



Iluka Resources

Goldman Sachs Rare Earth Conference
December 2020

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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 20 February 2020 in *2019 Annual Report*; on 24 July 2019 in *Eneabba Mineral Sands Recovery Project Updated Mineral Resource Estimate*; on 25 January 2019 in *Inaugural Pejebu 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 in 2020



Jacynth-Ambrosia, South Australia



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Iluka's first priority is the safety and wellbeing of its people, their families, and the communities in which the company operates.

Iluka has maintained operations across all sites and marketing and logistics channels have remained open.

Iluka's Approach and Response

Health and Safety Measures



Implemented a number of health and safety measures across all sites to effectively manage the risks and impacts of the virus while maintaining operational continuity:

- Roster changes, increased cleaning and site based physical distancing measures
- Site specific risk-based plans in place
- Employee support programs, including mental health focus



Delivered on Commitments

- Kept supply chain open to maintain continuity of supply to customers
- Helped to deliver pricing and volume stability to market in uncertain times

Operational and Project Changes



Changes implemented in response to market conditions:

- Altered production settings at the Narngulu mineral separation plant from Q2 to reduce zircon production and reduce costs
- Return to mining at Jacinth from Ambrosia from August 2020 to reduce costs and defer tailings management capital spend
- Completed field work associated with Balranald trial
- Completed Sembehun scoping study and progressed PFS
- Progressed other key projects without significant delays



Maintaining Strong Financial Position

- Operational changes aimed at reducing costs and preserving cash to maintain a strong balance sheet
- Focus on costs and capital discipline
- Continued investment in the future including key technology projects

Mineral Sands Operational Configuration

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Portfolio of operations weighted towards premium zircon and high-grade titanium products. 2020 operational configuration based on: optimising production based on market conditions; minimising costs and improving cash flow; and maintaining flexibility in line with market conditions.

Cataby / South West



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

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.

Eneabba



Processing and sale of monazite concentrate from a strategic stockpile. Operations began April 2020. Further developments involving additional value addition being progressed.

Sierra Leone



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

Demerger of Deterra Royalties Completed

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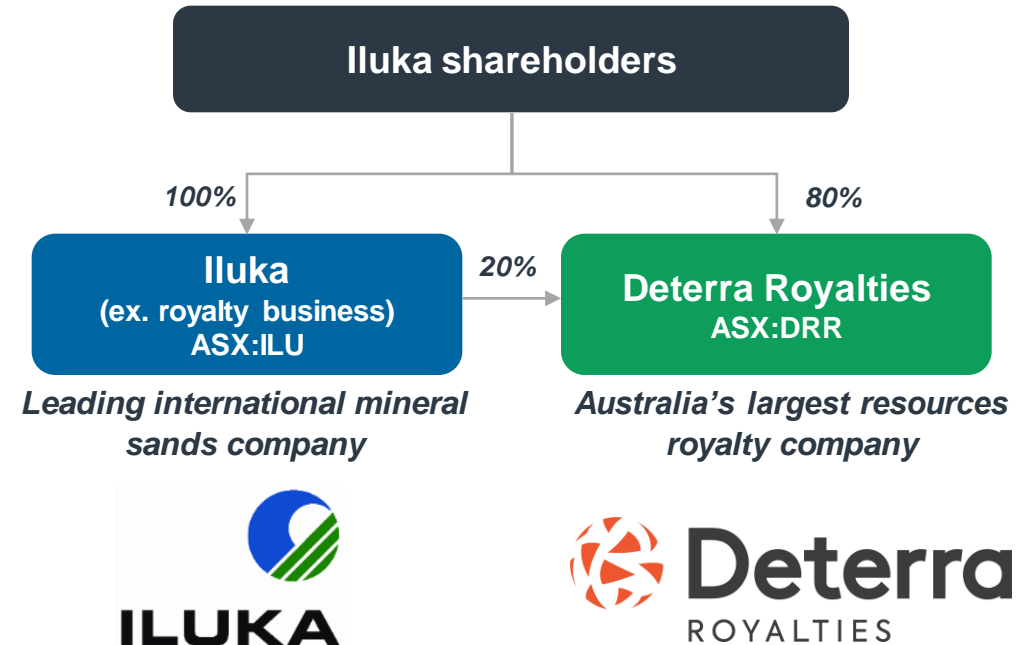
The demerger of Deterra Royalties has created two separate ASX-listed businesses – Iluka continues to be a global leader in the mineral sands industry and holds 20% of Deterra Royalties the largest ASX-listed resources focused royalty company

Demerger overview

- Iluka has demerged its royalty business, Deterra Royalties
- Deterra Royalties listed on the ASX on 23 October
- The cornerstone asset of the new company is the Mining Area C iron ore royalty
- Iluka retains a 20% stake in the new company

Iluka's focus post demerger

- Iluka is a leading international mineral sands company
- Focussed on delivering sustainable value from exploration / mining / beneficiation / marketing / rehabilitation of quality mineral sands assets
- High value-in-use products for specific customer applications with customer-centric marketing approach
- Maintain high sustainability standards, including by supplying high grade products with low waste for customers and zircon <500ppm U+Th
- Establishing a position in rare earths - logical diversification based on world class assets
- Project pipeline to meet future needs of our customers





Project Pipeline

Eneabba, Western Australia



ILUKA

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Iluka develops and gates projects in a disciplined manner towards execution subject to acceptable progress in the following areas: (i) confidence in satisfactory project risk-return attributes, (ii) high level of strategic alignment, and (iii) sequenced to take advantage of the 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	361Mt @ 4.8% HM for 17.4Mt In Situ HM		Atacama			Jacinth-Ambrosia
Murray Basin	195Mt @ 17.2% HM for 33.4Mt In Situ HM		Wimmera Balranald			
Mid West / South West WA	994Mt @ 5.6% HM for 55.6Mt In Situ HM	South West Deposits		SR1 Kiln Restart	Eneabba (Phase 2)	Eneabba (Phase 1) Cataby
Sierra Leone	739Mt @ 1.1% Rutile for 8.2Mt 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
			No Resource estimate	Resource estimate	Reserve estimate	Other

1. Refer to the 2019 Annual Report for additional information. The Mineral Resource information on this indicative growth pipeline summary is extracted from the company's previously published 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.

Iluka is developing an emerging position in rare earth elements, based on world class assets at Eneabba and Wimmera, which present a logical diversification for the company

- Phased approach to development to reduce risk and gain understanding of market
- Eneabba Phase One in operation and Phase Two in execute stage
- Further development to undertake downstream processing under active consideration (Eneabba and Wimmera)
- Engagement with potential rare earths customers in progress

Rare Earth Value Chain

1. Exploration,
development,
mining

2.
Concentrating

3. Cracking and
leaching

4. Separation
and finishing

5. Upgrading

6. Component
manufacturing

Ore

Monazite
concentrate

Rare earth
mixtures

Individual rare
earth oxides

Rare earth metals

Magnets, alloys,
catalysts etc

Eneabba
Phase One

Eneabba
Phase Two

Potential further
development



Extraction, processing and sale of monazite-rich tailings stockpile providing additional business diversification into rare earth elements

Deposit

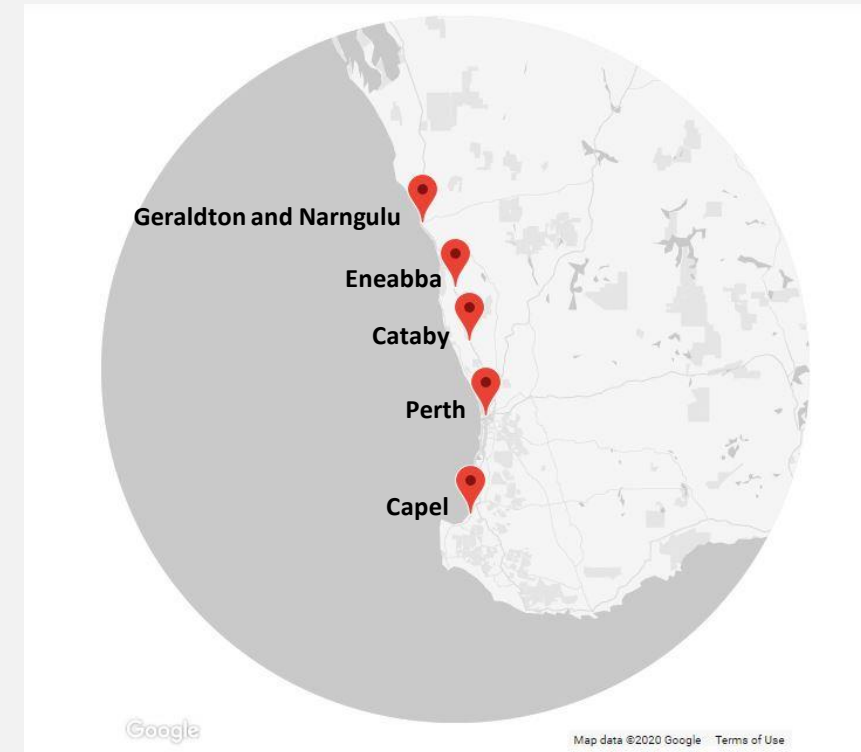
- A monazite-rich strategic stockpile stored in a mining void at Eneabba, Western Australia
- Material built since 1990's from Iluka's mid west mineral separation plants
- Iluka previously sold this material prior to 1990s

Processing and Logistics

- Stockpile is at surface and requires minimal processing to produce a monazite-zircon concentrate for sale
- Product exported from Port of Geraldton

Phased Development

- Phase One was low capital entry into market through sale of a 20% monazite concentrate
- Phase Two involves further upgrade ~90% monazite concentrate
- Actively exploring further downstream processing



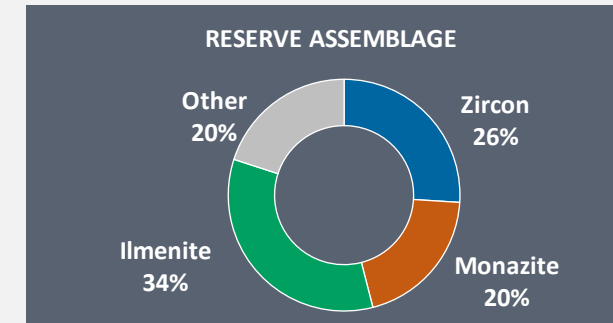
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Eneabba Key Project Parameters

	Metric (average over project life)	Comment
Life of Project at Reclaim Capacity (Phase 1 and Phase 2)	~10 years	Based on Ore Reserve ¹ and production rates assumed below
Reclaim Capacity (Phase 1 and Phase 2)	~100ktpa	
Average annual production (Phase 1)		
20% monazite-zircon concentrate	~50ktpa	Offtake contract for 50ktpa for 2 years
Average annual production (Phase 2)		
90% monazite concentrate	16-20ktpa	No offtake contracts in place at present
Zircon	7-9ktpa	Recoveries assume production of Premium grade zircon
Ilmenite	~20ktpa	Saleable or suitable synthetic rutile feed
HyTi90	~1ktpa	
Cash costs (from Phase 2)	\$35-40 million p.a.	
Capital expenditure		
Phase 1 (execute 2019)	<\$10 million	
Phase 2 (execute August 2020)	~\$35 million	
Payback period (Phase 2 capex)	<1 year	Payback from first production of Phase 2



ORE RESERVE¹
1.0Mt @ 83.5% HM
0.8Mt of In Situ HM

Notes: All values approximate. Production figures stated as estimated recovered mineral in the concentrate. Payback period based on externally sourced long term monazite price forecast and internal mineral sands prices.

1. ASX release "Eneabba Mineral Sands Recovery Project Ore Reserve Estimate" 18 Feb 2020, available at www.iluka.com



Eneabba is the highest grade operational rare earths deposit (stockpile) globally, with high assemblage of valuable neodymium and praseodymium and high contribution from ‘heavy’ rare earths and yttrium.

1. The estimated Ore Reserve for the Eneabba Rare Earth Stockpile is 0.96mt containing 17.1% monazite + xenotime (rare earth bearing minerals). The rare earth oxide assemblage is the rare earth assemblage of the monazite plus xenotime expressed as a percentage distribution of rare earth metals as oxides (REO).
2. Historical prices shown as a guide only and not an indicator of potential future prices.

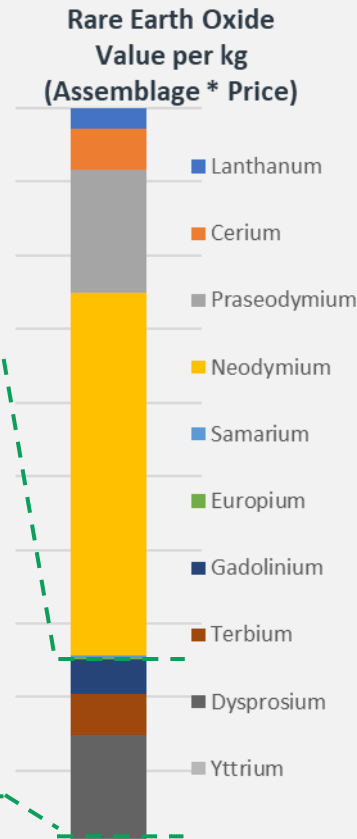
Light rare earths metal used in permanent magnets (electric vehicle motors, wind turbines) and advanced metal alloys, glass polishing and catalyst markets.

Heavy rare earths and Yttrium, are also used in magnets and are critical to defence applications.

Non-lanthanide

Eneabba Rare Earth Oxide Elements and Value

	% of Rare Earth Oxide Assemblage ¹	Rare Earth Oxide Price ² (2019 US\$/kg)	Rare Earth Oxide Value per kg (Assemblage * Price)
Lanthanum	22	2	
Cerium	45	2	
Praseodymium	5	54	
Neodymium	17	45	
Samarium	3	2	
Europium	<1	35	
Gadolinium	2	46	
Terbium	<1	507	
Dysprosium	<1	238	
Holmium	<1	n/a	
Erbium	<1	n/a	
Thulium	<1	n/a	
Ytterbium	<1	n/a	
Lutetium	<1	n/a	
Yttrium	4	3	
Total	100		



Source: Iluka and Argus



Mining and beneficiation of a fine grained heavy mineral sand ore body for the potential long-term supply of ceramic grade zircon and rare earth product

Deposit

- Wimmera is a large-scale deposit with the potential to produce ceramic-grade zircon and rare earth products
- Rare earth elements include valuable neodymium and praseodymium, while xenotime contributes to dysprosium, terbium and yttrium

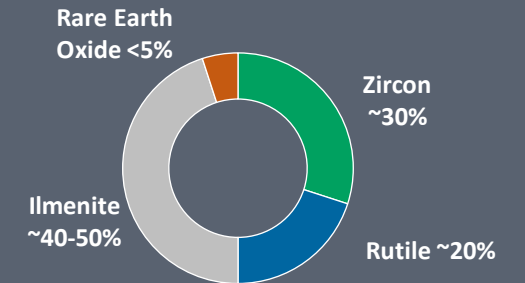
Project Overview

- Iluka has undertaken innovative technology studies to process and optimise recovery and purity from the ore of the deposit
- If successful, this will enable the development of other similar challenging projects
- Work continues to validate a processing solution
- Mine plan based on a conventional open pit mine

Project Status

- Preliminary feasibility study (PFS) underway
- PFS will select the optimal mining method, advance design, de-risk process flow sheet for rare earths refining and validate zircon processing solution

INDICATIVE ANNUAL PRODUCTION MIX



ASSET LIFE

Long life, subject to further studies

CAPEX

Subject to further study



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Eneabba Mineral Resources and Ore Reserves⁵

Mineral Resource Category	Resource Tonnes ¹ (Mt)	In situ HM Tonnes ⁴ (Mt)	HM (%)	Mineral Assemblage in HM ³			
				Zircon (%)	Monazite (%)	Xenotime (%)	Ilmenite (%)
Measured	0.84	0.70	83.7	25.7	20.2	1.2	33
Indicated	0.16	0.12	77.5	7.6	15.3	1.2	37
Total	1.0	0.83	82.7	26.0	19.5	1.2	34

Ore Reserve Category	Reserve Tonnes ^{1,2} (Mt)	In situ HM Tonnes ⁴ (Mt)	HM (%)	Mineral Assemblage in HM ³			
				Zircon (%)	Monazite (%)	Xenotime (%)	Ilmenite (%)
Proved	0.81	0.68	84.4	26	20	1.2	33
Probable	0.15	0.12	78.3	28	15	1.2	37
Total	0.96	0.80	83.5	26	20	1.2	34

Notes:

1. In situ (dry) metric tonnage is reported.
2. Ore Reserves are a sub-set of Mineral Resources.
3. Mineral assemblage is reported as a percentage of HM.
4. Rounding may generate differences in the last decimal place.
5. ASX Release "Eneabba Mineral Sands Recovery Project Ore Reserve Estimate" 18 Feb 2020 available at www.iluka.com