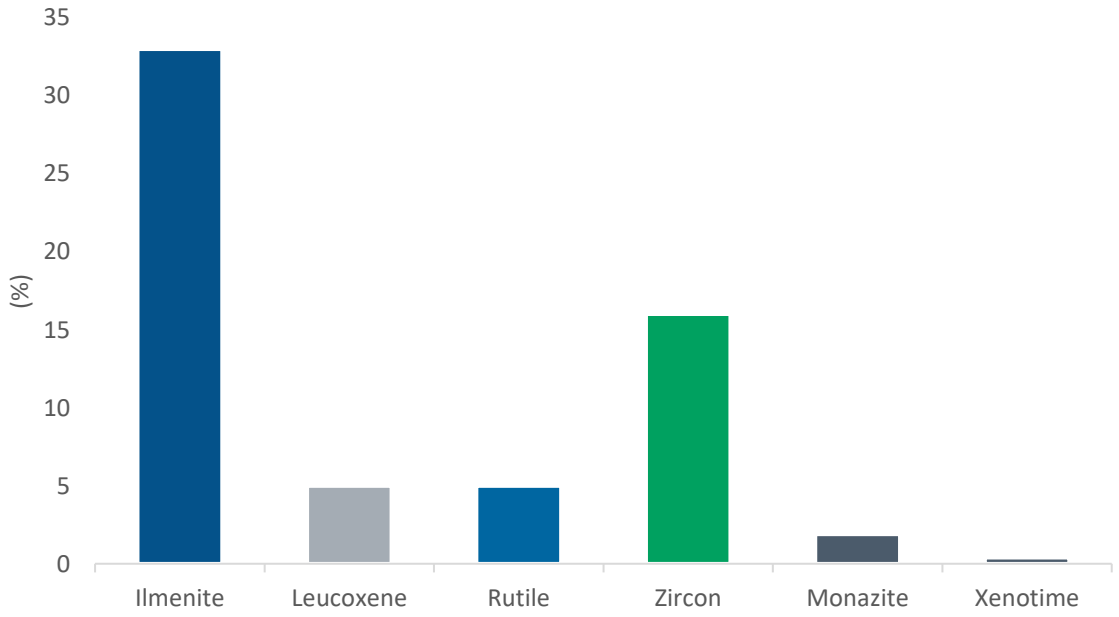
Wimmera, Victoria – innovative zircon processing solution

An innovative processing solution that could unlock a new mineral province

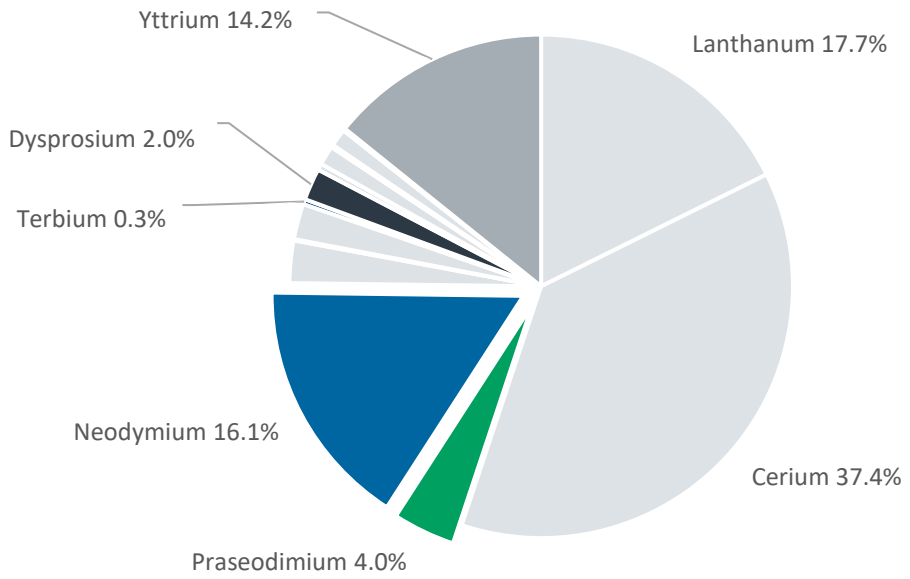
Study work for the Wimmera project is focussed on validating Iluka's zircon processing solution and on progressing baseline environmental studies. Testing results on the processing solution continue to be pleasing, with larger scale piloting currently underway.

The Wimmera project's rare earth bearing minerals are very similar to Iluka's rare earths stockpile at Eneabba, Western Australia, with a slightly higher assemblage of the heavier rare earths dysprosium and terbium. The Wimmera project could supplement feed to Iluka's potential downstream refining activities at Eneabba in future years.

Mineral assemblage in HM (%)



Wimmera rare earth assemblage (%)



Source: Iluka

Eneabba, Western Australia – rare earths

Eneabba Phase 1 operational. Phase 2 under construction, commissioning scheduled for H1 2022

Phase 3 – a fully integrated rare earths refinery – feasibility study progressing, completion scheduled for early 2022

Project overview

The Eneabba development involves the reclaiming, processing and sale of a strategic stockpile rich in monazite (a mineral containing rare earth elements) and mineral sands

Eneabba is currently the highest-grade rare earths operation globally

Phase 1 is operational and produces a mixed monazite-zircon concentrate (~20% monazite)

Phase 2 is under construction and will produce two separate concentrates

- ~90% monazite concentrate, suitable as a direct feed to a downstream rare earths refinery
- zircon-ilmenite concentrate to be processed into finished products

Phase 3 is currently the subject of a feasibility study to develop a fully integrated rare earths refinery

Recent developments

- Phase 2 site works have commenced and upgraded high voltage infrastructure has been commissioned
- Engagement with customers

Current Phase 3 workstreams

- dedicated project team supported by carefully selected experts/practitioners within owners team
- technical engineering studies, market assessment and regulatory/environmental approvals processes being advanced through reputable project partners
- active engagement with EFA to progress the terms of the proposed loan facility

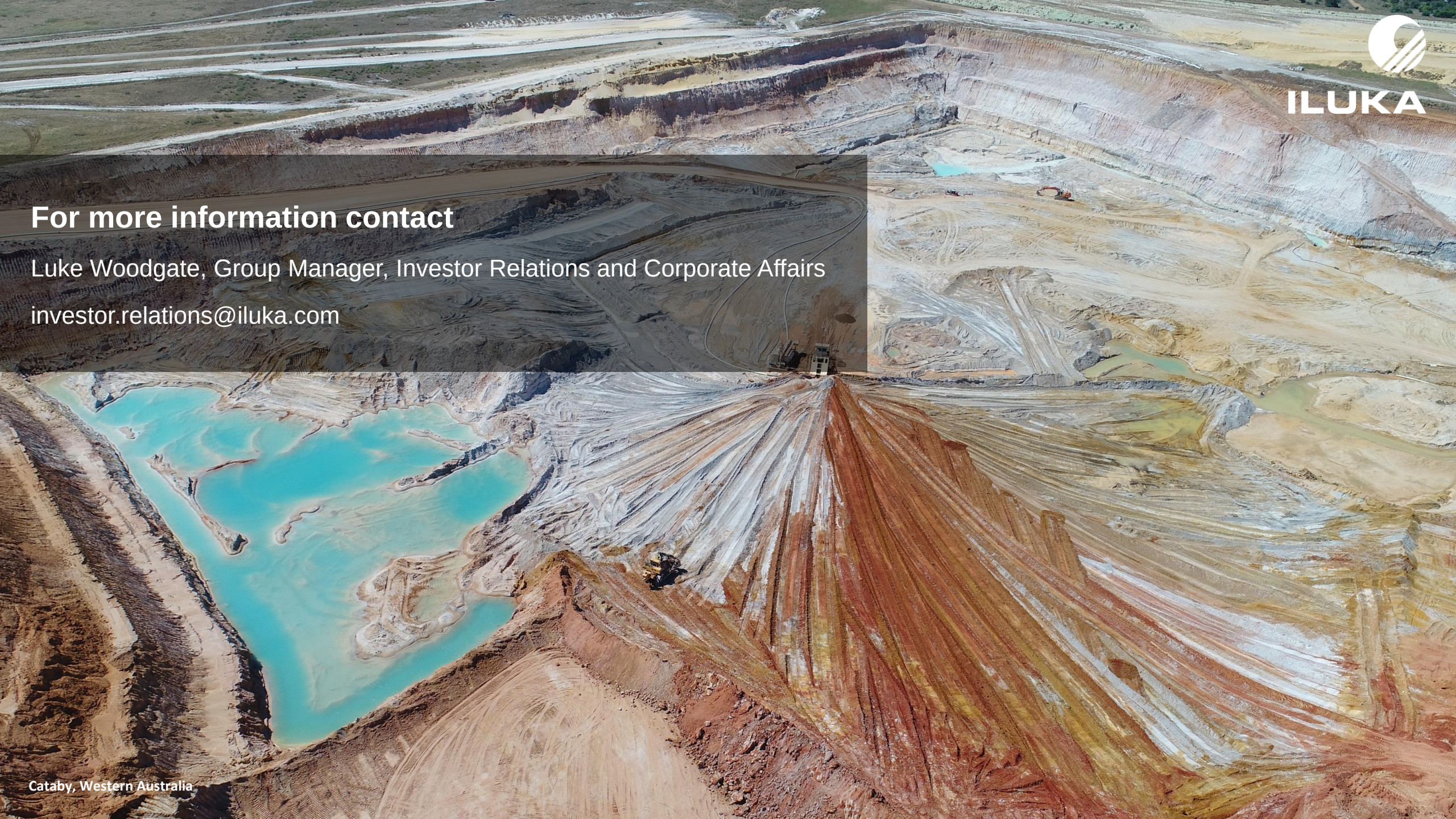
Early 2022
Target completion of Feasibility Study and FID[1]

Late 2024
Subject to FID, target construction completion and commissioning

Feasibility study key partners

Australian Government ANSTO Science. Ingenuity. Sustainability. CARESTER Your partner for Rare Earths wood. MBS ENVIRONMENTAL

1. FID remains subject to feasibility study, the terms of any EFA loan facility and Iluka Board approvals. Any EP3 investment will also be assessed against the advantaged position Iluka currently has in the high value existing monazite stockpile at Eneabba and the potential value of EP2.



For more information contact

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Cataby, Western Australia

Appendix 1 – Wimmera Deposits Mineral Resource Summary

Table 1: Mineral Resource Summary for Iluka's Wimmera deposits reported by deposit and JORC Code (2012 Ed.) Category as at December 2021

MINERAL RESOURCE SUMMARY FOR ILUKA WIMMERA DEPOSITS											
Deposit	Mineral Resource Category	Resource Tonnes[1]	In situ HM Tonnes[2]	HM	Clay	Mineral Assemblage in HM[3]					
						Ilmenite	Leucoxene	Rutile	Zircon	Monazite	Xenotime
		(Mt)	(Mt)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
WIM50	Inferred	360	15	4.1	12	38	7	7	16	1.8	0.4
WIM50 North	Inferred	580	33	5.7	14	29	4	4	15	1.8	0.4
WIM100	Indicated	340	16	4.7	13	33	7	6	17	2.2	0.5
WIM100	Inferred	100	3	3.4	14	35	7	6	17	2.2	0.5
WIM100	Sub Total	440	19	4.4	13	34	7	6	17	2.2	
Total	Indicated	340	16	4.7	13	33	7	6	17	2.2	0.5
Total	Inferred	1040	51	4.9	13	32	5	5	15	1.8	0.4
TOTAL[4]	All	1380	67	4.9	13	33	5	5	16	1.9	0.4

Notes: 1. A dry density of 1.7t/m^3 is used. 2. Mineral Resources are reported at a cut-off grade of 1.0% HM. 3. The mineral assemblage is given as a percentage of the HM content. 4.Rounding may generate differences in the last decimal place.