



ILUKA

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1 April 2014

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Non-IFRS Financial Information

This presentation uses non-IFRS financial information including mineral sands EBITDA, mineral sands EBIT, Group EBITDA and Group EBIT which are used to measure both group and operational performance. A reconciliation of non-IFRS financial information to profit before tax is included in the supplementary slides. Non-IFRS measures have not been subject to audit or review.



“Shifting Sands”

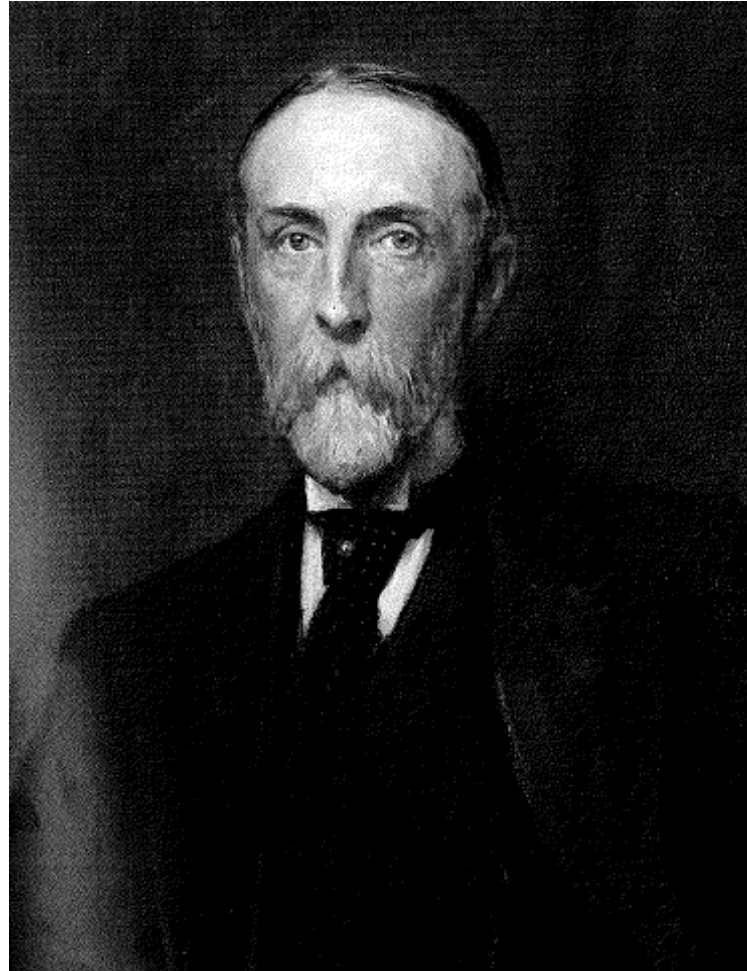
- A changing mineral sands landscape
- The role of technology – past, present and future
- Iluka’s response

South African Origins

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Cecil John Rhodes (1853 - 1902)



Charles Rudd (1844 -1916)

Australian Origins

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George Renison Bell (1890 - 1958)

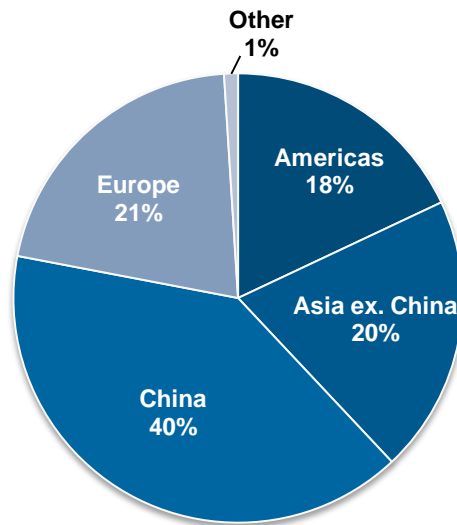


Company Overview

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- Largest producer of zircon in the world
- Significant high grade titanium dioxide producer (rutile and synthetic rutile)
- ~10 years reserve life; resources¹ ~ 5 times reserves
- Royalty from BHP Billiton's Mining Area C in WA
- Strong balance sheet, 11.8% gearing as at 31 December 2013

2013 Revenue by Region



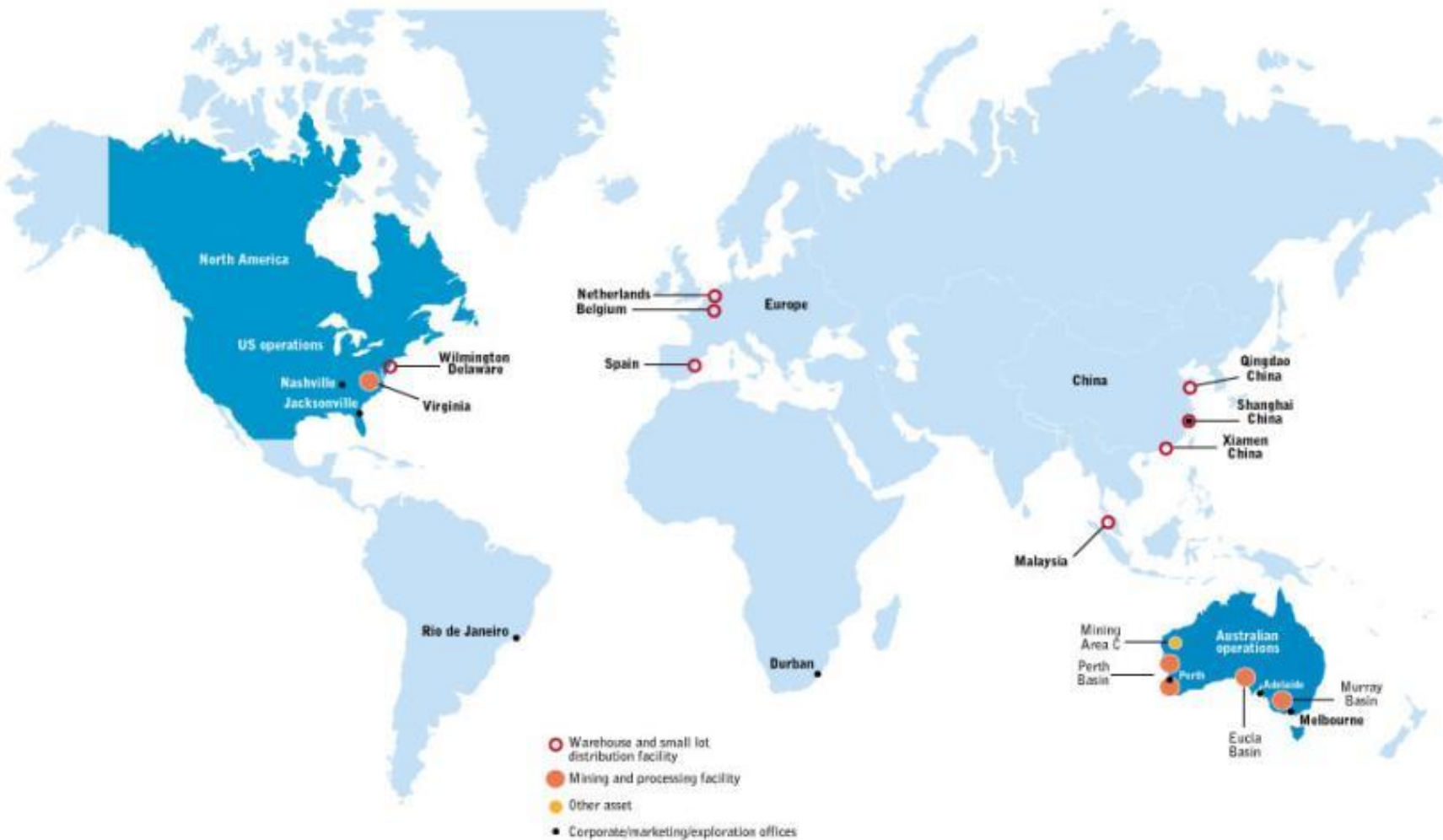
Note: Revenues include MAC royalty
(1) As of December 2013
(2) Reflects FY 2013 Revenue Distribution

Notes:
¹ Net of reserves

Iluka Operating and Marketing Locations



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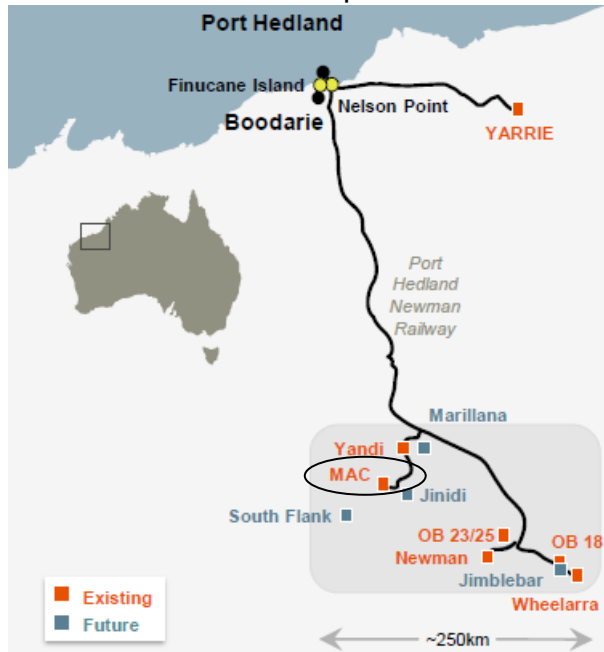


Mining Area C Iron Ore Royalty

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- MAC covers part of BHP Billiton's iron ore mining operations in WA's Pilbara region, operated by BHP (85%) under a JV with Itochu and Mitsui

BHP Pilbara Iron Ore Operations



Source: BHP Billiton (Mar 2013)

Note: all production volumes based on wet metric tonnes.

- In perpetuity royalty stream
 - 1.25% of FOB A\$ revenues
- One-off payments: \$1m per 1mdmt production increase
- FY13 production for MAC of 50.5mdmt
- BHP WA Iron Ore capacity +220mtpa by end FY15
 - can cost effectively grow towards 260-270mtpa
- Capacity growth to come from:
 - debottlenecking, mobile crushers (+20mtpa); and
 - low cost option to expand Jumblebar to 55mtpa
- MAC an important part of non-Jumblebar growth

Zircon Attributes and Applications

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Ceramics

Opacity (whiteness)
Water, chemical & abrasion resistant



Floor and wall tiles
Sanitary ware
Table ware

Refractory and Foundry

Heat resistant
Non-reactive



Steel & glass manufacturing
Precision metal casting

Zirconium Metal

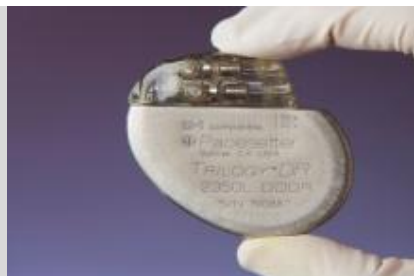
Low thermal neutron absorption
Corrosion resistant



Nuclear reactor cores & fuel rods
Heat exchangers

Zirconia & Zirconium Chemicals

Many unique properties



Electronics
Catalysts
Fibre optics
Catalytic converters

Titanium Dioxide Attributes and Applications

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Pigment

Opacity (whiteness)
UV resistant
Non-toxic and inert



Paints and coatings
Paper
Inks
Packaging

Titanium Metal

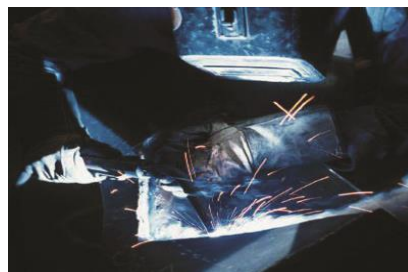
High strength to weight ratio
Corrosion resistant



Aircraft engines and frames
Defence armourments
Chemical & desalination plants
Medical applications
Sporting equipment

Welding Flux Agent

Corrosion resistant



Steel construction
Ship building

Nanomaterials

Many unique properties



Dye-sensitised solar cells
Water purification
Cancer treatments
Noise absorption

Robust Longer Term Demand Growth

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Urbanisation



**Consumption based
growth in developing
economies**



**Increasing array of
applications**

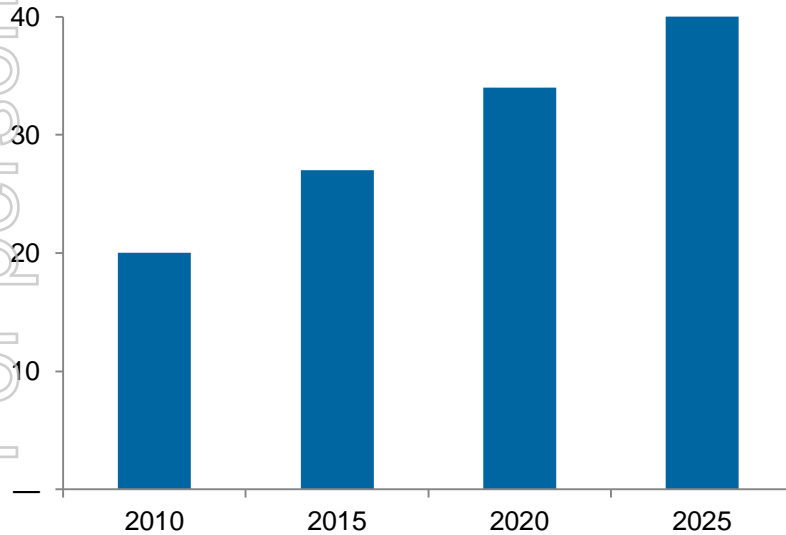


Urbanisation and Tiles

- Large urban population and floor space increases in developing countries
- Growth regions have preference for tiles as floor covering

China Urban Residential Floor Space

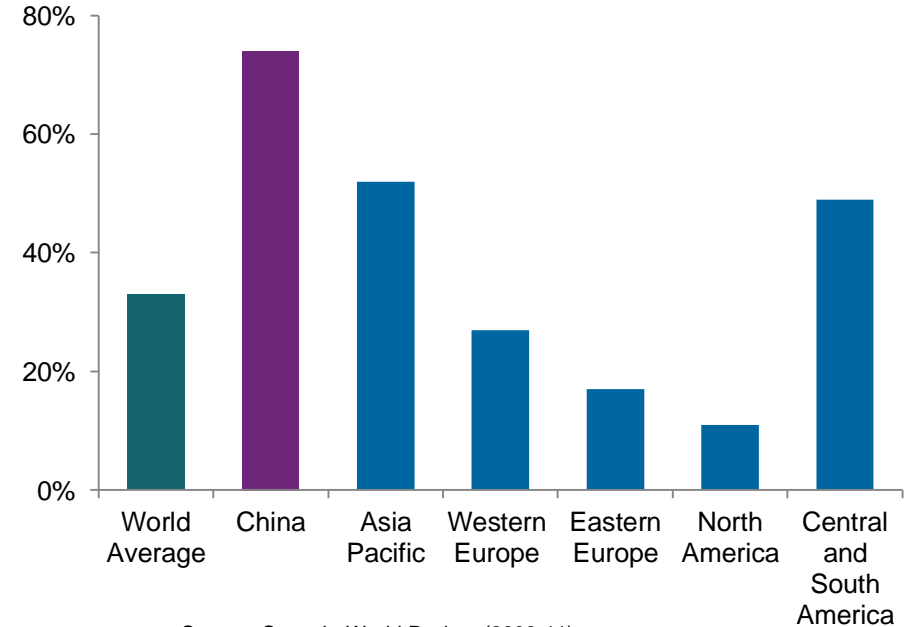
Billion sqm



Source: Global Insight (2011), BHP (2011), RBS (2012)

Tile Use as Floor Covering

% of all floor covering



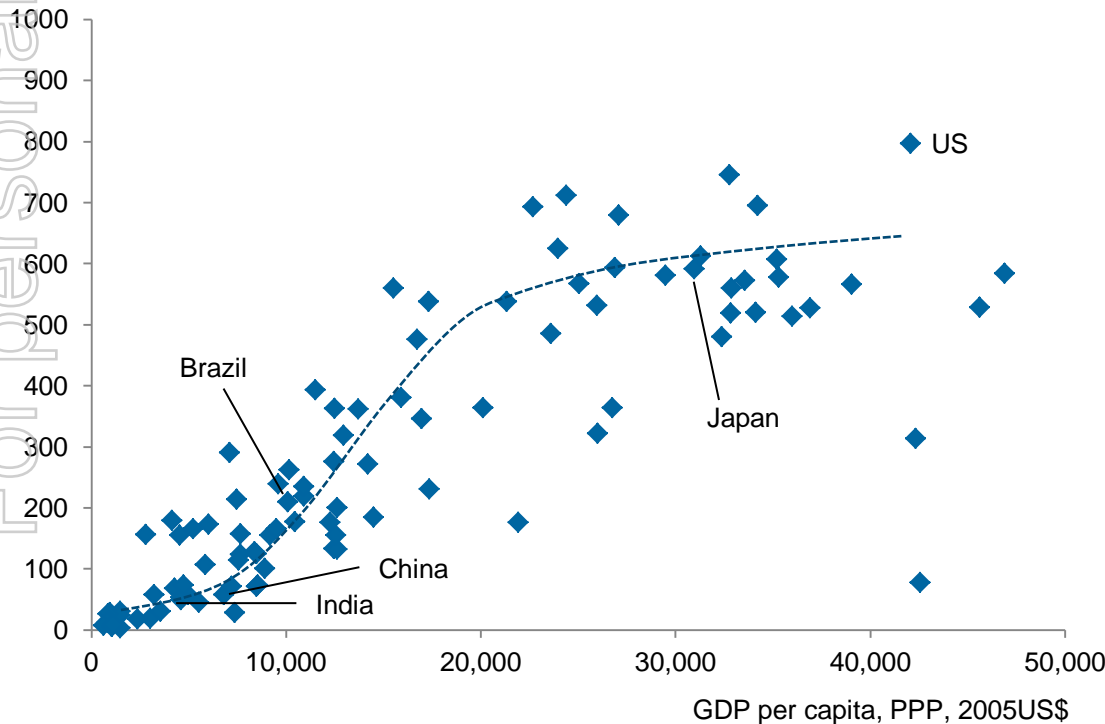
Source: Ceramic World Review (2000-11)

Consumption Based Growth

- Developing economies moving from investment to consumption based economic growth
- Rising incomes and living standards create S-curve demand trend

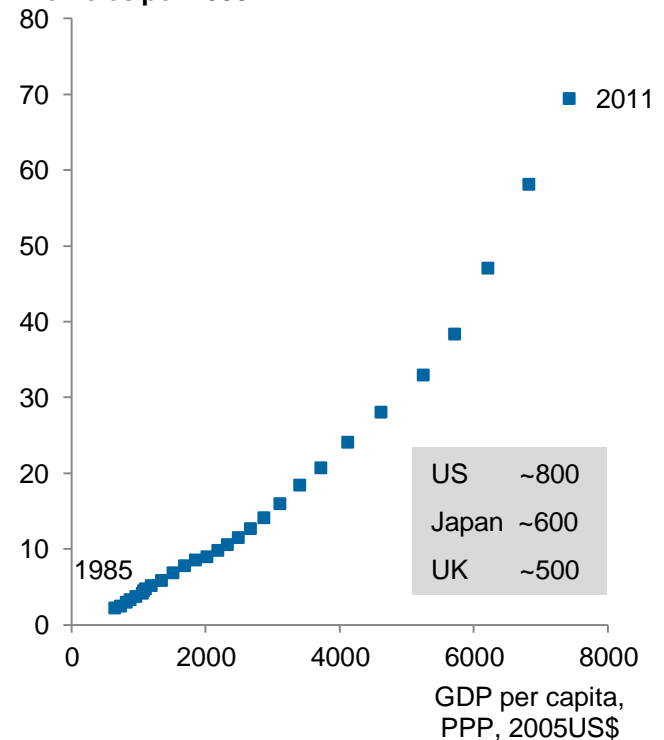
**Motor Vehicles Per Capita
2010/11**

Vehicles per
1000



**China Motor Vehicles Per Capita
1985-2011**

Vehicles per 1000

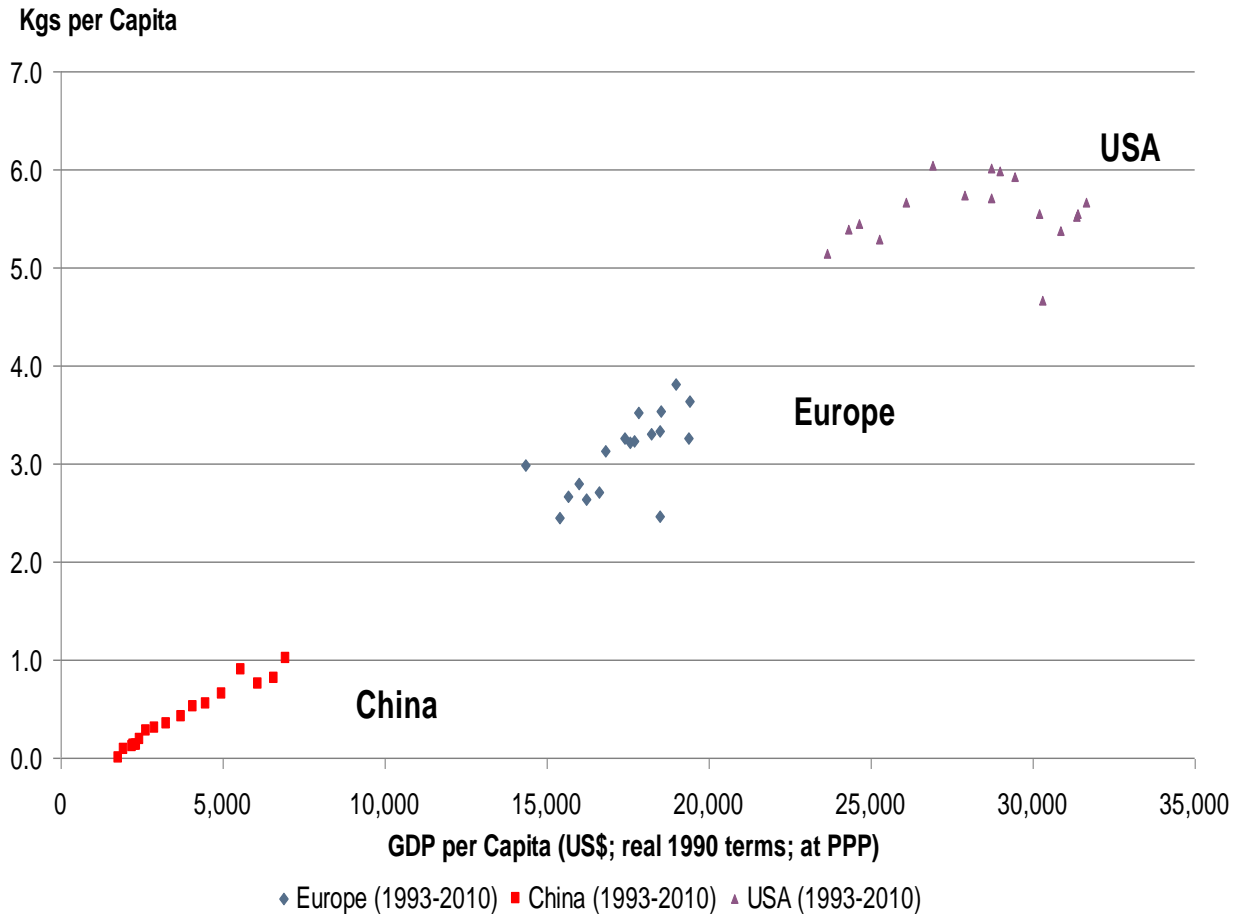




Pigment Demand Intensity

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TiO₂ Feedstocks: Intensity of Use



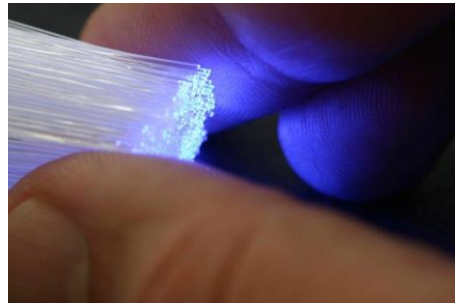
Increasing Array of Applications

Zircon Chemicals Applications

- Catalytic converters
- Nuclear fuel rods
- Oxygen and pressure sensors
- Fibre optics
- Electrical motherboards and capacitors

Titanium Metal Applications

- Desalination plants
- Offshore oil and gas components
- Power plant cooling systems
- Aerospace
- Nanotechnologies
- Defence armaments



A Changing Landscape

- Recent industry activity
 - Sichuan Lomon MOU with WTR (subsequently rescinded)
 - Huntsman/Rockwood
 - DuPont spinoff
 - Iluka re-acquisition of Puttalam resources in Sri Lanka
- Assets/operations/businesses for sale – all parts of value chain
- DuPont Altamira chloride pigment expansion ~200kt in 2015
- China advancement of chloride pigment capacity
 - Government policy settings encouraging move to chloride
 - multiple projects underway or foreshadowed
 - first chloride producers ramping up
- No “new news” on additional mineral sands ore supply
- No exploration

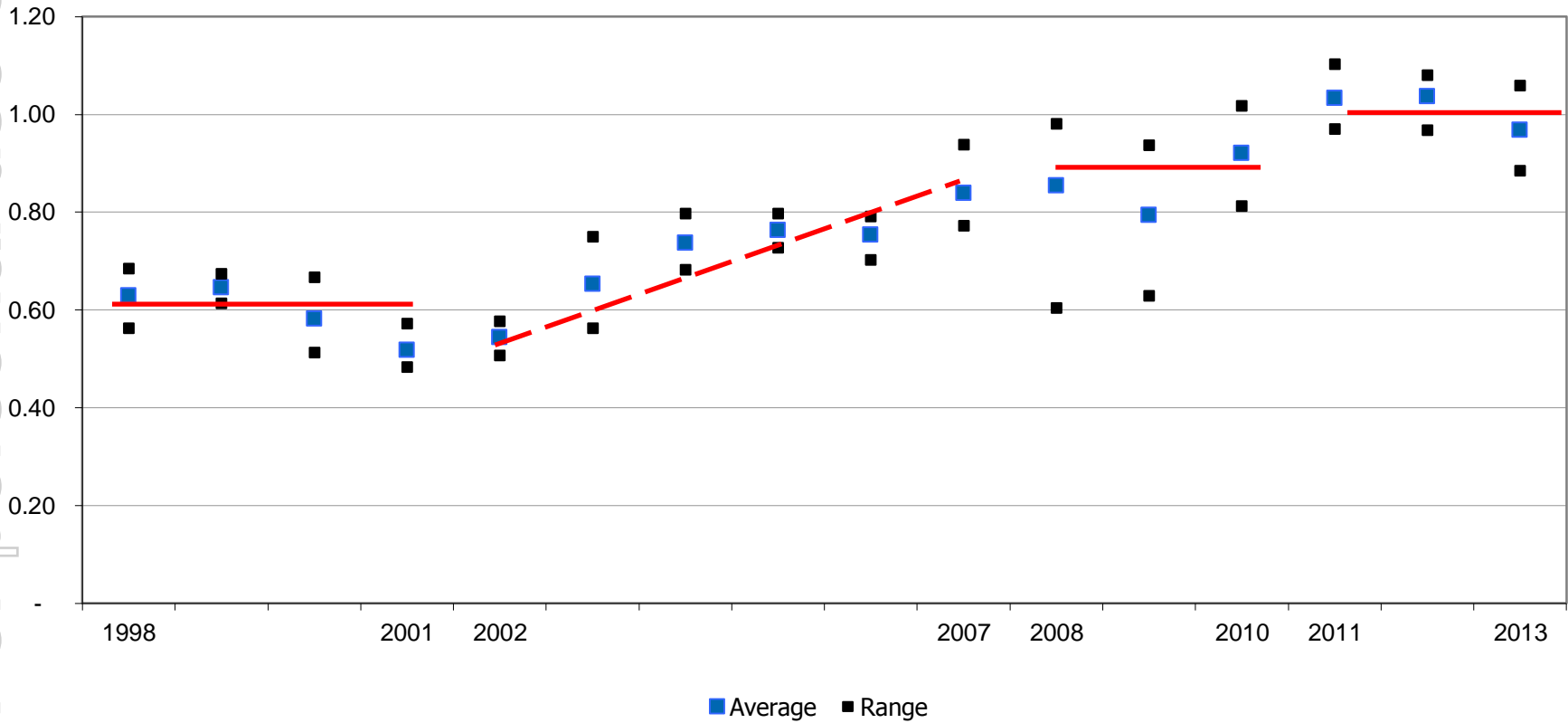
Exchange Rate Pressures

1998 to 2013



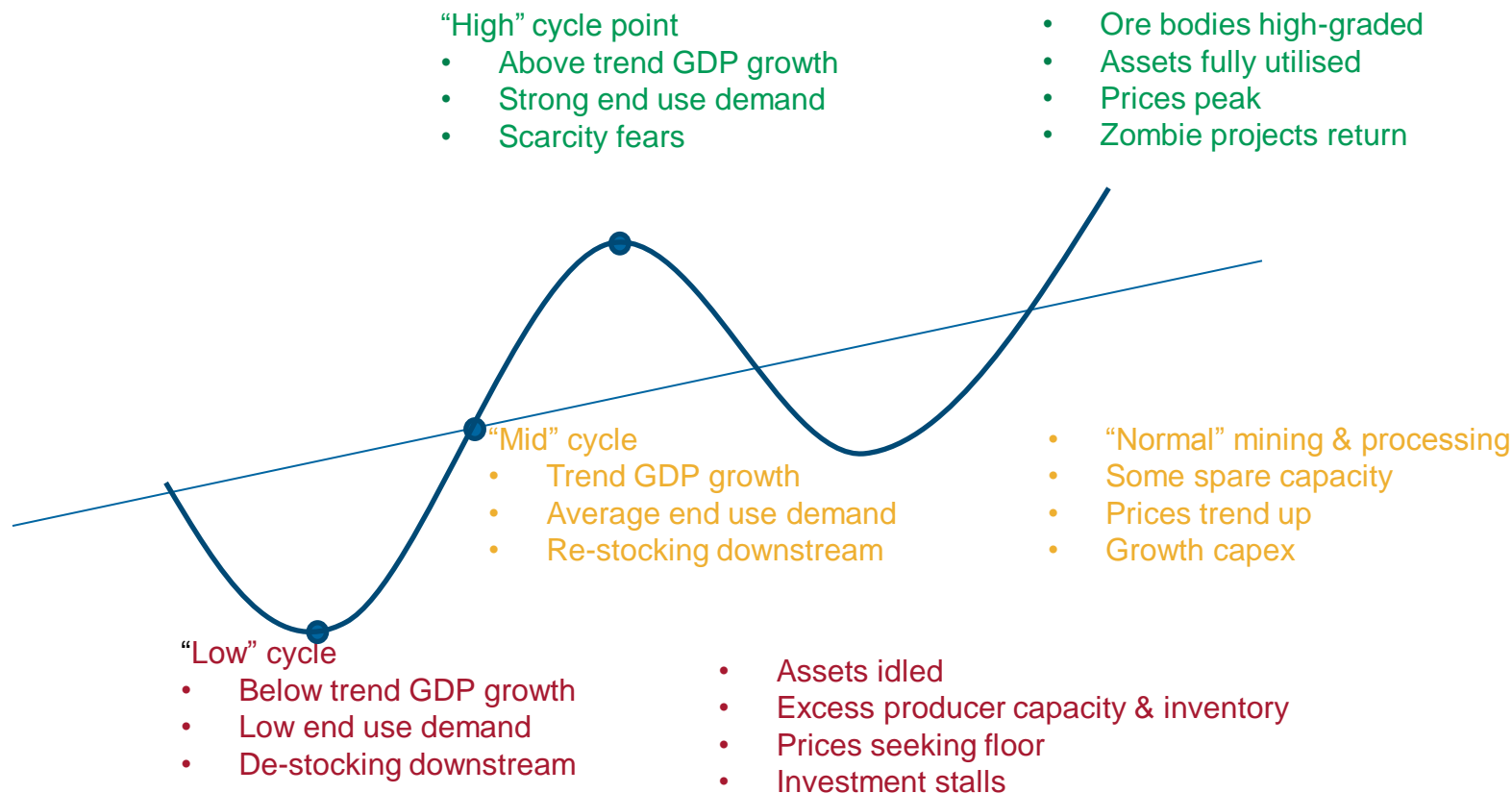
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A\$: US\$ FX Rate



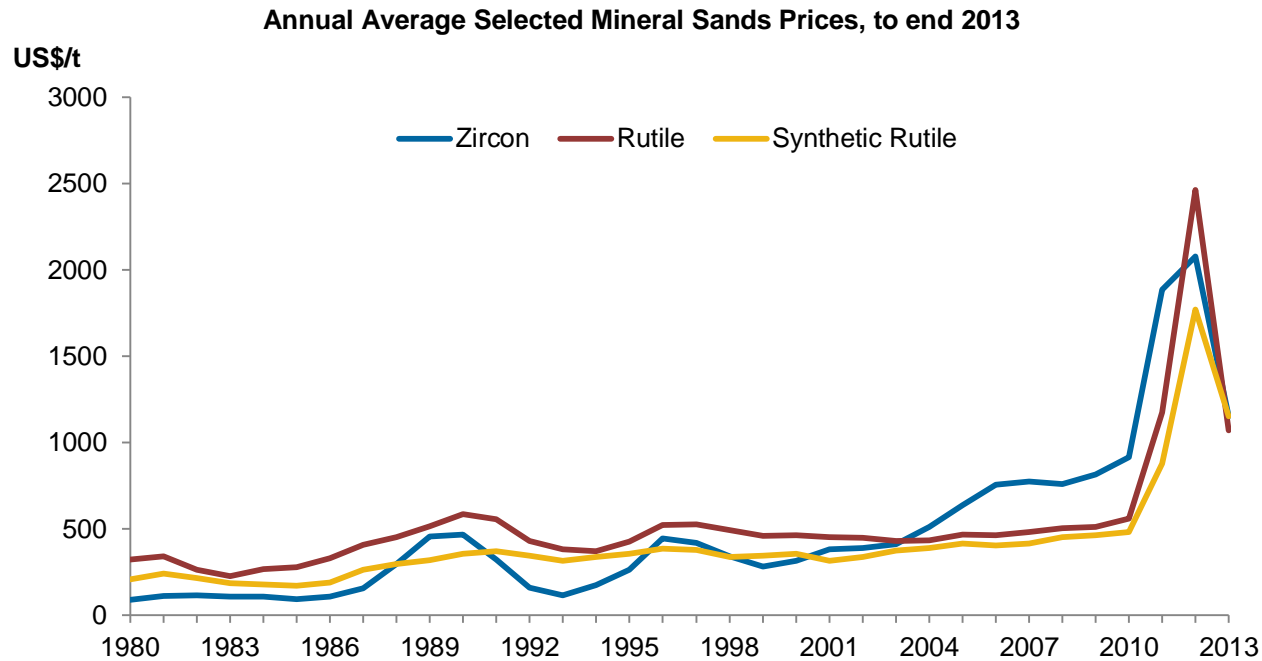
Mineral Sands Cycle Characteristics

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Price Volatility

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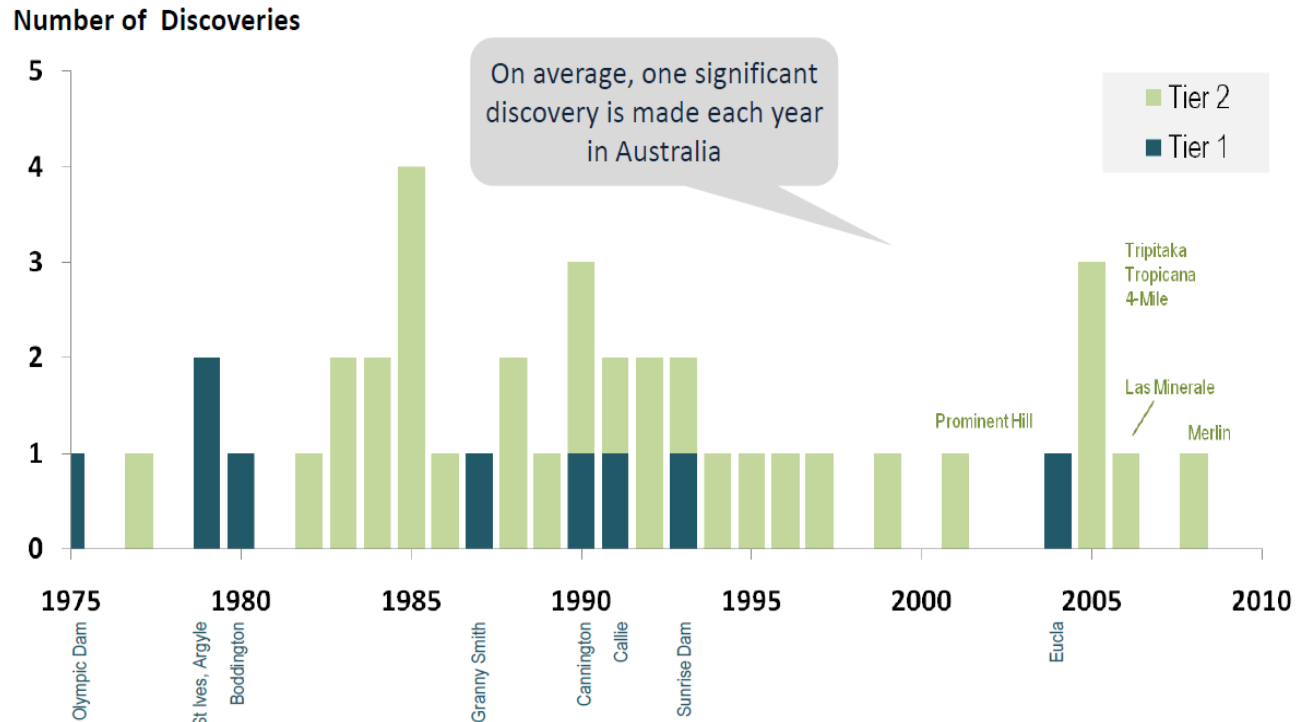


Source: Iluka and TZMI

Tier 1 & 2 Discoveries: Australia

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Tier 1&2 Discoveries : Australia



Tier 1 = "Company Making" Mines. They are large, long life and low cost
 Tier 2 = "Significant" Deposits. Has some, but not all, of the characteristics of a Tier 1

Source: MinEx Consulting May 2010

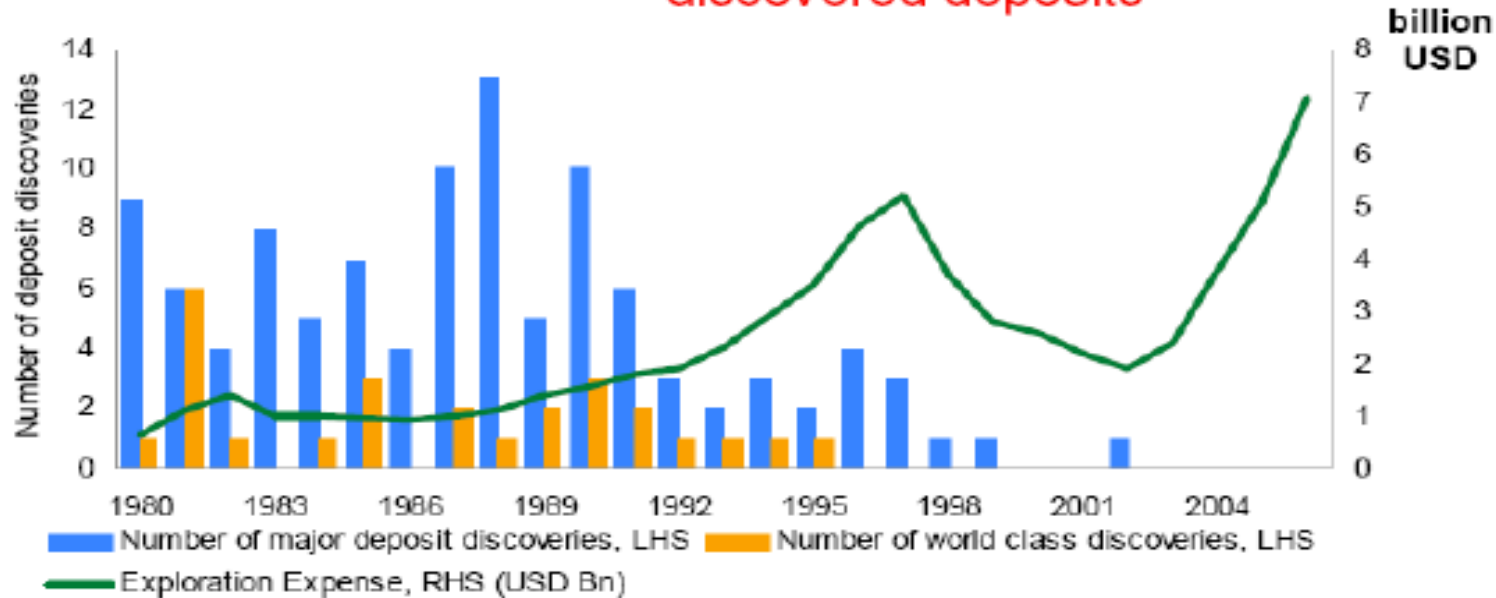


Discovery Rate of Major Mineral Deposits

Metal minerals reserves

Discovery rate of major mineral deposits

low expectations of yet to be discovered deposits



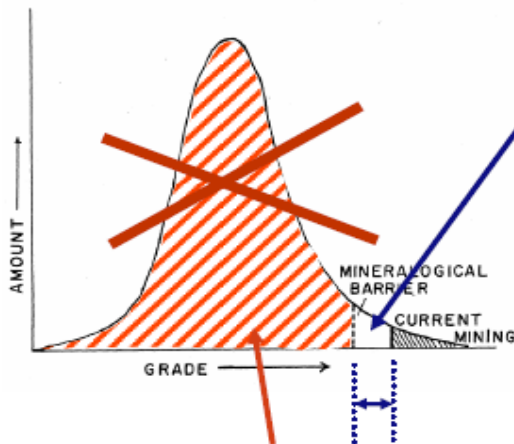
Sources: BHP Billiton, MEG, UBS WMR. , Raw Materials Group

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Mineralogical and Energy Intensity Barriers

Energy scarcity means materials scarcity

Mineralogical barrier for elements $\geq 0.1\%$
(mass) earth's crust



Remaining relevant resources of
**aluminum, iron, silicon,
magnesium, titanium,**

Source: "Exploring the resource
base" by Brian J. Skinner, Yale
University, 2001

Extremely energy-intensive to extract



What Prompts Innovation

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- Desire to achieve
- Problem Solving
- Desperation / Survival
- Mistakes
- Risk Management
- Economics
- Tyranny of distance

Heavy Minerals Innovation

Innovation Examples

1920's

Zircon Flotation

1930's

- Monazite concentrate (wet tables) → Cerium
- Kroll process → Ti Sponge

1940's

- Air tables → HM Separation
- Electro-magnetic separation → Ilmenite from rutile concentrate
- HT roll electrostatic plate separator
- Dredge mining – pontoon mounted pump, land based spiral plant

Heavy Minerals Innovation

Innovation Examples

1950's

- Chloride pigment
- Australian rutile → Titanium metal for aircraft
- Suction cutter dredge
- Rock ilmenite → Sulphate slag, Canada

1960's

- Improved fibre glass spiral and cone concentrator
- Becher SR, Australia

1970's

- Ilmenite → Chloride slag, South Africa

1980's

- Rare earth roll magnets, hydrosizers, up current classifiers
- "Wallace" air core drill
- Circular slag furnace, Norway

Iluka Synthetic Rutile Evolution

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Kiln	Location	Commissioned	Decommissioned
'A'	South Capel	1968	1993
'B'	South Capel	1974	1997
SR1	North Capel	1986	
'C' = SR3	Narngulu	1988	
'D' = SR4	Narngulu	1991	
SR2	North Capel	1997	

Where To From Here

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Iluka Response Game Plan

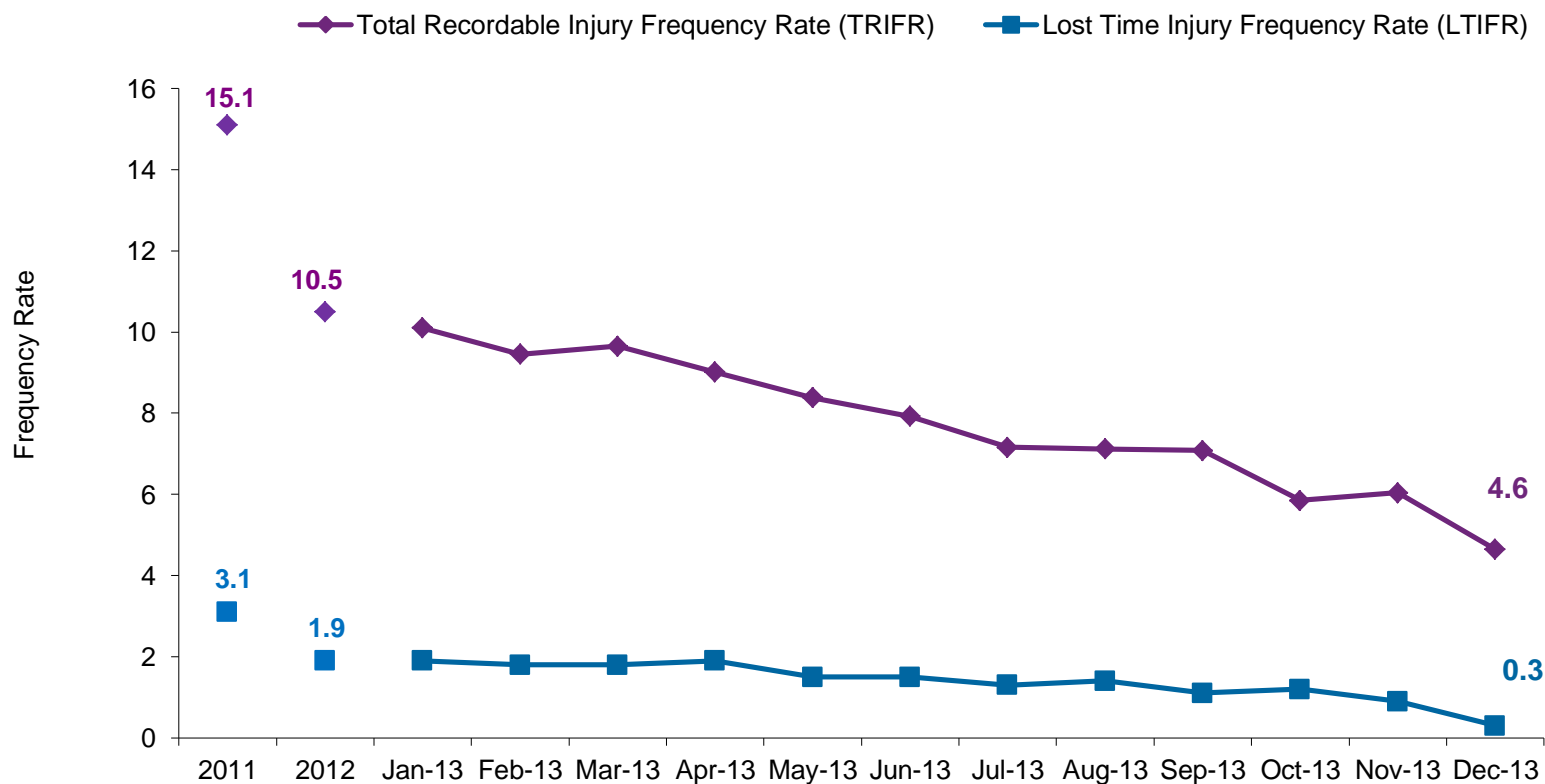
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Continued Improvement in Safety Performance



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- 63% reduction in TRIFR since 2011 (commencement of Safe Production Leadership)
- 90% reduction in LTIFR since 2011

Iluka Approach



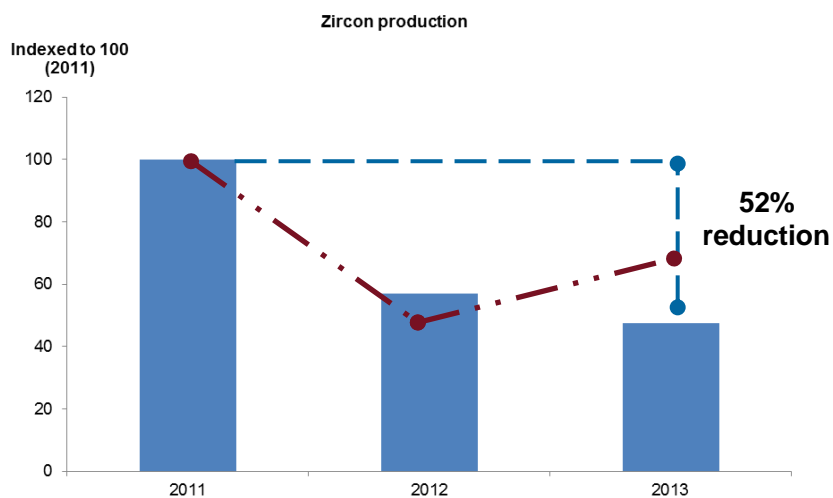
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- Focus on shareholder returns through the cycle
- Flex asset operation in line with market demand
- Continue market development through the cycle
- Preserve/advance mineral sands growth opportunities
- Maintain strong balance sheet
- Continue to evaluate/pursue corporate growth opportunities
- Act counter-cyclically where appropriate

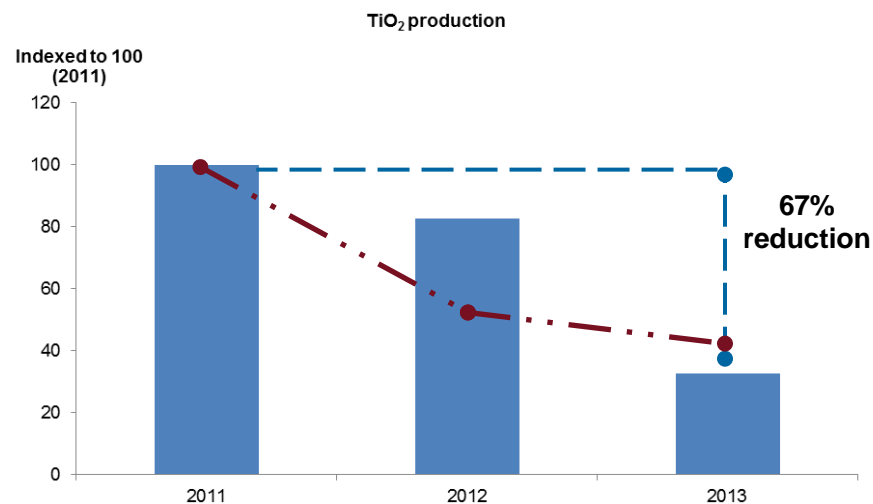
Production Flex – Zircon & High Grade TiO₂



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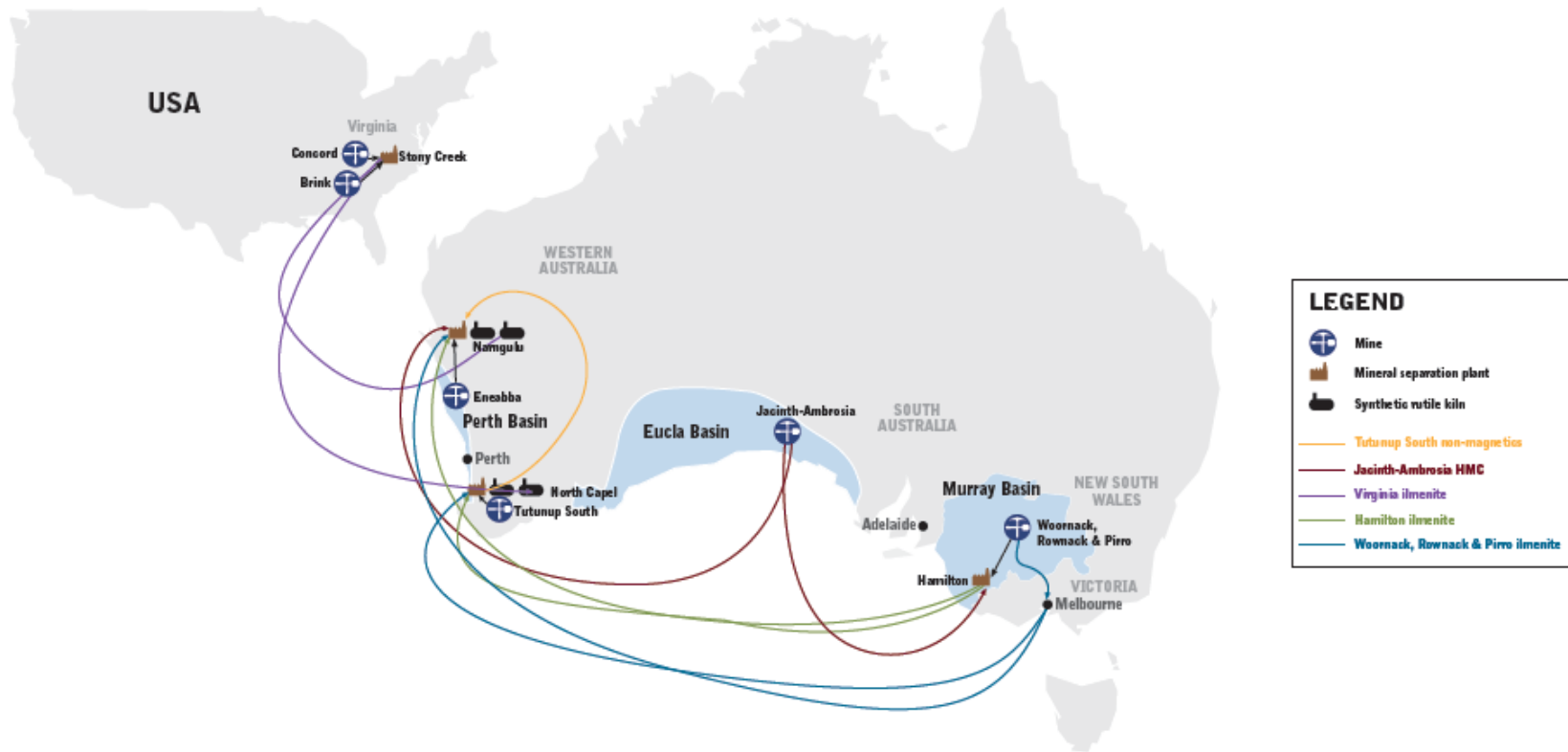
—●— Sales profile - zircon



—●— Sales profile (rutile and synthetic rutile)

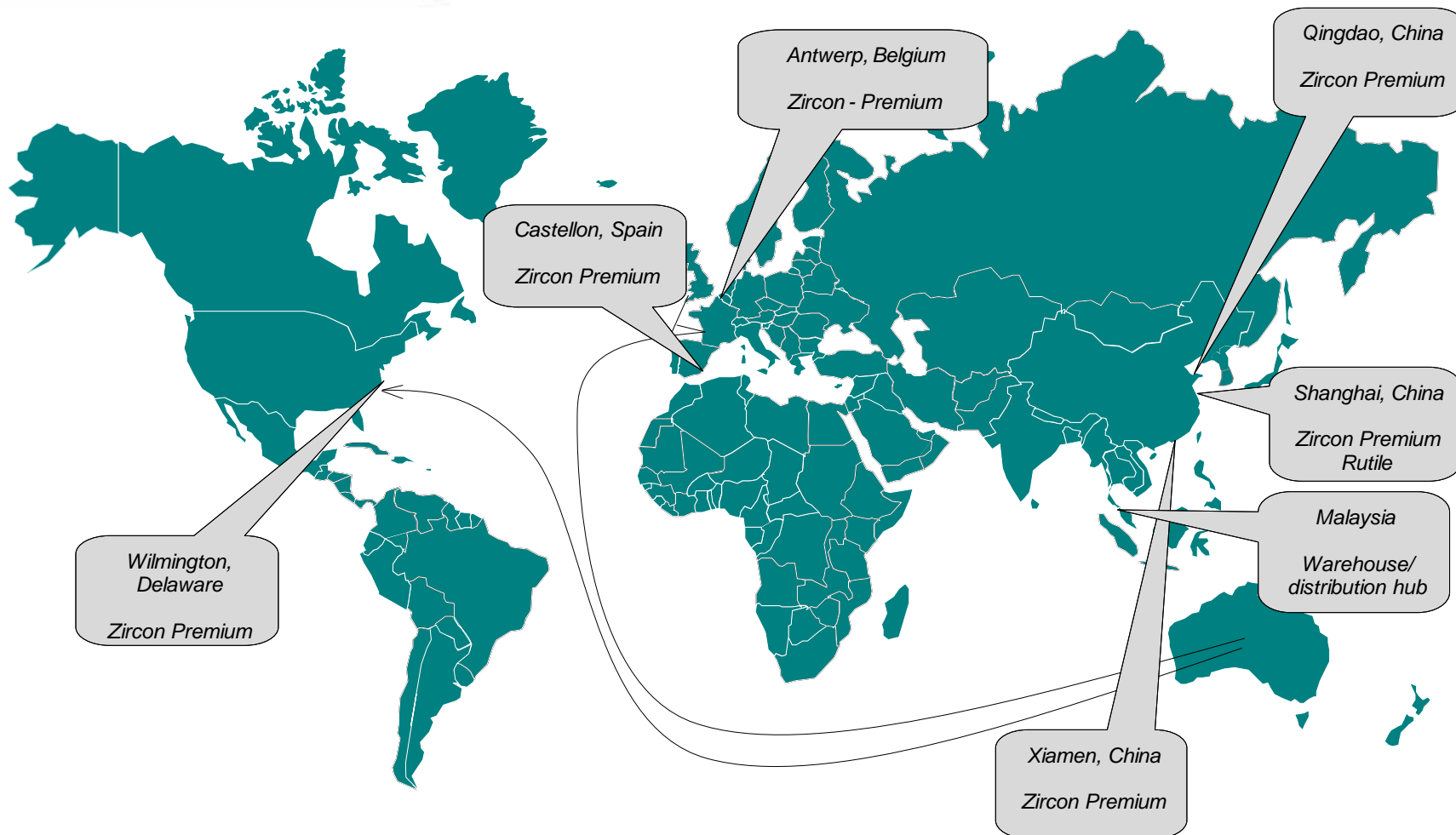
Integrated Operations

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Marketing and Supply Evolution

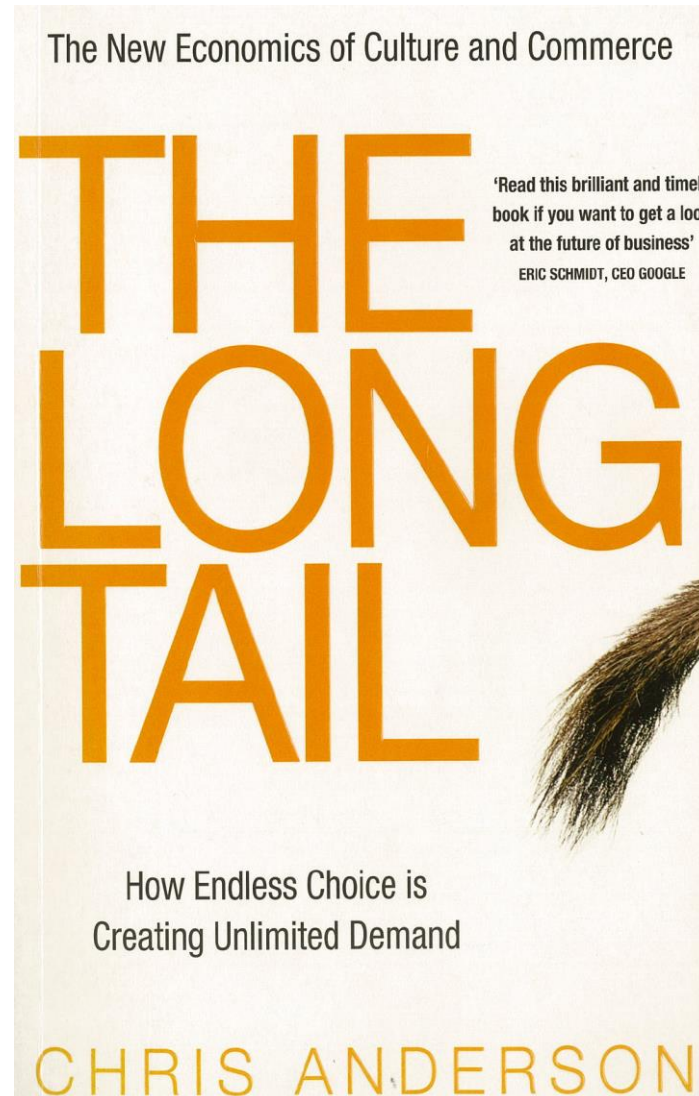
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- Iluka has grown its presence in growth markets, especially China
- Iluka's high grade titanium customer base has grown from 20 customers in 2007 to 75 customers as at September 2011
- Iluka's zircon customer base has grown from 45 customers in 2007 to 135 customers as at September 2011

The Long Tail

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China

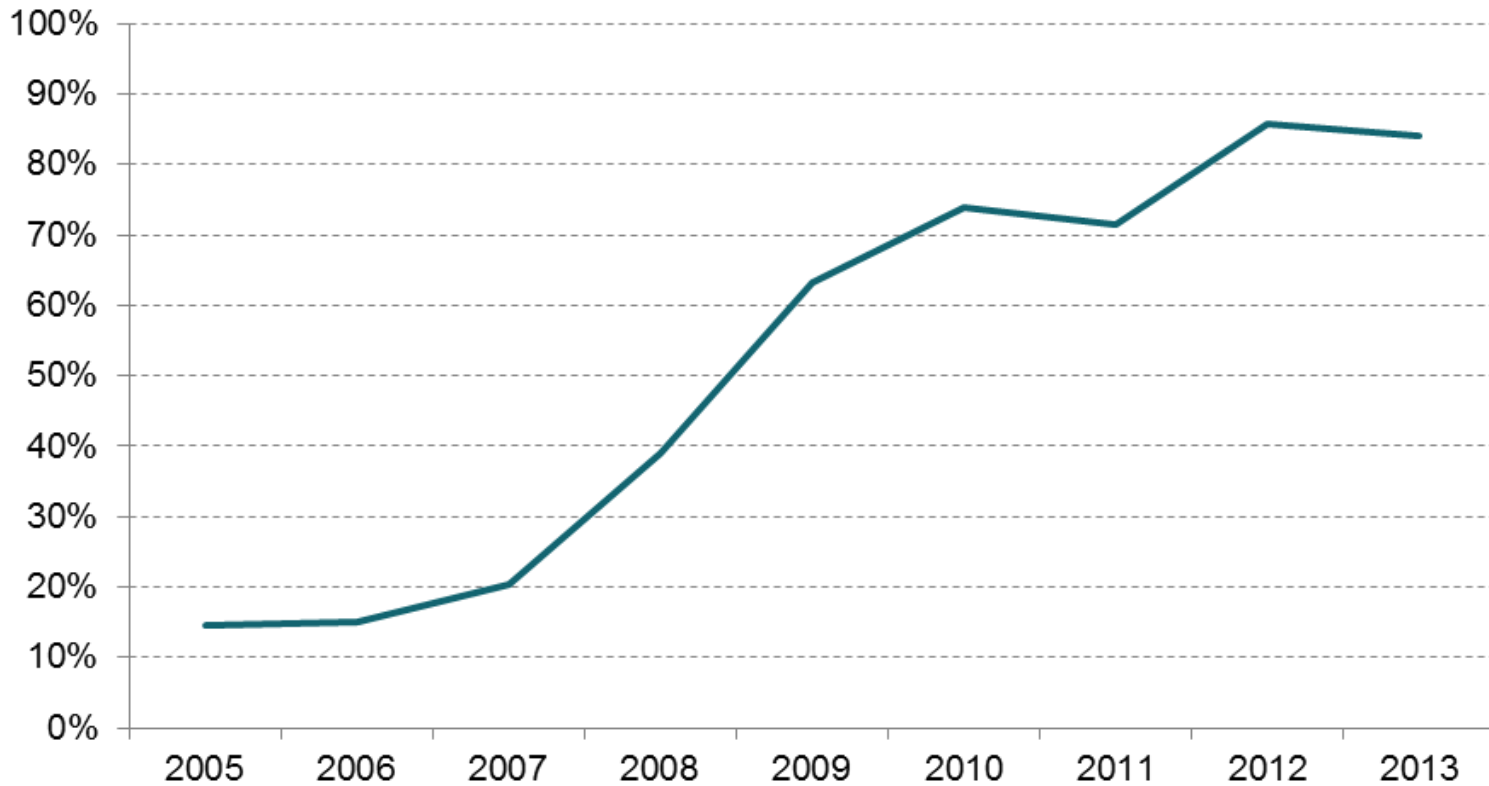
Direct Sales to China Customers



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Iluka Sales to Zircon End Customers - China

% of End Sales



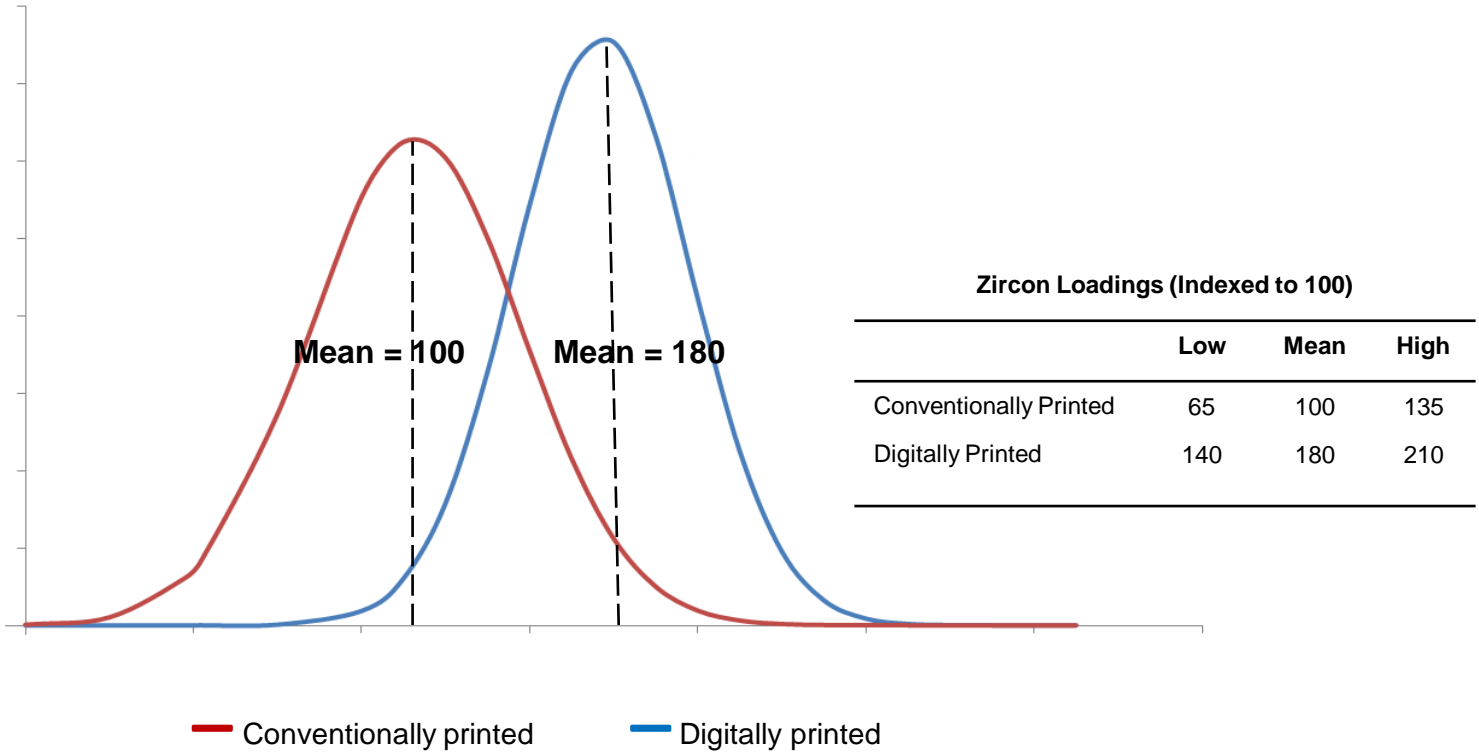
— % End Customers vs Total China Sales



Zircon Loading - Digital vs Conventionally Printed Tiles

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Notes:

- This slide charts the distribution of zircon loadings for conventionally printed and digitally printed tiles, from Iluka's 2013 ceramics tile survey. The zircon distribution is shown as grams/sqm (data excluded for proprietary reasons).
- The mean of conventionally printed tile zircon loadings is shown as 100. Digitally printed mean zircon loading is shown as 180, hence 80% higher than the mean of conventionally printed tiles. The low and high zircon loadings for both types of tiles are shown in the table at 5% and 95% confidence intervals.

Mineral Sands Project Development



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Project	Location	Characteristics
Pre-execute		
Hickory	Virginia, USA	<ul style="list-style-type: none"> • Chloride ilmenite with associated zircon • Utilisation of existing mineral separation plant (MSP) • ~ 10 year mine life
Definitive Feasibility Study		
West Balranald	Murray Basin, NSW	<ul style="list-style-type: none"> • High grade rutile, zircon, ilmenite • Next planned mine development in Murray Basin • ~ 8 year mine life
Cataby	Perth Basin, WA	<ul style="list-style-type: none"> • Chloride ilmenite with associated zircon • Next planned mine development in WA • ~ 6 year initial mine life
Eucla Basin Satellite Deposits	Eucla Basin, SA	<ul style="list-style-type: none"> • 3 chloride ilmenite with associated zircon deposits • Close proximity to Jacinth-Ambrosia infrastructure • Mine life extension to ~2027+
Aurelian Springs	North Carolina, USA	<ul style="list-style-type: none"> • Chloride & sulphate ilmenite with associated zircon • Utilisation of Virginia MSP • ~ 11 year mine life
Scoping / Pre PFS		
Puttalam	Sri Lanka	<ul style="list-style-type: none"> • Large, long life mainly sulphate resource, re- acquired by Iluka in 2013

Notes:

In some cases, particularly the US, projects may be a significant component of the carrying value of the associated assets.

WRP Mine Move

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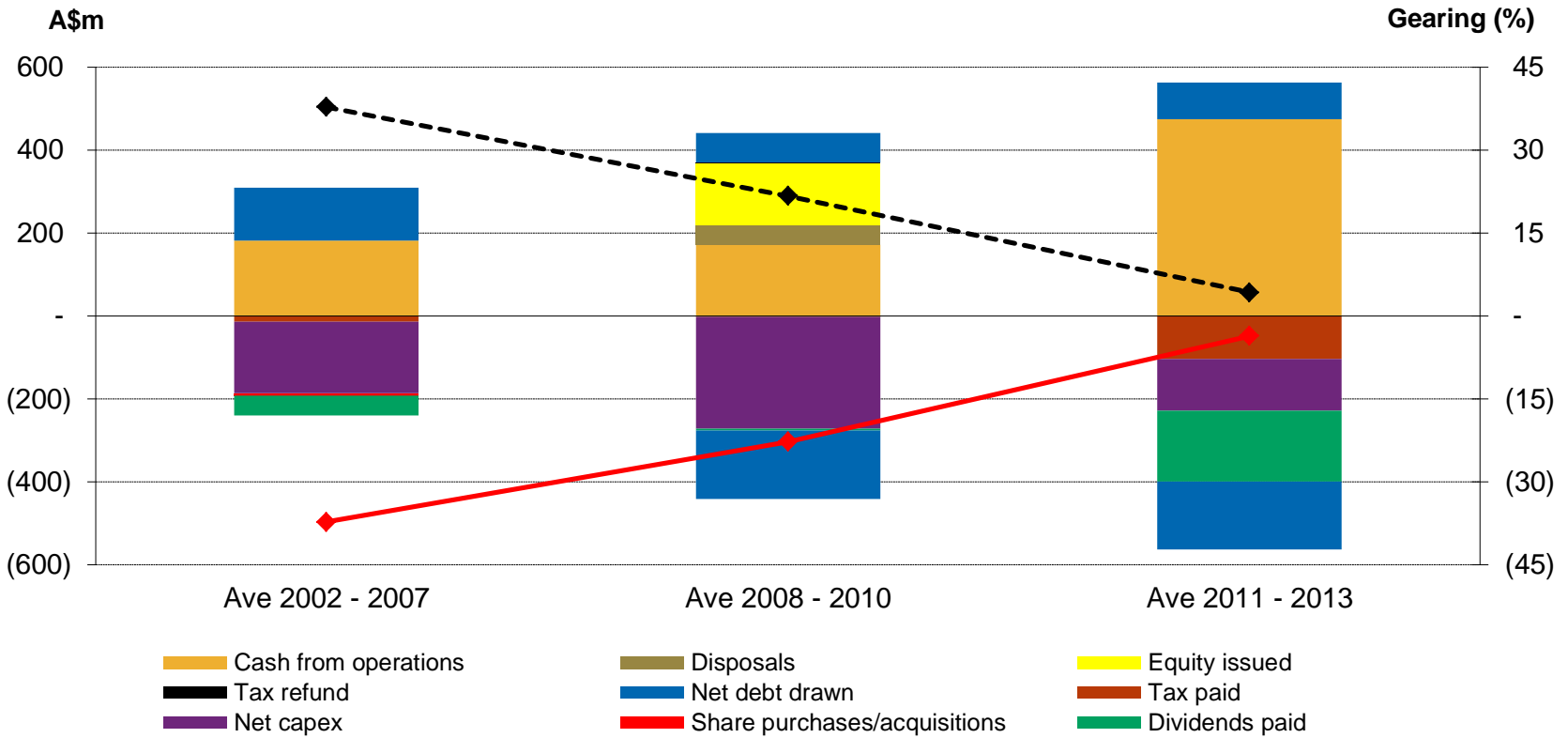


Iluka Response

Sources and Uses of Funds



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Metalysis – Strategic Fit

- Adjacencies with mineral sands business
 - could transform demand for titanium metal
- “Right” stage of technical/commercial development
- Ability for Iluka to contribute more than cash
 - supply of high grade titanium feedstocks
 - process engineering
 - project management
 - product development
 - global marketing
- Significant investment returns possible

New Investment - Metalysis

- 18.3% equity interest in Metalysis (UK VC Company) for \$22.5 million
- Metalysis can produce titanium powder directly from rutile
 - process has the potential to materially reduce the cost of titanium powder
- Metalysis process
 - developed patented production process for high value metals at lower cost
 - initial application tantalum metal powder
 - close to commercialisation
 - plan to construct processing plant
 - titanium (Ti) metal viewed as key market application for technology
- Potentially disruptive technology. If successfully commercialised:
 - new growth pathway for high value metals and alloys
 - major impact on Ti metal demand
 - application to new manufacturing technologies – including 3D printing

Ti Metal Industry – Potential

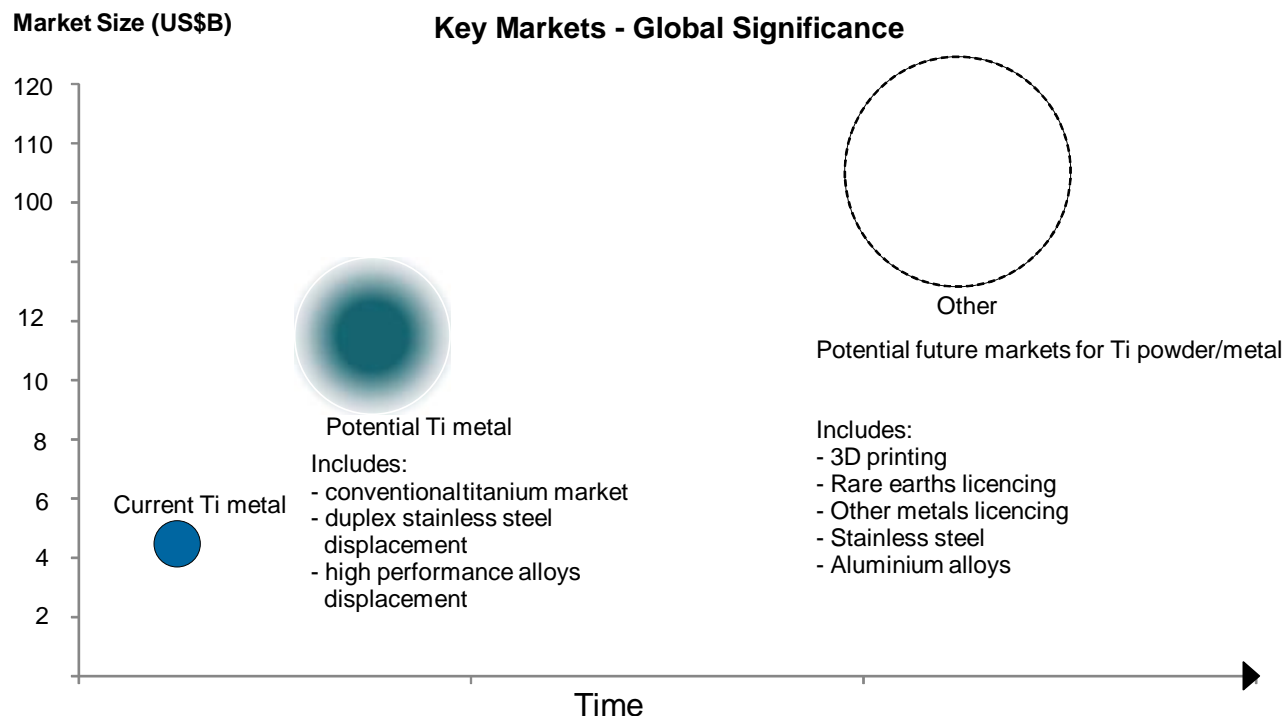
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Lower cost Ti metal compete with High Performance Alloys (US\$4.5b market) & Duplex stainless steel (US\$2.3bn market)

- access to a small percentage of these markets would significantly increase the size of the Ti metal industry

3D printing: potential market size of \$230-\$550 billion per year by 2025*

Flow through increase in demand for titanium feedstocks (~2.5t of rutile required for 1t of Metalysis Ti powder)



Iluka Approach



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