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Iluka Resources Titanium Mineral Feedstocks History and Future Trends

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These forward-looking statements are subject to a range of risk factors associated, but not exclusive, with potential changes in:

- exchange rate assumptions
- product pricing assumptions
- mine plans and/or resources
- equipment life or capability
- current or new technical challenges
- market conditions
- management decisions

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All currency referred to is Australian denominated unless otherwise indicated.

Presentation Outline



- Introduction to Titanium Mineral Feedstocks
- Industry Overview
- Industry History
- Iluka Resources Overview and Products
- Recent Market Conditions
- Future Trends



Introduction to Titanium Mineral Feedstocks and Industry Overview

Where Are Titanium Mineral Feedstocks?

Ti on Wikipedia

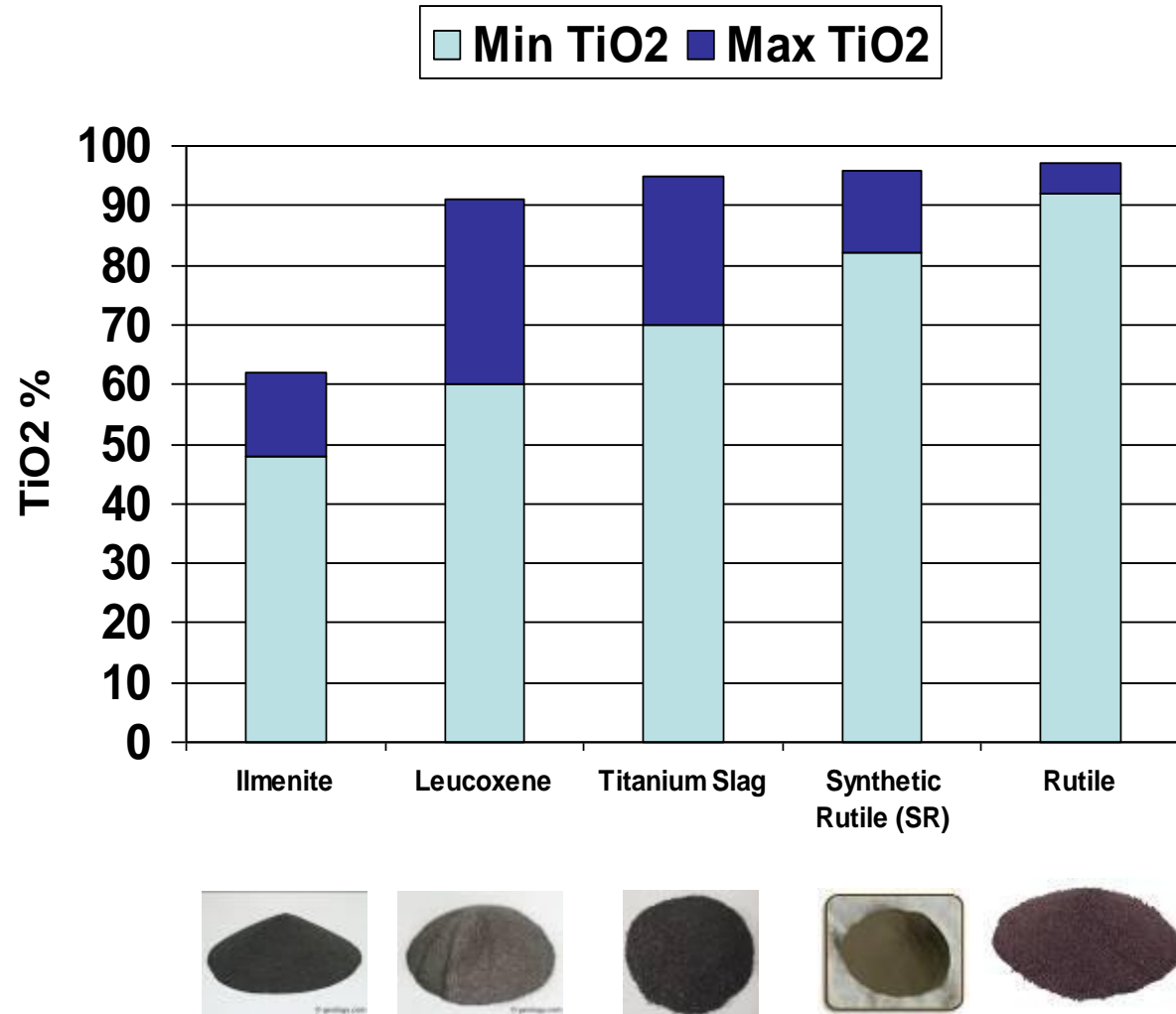
- Ti is the ninth-most abundant element in the Earth's crust (0.63% by mass) and the seventh-most abundant metal
- Contained in most igneous rocks and sediments derived from them
- Proportion in soils is approximately 0.5 to 1.5%.
- Widely distributed and occurs in many minerals.
- Rutile and ilmenite have economic importance, yet even they are difficult to find in high concentrations
- Total reserves of titanium are estimated to exceed 600 million tonnes.



What Are Titanium Mineral Feedstocks?

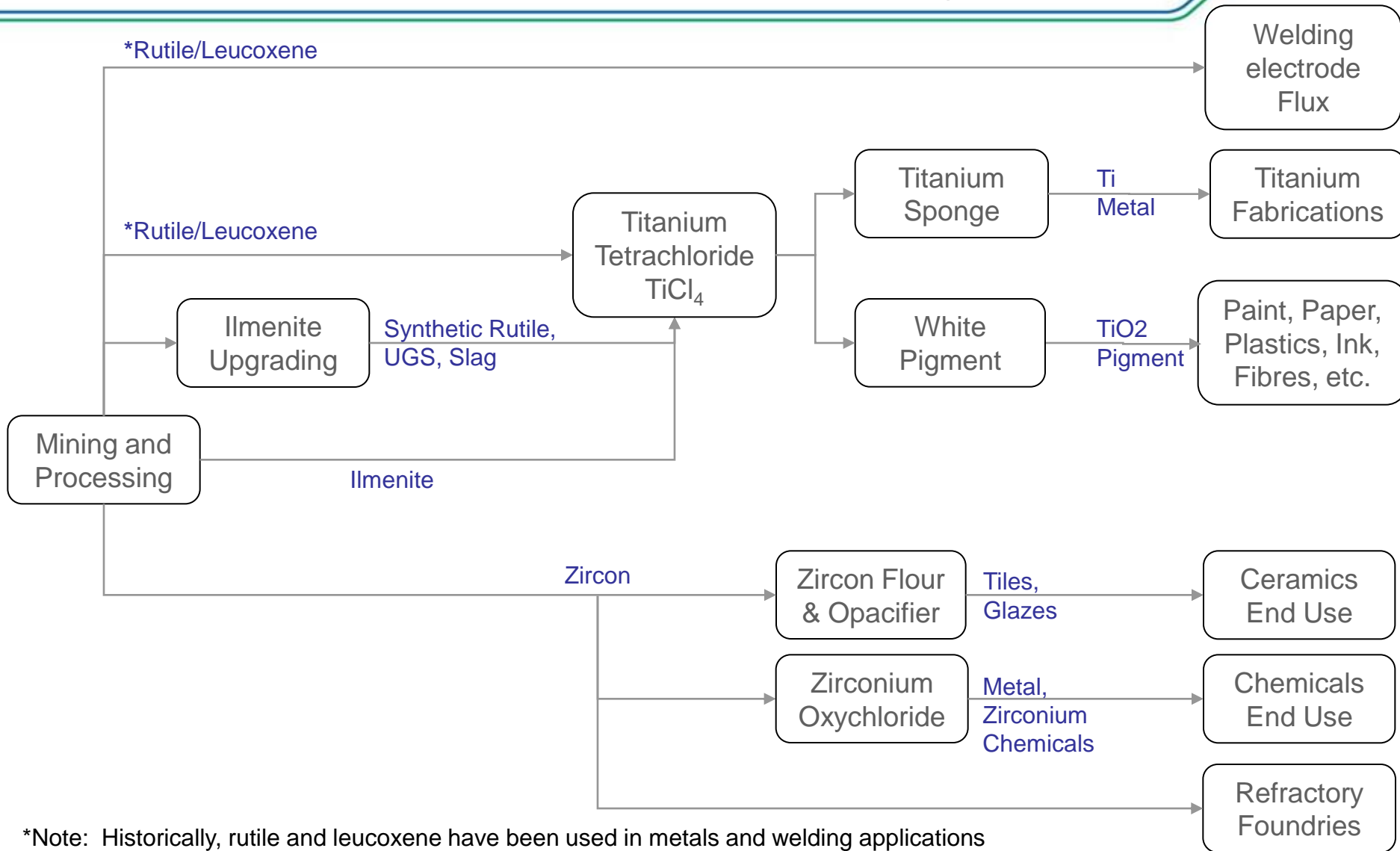
Titanium minerals and derivatives used to produce TiO₂ pigments, Ti metal, and welding electrodes.

- Ilmenite: (FeTiO₃) ~53% TiO₂
- Leucoxene: altered ilmenite
- Ti Slag, UGS: smelted ilmenite, ~85% TiO₂
- Synthetic Rutile: upgraded Ilmenite, ~90 %TiO₂
- Rutile (TiO₂) ~95% TiO₂



Overview

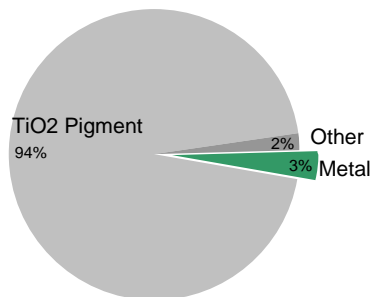
Generic Structure of the Industry



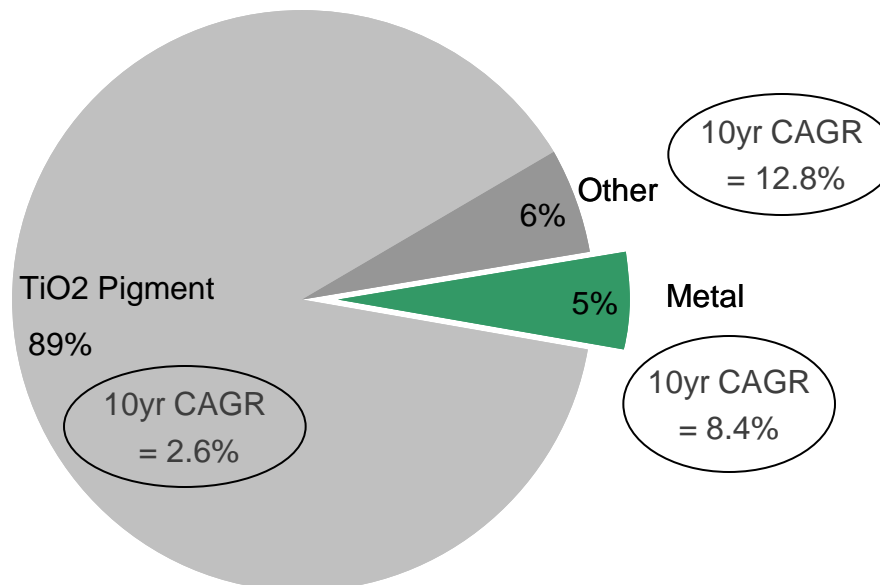
*Note: Historically, rutile and leucoxene have been used in metals and welding applications however they are primarily used for pigment feedstock

Titanium Metal Segment

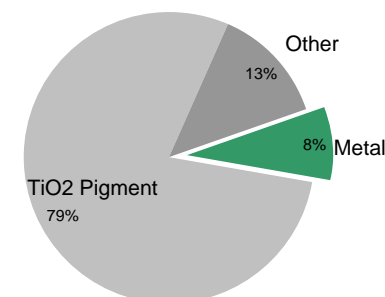
1998



2008 All TiO₂ Demand = 6,011 kt TiO₂
 2008 Metal Use Demand = 321 kt TiO₂



2018 est*



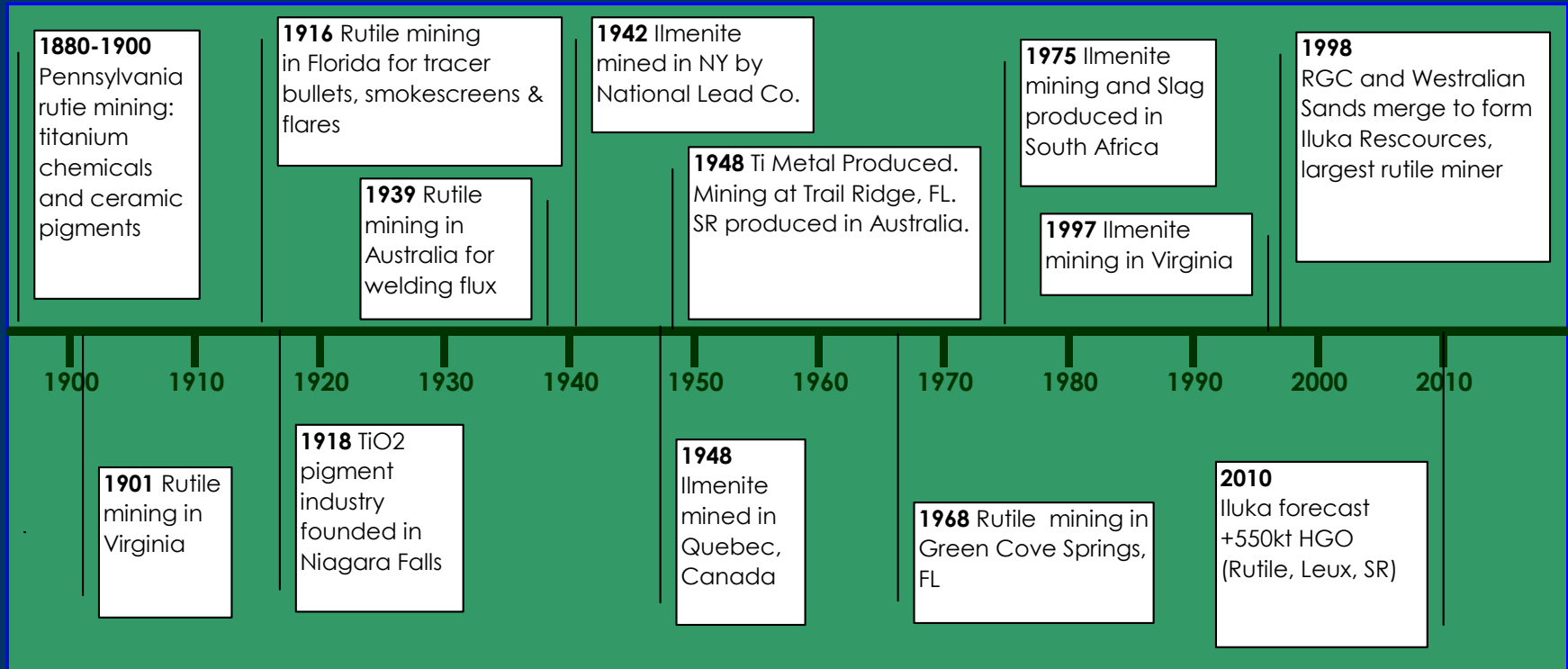
*based on prior 10yr CAGR



Titanium Mineral Feedstocks History Iluka Resources Overview and Products

Titanium Mineral Feedstocks History

Titanium Mineral Feedstock Timeline



Iluka Resources Overview

Iluka Resources (ASX: ILU) is a major participant in the global mineral sands industry. The company is involved in mineral sands exploration, mining, processing and marketing.

Iluka's principal objective is the creation and delivery of shareholder value.

Company Overview

- ASX 100: market capitalization ~A\$2.2 billion
- Shares on issue: 418.7 million
- Largest global producer of high value titanium dioxide products: **rutile** and **synthetic rutile**
- Largest global producer of zircon with a market share of approximately 34%



Iluka Resources Rutile Products

Premium Rutile

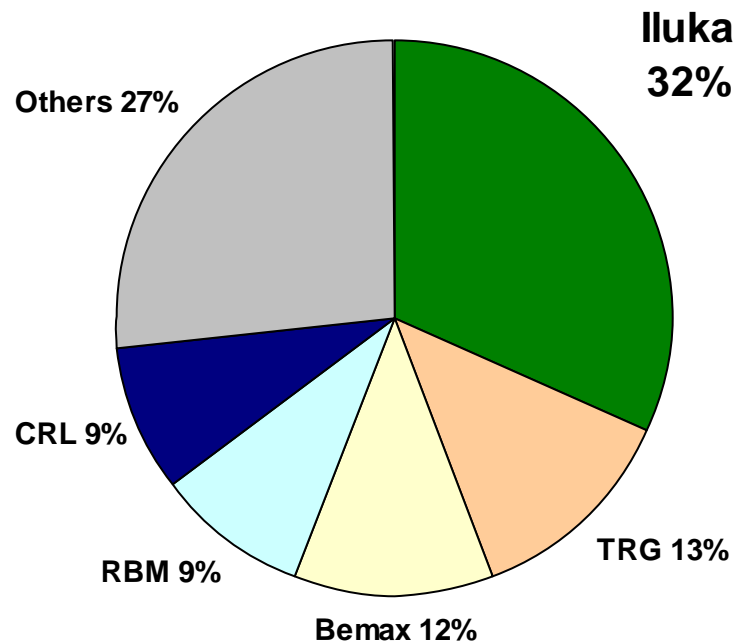
- 95% TiO_2
- White pigment in paints, plastics, papers
- Titanium Metal
- Welding Electrode Flux

Murray Basin Rutile 92

- 92% TiO_2
- Welding electrode flux
- White pigment in paints, plastics, papers



2010 Estimated Rutile Market Share
(Production)



Iluka Resources Synthetic Rutile and Leucoxene Products

Synthetic Rutile

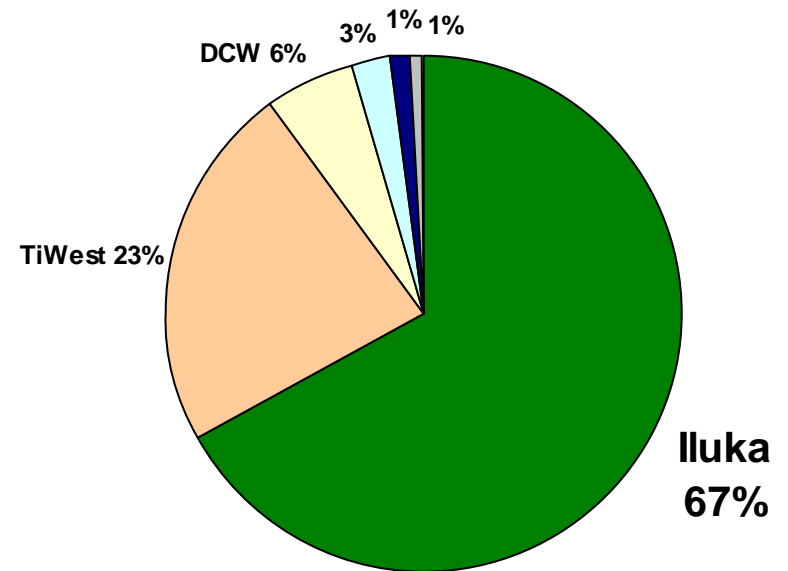
- 88-92.5% TiO₂
- White pigment in paints, plastics, papers
- Titanium Metal

Leucoxene

- HyTi 88, HyTi 90, HyTi 91
- TiO₂ Pigments
- Welding Electrode Flux



2010 Estimated Synthetic Rutile Market Share (Production)



Company Overview

Operations & Projects



Invested over \$520 million in 2009
developing new mines

Murray Basin

- Major Rutile and Zircon production
- 43.8mt of HM resources
- 28% of group total resources
- Economic life to 2023+

Eucla Basin (Jacinth-Ambrosia, Typhoon)

- 52,000km² of exploration tenements
- 10.1mt of HM resources
- Mine life to 2020+

Western Australia

- Historical base of Iluka's operations
- Processing hub for Eucla concentrates
- 4 Synthetic Rutile Kilns (2 idled)

Virginia (United States)

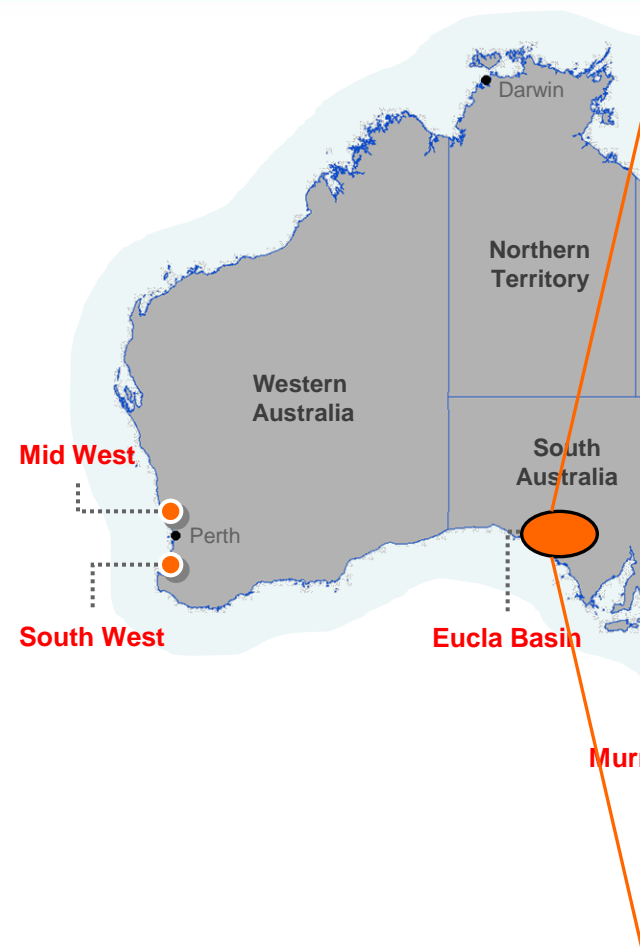
- High quality zircon & ilmenite production (American market)

Marketing Agreement

CRL

- High quality Rutile and zircon production
- Dredge mining - North Stradbroke Island

Jacinth-Ambrosia Processing Operations



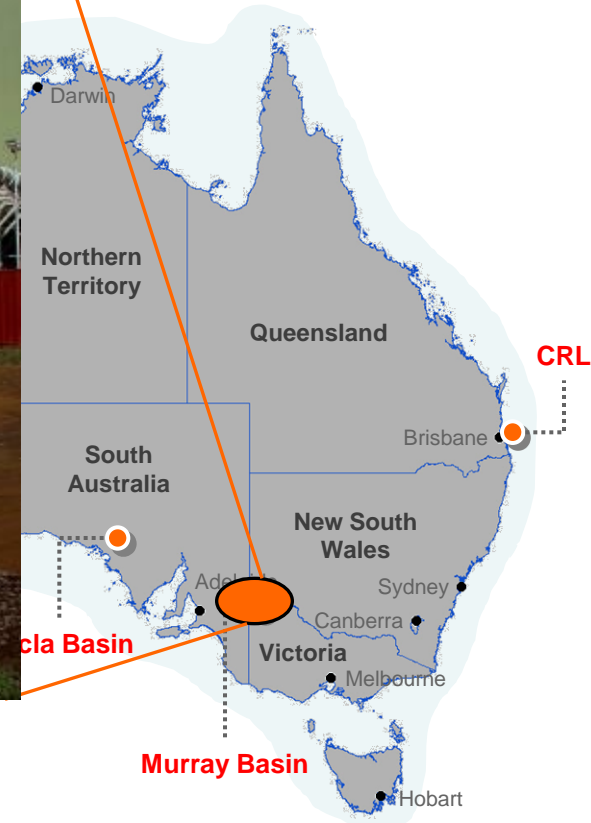
Jacinth-Ambrosia Mining Method:
Near Surface, Shallow



Murray Basin Processing Operations

Hamilton MSP

MB Stage 2: Kulwin Mining Unit





Recent Market Conditions

High Grade Titanium Dioxide Market Dynamics

- Demand recovery for high grade titanium dioxide feedstocks
- Emerging industry situation of insufficient high quality supply
- Iluka rutile volumes fully contracted for 2010
- Slower than targeted Murray Basin ramp up has exacerbated supply issue
 - some switching of customers into synthetic rutile
- Iluka expects to end 2010 (as with 2009) with minimal rutile inventories
- Budgeted 2010 SR volumes fully contracted
 - higher SR production offset lower rutile production
- Idling of SR kiln 3 in Mid West (WA) deferred from September to early 2011



Chinese Ti Sponge Production

- Numerous $TiCl_4$ plants in China supply the Ti sponge industry
- Currently using low grade domestic sulphate slag as feedstock
- Under huge pressure to improve environmental impact (waste disposal)
- Seeking to improve efficiency and reduce costs
- Interest in using higher grade feedstocks such as Rutile and SR

- **Key message: Current Chinese production is slag dependent and is considered to be less efficient, variable in quality, and environmentally less acceptable, than production utilizing higher grade feedstock**





Future Trends

Physical Characteristics

High Level Summary - Production



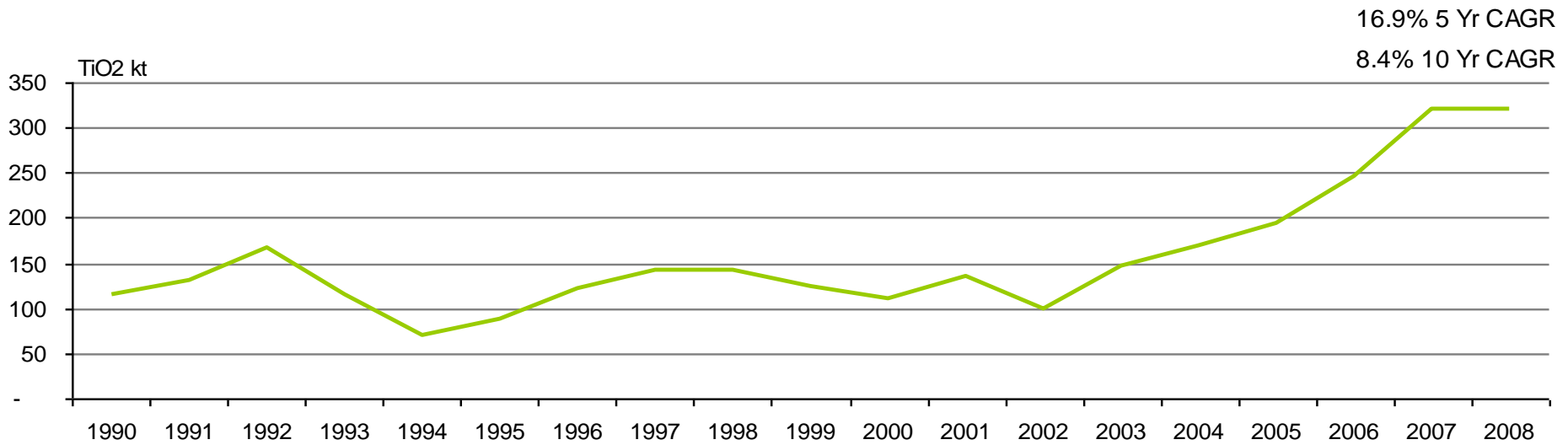
Production* k tonnes	2006 - 2008 (annual average)	2009	2010	2011 - 2013 (annual average)
Zircon	410	263	~400	~500 ¹
Rutile	125	127	~240	~250
Synthetic Rutile	500	405	~300	~290 ²
Saleable Ilmenite	440	342	~290	~300

¹ Zircon production 90% Australia / 10% United States

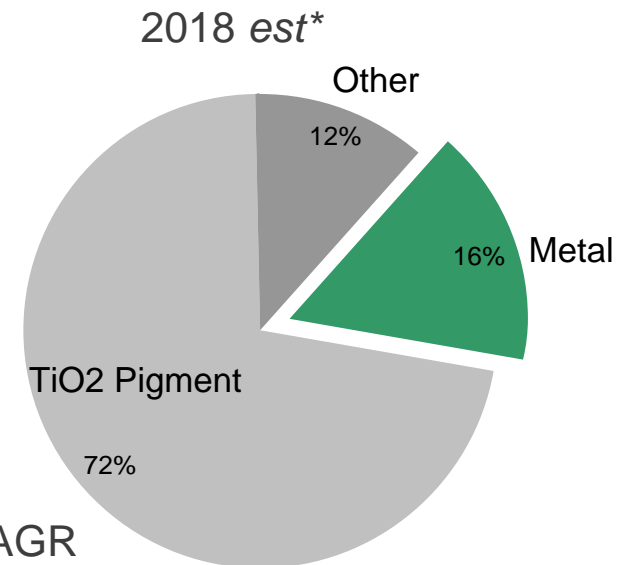
² Based on 2 SR kilns operating; one kiln operation would equate to 190-200kt of SR production

*Forecast production as at February 2010 subject to variation as Iluka finalizes current business plans

Ti Metal Feedstock Demand



- Growth trend in high grade Ti Feedstocks expected to continue in Ti metal sector
- China produces 25% of the world's sponge, now switching to high grade feedstocks
- Ti Feedstock supply linked to TiO2 pigment demand
- Can supply keep up with demand?



*based on prior 5yr CAGR

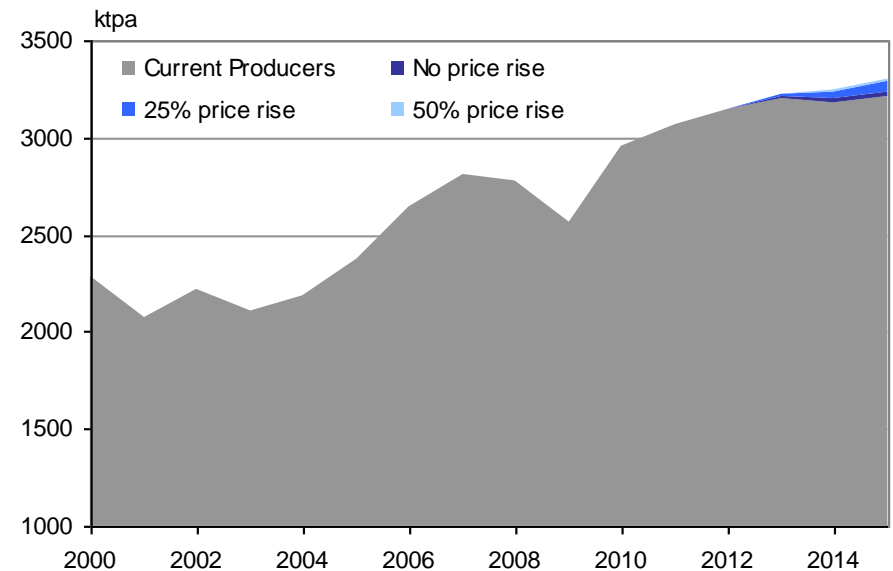
High Grade Titanium Dioxide Supply Crunch Near Term?

- Titanium feedstocks are abundant in the earth's crust
- Currently, the majority of new projects are not economically feasible

To entice investment in new projects:

- Demand growth must remain strong
- Economics must improve

High Grade Titanium Dioxide Supply Induced New Projects at 0%, 25% and 50% price rises (on 2008 levels)



“High grade” = rutile, synthetic rutile, chloride slag and upgraded slag.

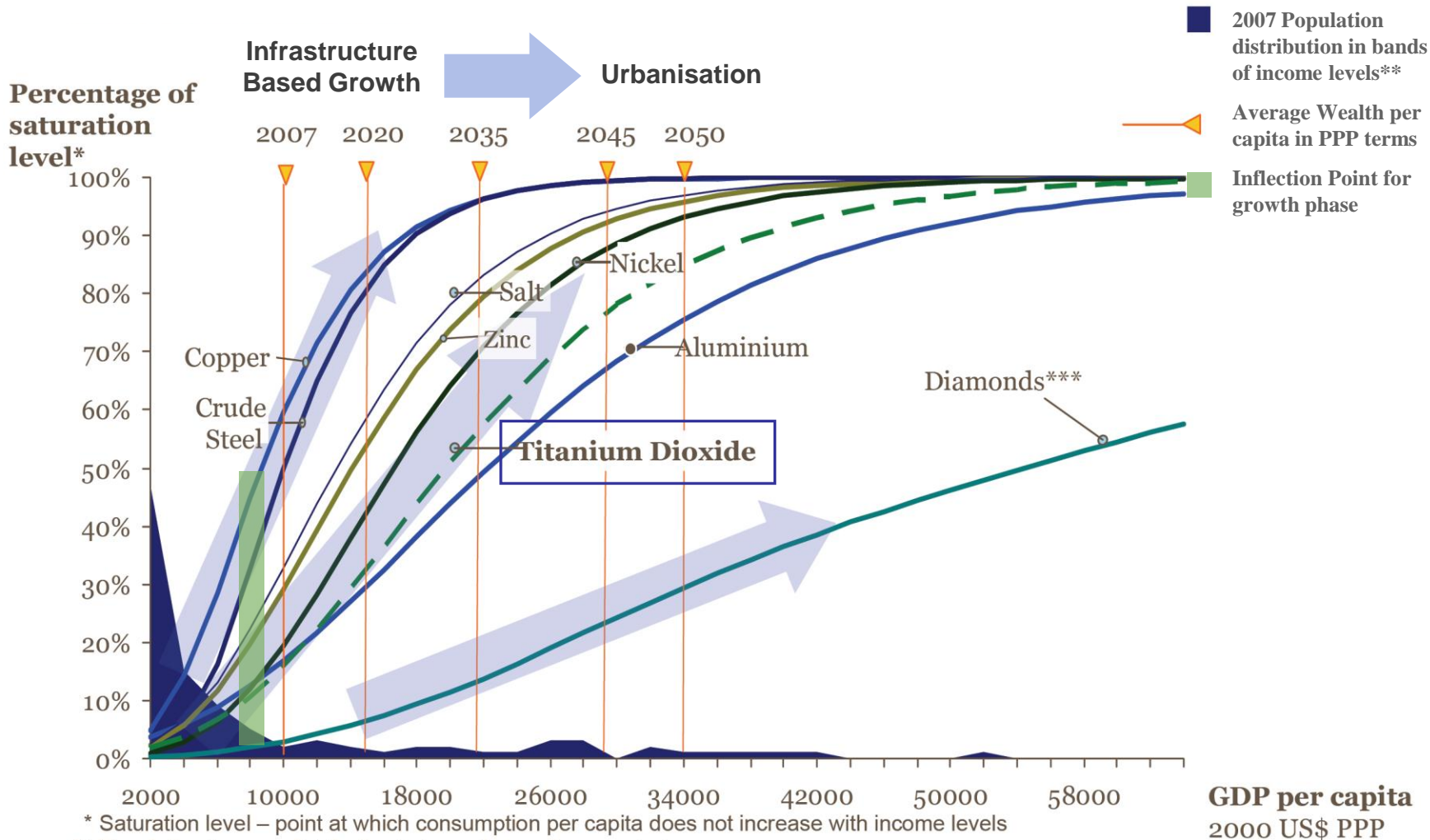
Iluka’s analysis of mineral sands supply is based on inducement analysis of known projects, at varying zircon and TiO₂ prices, with a risk weighting applied based on: sovereign, environmental, regulatory approval, funding and technical risks.



Thank You

Global Development Trends

Rio's Model for Long Term Growth



* Saturation level – point at which consumption per capita does not increase with income levels

** Population income distribution is in market exchange rate terms

*** Diamonds is classed as a luxury good and hence saturation levels are not reached within the specified time period