Kasiya

A globally significant natural rutile discovery

February 2022

AIM: SVML | ASX: SVM

@sovereignmetals | info@sovereignmetals.com.au

ABN: 71 120 833 427

SOVEREIGN METALS LIMITED

DISCLAIMERS & DISCLOSURES

AUTHORISATION STATEMENT

This presentation has been approved and authorised for release by the Company's Managing Director, Dr Julian Stephens.

DISCLAIMER NOTICE

This presentation has been prepared as a summary only and does not contain all information Sovereign Metals Limited's ("SVM") assets and liabilities, financial position and performance, profits and losses, prospects, and the rights and liabilities attaching to SVM's securities. The securities issued by SVM are considered speculative and there is no guarantee that they will make a return on the capital invested, that dividends will be paid on the shares or that there will be an increase in the value of the shares in the future. SVM does not purport to give financial or investment advice. No account has been taken of the objectives, financial situation or needs of any recipient of this report. Recipients of this report should carefully consider whether the securities issued by SVM are an appropriate investment for them in light of their personal circumstances, including their financial and taxation position. The material in this presentation ("material") is not and does not constitute an offer, invitation or recommendation to subscribe for, or purchase any security in SVM nor does it form the basis of any contract or commitment. SVM makes no representation or warranty, express or implied, as to the accuracy, reliability or completeness of this material.

SVM, its directors, employees, agents and consultants shall have no liability, including liability to any person by reason of negligence or negligent misstatement, for any statements, opinions, information or matters, express or implied, arising out of, contained in or derived from, or for any omissions from this material except liability under statute that cannot be excluded. Statements contained in this material, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of SVM, industry growth or other trend projections are, or maybe, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors.

FORWARD LOOKING STATEMENT

This presentation may include forward-looking statements, which may be identified by words such as "expects", "anticipates", "believes", "projects", "plans", and similar expressions. These forward-looking statements are based on Sovereign's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Sovereign, which could cause actual results to differ materially from such statements. There can be no assurance that forward-looking statements will prove to be correct. Sovereign makes no undertaking to subsequently update or revise the forward-looking statements made in this release, to reflect the circumstances or events after the date of that release.

COMPETENT PERSONS STATEMENT

The information in this presentation that relates to Production Targets, Processing, Infrastructure and Capital and Operating Costs, is extracted from the announcement dated 16 December 2021 which is available to view on www.sovereignmetals.com.au. SVM confirms that: a) it is not aware of any new information or data that materially affects the information included in the announcement; b) all material assumptions and technical parameters underpinning the Production Target, and related forecast financial information derived from the Production Target included in the Announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this presentation have not been materially modified from the Announcement.

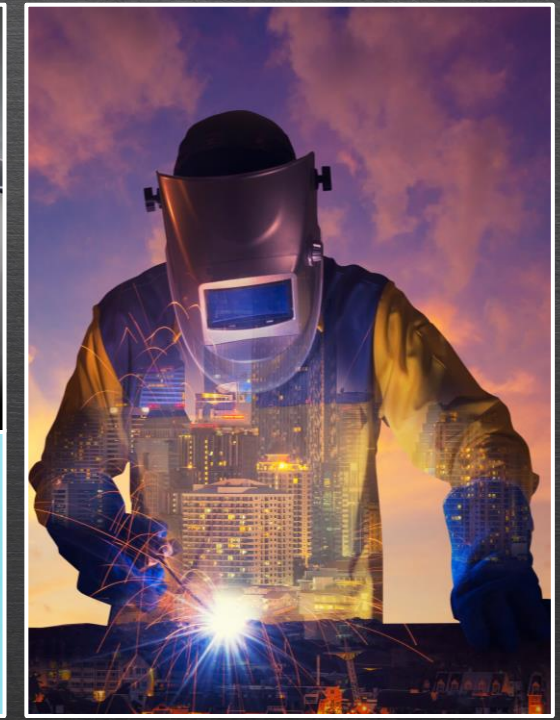
The information in this presentation that relates to the Mineral Resource Estimate is extracted from the announcement dated 16 December 2021 which is available to view on www.sovereignmetals.com.au. SVM confirms that a) it is not aware of any new information or data that materially affects the information included in the announcement; b) all material assumptions included in the announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially changed from the announcement.

The information in this presentation that relates to the Metallurgy is extracted from the announcement dated 7 December 2021 which available to view on www.sovereignmetals.com.au. SVM confirms that a) it is not aware of any new information or data that materially affects the information included in the announcement; b) all material assumptions included in the announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially changed from the announcement.

Rutile - a major source of titanium

Pigment (58%)

Welding (31%)

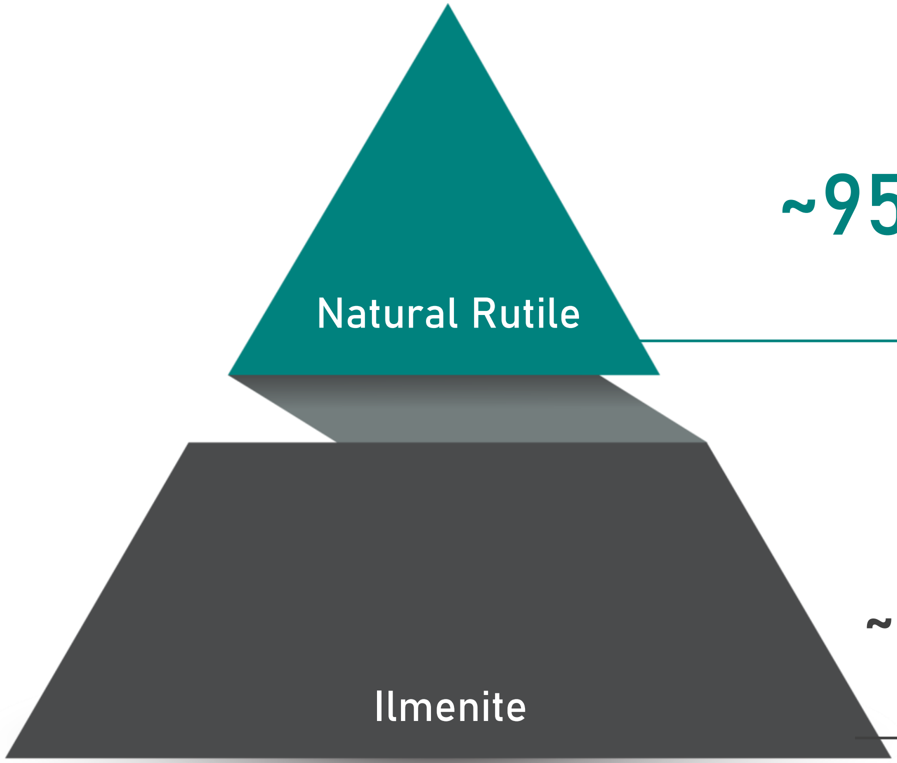


Titanium Metal (11%)

Titanium – designated a CRITICAL RAW MATERIAL by the US and EU based on “supply risk” and “economic importance”

Note: Percentages relate to uses of rutile as a titanium feedstock

Natural Rutile – the purest natural form of titanium



Natural Rutile

~95% TiO_2

+US$1,350/t
Spot over US$2,000/t*

0.5Mt
Supply 2020[1]

Ilmenite

~50% TiO_2

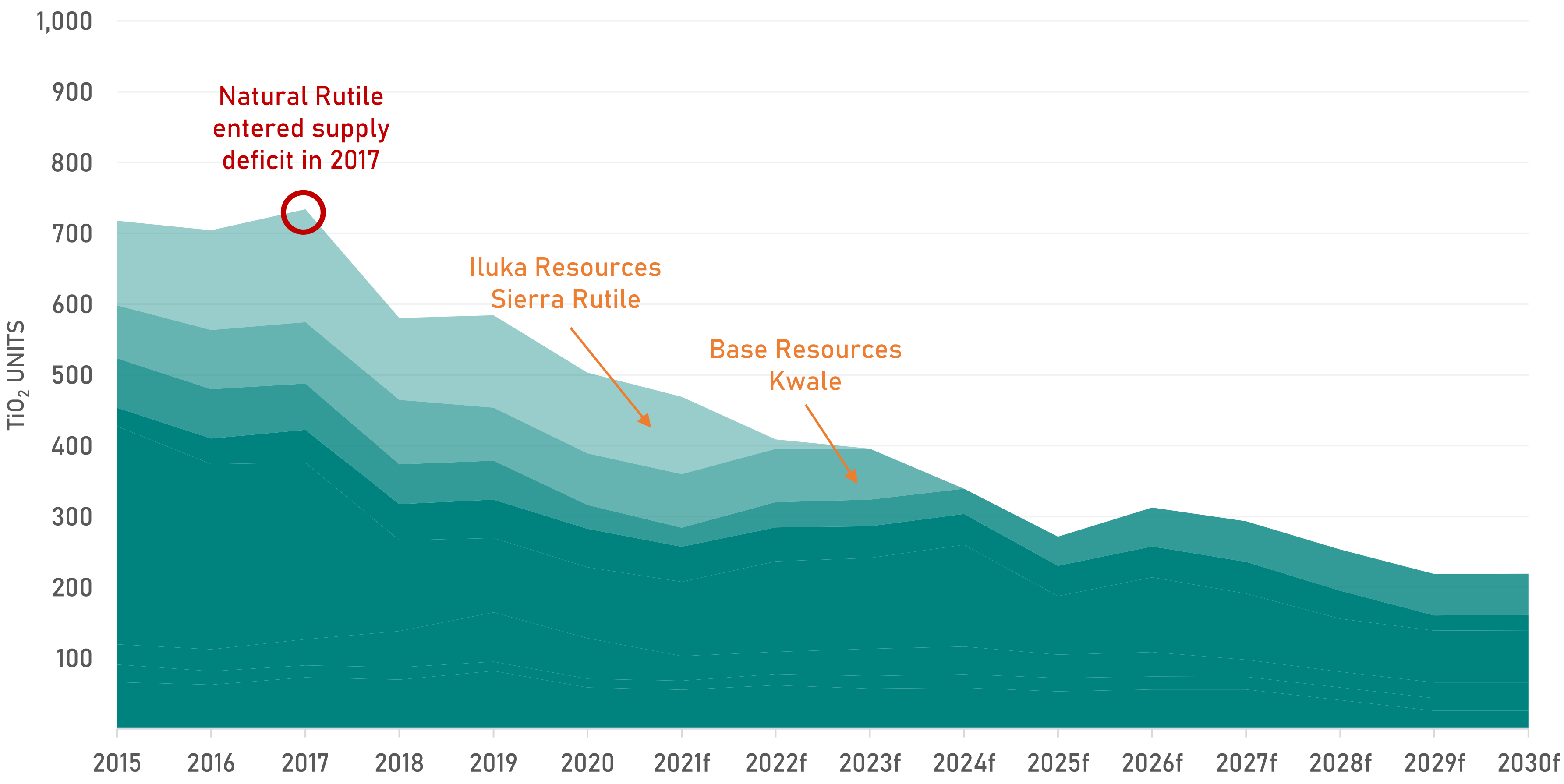
+$200/t
Spot over US$400/t*

6.2Mt
Supply 2020[1]

1.Titanium feedstock supply. Ilmenite includes sulphate slag production and chloride slag production; leucoxene, synthetic rutile and upgraded chloride slag ("UGS") not included. Source: TZMI
2.Rutile price: Iluka Resources Limited (ASX: ILU): December 2021 Quarterly Report (US$1,351). Chloride Ilmenite: TZMI (US$235)
* Spot price: Ruidow

Natural Rutile – genuinely scarce

EXPECTED GLOBAL RUTILE SUPPLY TO 2030



70%
Expected decrease in global rutile supply from 2017 to 2030 (~515kt)

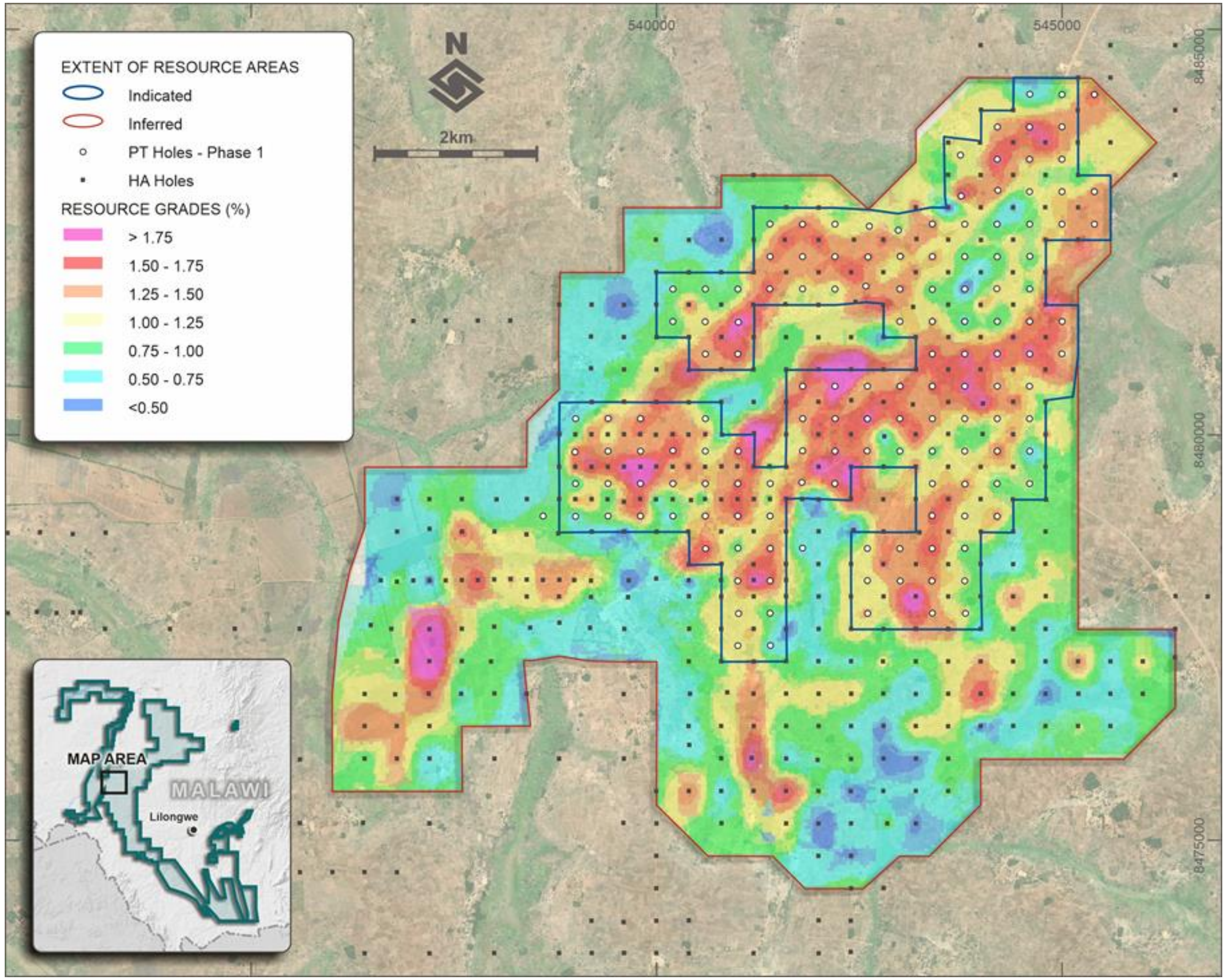
2.8Mt
Expected increase in global TiO_2 demand from 2017 to 2030

+50 Years
Since new significant, standalone rutile-dominant deposits discovered

Source: TZMI

Kasiya – globally significant rutile discovery with graphite by-product

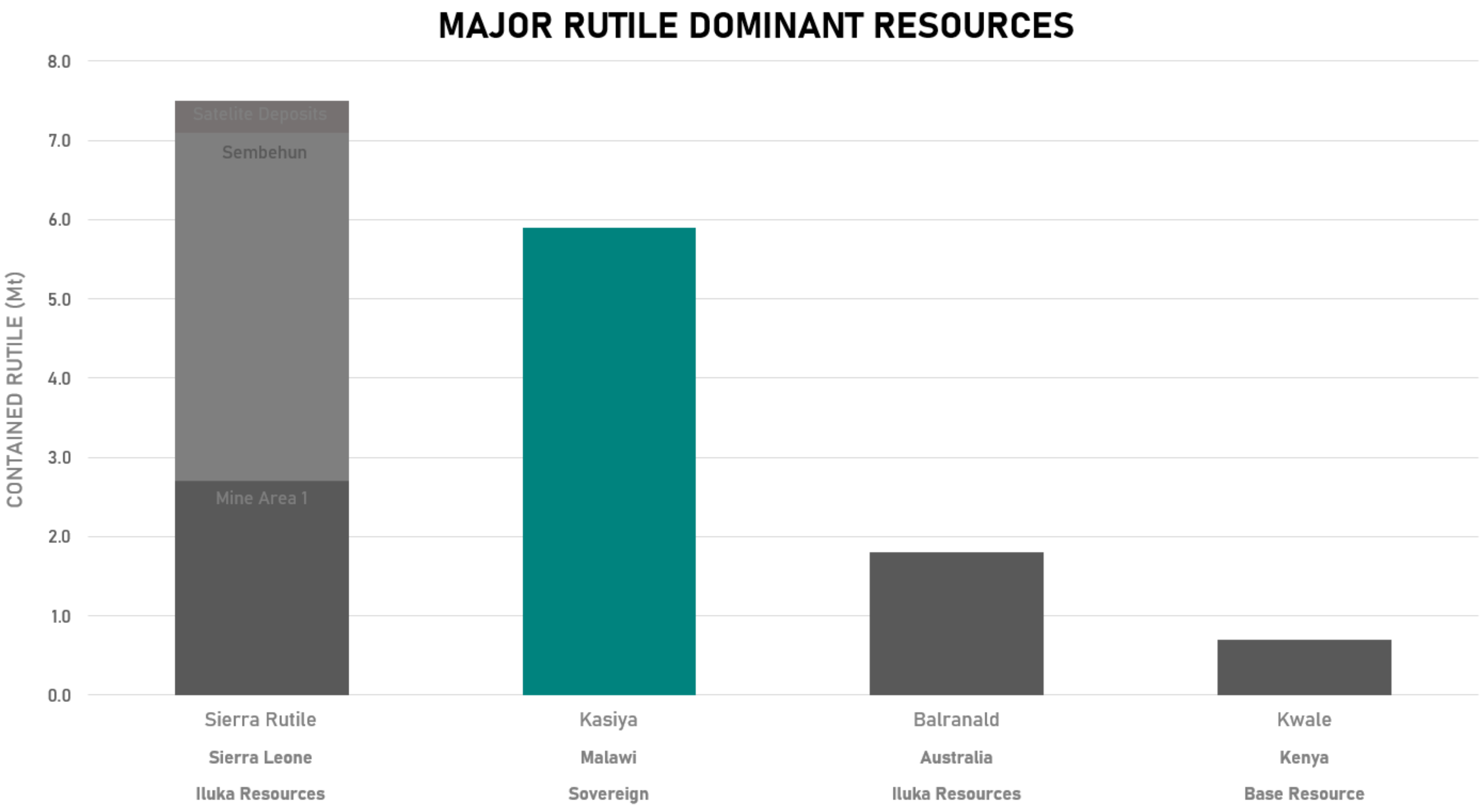
Kasiya Mineral Resource Estimate at 0.7% Rutile Cut-off					
Mineral Resource Category	Material Tonnes (millions)	Rutile Grade (%)	Rutile Tonnes (millions)	TGC (%)	TGC Tonnes (millions)
Indicated	304	1.02%	3.1	1.31%	4.0
Inferred	301	0.93%	2.8	1.16%	3.5
Total	605	0.98%	5.9	1.24%	7.5



Source: Sovereign Metals

Largest undeveloped rutile deposit in the world

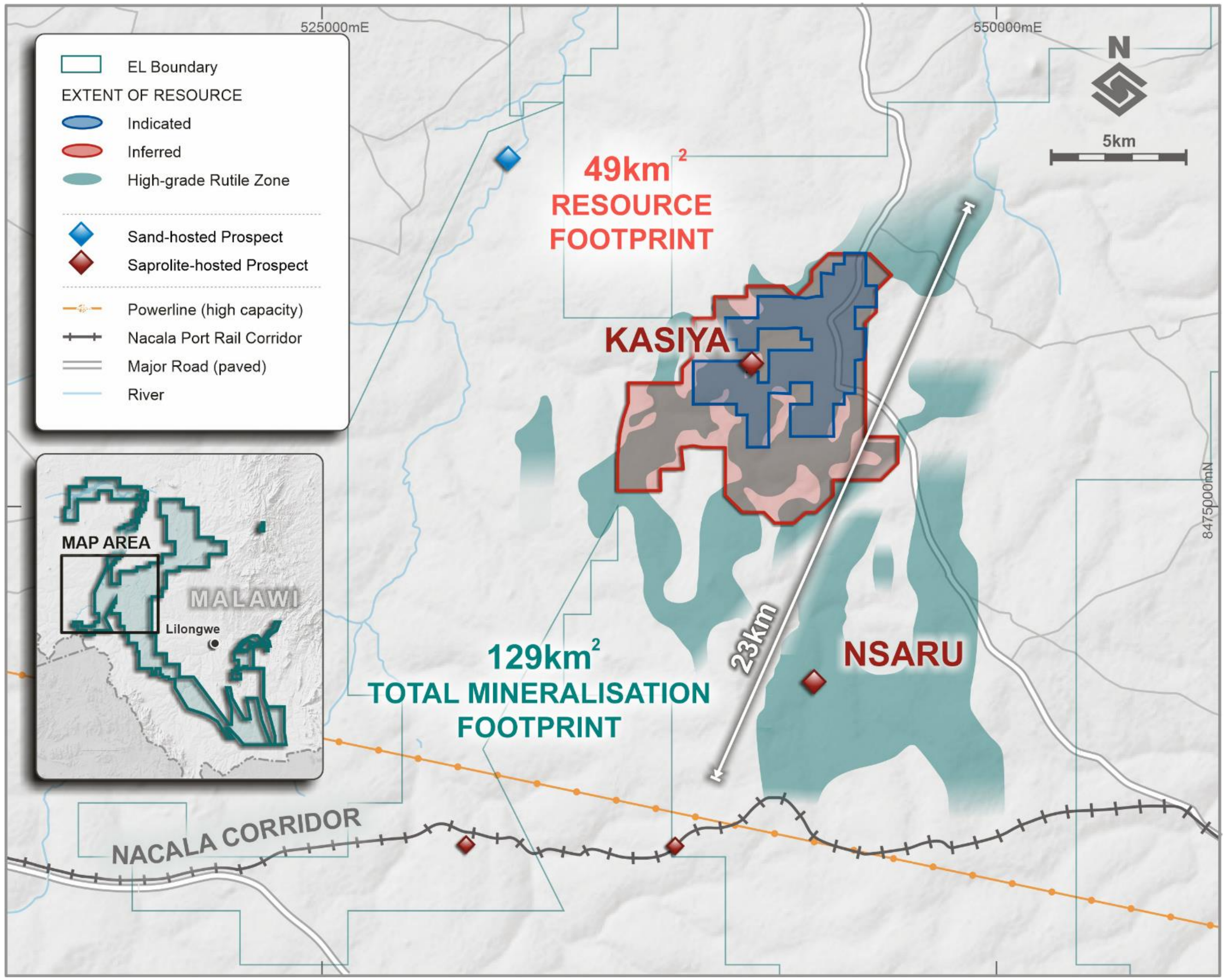
- One of the largest standalone rutile-dominant deposits discovered in over 50 years
- Kasiya sits within the top two rutile resources in the world alongside Sierra Rutile
- Substantial additional resource growth expected in coming months



Sources:
Base Resources – Kwale: Updated Kwale North Dune and maiden Bumamani Mineral Resource Estimate (released on ASX 19/02/2021)
Iluka Resources – Sierra Rutile: Iluka Resources Limited's 2020 Annual Report (released on ASX 25/02/2021); Iluka Resources – Balranald: Iluka Resources Demerger Briefing Presentation (released on ASX 10/09/2020)

Significant growth potential

- Scoping Study based on current mining inventory covering only 38% of total drill-defined mineralised footprint in Malawi
- Kasiya (89km²) and Nsaru (40km²) total ~129km² of drilled, high-grade rutile mineralisation
- Step-out drilling at Kasiya and Nsaru is continuing with multiple field drilling teams deployed
- Significant potential resource increases planned for early-mid 2022



Initial Scoping Study results: rutile and by-product graphite

Mine life	25 years
Annual throughput	12,000,000 tonnes
Annual production – rutile	122,000 tonnes
Annual production – graphite	80,000 tonnes

NPV_8 (real post-tax)	IRR (after-tax)	Payback
US$861m	36%	2.5 years
Total Revenue (LoM)	**Revenue (annual average LoM)**	**EBITDA (annual average LoM)**
$6,266m	US$251m	US$161m
Total Capital Cost	**Operating Costs (FOB per tonne product)**	**NPV_8/CAPEX**
US$332m	US$352/t	2.6

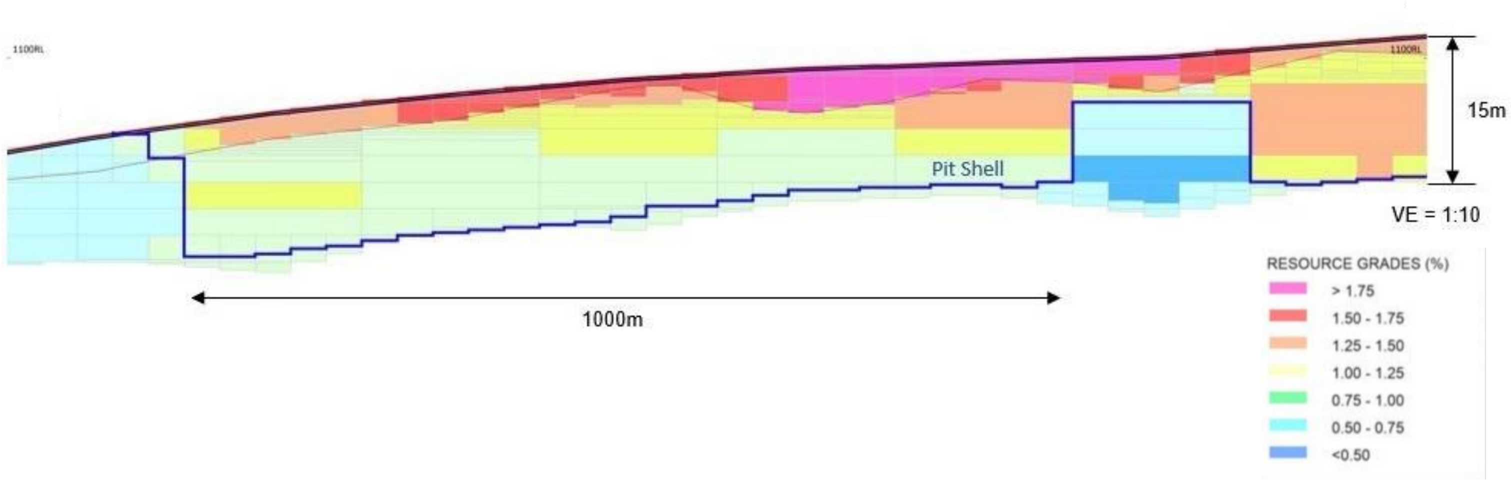
- Multi-decade mine concept to provide stable, sustainable supply of environmentally-friendlier rutile and graphite
- Very significant contribution to the economy of Malawi and creating over 480 direct jobs and many more indirect jobs
- Highly strategic in a rutile market experiencing extreme supply deficit

Source: Sovereign Metals

Simple geology

High grade rutile mineralisation from surface

- Rutile mineralisation lies in laterally extensive flat "blanket" style bodies
- All mineralisation occurs in a single, large, and coherent deposit with much of the high-grade material occurring within the top ~5 metres from surface
- Several high-grade mineralised corridors strike NE – SW providing significant exploration targets at depth



Source: Sovereign Metals

Simple mining

Hydro-mining a proven mining technique

- Long history of successful hydro-mining of heavy mineral deposits across southern Africa

- Numerous African heavy minerals operations use hybrid hydro / dozer mining methods that provide significant operational flexibility

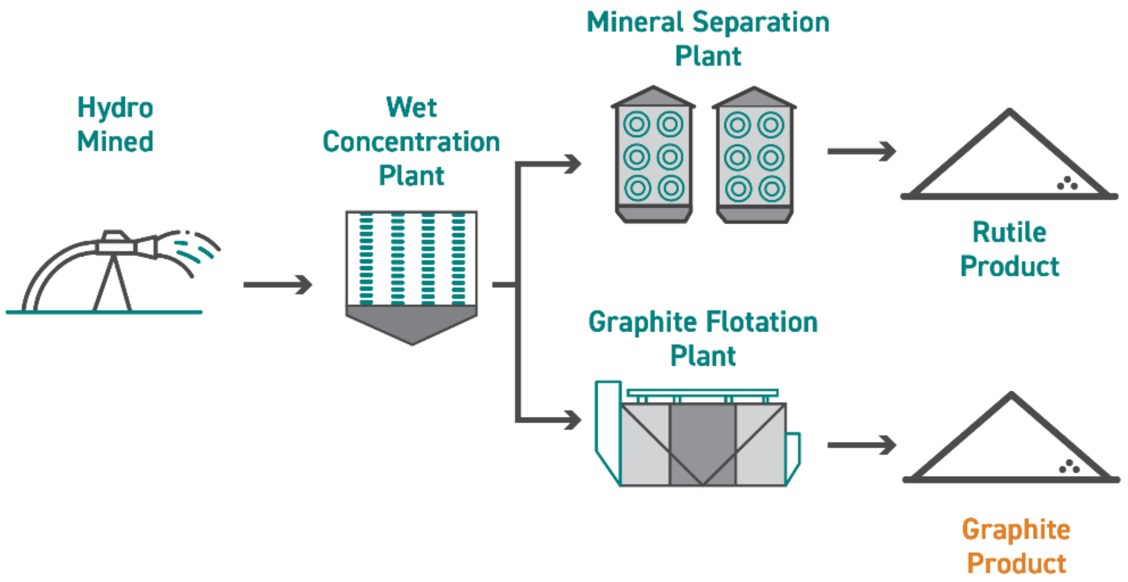
Homogenous, soft, friable saprolite

Source: Sovereign Metals; Image of hydro mining from Base Resources

Simple processing

Premium-grade rutile produced via conventional flowsheet

- Robust metallurgy now confirmed from two distinct bulk test work programs
- Significant interest from Tier 1 rutile off-takers
- Conventional graphite flotation plant at marginal incremental cost

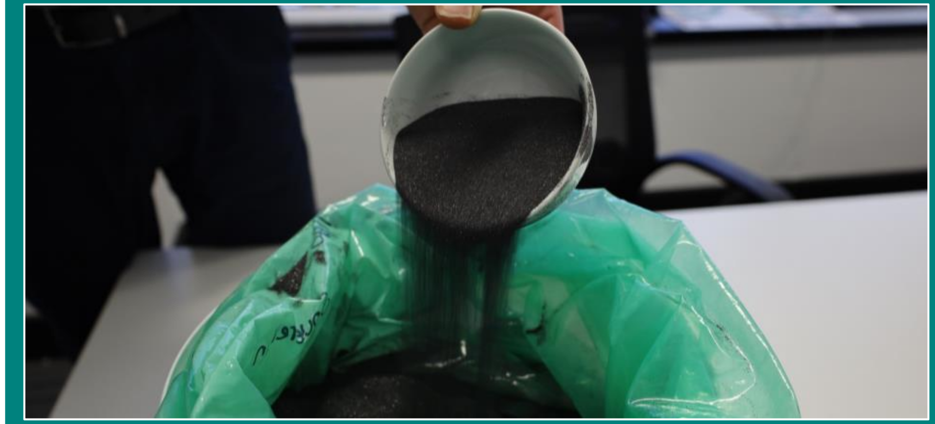


94%-100%
Stand-out Rutile Metallurgical Recoveries

95.0%-97.2% TiO_2
Premium Specification Rutile

96% TGC
Coarse Flake High-grade Graphite

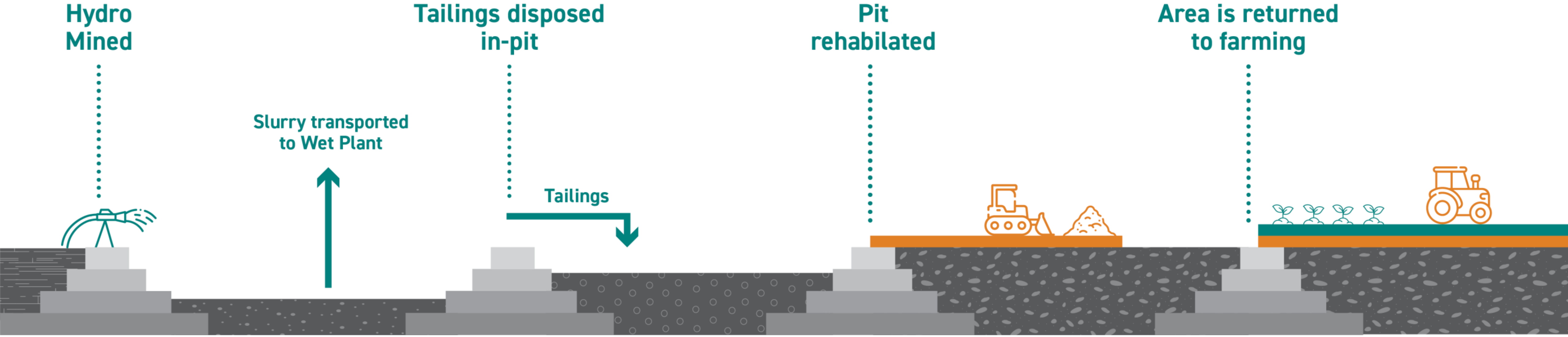
Final rutile product from test work



Source: Sovereign Metals

Simple progressive rehabilitation

Socially responsible and sustainable



- In-pit disposal minimises disturbance
- Progressive returning of land to communities
- Efficient closure campaign at end of mine life

Example of progressive rehabilitation of a mineral sands mine

Source: Images from Minerals Council of Australia

Low-risk operation

Simple Mining

High-grade rutile mineralisation from surface

Soft, friable material suitable for efficient hydro and dozer-trap mining methods

Simple Processing

Simple, conventional flowsheet

Single heavy mineral product means simplified back-end mineral separation plant

Progressive Rehabilitation

Positioned for effective ESG outcomes

Land to be progressively returned to original condition (farms/bushland)

Malawi
Stable, Transparent Jurisdiction

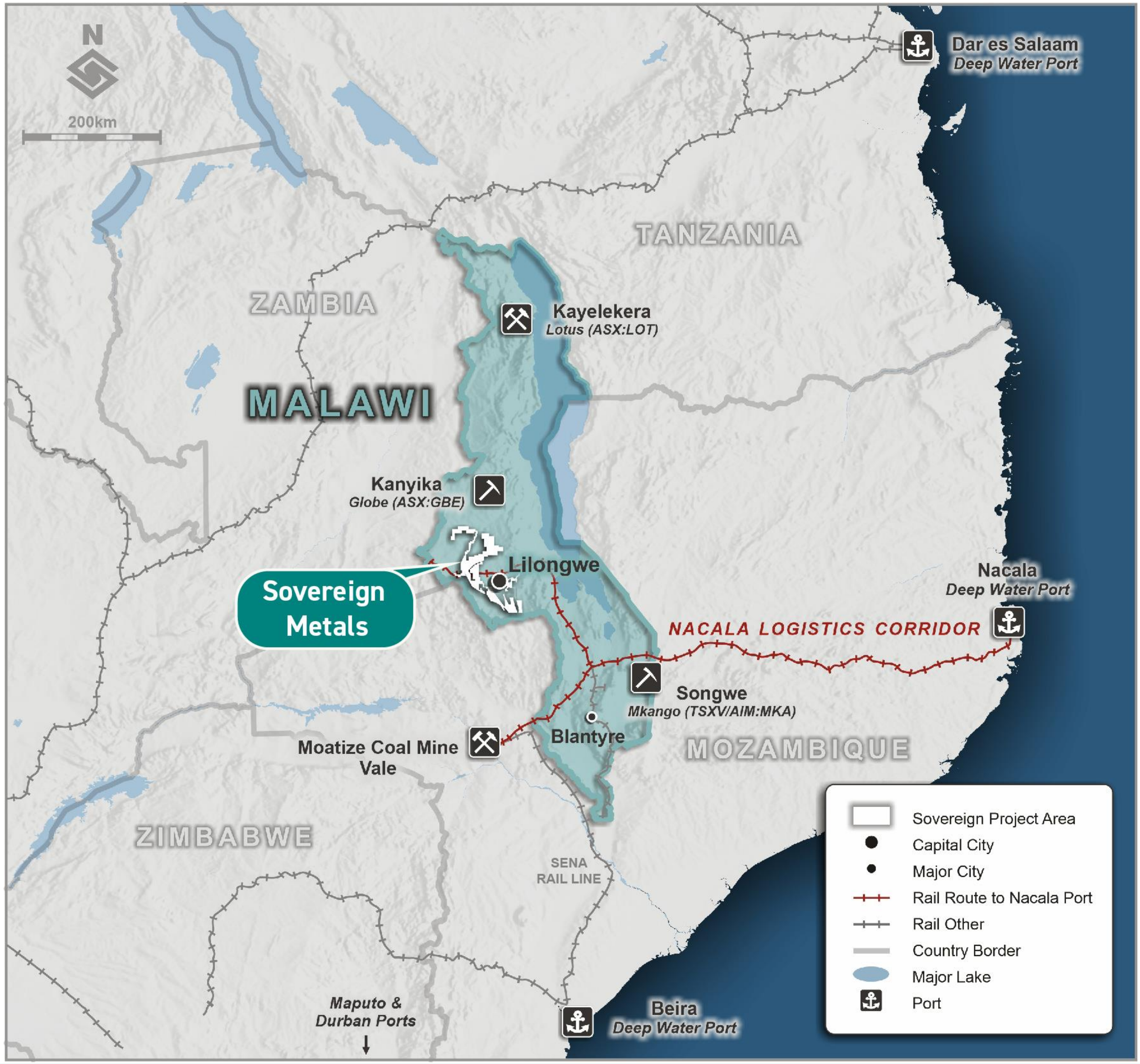
Member country of the Commonwealth

Attracting significant investment

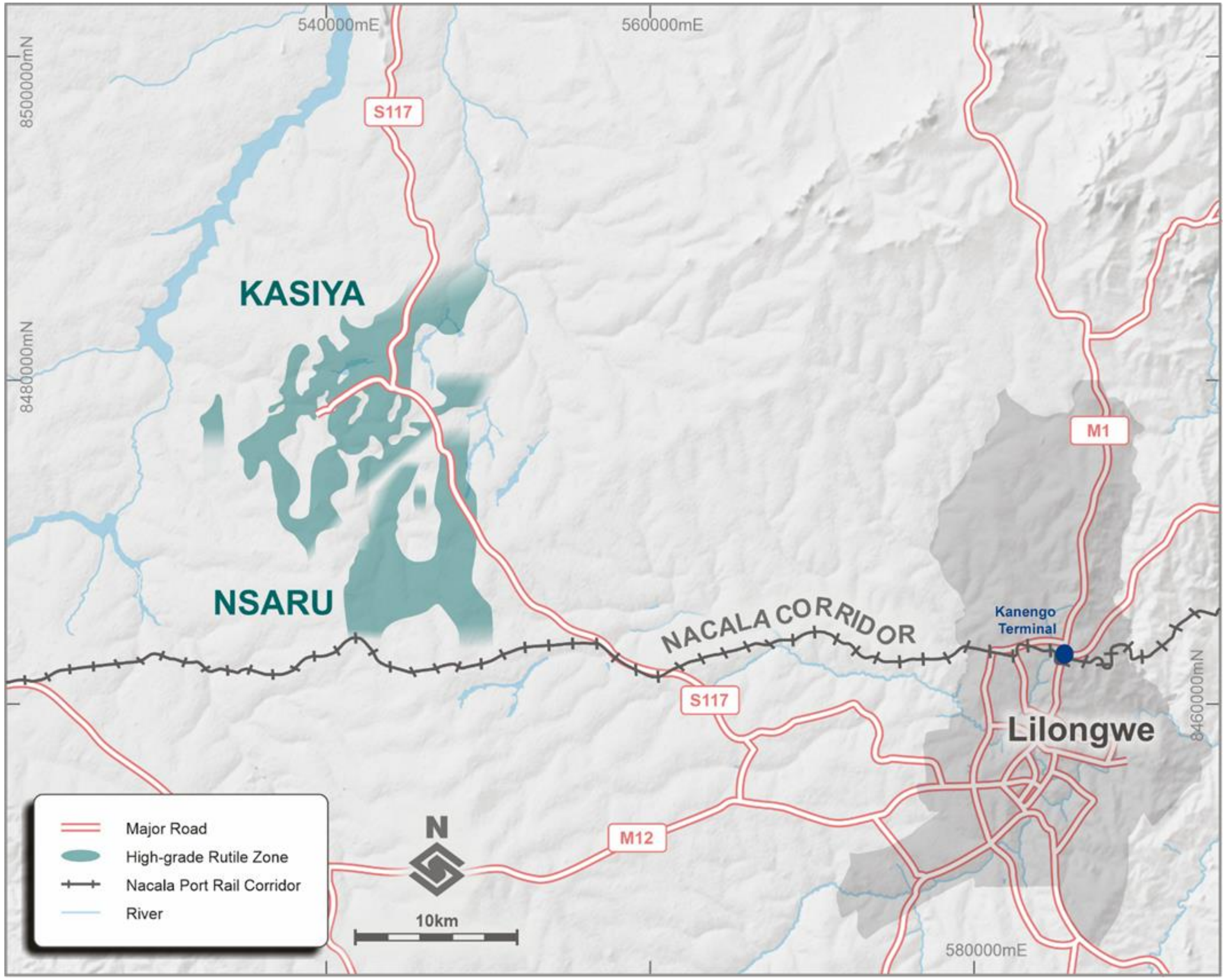
Demonstrable aspiration for mining

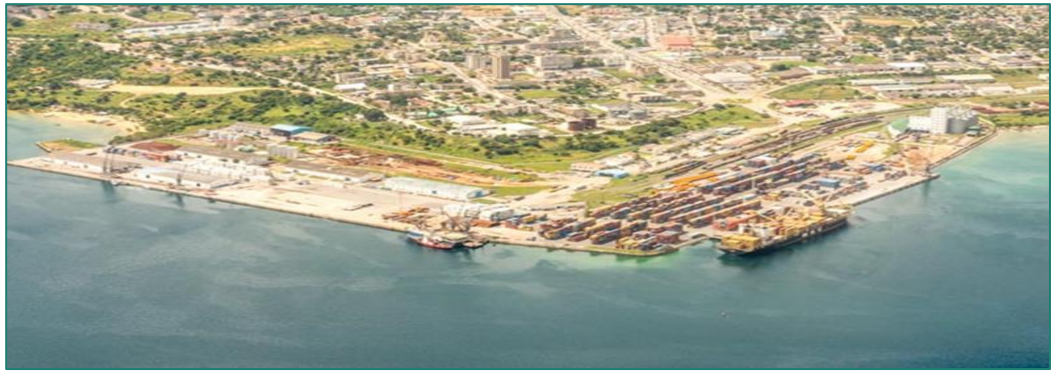
Excellent operating infrastructure

The Economist
2020 Country of the Year

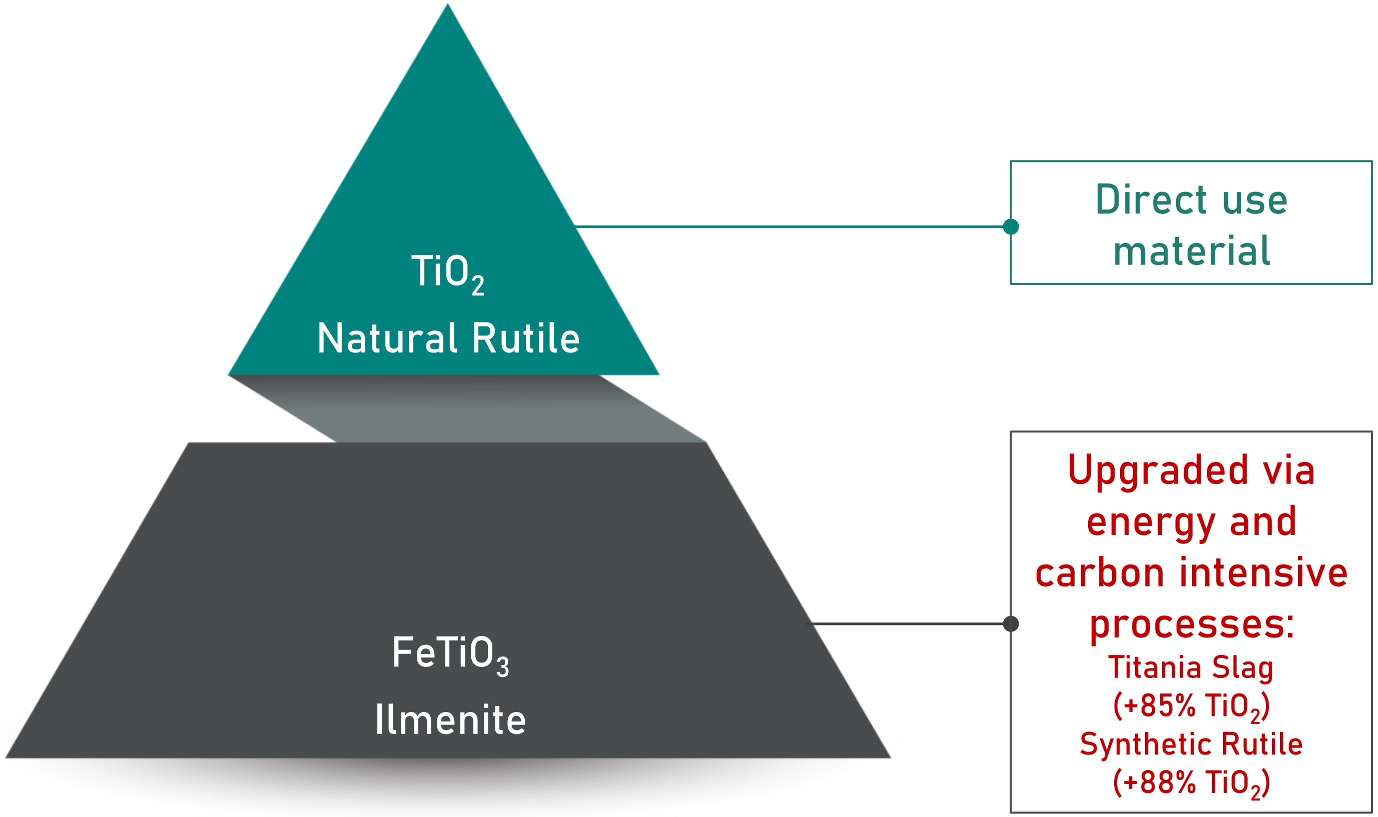


Operation-ready infrastructure

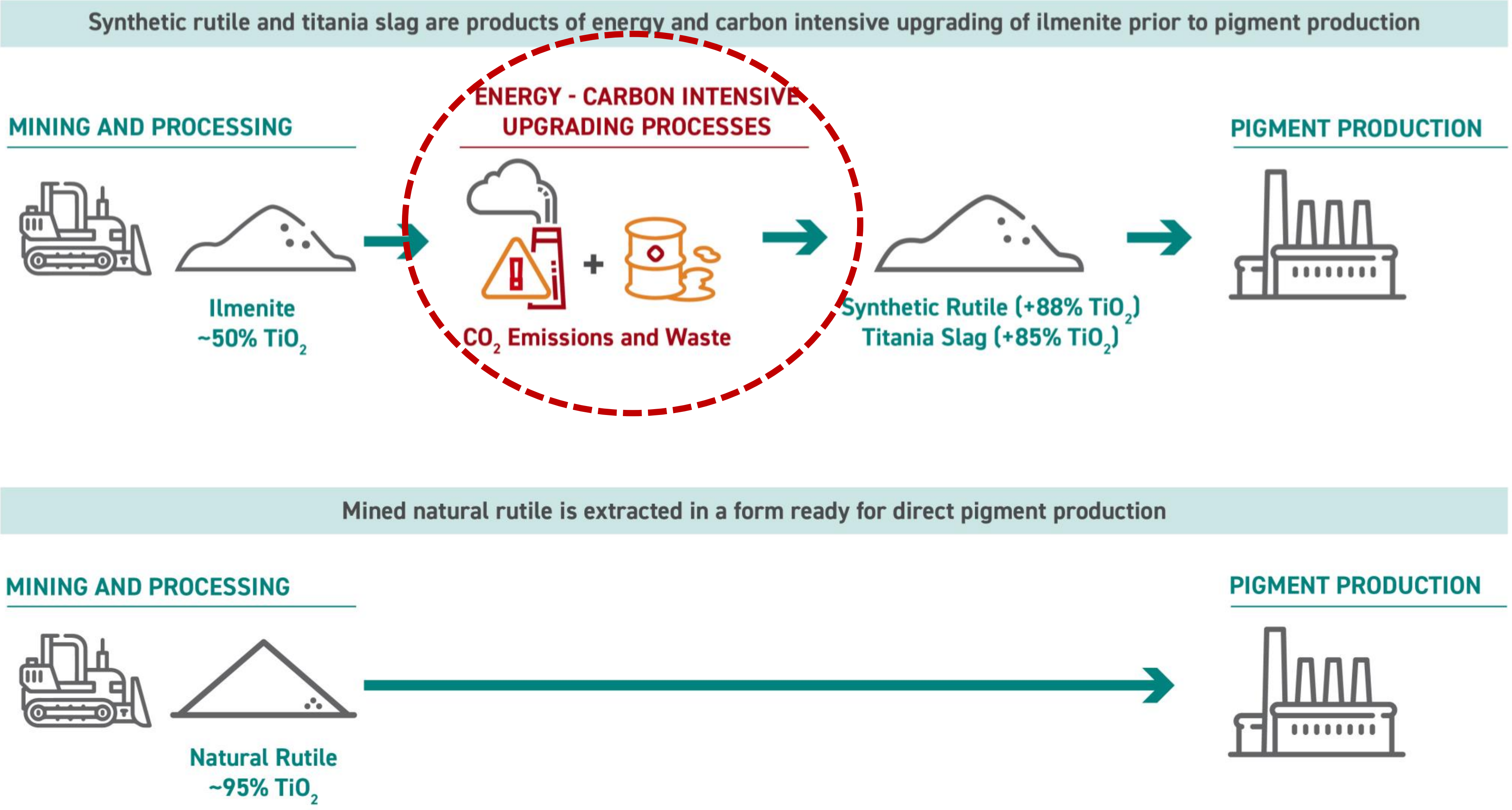




Natural rutile in a world of increasing cost of carbon emissions



Natural rutile – a lower carbon footprint alternative



Utilising natural rutile saves up to

2.8

tonnes CO_2 eq. per tonne

Source: Minviro Ltd; Sovereign Metals

Exciting year ahead

- Revised Life Cycle Assessment – *Q1 2022*
- Substantial JORC resource tonnage increase – *H1 2022*
- Updated Scoping Study based on new resource – *H1 2022*
- Commencement of Pre-Feasibility Study following completion of Scoping Study
- Continued Exploration across mineralised footprint
- Potential execution of MoUs with future rutile off-takers

CAPITAL STRUCTURE

432,433,755
Shares on Issue[1]

19,794,500
Unlisted Options[1]
($0.14 to $0.50)

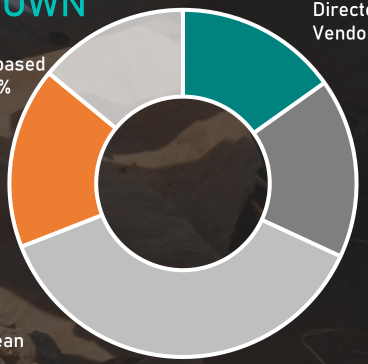
13,490,000
Performance Rights
(milestone vesting conditions)

A$216m / £118m
Un-Diluted Market Capitalisation @27.25p[2]

~A$3.7 m
Cash[3]

1 & 2. Closing price and equities as at 15 February 2022
3. Cash at Bank – 31 December 2021

REGISTER BREAK-DOWN



Estimate as at November 2021.

Source: Sovereign Metals; ASX; London Stock Exchange

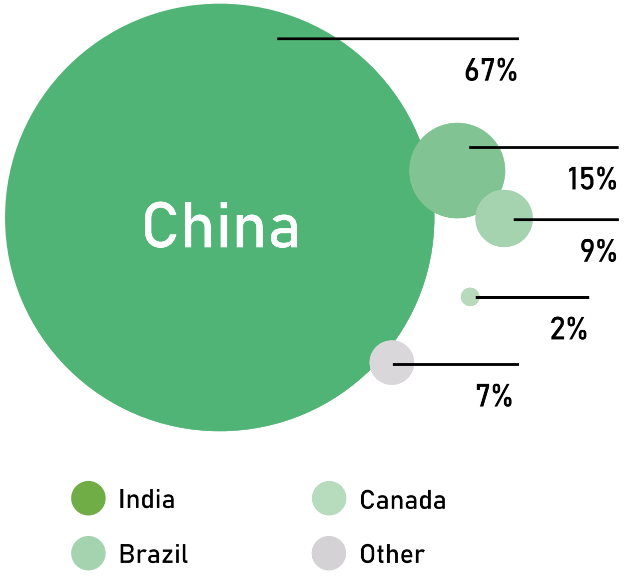
SOVEREIGN
METALS LIMITED

Thank you

Appendix I: EU & US have declared graphite a supply critical material

Currently China produces over two-thirds of all natural graphite and accounts for 100% of all anode material precursor

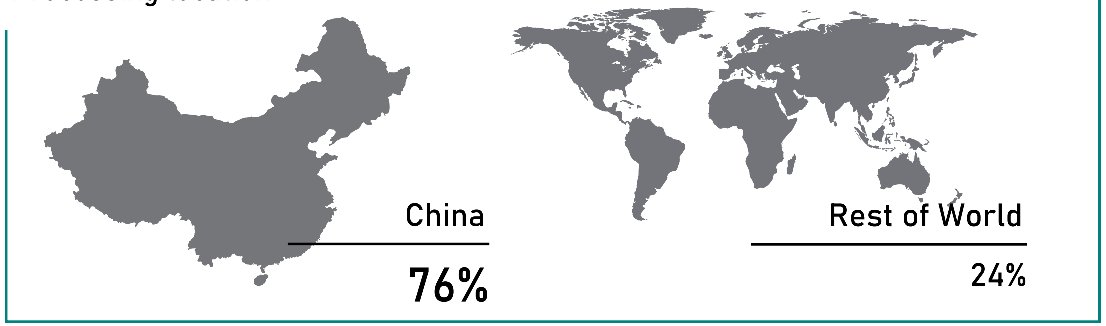
Global production per location



Natural Graphite

Extracted from mining (natural graphitization occurred over time)

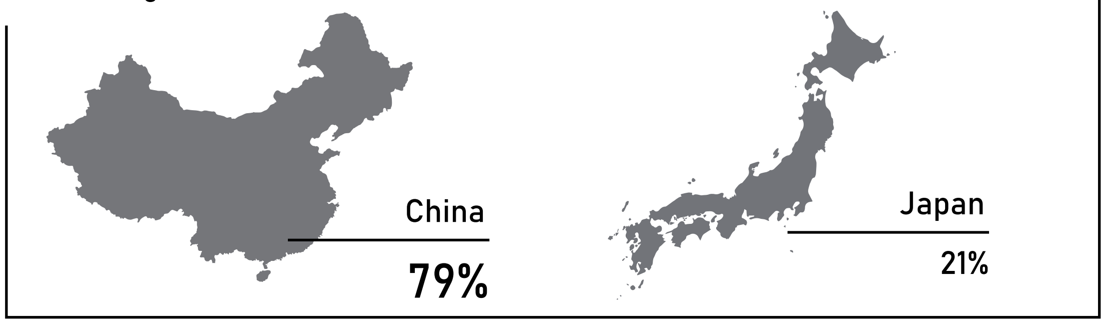
Processing location



Synthetic Graphite

Produced from needle coke via graphitization process.

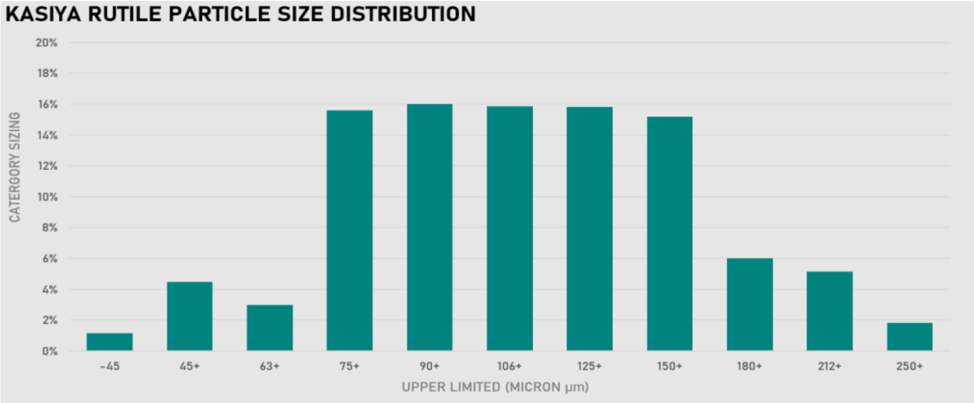
Processing location



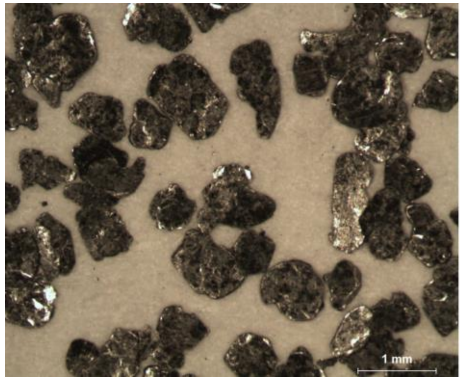
Source: Sovereign Metals

Appendix II: Premium product specifications

Constituent		Kasiya Products		Peer Comparisons	
		100% Recovery Product	94% Recovery Product	Sierra Rutile (Iluka)	Base Resources (Kwale)
TiO_2	%	95.0	97.2	96.3	96.2
ZrO_2+HfO_2	%	0.20	0.21	0.78	0.72
SiO_2	%	0.67	0.61	0.62	0.94
Fe_2O_3	%	0.99	0.42	0.38	1.25
Al_2O_3	%	0.45	0.38	0.31	0.23
Cr_2O_3	%	0.13	0.13	0.19	0.17
V_2O_5	%	0.67	0.70	0.58	0.52
Nb_2O_5	%	0.37	0.39	0.15	-
P_2O_5	%	0.01	0.001	0.01	0.00
MnO	%	0.02	0.01	0.01	0.03
MgO	%	0.003	b/d	0.01	0.10
CaO	%	0.003	0.001	0.01	0.04
S	%	0.01	0.01	<0.01	-
U+Th	ppm	31	23	26	53



Particle Size		Carbon	Weight Distribution	Flake Category
Tyler Mesh	Micron (µ)	(%)	(% w/w)	
+32	+500	96.0	5.4	Super Jumbo
-32 +48	-500 +300	96.6	25.1	Jumbo
-48 +80	-300 +180	96.7	30.9	Large
-80 +100	-180 +150	96.8	10.9	Medium
-100 +150	-150 +106	96.11	14.4	Small/Medium
-150 +200	-106 +75	95.8	7.5	Small
-200	-75	93.8	5.8	Amorphous
Total		96.3	100	



Source: Sovereign Metals

Appendix III: Commodity price deck

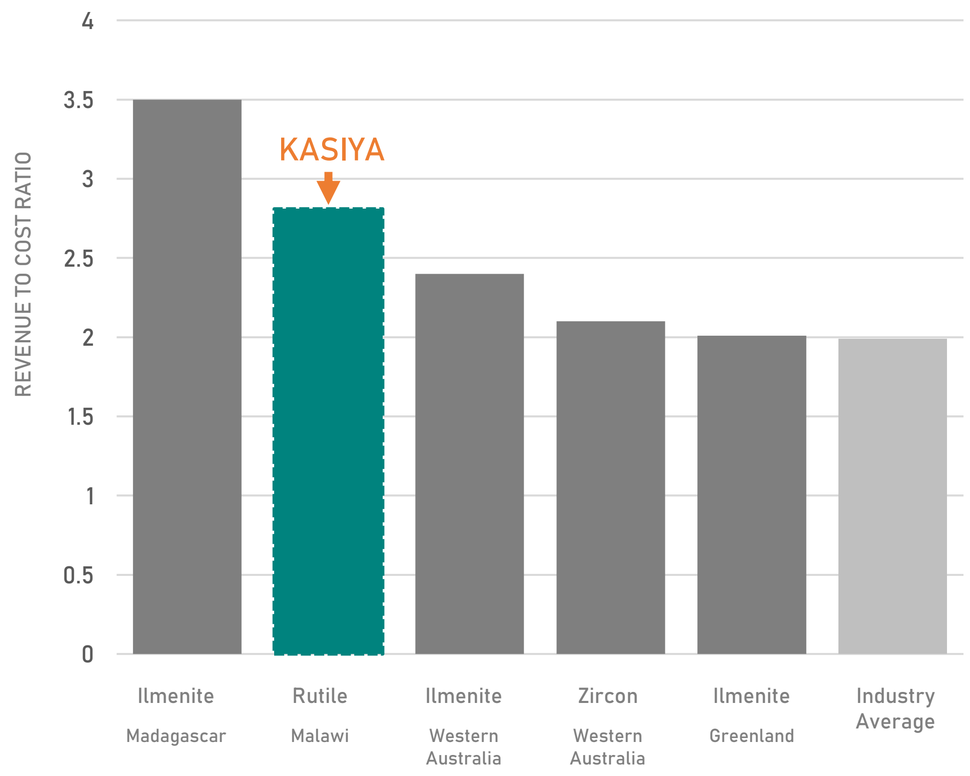
Rutile Price Assumption												
	Sales Mix	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Long- term
TZMI Forecast Price –Base (real)		$1,336	$1,334	$1,314	$1,336	$1,328	$1,311	$1,287	$1,255	$1,221	$1,180	$1,180
Bulk sales (pigment inducement price)	60%	$1,336	$1,334	$1,314	$1,336	$1,328	$1,311	$1,287	$1,255	$1,221	$1,180	$1,180
Bagged sales (25% premium)	40%	$1,670	$1,667	$1,642	$1,670	$1,660	$1,639	$1,609	$1,569	$1,526	$1,475	$1,475
Weighted Price		$1,470	$1,467	$1,445	$1,470	$1,461	$1,442	$1,416	$1,381	$1,343	$1,298	1,298
LoM Average												$1,346

Graphite Price Assumption				
Flake Category	Micron (µm)	Distribution (% w/w)	Forecast Price US$/t	Contribution US$/t
Super Jumbo	+500	5.4	$2,100	$114
Jumbo	-500 +300	25.1	$1,600	$402
Large	-300 +180	30.9	$1,085	$335
Medium	-180 +150	10.9	$775	$86
Medium/Small	-150 +106	14.4	$605	$87
Small	-106 +75	7.5	$515	$38
Amorphous	-75	5.8	$425	$24
Total		100	-	$1,085

Source: Sovereign Metals

Appendix IV: One of the world's best undeveloped mineral sands projects

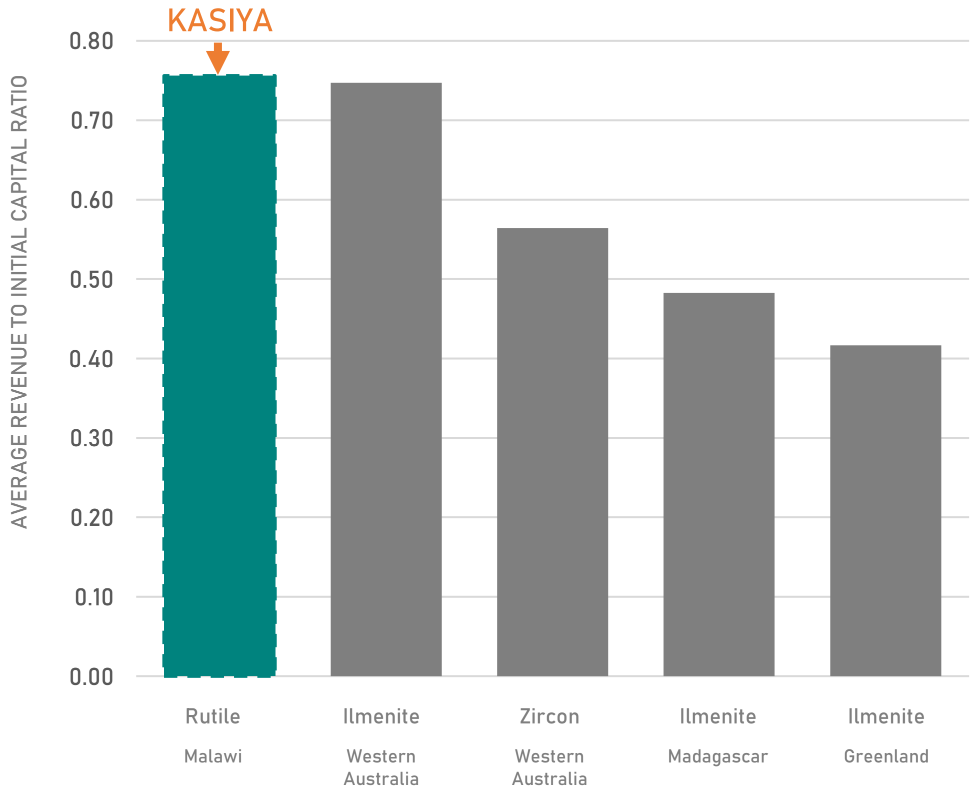
REVENUE TO COST RATIO UNDEVELOPED PROJECTS



*Revenue based on average life of mine & costs = operating cost plus royalties
Industry Average: TZMI 2022 Estimate

UNDEVELOPED MINERAL SANDS PROJECT PIPELINE

ANNUAL AVERAGE REVENUE TO CAPEX



*Average Revenue based on average life of mine revenue
Capital costs: Initial capital costs disclosed in study. Total capital used for phased developments

Source: Sovereign Metals