

# BAOBAB RESOURCES

## UNLOCKING THE IRON & STEEL WEALTH OF MOZAMBIQUE



BAOBAB  
RESOURCES



June 2013

- Located in the emerging mining & industrial hub of Tete, where tier one coal deposits are being developed by global industry leaders.
- Unique access to all critical infrastructure & complementary resource requirements.
- 727Mt Global JORC Resource inventory.
- Pre-Feasibility Study of a 1Mtpa operation underlines the potential to add substantial value at the mine-mouth through smelting of Pig Iron & Ferro-Vanadium with compelling economics:
  - **NPV<sub>10</sub> (before tax):** **US\$1.3bn**
  - **IRR (before tax):** **22%**
  - **Opex (FOB & pre-credits):** **US\$225/t**

BAOBAB RESOURCES PLC  
27/28 Eastcastle Street  
London W1W 8DH  
United Kingdom  
Web: [www.baobabresources.com](http://www.baobabresources.com)  
AIM : BAO

BAOBAB MINING SERVICES Pty Ltd  
Unit 25 South Terrace Piazza  
Fremantle  
Western Australia 6160  
Australia  
Post: PO Box 1229 Fremantle  
Western Australia 6959 Australia  
Tel: (+61) 8 9430 7151  
Fax: (+61) 8 9430 7664

CAPITOL RESOURCES Lda  
Rua De França 19 / 2 Andar  
Bairro Coop  
Maputo  
Mozambique  
Tel: (+258) 21 415 200

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# BAOBAB RESOURCES PLC



- Baobab Resources plc listed on AIM in 2007 & wholly owns Mozambique company Capitol Resources Ida.
- Mozambique focused with a portfolio of 5 green to brown fields projects boasting a range of commodities. First mover advantage with 6 years operating experience in country.
- Baobab owns 85% of the Tete project since bringing in International Finance Corporation (IFC), a member of the World Bank group, in 2008/2009. IFC now has a 15% contributing interest in the project & is the Company's second largest shareholder.
- African Mineral Exploration & Development (AMED) fund became a cornerstone investor in July 2012 through a £4m equity subscription. Conversion of options in January 2013 raised an additional £3m & raised AMED's stake to 27%.
- Robust 1Mtpa Pre-Feasibility Study results released at the end of March 2013 & 2Mtpa production scenario released in June 2013.
- Standard Chartered Bank's specialist mining corporate finance division engaged in June 2013 to assist Baobab determine & execute its corporate opportunities with relation to the Tete Project.



Shares on issue:	300.1m
Warrants:	0.4m
Options:	7.3m
Employee & Director Options:	13.7m

Fully Diluted: 321.5m

Market Cap (3 May 2013): c.£55m



# BOARD PROFILE

## DEMONSTRABLE EXPERIENCE, FOCUS & SUCCESS



### **Jeremy Dowler, Chairman**

- Founding shareholder & Finance Director of Platmin Ltd from 2000 to 2005. During this period Platmin was transformed from a concept capitalised at £1m to an exploration company capitalised at £170m, with a discovered resource base of 23m ounces of PGE's, upon listing on the AIM & TSX in 2006. By mid-2007, the pre-production market capitalisation had risen to c.£450m.
- Non-executive director of Welsh coal miner Unity Power Plc from 2006 until December 2011, developing a world class metallurgical coal deposit. Unity has defined a resource base of c.2Bt and is in production.
- Qualified Chartered Accountant & board member of various resource companies of the past 20 years including ASX listed Cove Mining as well as corporate consultant to OFEX traded Coronation Mining Limited which initiated exploration on the Essakane gold deposit in Burkina Faso, now in the IAMGOLD stable.



### **Jonathan Beardsworth, Non-executive Director**

- Managing Director (Asia) for corporate advisors Cutfield Freeman & Co. Based in Hong Kong.
- Former CEO of Metals Exploration Plc. – delivered the feasibility study on the Runruno Au/Mo project in the Philippines.
- Former head of the London office of Standard Bank Plc's Mining & Metals team with specific responsibility for Asia/China.
- Nearly 20 years corporate & M&A experience in the mining industry worldwide.
- Early career: Major, Royal Tank Regiment, British Army



### **Dr Mohan Kaul, Non-executive Director**

- Dr Kaul is currently Chairman of the Commonwealth Business Council (CBC) & Commonwealth Investment Corporation.
- Appointed Director-General & CEO of the CBC on its establishment by the Commonwealth Heads of Government in 1997, a position held until March 2012.
- A member of the Presidential Advisory Councils of Mozambique, Uganda & Zambia.
- Has led international advisory & consultancy assignments in over 40 countries, including assisting the South African government on public service reforms & leading a delegation to China for Presidential level discussions on governance & globalisation.



### **Dr David Twist, Non-executive Director**

- PhD geologist & business man with more than 30 years experience in mineral research & exploration.
- Has been involved in multi-commodity target generation, implementation & management of exploration programmes, feasibility studies, mining & deal-making.
- Founding a director of Platmin, Taung Gold, Sephaku Holdings & other companies.
- Co-founder of African Minerals Exploration & Development SICAR, a private equity fund focused on brownfields exploration in Africa.



### **Carlo Baravalle, Non-executive Director**

- Holds an MBA from INSEAD & brings a wealth of experience in corporate finance to the board.
- Held numerous roles in the European & North American telecoms industry, including Director of the Corporate Finance Telecoms team at Warburg.
- Involved in the private equity sector since 2007, managing large funds for mainly Italian institutional investors.
- Co-founder of African Minerals Exploration & Development SICAR, a private equity fund focused on brownfields exploration in Africa.

# MANAGEMENT PROFILE

## DEMONSTRABLE EXPERIENCE, FOCUS & SUCCESS

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### **Ben James, Managing Director**

- Geologist with over 17 years global experience in the mineral exploration & development industry (MAusIMM).
- Working expertise in a wide variety of geological terrains & commodities in Africa, Australasia & eastern Europe.
- With Baobab Resources since 2006 as Exploration Manager, Technical Director & Managing Director.
- Relocated to Mozambique during Q2 2012 to oversee aspects of PFS, particularly government & key stake holder liaisons.



### **Iain Plews, Exploration Manager**

- Over 30 years exploration & mining experience in Africa, holding senior positions with Anglo American Corporation, Ashanti Goldfields, ITM Corporation, Reunion Mining & Takoradi Gold NL.
- Operated in over a dozen countries in sub-Saharan Africa exploring for a range of commodities including gold, PGEs, diamonds & base metals.
- Residential in Mozambique. Fluent Portuguese language/literacy.



### **Christian Kunze, Project Manager**

- Masters Degree in Mechanical Engineering & Business Administration.
- 20 years international management experience in iron ore project development, plant engineering & steel manufacture, working for industry specialists including Siemens VAI & ProMet Engineers.
- Well established network of industry associates in the Africa, USA, Europe, Asia & Australia.
- Combined technical expertise & commercial understanding.
- Managed the 2011 Tete Scoping Study.



### **Graham Anderson (GDA Corporate), Joint Company Secretary & CFO Services**

- Chartered Accountant with over 25 years of commercial & corporate experience.
- Corporate Services Partner with the National Accounting firm Howarth before establishing GDA Corporate in 1999.
- Has held the offices of Chairman & Non Executive Director of a number of publicly listed companies as well as company secretary for over a dozen companies.
- Strong expertise in accounting standards, corporate governance, the Corporate Act & ASX Listing Rules, as well as AIM client experience.

# PIG IRON MARKET

## RAPID GROWTH SECTOR

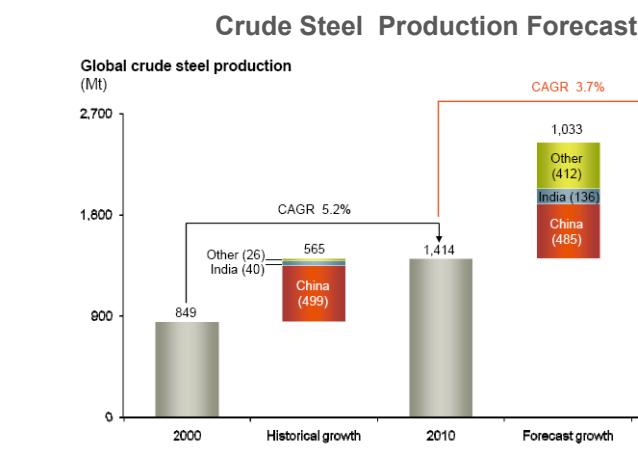
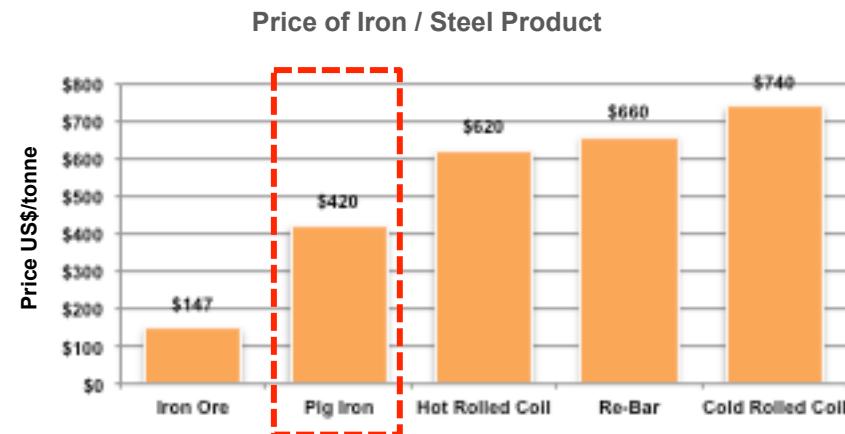
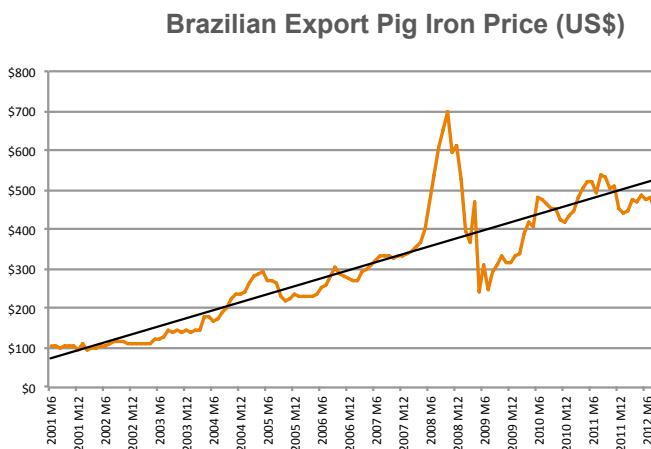


### COMMODITY OVERVIEW

- Pig Iron is a Raw Material & an intermediate product of the smelting of Iron Ore.
- Pig Iron used in Electric Arc Furnaces (EAF) along side Scrap Iron to produce crude & finished steel products.
- Global Consumption:
  - Pig Iron:** c.70Mtpa (including domestic China)
  - Scrap Iron:** c.350Mtpa (2010)

### STRONG MARKET FUNDAMENTALS

- Fundamentals driven by:
  - Industrialization of BRICs & sub-Saharan Africa – appetite for steel products
  - Declining quality & quantity of scrap vs. growing number of EAFs



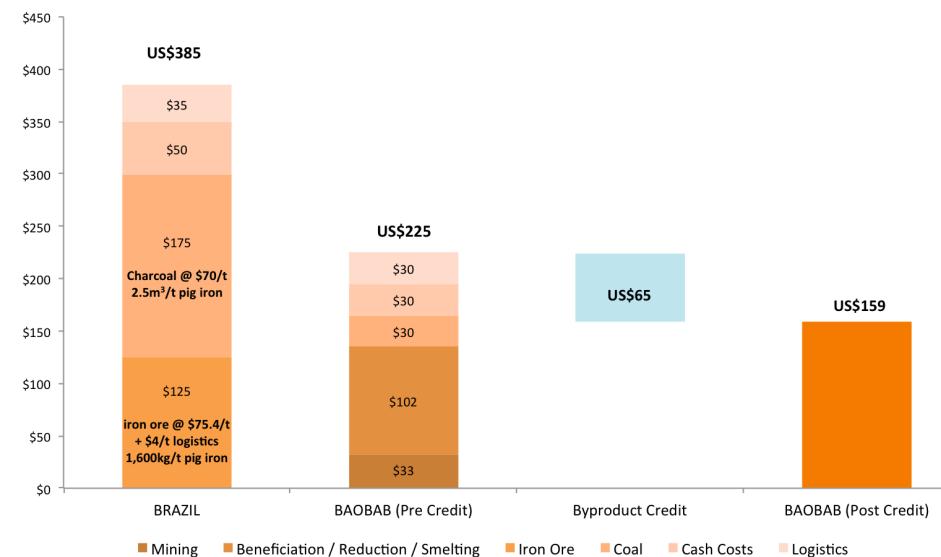
# TETE PIG IRON OPERATING COSTS

TETE PROJECT TO REDEFINE THE BOTTOM OF THE COST CURVE



## TETE PIG IRON

- Unique confluence of iron making commodities (iron ore, coal, power & water).
- Current JORC Resource inventory underpins a 1Mtpa to 4Mtpa Pig Iron operation.
- **Pre-Feasibility Study indicates a 1<sup>st</sup> quartile cost of production** enabling the Tete Project to compete across the broader global Pig Iron market, including the Chinese market, as well as competing within the significantly larger Scrap Iron space.
- Producing higher value product mitigates competing for port and rail access.



**“** Recent discoveries of significant off-shore gas reserves position Mozambique to become one of the world's largest LNG exporters within the next decade. An investment of over \$40bn has been slated to establish the industry which, coupled with other large-scale infrastructure projects being commissioned, is likely to drive future domestic & regional demand for iron & steel materials.

**”**

# MOZAMBIQUE

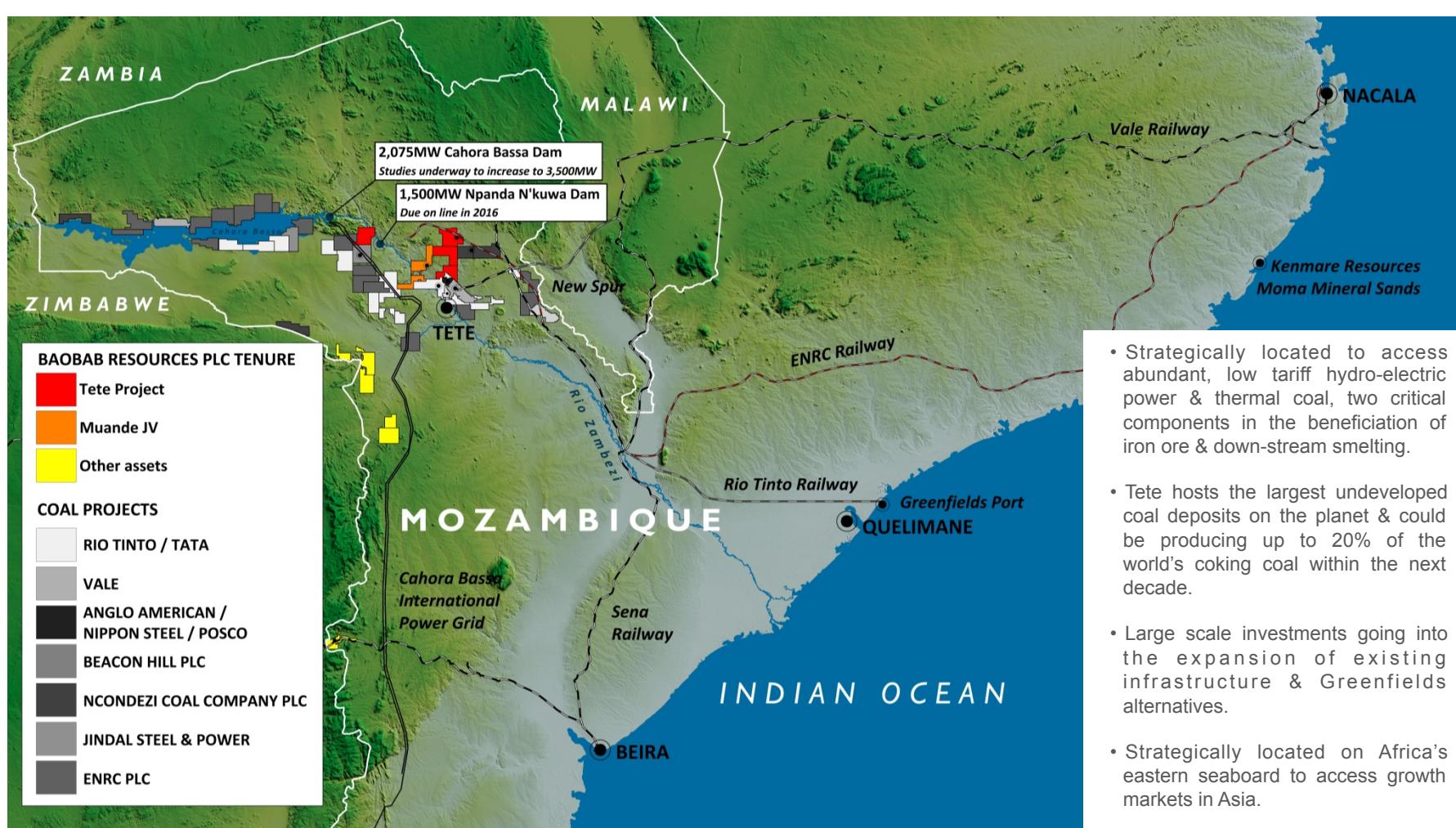
## SOUTHERN AFRICA'S RISING STAR



- Robust geological provinces with little or no historic exploration.
- Stable, democratic government.
- Modern Mining Act & Cadastral licensing system guaranteeing security of tenure.
- Improving infrastructure with major investments into transport, communications, power, agriculture, industry & mining.
- The Mozambican Government is firmly committed to encouraging foreign investment in developing the Mozambique's mining industry. Baobab enjoys strong support from the Government, in particular the Ministry for Mineral Resources.
- Flourishing mining industry with the Tete region becoming significant mining & industrial hub, expected to produce up to 20% of the world's coking coal within the next decade.
- Major discoveries in Oil & Gas sector could position Mozambique as the 3rd largest LNG exporter globally.
- Successfully commissioned large scale secondary industries as evidenced by the Mozal aluminium smelter (BHP Billiton / Mitsubishi / IDC).

# TETE PIG IRON / VANADIUM / TITANIUM PROJECT

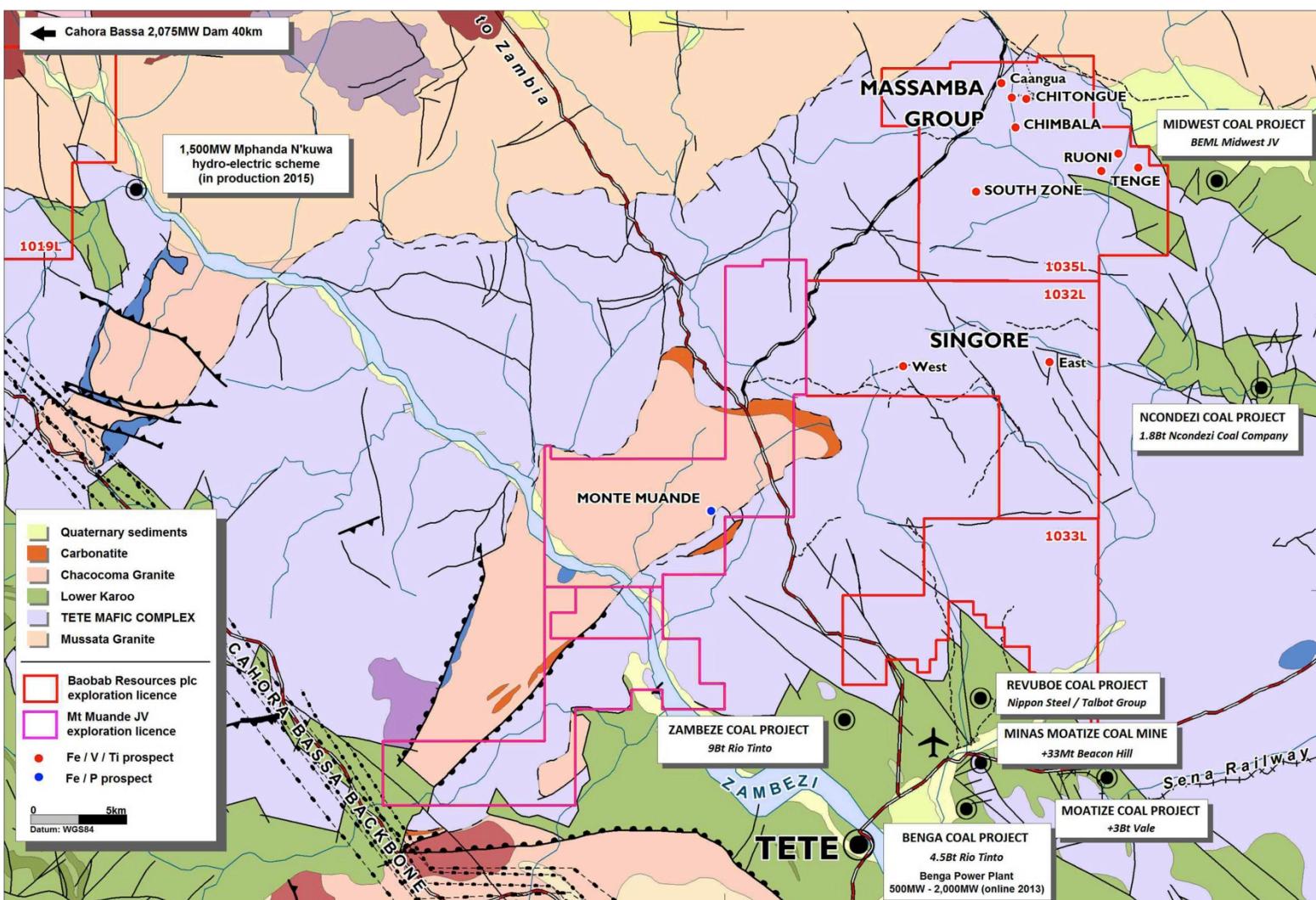
A MAJOR ASSET IN AN EMERGING MINING & INDUSTRIAL HUB OF SOUTHERN AFRICA



- Strategically located to access abundant, low tariff hydro-electric power & thermal coal, two critical components in the beneficiation of iron ore & down-stream smelting.
- Tete hosts the largest undeveloped coal deposits on the planet & could be producing up to 20% of the world's coking coal within the next decade.
- Large scale investments going into the expansion of existing infrastructure & Greenfields alternatives.
- Strategically located on Africa's eastern seaboard to access growth markets in Asia.

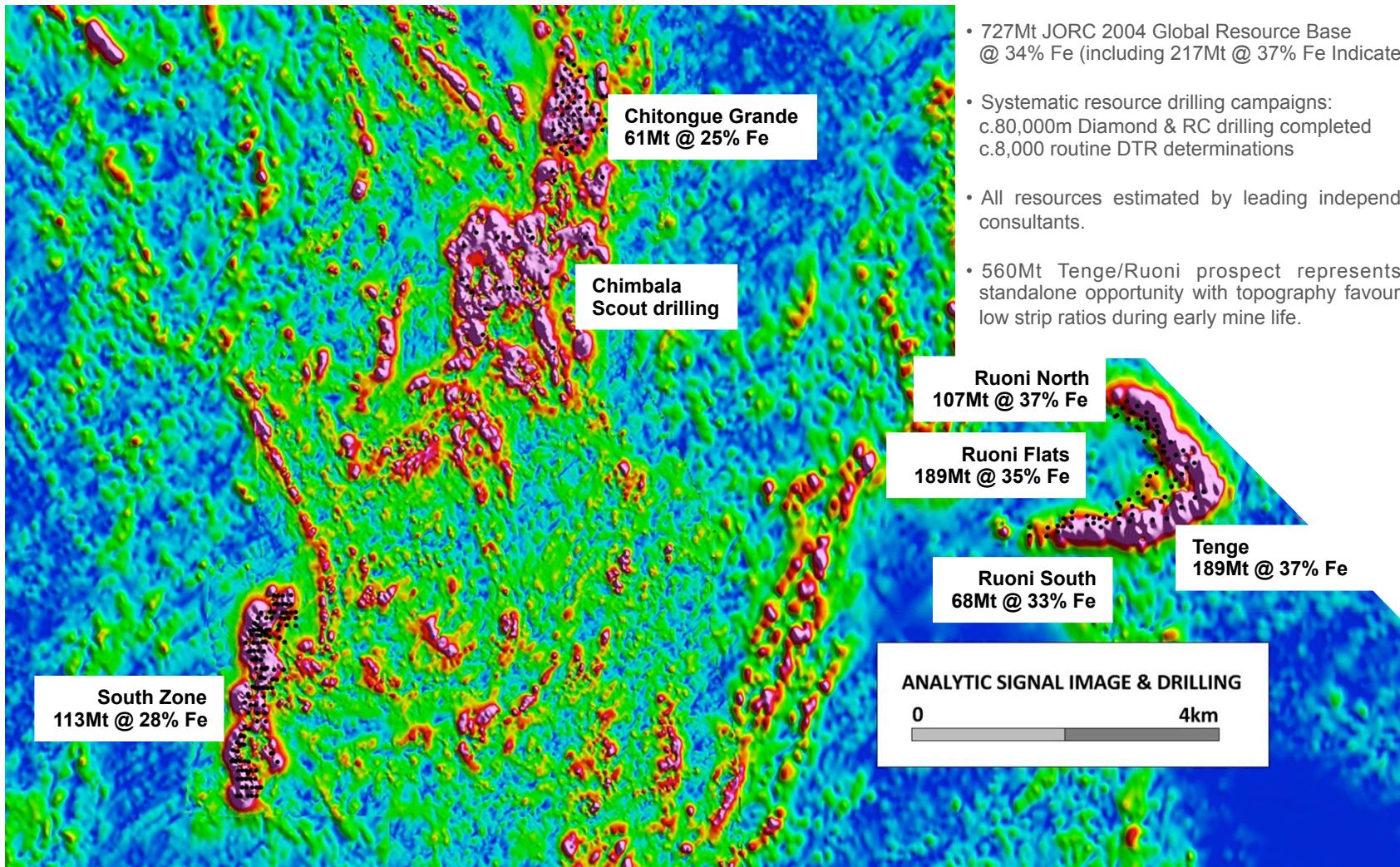
# PROJECT INFRASTRUCTURE & GEOLOGY

STRATEGIC LAND POSITION STRADDLING 620km<sup>2</sup> OF TETE MAFIC COMPLEX



# RESOURCE INVENTORY

## SMALL FOOTPRINT / LARGE POTENTIAL



# PRE-FEASIBILITY STUDY: PROCESS FLOW SHEETS

## UTILISING LOW CAPEX, WELL ESTABLISHED TECHNOLOGY



### Iron Making Pyro-Metallurgy

#### Mass Balance & CSIRO Results:

- Low impurity Pig Iron within ISO specifications.
- Vanadium slag grading c.20% V<sub>2</sub>O<sub>5</sub>, upgradable to a ferro-vanadium alloy.
- Titanium slag grading c.30% TiO<sub>2</sub>.

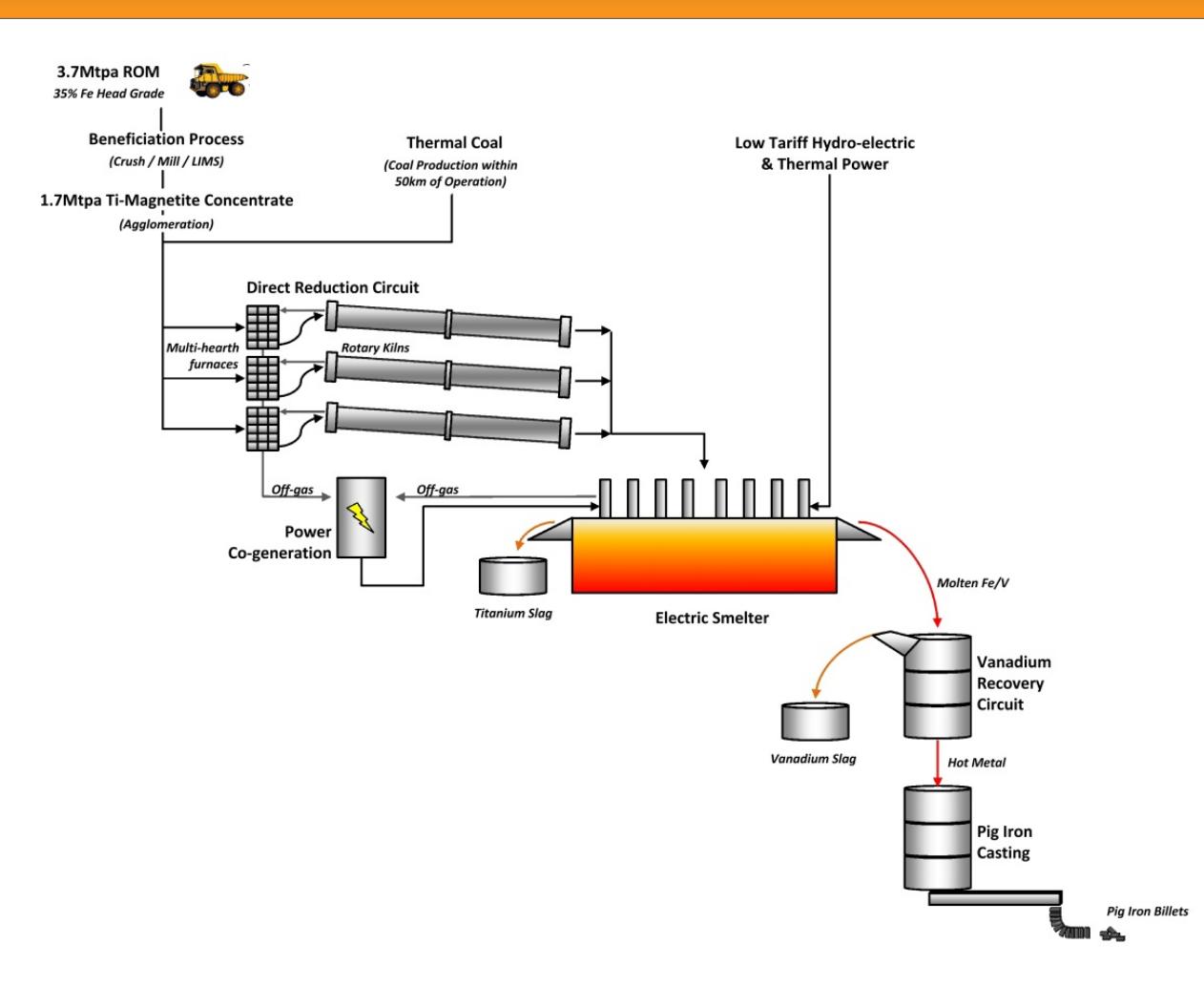
#### Operational Analogies:

##### Highveld Steel & Vanadium

- Operator: EVRAZ
- Years in operation: >40
- Concentrate specs: 59% Fe, 13% TiO<sub>2</sub>, 1.5% V<sub>2</sub>O<sub>5</sub>
- Annual production: c.750,000t

##### New Zealand Steel (Glenbrook)

- Operator: BlueScope Steel
- Years in operation: c.40
- Concentrate specs: 59%Fe, 8% TiO<sub>2</sub>, 0.46% V<sub>2</sub>O<sub>5</sub>
- Annual production: c.1Mt
- Power Co-gen: 60% total power requirement



# PRE-FEASIBILITY STUDY: REDUCTION & SMELTING TESTWORK

## HIGH PURITY PIG IRON PRODUCED WITH BAOBAB IRON ORE & TETE COAL



### CSIRO REDUCTION & SMELTING TESTWORK

- Bench-scale pyro-metallurgical test work has confirmed the ability to produce a low impurity pig iron product using Baobab's iron ore & local Mozambique thermal coal.
- The reduction & smelting test work conducted using coarse concentrates derived from the Tenge resource block at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) laboratories in Australia.
- Reduction test work using a rotary kiln simulator returned very promising results with in excess of 80% metallisation being achieved after a short residence time using locally sourced thermal coal as a reductive agent.
- Samples from the rotary kiln experiments were inductively smelted in a crucible to produce a clean disc of pig iron reporting 97% Fe (at 1.8% C) & containing a very low level of titanium of 0.002%.

Product	Assays (%)										
	Fe	C	S	P	Ti	V	Cu	Ni	Co	Cr	
Pig Iron (melt -1 iron [A])	97.0 <sup>#1</sup>	1.76	0.2	0.161	0.002	0.102	0.037	0.209	0.045	0.175	

<sup>#1</sup> – Fe approximate by difference, Carbon and Sulphur analysis by LECO and other analytes by ICP OES.



# PRE-FEASIBILITY STUDY: RESULTS

## COMPELLING COMMERCIAL CASE FOR DEVELOPMENT



		1Mtpa with 37y LOM	2Mtpa with 22y LOM
<b>Summary of Key Financial Parameters</b>	<b>Unit</b>		
NPV @ 10% (Pre - Tax)	US\$M	1,261	2,401
EBITDA (LOM)	US\$M	10,376	12,430
EBITDA (Avg. p.a, steady state)	US\$M p.a	280	565
IRR (Pre - Tax)	%	22	26
<b>Key Parameters</b>			
Resource Base	Mt	117	145
Life Of Mine	Years	37	22
Pig Iron production (LOM)	Mt	37	44
FerroVanadium Production (LOM)	Kt	119	141
Royalty <sup>(1)</sup>	%	3%	3%
<b>Commodity Prices</b>			
Pig Iron	US\$/t	450	450
Ferro-vanadium	US\$/t	25,000	25,000
<b>Unit Operating Costs (FOB)</b>			
Pig Iron (Pre Credit)	US\$/t pig iron	225	224
Ferro-vanadium	US\$/t pig iron	4,652	4,652
Pig Iron (Post Credit)	US\$/t pig iron	159	158
<b>Capital Expenditure</b>			
Upfront Capex - Pig Iron Plant	US\$M	1,010	1,761
Upfront Capex - FerroVanadium Plant	US\$M	133	220
Total Upfront Capex	US\$M	1,143	1,981
Sustaining Capital - First 5 years <sup>(2)</sup>	%	2.5%	2.5%
Sustaining Capital > 5 Years <sup>(2)</sup>	%	5.0%	5.0%

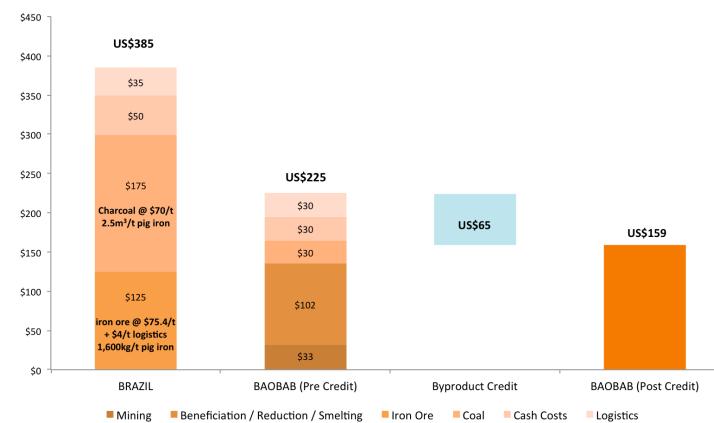
# PRE-FEASIBILITY STUDY: FERRO-VANADIUM CO-PRODUCTION

## A HIGH VALUE / HIGH DEMAND ADDITION TO THE REVENUE STREAM



### FERRO-VANADIUM ALLOY (FeV)

- Over 90% of vanadium is consumed as ferrovanadium in the production of steel to improve steel strength, toughness & heat resistance. It is usually added in the form of ferro-vanadium (FeV), a vanadium-iron alloy.
- Global demand is set to increase with new Chinese regulations on high strength construction steel a key driver.
- Co-production of c.3,000tpa (in 1Mtpa scenario) of ferro-vanadium alloy (FeV) adds significantly to the revenue stream & represents a by-product credit of c.US\$66/t of pig iron (using US\$25/kg FeV).



- Recently released Pre-Feasibility Studies assessing similar production scenarios in southern Africa estimate a ferro-vanadium price of \$35/kg FeV.

### Summary of Production Scenarios at \$25/kg & \$35/kg FeV

Production Scenario	1Mtpa	2Mtpa	1Mtpa	2Mtpa
	FeV Price	\$25/kg	\$35/kg	
NPV10 (before tax)	\$1.3bn	\$2.4bn	\$1.5bn	\$2.9bn
IRR (before tax)	22%	26%	25%	29%

# DEFINITIVE FEASIBILITY STUDY: MANAGEMENT TEAM

INFORMED, INNOVATIVE COLLABORATION OF INDUSTRY SPECIALISTS



## Christian Kunze, Baobab Resources Project Manager

- Masters Degree in Mechanical Engineering & Business Administration.
- 20 years international management experience in iron ore project development, plant engineering & steel manufacture, working for industry specialists including Siemens VAI & ProMet Engineers.
- Well established network of industry associates in the Africa, USA, Europe, Asia & Australia.
- Combined technical expertise & commercial understanding.
- Managed the 2011 Tete Scoping Study & 2012 Pre-Feasibility Study.

## Dr John Clout, Process Consultant

- Former Head of Resource Strategy at FMG.
- Former CSIRO manager & adviser to Rio Tinto, BlueScope, OneSteel, Robe River, Hancock & WISCO.
- Adjunct Professor at the School of Mechanical & Chemical Engineering, University of Western Australia.
- Leader in iron ore petrography, metallurgy, beneficiation, downstream processing & marketing.

## André Mouton, Engineering Consultant

- 21 years experience in iron & steel making & related process engineering industry (ISCOR, Columbus Stainless & ProMet Engineers).
- Involved in number of studies evaluating the majority of current available iron-making technologies, including Corex, Finex, Fastmelt, ITmk3 & Rotary Kiln – Submerged Arc Furnace.

## CONSULTANCIES & SUPPLIERS USED TO DATE:



SNC-LAVALIN



ALS Chemex



Projectos e Estudos Ambientais



Mitchell  
DRILLING SERVICES

# CORPORATE & LOGISTICS SOLUTIONS INITIATIVES

## ADDRESSING THE KEY PROJECT RISKS



**Tangible Development**  
Bridge footings: New section of  
Vale's Nacala Rail Corridor in Malawi.

### CORPORATE DEVELOPMENT

- Standard Chartered Bank formally engaged in June 2013.
- Standard Chartered, through its specialist mining corporate finance division, will assist Baobab to determine & execute its corporate opportunities with relation to the Tete Project.
- As part of the mandate, Standard Chartered will assess a range of strategic corporate opportunities and financing alternatives to support the successful development of the Tete project.



**“** Standard Chartered is delighted to be working with Baobab on this exciting project in a region which we believe has enormous potential. Following the successful completion of Baobab's PFS, we look forward to assisting the Company in achieving the next milestones in the development of a producing operation.

Christian Wiklund, Managing Director, Mergers & Acquisitions Africa

**”**

### LOGISTICS SOLUTIONS

- Discussions with both the private & public sectors making good progress.
- Targeting the formalisation of discussions in H2 2013.



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MOZAMBIQUE PORTS AND RAILWAYS

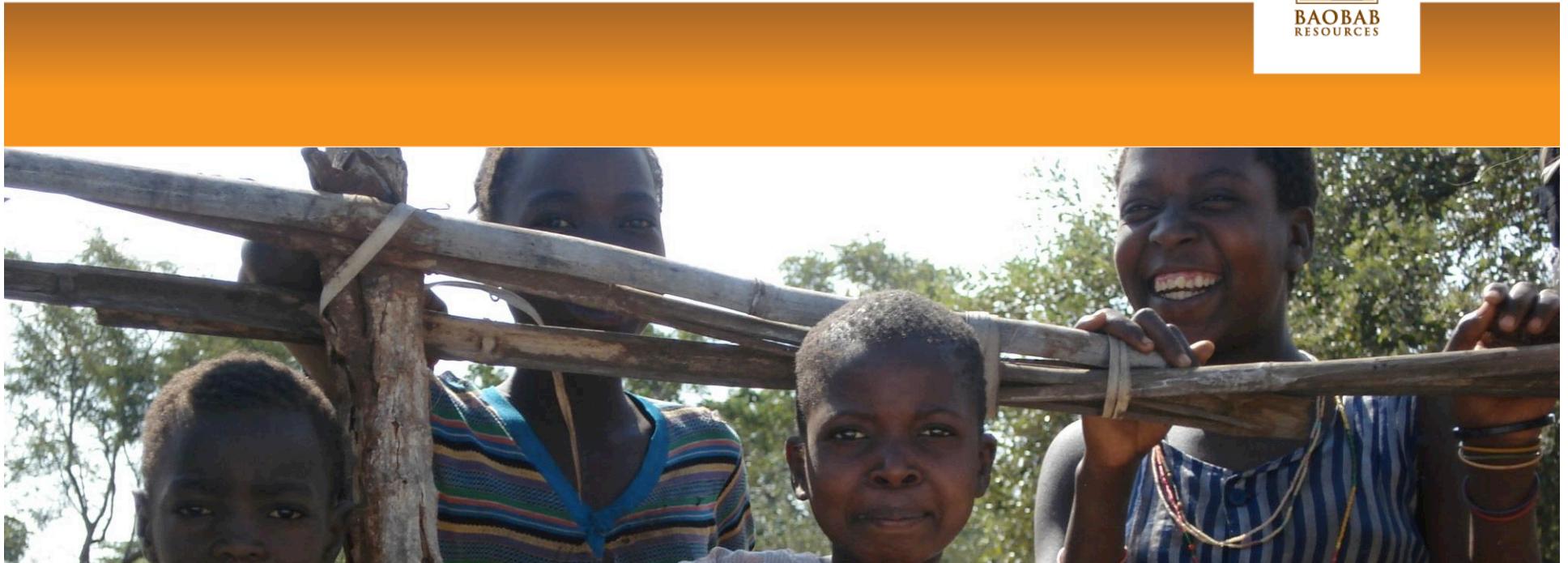


ELECTRICIDADE  
DE MOÇAMBIQUE, E.P.

# CORPORATE SOCIAL RESPONSIBILITY

## WORKING WITHIN THE COMMUNITY

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- Environmental & social baseline studies completed at outset with ongoing monitoring.
- Employing 'local-local' where possible.
- The Company is firmly committed to the retention & promotion of staff through formal & informal training & mentoring programmes.
- The Company respects the rights & needs of the local community & endorses the UN Millennium Development Goals & UN Global Compact.
- As the project matures, the Company will be working with IFC to implement sustainable & meaningful community initiatives.

# TENGE / RUONI FLY-THROUGH

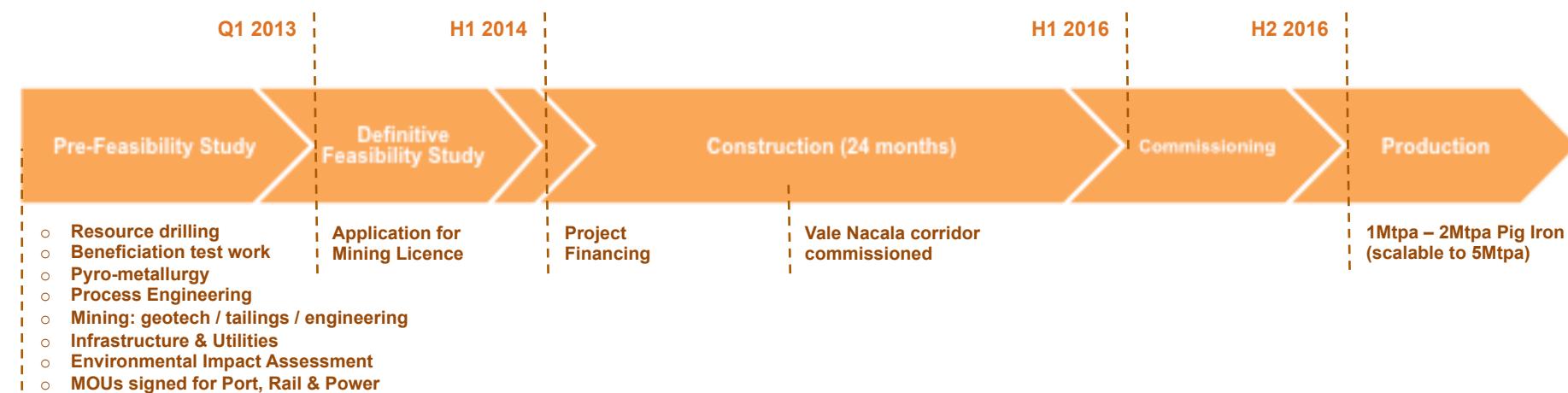
THE CONCEPT IN 4D

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# PROJECT DEVELOPMENT TIMELINE

## UNLOCKING THE IRON & STEEL WEALTH OF MOZAMBIQUE



- The project's strategic proximity to abundant low tariff hydro-electric power, coal resources & water presents a unique opportunity to add additional value on site through low CAPEX / low OPEX mine-mouth smelting of Pig Iron & vanadium by-products.
- Developing higher value, higher demand products on site reduces exposure to market fluctuations & mitigates the requirement to compete for rail infrastructure.
- Expanding resource inventory & modular, scalable processing technologies support significantly larger production scenarios of up to 4Mtpa.
- Anticipated Lowest Quartile cost of production will provide a significant competitive advantage, broadening market base to include domestic China & global scrap market.

# INVESTMENT CASE

AN UNIQUE OPPORTUNITY IN SOUTHERN AFRICA'S PREMIER MINING ADDRESS



## SCALE

- 189mt Tenge resource alone underpins a 22 year mine life for a 1mtpa pig iron operation at a strip ration of 0.4
- 727mt global resource inventory may underpin significantly larger production scenarios.

## ECONOMICS

- Pre-Feasibility Study points to an economically robust, vertically integrated mine-mouth pig iron smelting operation.
- Generating a higher value, higher demand products broadens market base & mitigates infrastructure burden.

## IFC PARTNERSHIP

- Strong, supportive project partner (15% Tete interest) & corporate shareholder.
- Credentialises Tete & Baobab.

## SUBSTANTIAL UPSIDE

- Potential to add further value on site through downstream production of steel.
- Developing domestic & regional demand for refined iron & steel products.

## LOCATION & INFRASTRUCTURE

- Proximity to all critical infrastructure & resource requirements.
- Tete becoming a globally significant mining & industrial hub, producing up to 20% of the world's coking coal.
- Off-shore gas discoveries position Mozambique to become leading LNG exporter.
- Strategic access to Africa's eastern seaboard.

## GOVERNMENT RELATIONS

- Stable, democratic government firmly committed to encouraging foreign investment in mining industry.
- Modern Mining Act & Cadastral licensing system guaranteeing security of tenure.

## CLEAR PATH TO DEVELOPMENT

- Independent specialists engaged under the management of an experienced in-house technical team.
- Development of financing strategies to be pursued as project de-risked through DFS & value confirmed.



**BAOBAB RESOURCES PLC**

UNLOCKING THE IRON & STEEL WEALTH OF MOZAMBIQUE

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O B R I G A D O



# ANNEXURE 1: TETE PROJECT GLOBAL RESOURCE INVENTORY

## LARGE RESOURCE BASE PROVIDING SCOPE TO SIGNIFICANTLY SCALE UP PRODUCTION



### Tete Iron Project

Whole Rock Grade Estimates Derived by Ordinary Kriging - \*15% Lower Cutoff Grade Applied    \*\*No Lower Grade Cutoff Applied

Resource Classification Based on JORC Code (2004) Guidelines

AREA	Resource Classification	Tonnage (Mt)	Fe (%)	V <sub>2</sub> O <sub>5</sub> (%)	TiO <sub>2</sub> (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	P (%)	LOI (%)	CaO (%)	K <sub>2</sub> O (%)	MgO (%)	MnO (%)	S (%)
Ruoni North*	Indicated	82.2	37.1	0.4	13.7	15.6	9.5	0.00	-1.8	2.2	0.2	4.9	0.2	0.2
	Inferred	24.6	38.0	0.4	14.2	14.5	9.3	0.00	-1.8	2.1	0.2	4.6	0.2	0.2
	Total	106.8	37.3	0.4	13.9	15.4	9.4	0.00	-1.8	2.2	0.2	4.8	0.2	0.2
Tenge*	Indicated	116.1	37.0	0.4	13.6	15.7	9.8	0.01	-1.7	2.4	0.2	4.2	0.2	0.2
	Inferred	73.4	37.8	0.4	14.1	14.9	9.3	0.01	-0.8	2.1	0.2	3.8	0.2	0.2
	Total	189.4	37.3	0.4	13.8	15.4	9.6	0.01	-1.3	2.3	0.2	4.1	0.2	0.2
Ruoni South*	Indicated	19.0	33.2	0.4	12.2	19.1	10.8	0.01	-1.0	3.2	0.3	4.7	0.2	0.2
	Inferred	49.2	33.3	0.4	12.5	19.1	10.5	0.01	-1.1	3.2	0.3	4.8	0.2	0.2
	Total	68.2	33.3	0.4	12.4	19.1	10.6	0.01	-1.1	3.2	0.3	4.8	0.2	0.2
Ruoni Flats*	Inferred	188.6	35.2	0.4	12.8	17.3	10.3	0.01	-1.3	2.7	0.3	4.7	0.2	0.3
Chitongue Grande**	Inferred	60.9	24.9	0.2	9.6	29.4	12.0	0.00	-0.2	4.8	0.7	4.6	0.2	0.3
South Zone**	Inferred	113	27.5	0.2	10.1	25.9	8.0	0.29	-0.7	5.2	0.3	6.9	0.3	0.3
<b>Total Indicated</b>		217.2	36.7	0.4	13.6	16.0	9.8	0.0	-1.6	2.4	0.2	4.5	0.2	0.2
<b>Total Inferred</b>		509.7	32.6	0.3	12.1	20.3	9.8	0.1	-1.0	3.4	0.3	5.0	0.2	0.3
<b>Grand Total</b>		726.9	33.8	0.4	12.5	19.0	9.8	0.1	-1.2	3.1	0.3	4.9	0.2	0.2

Where no lower cut-off grade has been applied, the resource blocks have been constrained by geologically defined mineralised zones and therefore reported accordingly; it is currently assumed that mining selectivity is limited within the mineralised zones. A three-dimensional block model was generated for the Tenge deposit to enable grade estimation. Coffey Mining has based its grade interpolation on Ordinary Kriging. Whole rock and concentrate grades were interpolated based on 4m composite samples using domain control for both composite and block selections applying hard boundaries between the zones. A service variable approach to the estimation of block concentrate grades required to account for the variation in percent recovery weight. The concentrate grades (Fe, V<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, LOI, CaO, K<sub>2</sub>O, MgO, Mn, and S) were then back calculated from these estimates. Ordinary Kriging was also used to obtain estimates of DTR and service variables for Ruoni South. For the concentrate grades of all other resource blocks, a similar approach was adopted. However, insufficient DTR test work resulted in a lower confidence in the estimate, precluding their classification.

### DTR CONCENTRATE CHARACTERISTICS:

#### Combined Tenge / Ruoni Resource Blocks

Coffey Mining has estimated the expected average concentrate characteristics for the mineralised material for the combined Tenge/Ruoni resource as: 59.7% Fe, 0.9% V<sub>2</sub>O<sub>5</sub>, 10.6% TiO<sub>2</sub>, 0.9% SiO<sub>2</sub>, 3.2% Al<sub>2</sub>O<sub>3</sub>, 0.001% P and 0.2% S at a Mass Recovery of 44.3%.

## ANNEXURE 2: African Minerals Exploration & Development (AMED)

### A SUCCESSFUL & EXPERIENCED CORNERSTONE INVESTOR



- Private Equity Fund with a primary investment focus on minerals exploration & development projects in Africa
- Investment strategy focused on:
  - Africa, & predominantly sub-Saharan politically stable countries with reliable mining regulatory framework & title laws.
  - Brownfield projects with evidenced resource base.
  - Projects with the potential to become world –class deposits & with lower quartile production costs.
- Founding partners bring a large amount of expertise & are intricately involved in all stages of a project development:



**David Twist**  
Geology & Metallurgy

- Accomplished & highly experienced geologist
- Has worked all of his career in Africa



**Rudolph de Bruin**  
Title & Mining Laws

- Initially practicing as an advocate
- Focused the rest of his career on acquiring & developing mineral exploration & mining projects in Africa



**Carlo Baravalle**  
Finance & Fund Operations

- Previous experience as management consultant, investment banker & executive

- Partners' previous successful ventures include :
  - *Platmin*: In partnership with Rudolph de Bruin, David Twist co-founded Platmin which has grown from a platinum exploration company to a PGM producer.
  - *Sephaku*: Rudolph de Bruin & David Twist also founded Sephaku in 2005, a company focused on cement & fluorspar projects. The cement division was listed on the JSE in 2009 & the company has since developed into an emerging player in the African construction sector.
- AMED's partners are further supported by a group of 20 geologists & 3 mining engineers.