

# Iluka Investor Modelling Information

July 2020

This modelling information document and data have been designed to assist sophisticated investors and analysts to model the physical operations and financial statements of Iluka Resources. All information is based on is based on previously disclosed material. For more detailed information on all aspects of the company, please refer to the company's website, www.iluka.com.

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approach to modify its production settings based on market demand, and this can have a significant effect on operational parameters and associated physical and finance characteristics of the company

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This presentation contains certain statements which constitute "forward-looking statements". 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; estimates of future capital expenditure or construction commencement dates; expected costs or production outputs; estimates of future product supply, demand and consumption; statements regarding future product prices; and statements regarding the expectation of future Mineral Resources and Ore Reserves.

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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 OF Reserve and Mineral Resource the australian 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 21 February 2019 in 2018 Annual Report, on 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.

### 1. MINERAL SANDS GENERAL INFORMATION

### A. GRADE, ASSEMBLAGE AND REVENUE : CASH COST RATIO

Mineral sands deposits typically contain both titanium dioxide mineral and zircon. Heavy mineral (HM) grade refers to the proportion of the ore body which contains heavy minerals (both valuable and trash components). HM grade typically provides an indication of the cost of mining or the amount of ore required to be mined to extract the valuable component. Assemblage refers to the relative composition of the heavy or valuable heavy mineral components, and includes, typically, ilmenite, rutile and zircon in varying proportions.

Assemblage has an influence on the financial characteristics of mineral sands deposits. Each product stream has different, and often highly varied, price structures that influence revenues. In the case of titanium dioxide products, their value generally reflects the titanium dioxide (TiO<sub>2</sub>) content (expressed as a per cent) which, in turn, affects the relative value in use of each product in downstream applications. Zircon has typically had a price structure at, or above, high grade titanium dioxide products. As such, it can be an important co-product stream in some mineral sands deposits. For more detail on mineral sands prices, refer to section 3 of this document.

Project economics can be influenced as much by assemblage or revenue per tonne attributes as by the cash cost of production. Consequently, the industry typically utilises revenue to cash cost ratios or unit margin metrics to compare deposits. Key factors influencing unit costs are the grade of valuable mineral, scale and mining method, and associated costs. Unit revenue is determined by assemblage and respective product pricing.

Industry participants, when considering 'cost curves', typically use a cost curve based on the principal product, say ilmenite, or in the case of a zircon-rich deposit like Iluka's Jacinth-Ambrosia deposit in South Australia, zircon. As such a deposit can be considered in terms of various cost curves, and in some cases with the cost attributed to the principal product able to be netted off by 'co-product' credits, whether zircon, or in the case of upgraded slagging operations, pig iron credits.

### Zircon

Zircon usually occurs in lower quantities in minerals sands assemblages than titanium dioxide. The historical average ratio of zircon to titanium dioxide has been 1:4 to 1:5. Iluka's Jacinth-Ambrosia operation, as indicated, is an industry exception with zircon accounting for approximately 50 per cent of the assemblage of valuable heavy mineral, approximately 10 times the industry average.

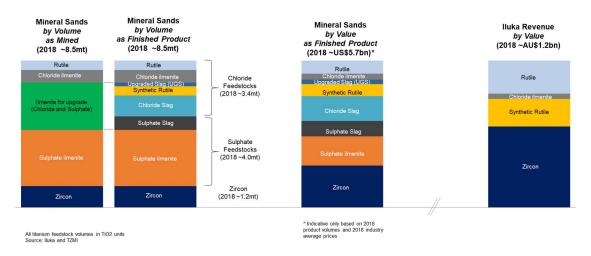
### Titanium dioxide feedstocks

Titanium dioxide feedstocks are graded by their titanium dioxide content, which ranges from approximately 45 per cent for sulphate ilmenite to approximately 95 per cent for natural rutile. Feedstocks are sold as raw minerals (rutile and chloride or sulphate ilmenite) or upgraded feedstocks.

Form of Titanium Dioxide		anium Dioxide	Titanium Dioxide Content (%)		
Rutile			95-97		
Synthetic rutile		tile	88-95		
Ilmeni	te				
	-	sulphate	52-54		
	-	chloride	58-62		
Slag					
	-	sulphate	80-85		
	-	chloride	85-90		
	-	upgraded	95		

### **B. FINAL PRODUCT STREAMS AND END MARKETS**

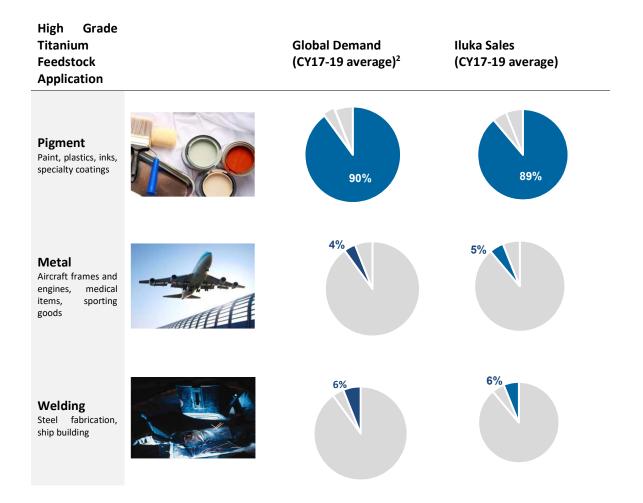
The mineral sands industry final product streams and Iluka revenue base are shown in the figure below.



Iluka produces zircon and high grade titanium feedstocks (rutile, synthetic rutile and chloride ilmenite).

The global end markets for zircon and titanium dioxide and Iluka's sales over 2017-19 are shown below:

Zircon Application		Global Demand (CY17-19 average) <sup>1</sup>	Iluka Sales (CY17-19 average)
<b>Ceramics</b> Tiles, sanitary ware, table wear		50%	61%
Chemicals, & Specialty Uses Electronics, catalytic converters, fibre optics, nuclear fuel rods	Provinse (B) Provinse (B) Pr	22%	33%
Refractory and Foundry Investment casting, glass, steel and cement industries		28%	6%



### C. INDUSTRY MINING METHODS AND UPGRADING PROCESSES

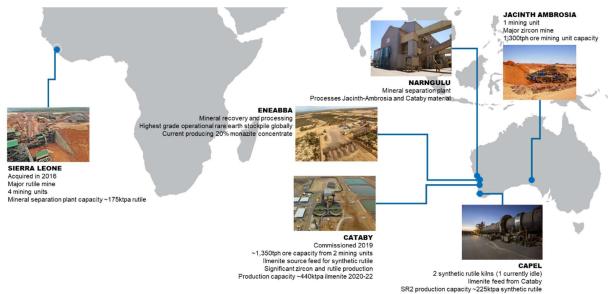
Mineral sands mining involves both dry and wet (dredge) mining operations. All of Iluka's mining operations are dry mining, typically involving the extraction of heavy mineral ore from relatively shallow, unconsolidated and free flowing deposits. Dredge mining is more suited to large, dunal deposits.

Upgrading involves chloride or sulphate ilmenite being heated in a kiln or furnace to remove impurities (mostly iron) and increase the titanium dioxide content. Upgraded feedstocks are synthetic rutile, chloride and sulphate slag and upgraded slag.

In terms of upgraded products, Iluka produces synthetic rutile. Iluka upgrades ilmenite (58 to 62 per cent titanium dioxide) to synthetic rutile (with a composition of 88 to 95 per cent titanium dioxide). This process uses approximately 1.7 tonnes of ilmenite to produce 1 tonne of synthetic rutile (depending on grade). Upgraded products of chloride and sulphate slag are produced by other companies.

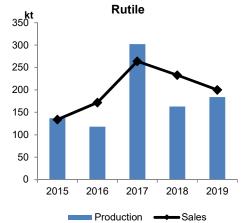
<sup>&</sup>lt;sup>2</sup> Global demand for titanium feedstocks. Source: TZMI.

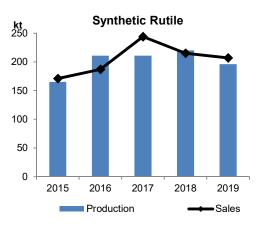
# 2. ILUKA OPERATIONS



### A. ILUKA PRODUCTION AND SALES







Iluka has integrated mining and processing operations that allow the company's production of its main products to vary according to demand and for appropriate building and subsequent drawdown of inventory levels over the market cycle.

Iluka's production flex capability is associated with a focus on seeking to preserve positive and profitable margins. As such, management of operations is structured in a manner to balance unit cash cost, inventory management and rapid reactivation capacity.

### **B. OPERATIONAL DETAILS**

	Jacinth-Ambrosia, Eucla Basin	Cataby, Western Australia	Sierra Rutile, Sierra Leone	Eneabba, Western Australia
Mine	<ul> <li>Zircon-rich deposit</li> <li>Dry mining</li> <li>150m x 100m ore blocks</li> <li>Ore at 15-40 metres thick</li> <li>Ore pushed by dozers into mobile mining unit plant dozer trap</li> <li>Primary geological grade maintained via blending 'slices' at various grades across ore block</li> <li>Mining unit capacity ~1,300tph, oversize removed</li> <li>Ore slurry pumped to wet concentrator plant</li> </ul>	<ul> <li>Chloride ilmenite suitable as feed for synthetic rutile kiln/s</li> <li>Dry mining</li> <li>Two in-pit mining units</li> </ul>	<ul> <li>Two mining operations</li> <li>Lanti dry mine, 1,000- 1,200 tph ore</li> <li>Gangama dry mine, 1,000-1,200 tph ore</li> </ul>	<ul> <li>Extraction, processing and marketing of a monazite-zircon concentrate from a stockpile</li> <li>Recovery and screening</li> </ul>
Logistics	<ul> <li>Accommodation village - 180 persons</li> <li>Sealed airstrip</li> <li>Water from borefield to site 32 km</li> <li>Off-grid diesel power station (6.8 MW)</li> </ul>	<ul> <li>Mains power</li> <li>Workforce based locally</li> </ul>	<ul> <li>28MW generator capacity (heavy fuel oil)</li> <li>Three on site camps</li> </ul>	<ul> <li>Existing mains power and infrastructure</li> </ul>
Wet concentrator plant (WCP)	<ul> <li>Wet concentrator capacity ~1,000tph</li> </ul>	<ul> <li>Wet concentrator capacity ~1,100tph</li> <li>Wet high intensity magnetic separation (WHIMS) plant on site to separate magnetic and non-magnetic material</li> </ul>	Two concentrators with each mine	n/a
Heavy Mineral Concentrate (HMC) transport	<ul> <li>HMC transported 270km by road to Port of Thevenard</li> <li>Triple road trains – 96t capacity</li> <li>40kt storage bunker at Port of Thevenard</li> <li>Charter shuttle vessels to Geraldton for Narngulu separation plant (WA) and Portland for Hamilton separation plant (Vic):</li> <li>payload of 20kt – 30kt</li> <li>approximately two week round trips</li> </ul>	<ul> <li>Magnetic material (ilmenite) trucked to Capel for conversion to synthetic rutile</li> <li>Non-magnetic material (zircon and rutile) trucked to Geraldton for processing to final product at Narngulu mineral separation plant.</li> </ul>	Heavy mineral concentrate trucked to on-site mineral separation plant	Transported to Geraldton for shipment in Rotaboxes
Mineral Separation Plant	<ul> <li>Final product processing at Namgulu mineral separation plant, Geraldton</li> </ul>	<ul> <li>Non-magnetic material (zircon and rutile) processed at Narngulu mineral separation plant, Geraldton.</li> </ul>	<ul> <li>Capacity of ~175ktpa rutile</li> </ul>	n/a
Synthetic Rutile Kiln	• n/a	<ul> <li>Cataby ilmenite to supply feedstock to kiln SR2 (capacity ~220ktpa synthetic rutile)</li> <li>Currently idle kiln SR1 (capacity ~120ktpa synthetic rutile)</li> </ul>	• n/a	• n/a

### C. PROJECTS

Project status updates available in the company's latest Quarterly Review, available at www.iluka.com.

### **D. RECOVERIES**

As a guide, recoveries of final product at the Hamilton and Narngulu mineral separation plants are:

- rutile ~86-93%;
- zircon ~85-94%; and
- ilmenite 90-95%.

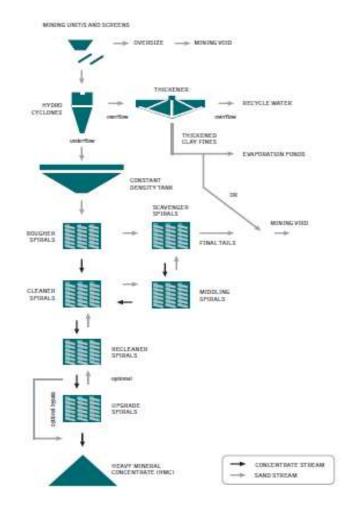
Recoveries are a function of the heavy mineral concentrate source feed and product stream characteristics and properties.

### E. OPERATING MINES PHYSICAL DATA

Operating mines physical data is available in the latest Quarterly Review, available at www.iluka.com.

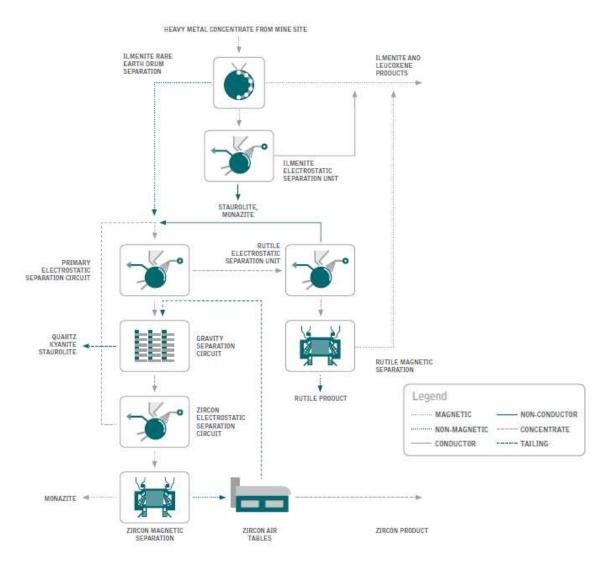
### F. PROCESS FLOW DIAGRAMS

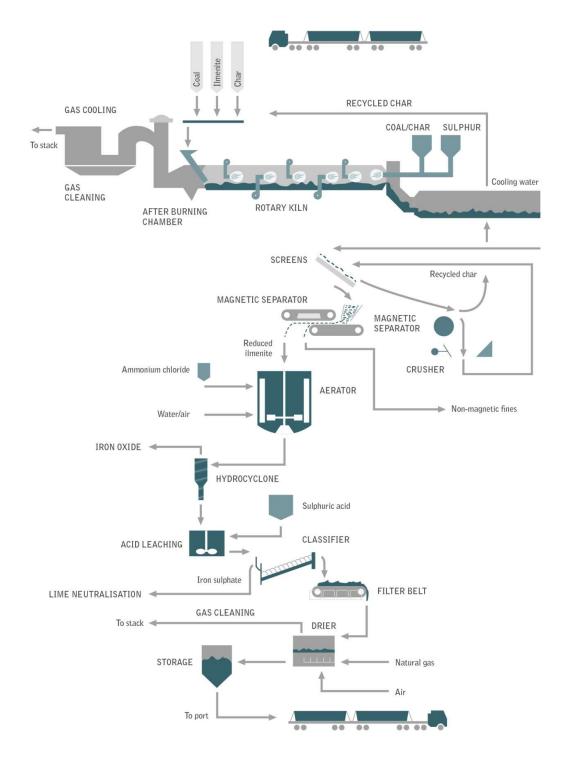
i.Wet Concentrator Plant



This represents a typical wet concentrator plant.

### ii.Mineral Separation Plant





### G. WORKED PHYSICAL EXAMPLE

The following is an illustrative example of mining through to final products. The figures are provided to show the calculations involved. The values do not reflect any of Iluka's operations.

(		Overburden			ait Cal	culation	
		Overburden (million Bank 0	Cubic Metres, r	PCM		culation	
		Specific gravity ratio (tonne		2		put A put B	
	Overburden	Overburden (mt)				A*B	
		Strip Ratio (BCM/Ore t)				A'B A/G	
	Overburden removed to access ore						
		0			1	0.1.1.4	
		Ore consists of: Slimes / Clay	% of I otal	Calculation	mt	Calculation	ר
(		Oversize (large rocks)	15%	Input C	1.5	C*G=H	Waste
	Ore	Trash / Quartz	5%	Input D	0.5	D*G=I	THUSIC .
-		Heavy Mineral (HM) grade	70% 10%	Input E	7.0	E*G=J F*G=K	Valuable and non-valuab
		Total Ore	10%	Input F	1.0 10.0	Input G	
			100 /4		10.0	input O	
		HM Assemblage	6 of Total HM	Calculation	mt	Calculatio	n
imes		Zircon	10%	Input L	0.10	L*K	1
id ersize	On fulling Mining 11-1 Dime	Rutile	5%	Input M	0.05	M*K	<ul> <li>Valuable HM</li> </ul>
010128	Ore fed into Mining Unit Plant	Ilmenite	65%	Input N	0.65	N*K	J
		Non-Valuable HM	20%	1-(L+M+N)=	0.20	0*K	
		Total HM	100%	L+M+N+O	1.00	К	
/		RHF consists of:	% of Total	Calculatio	n mt	Calculat	ion
(	Rougher Head Feed (RHF)	HM	13%	F/P=Q	1.0		
	Feed (RHF)	Trash / Quartz	88%	E/P=R	7.0		
		Total RHF	100%	Q+R	8.0	K+J=P	
artz d		Wet Concentrator Plant	WCP recover	v Calculatio	n mt	Calculati	ion
ash	RHF fed into Wet Concentrator Plant	HM recovery	95%	Input S	0.9		
		Quartz recovery Total HMC	2%	Input T	0.14		
		Total HMC			1.0	0+v=v	
		HMC consists of:	% of Total	Calculation	on m	t Calculat	tion
(	Heavy Mineral Concentrate (HMC)	НМ	87%	U/W=X	0.9	5 U	
1	concentrate (HMC)	Trash / Quartz	13%	V/W=Y	0.1		
		Total HMC			1.0	9 W	
		HMC consists of:	% of Total	Calculatio	n mt	Calculati	on
		Zircon	8.7%	X*L	0.1	) X*L*W=	Z
		Rutile	4.4%	X*M	0.0	X*M*W=A	A
		Ilmenite	56.7%	X*N	0.6	2 X*N*W=A	B
uartz,		Non-Valauble HM	17.4%	X*O	0.1	X*O*W	
a sh	HMC fed into Mineral Separation Plant	Total HM	87%		0.9	5	
		Trash / Quartz	13%	Y	0.1	Y*W	
		Total HMC	100%		1.0	w	
			% recovered				
		Mineral Separation Plant recoveries	% recovered from HMC to final product	Calculation	% necove		ion
							1
	Zircon	% of Zircon to Zircon	90%	Input AC	10%		Product not recove
		% of Rutile to Rutile	85%	Input AD	15%		becomes VHM tails
		% of Ilmenite to Ilmenite	95%	Input AE	5%	1-AE	L
	Rutile		% of Total	Calcula			alculation
		Zircon	8%	AF/W/1	000	86 Z*A	C*1000=AF
		Rutile	4%	AG/W/	000	40 AA*.	AD*1000=AG
	Ilmenite	Ilmenite	54%	AH/W/	000	587 AB*	AE*1000=AH
		Final Products	65%			713 A	F+AG+AH W-
		Tails	35%	AI/W/1	000	378 (AF	+AG+AH)=AI

### H. OPERATING COST BREAKDOWNS

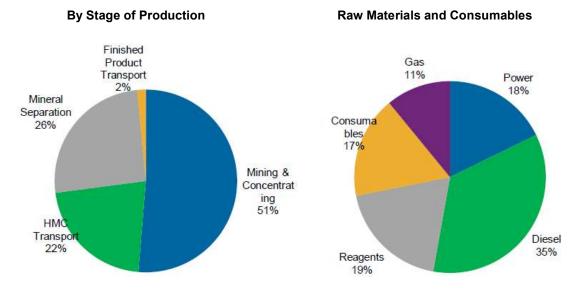
Indicative cost breakdowns are shown below for various years. These are typically provided as information during site visits or investor days. Total costs and the weighting of each cost segment will vary each year based on operational settings.

The 2019 total cash costs of production were:

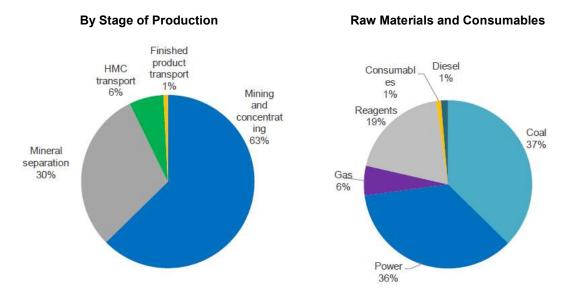
- Jacinth-Ambrosia \$162 million
- Cataby-South West \$198 million
- Sierra Rutile A\$173 million

Further details can be found in the Annual Report.

### JACINTH-AMBROSIA AND NARNGULU PRODUCTION CASH COSTS, as at 2018

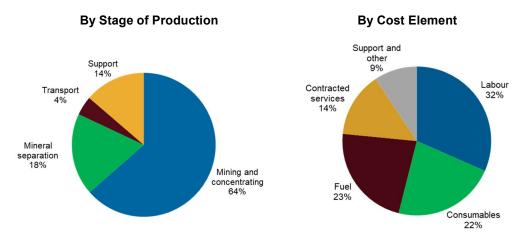


Note: Iluka announced changes to production settings at Jacinth-Ambrosia and Narngulu in 2020. These will reduce the proportion of costs associated with HMC transport and Mineral Separation.



### CATABY AND SOUTH WEST PRODUCTION CASH COSTS, based on 2020 forecast

### SIE RRA RUTILE PRODUCTION CASH COSTS, as at 2017



### **3. SALES AND PRICING**

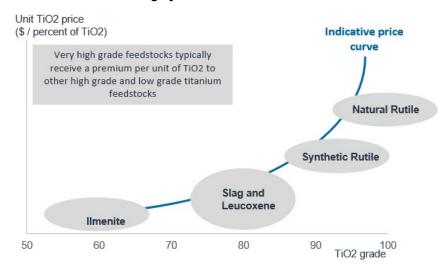
### A. MINERAL SANDS PRICE SETTING

Mineral sands products were traditionally sold on the basis of long term contracts, often referred to as legacy contracts This historical contractual setting resulted in an extended period of relative price stability and only modest price growth.

Constrained pricing in the context of declining grade and/or assemblage, increasing costs and adverse currency movements, were major contributors to the historically poor returns in the titanium feedstock industry. Low returns acted as a disincentive for new investment, with the industry still largely reliant on mining provinces which have been in existence for many years. Iluka was the first of the major titanium dioxide producers to come off so-called "legacy contracts" at the end of 2010 and consequently had the opportunity, under the prevailing market conditions, to increase its rutile and synthetic rutile prices. The remaining use of legacy contracts by other industry participants reportedly ended at the end of 2014.

Most high grade titanium feedstocks are sold to major pigment or titanium metal customers on contractual periods of varying periods, typically 6-12 months. Volumes to the welding and titanium metal sectors are usually sold on a shorter basis, usually monthly to quarterly contracts. Titanium product prices are based on value in use, with price increasing by titanium grade, see chart below.

#### **Titanium Feedstock Pricing by Titanium Grade**



Mineral sands products are not exchanged traded. As such, there are no readily sourced representative traded prices for mineral sands products. In Iluka's case the vast majority of its sales are direct; the company does not make use of distributors or agents to any significant extent.

### **B. HISTORICAL MINERAL SANDS PRICES**

Five year historical prices for selected mineral sands products below. For latest prices, refer to the latest Quarterly Review or results presentation at www.iluka.com.

	2015	2016	2017	2018	2019
Zircon (premium and standard)	986	810	958	1,351	1,487
Zircon (all products)	961	773	940	1,321	1,380
Rutile	721	716	790	952	1,142
Synthetic rutile	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Not disclosed

Source: Iluka

### C. ILUKA REVENUE BY REGION

### Mineral Sands Revenue by region (% of total)

	2019
China	34%
Americas	11%
Europe	33%
Asia and Middle East	18%
Australia	3%

## 4. FINANCIAL STATEMENTS, GUIDANCE AND NOTES

lluka reports its financial statements on a calendar year basis. All figures are in Australian dollars unless otherwise stated.

The company issues quarterly production reports which disclose production and sales revenue in March and September and, in addition to this information, sales volumes and cash costs of production in June and December.

### A. FINANCIAL STATEMENT EXPLANATORY NOTES

#### Revenue

The majority of Iluka's sales are denominated in US dollars and converted to Australian dollars.

#### Cash costs of production

Includes the following main components:

- mining and concentrating costs;
- transport of heavy mineral concentrate;
- mineral separation;
- synthetic rutile production and costs for externally purchased ilmenite;
- production overheads; and
- landowner royalty payments, but not Australian State Government royalties.

The respective weighting of each of these components varies by region and by factors including grade, mining rate, throughput, processing location and other factors.

Earnings reflect the difference between revenue and cost of goods sold, rather than the cash costs of production and depreciation incurred in a period.

Cost of goods sold is the inventory value (cash and non-cash costs) of each tonne of finished product sold. All production is added to inventory at cost with separate inventory stockpile values for each product (including heavy mineral concentrate (HMC) at mine sites) and location. The inventory value used for each tonne of finished product sold is the weighted average value per tonne for the stockpile from which the product is sold.

Inventories are valued at the lower of weighted average cost and estimated net realisable value. Weighted average cost includes direct costs and an appropriate portion of fixed and variable overhead expenditure, including depreciation and amortisation. Net realisable value is the amount estimated to be obtained from sale in the normal course of business, less any anticipated costs of completion and the estimated costs necessary to make the sale.

lluka typically provides guidance on cash and non-cash costs of production, as well as finished goods production volumes, which in periods of low and stable inventory levels will be a proxy for cost of goods sold

Inventories expected to be sold within twelve months after the balance sheet date are classified as current assets, all other inventories are classified as non-current assets.

#### Restructure and idle capacity charges

Restructure costs/plant idling costs are associated with changes in asset configuration and costs during the year, including those associated with assets previously idled.

#### Rehabilitation and holding costs for closed sites

The company has obligations to dismantle, remove, restore and rehabilitate certain items of property, plant and equipment.

The cost of an asset includes the present value of the estimated costs of dismantling and removing the asset and restoring the site on which it is located.

A provision is raised for the present value of the estimated cost of settling the rehabilitation and restoration obligations existing at balance date. Those costs that relate to rehabilitation and restoration obligations arising from the production process are recognised in cash costs of production.

As the value of the provision represents the discounted value of the present obligation to restore, dismantle and rehabilitate, the increase in the provision due to the passage of time is recognised as a finance cost.

The provisions are reassessed at least annually. A change in any of the assumptions used to determine the provisions could have a material impact on the carrying value of the provision. In the case of provisions for assets which remain in use, adjustment to the carrying value of the provision are offset by a change in the carrying value of the related asset. Where the provisions are for assets no longer in use, any adjustment is reflected directly in profit or loss.

#### **Government royalties**

This includes royalties paid to Australian State Governments. Royalties are levied as per cent of revenues generated from the sale of mineral sands products, and in the case of South Australia, with Jacinth-Ambrosia HMC (which is not processed in South Australia), by a determination arrived at with the South Australian Government.

The royalty rates for Western Australia and Victoria (Murray Basin operations) are 5.0 per cent and 2.75 per cent, respectively. However, revenues derived from synthetic rutile production are not subject to Western Australian State Government royalty as this is classed as a value adding beneficiation process.

#### Marketing and selling costs

This includes marketing overhead costs associated with Iluka's global marketing operations, as well as port costs.

#### **Resource Development**

Exploration and evaluation expenditure is accumulated separately for each area of interest. Such expenditure comprises net direct costs and an appropriate portion of related overhead expenditure. Each area of interest is limited to a size related to a known mineral resource, capable of supporting a mining operation.

Expenditure is carried forward (capitalised) when incurred in areas for which the group has rights of tenure and where economic mineralisation is indicated, but where activities have not yet reached a stage which permits a reasonable assessment of the existence or otherwise of economically recoverable ore reserves and active and significant operations in relation to the area are continuing. Each such project is regularly reviewed. If the project is abandoned or if it is considered unlikely the project will proceed to development, accumulated costs to that point are written off immediately.

While the level of exploration expenditure expensed and capitalised varies, typically about two thirds is expensed.

This category also includes product and technical and major development costs, which includes expenditure associated with new product development and trials as well as other mineral sands related research and development costs. These costs, as opposed to those directly related to new project expenditure (including feasibility studies) are typically expensed.

#### Depreciation and Amortisation

Depreciation and amortisation of mine buildings and mine specific machinery and equipment is provided for over the life of the relevant mine or asset, whichever is the shorter. Mine specific machinery and equipment refers to machinery and equipment for which the economic useful life cannot extend beyond the life of its host mine.

Depreciation and amortisation of mine buildings and other non-mine specific plant and equipment and reserves and development is determined on a straight-line basis as the consumption of economic benefits is not expected to vary over the operational life of the asset. Depreciation of mine specific plant and reserves and development is determined on a unit of production basis to more appropriately match depreciation with expected pattern of consumption of economic benefit of the asset.

The basis of depreciation of each asset is reviewed annually and changes to the basis of depreciation are made if the straight line or units of production basis is no longer considered to represent the expected pattern of consumption of economic benefits. The expected useful lives are typically as follows:

- Mine buildings the shorter of applicable mine life and 25 years
- Mine specific machinery and equipment the applicable mine life
- Mine specific plan units of production
- Reserves and development units of production
- Other non-mine specific plant and equipment 3 to 25 years

#### Corporate and other costs

This includes all non-operating costs not separately disclosed, including finance department, payroll, IT and other office services and Managing Director's office.

#### Income tax

The majority of Iluka's revenue is Australian based with a prevailing corporate tax of 30%.

Iluka is in a fully tax paying position and as such generating franking credits.

### **B. INVENTORY AND COST OF GOODS SOLD**

Earnings reflect the difference between revenue and cost of goods sold, rather than the cash costs of production and depreciation incurred in a period.

Cost of goods sold is the inventory value (cash and non-cash costs) of each tonne of finished product sold. All production is added to inventory at cost with separate inventory stockpile values for each product (including heavy mineral concentrate (HMC) at mine sites) and location. The inventory value used for each tonne of finished product sold is the weighted average value per tonne for the stockpile from which the product is sold.

Inventories are valued at the lower of weighted average cost and estimated net realisable value. Weighted average cost includes direct costs and an appropriate portion of fixed and variable overhead expenditure, including depreciation and amortisation. Net realisable value is the amount estimated to be obtained from sale in the normal course of business, less any anticipated costs of completion and the estimated costs necessary to make the sale.

lluka typically provides guidance on cash and non-cash costs of production, as well as finished goods production volumes, which in periods of low and stable inventory levels will be a proxy for cost of goods sold.

Inventories expected to be sold within twelve months after the balance sheet date are classified as current assets, all other inventories are classified as non-current assets.

### Cost of goods sold 2019

	2018	2019
	\$m	\$m
Cash costs of production	444	529
Depreciation and amortisation	84	156
Inventory movement (cash cost of production)	69	(63)
Inventory movement (non-cash cost of production)	28	(16)
Cost of goods sold	625	605

### C. DEBT, GEARING AND LOAN FACILITIES

lluka targets credit metrics broadly consistent with investment grade credit profile, whilst balancing the impacts of commodity pricing and investment factors through the cycle.

Refer to latest company results for updated facilities and debt position.

### D. EXCHANGE RATE IMPACTS AND EXPOSURE

The majority of Iluka's sales are in US dollars. Australian operating costs are in Australian dollars and the majority of Sierra Leone operating costs are in US dollars.

For further information on foreign currency, refer to the latest Annual Report.

### E. OUTLOOK

lluka typically discloses annual guidance of key physical and financial parameters for the forthcoming year, along with associated contextual comments. This guidance (reproduced in Appendix D) includes: production of zircon, rutile and synthetic rutile; cash costs of production (for zircon, rutile and synthetic rutile and also for ilmenite and by-products); other cash costs; and capital expenditure.

It is not Iluka's practice to provide sales guidance, although contextual comments may be included.

lluka also does not provide price forecasts nor responds to questioning on immediate prices. The company typically advises weighted average received prices for zircon and rutile in its quarterly, half and full year results (with the exception of first quarter). As synthetic rutile is sold under contracts which are commercial in confidence, the weighted average price received is not disclosed.

### 5. RESOURCES AND RESERVES

For latest Mineral Resources and Ore Reserve statement, refer to latest Annual Report document.

### A. MINERAL RESOURCES AND ORE RESERVES

Mineral resources are sub-divided, in order of increasing geological confidence in the estimate based on available data, into Inferred, Indicated and Measured categories.

Iluka's Mineral Resources, as reported, are inclusive of Ore Reserves.

Inferred Mineral Resource is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. There is insufficient data or exploration to confirm geological and grade continuity

Indicated Mineral Resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. There is, hence, sufficient detail to support mine planning and evaluation of the economic potential of the viability of the deposit (i.e. would support a feasibility study).

Measured Mineral Resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. Any additional drilling/exploration would be highly unlikely to significantly change the economic value of the deposit

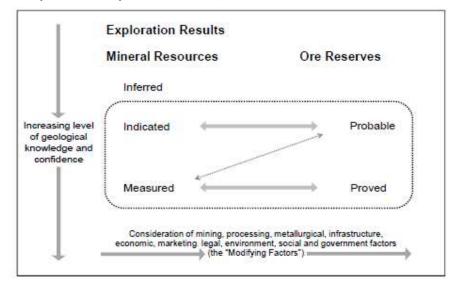
Ore Reserve is the economically mineable part of a Measured or Indicated Mineral Resource. It includes diluting materials and allowance for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and will include consideration of an modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.

A Probable Ore Reserve is the economically mineable part of an Indicated Mineral Resource, and in some circumstances, Measured Mineral Resource.

A Proved Ore Reserve is the economically mineable part of a Measured Mineral Resource.

The relationship is summarised in Table 1 of the JORC Code (below).

General relationship between exploration results, mineral resources and ore reserves



### **B. RESOURCE TO RESERVE CONVERSION**

Iluka typically converts Mineral Resources to Ore Reserves with the completion of definitive feasibility studies for potential projects and when sufficient confidence is achieved in relation to the technical and economic development of deposits.

Historically Iluka's conversion ratio from Resource to Reserve has varied between ~50 and 95 per cent averaging around 65 per cent. Reconciliation of reserve recovery (comparison of the actual HM recovered from the material mined compared to the estimate made before mining) is typically around 105 per cent in recent years but does vary from site to site.