


Horizonte Minerals: Araguaia Feasibility Study Investor and Analyst Presentation

October 2018



TSX:HZM / AIM:HZM
horizonteminerals.com

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Unless otherwise indicated, the scientific and technical information contained in this investor presentation has been prepared by or under the supervision of Frank Blanchfield FAusIMM, Andrew Ross FAusIMM of Snowden Mining Industry Consultants, David Haughton MIMM, C Eng of Ausenco, Nic Barcza HLFSAIMM . All are Qualified Persons within the meaning of Canadian National Instrument 43-101 and have acted as consultants to the Company.

For further details on the Araguaia mineral resource, please refer to the press release dated 29 October 2018, which is available on the Company's website at www.horizonteminerals.com and on SEDAR at www.sedar.com. Mineral resources that are not reserves do not have demonstrated economic viability.

A close-up, artistic photograph of industrial machinery. The scene is dominated by a large, glowing orange-red circular component on the left, which appears to be part of a larger machine. To the right, a series of bright, golden-orange sparks are being emitted from a point of contact, creating a dynamic, energetic feel. The background is dark and out of focus, with some metallic surfaces and bolts visible. The overall color palette is warm, with strong contrasts between the bright sparks and the deep shadows.

Horizonte Minerals
The Leading Nickel Development
Company



Overview

Araguaia Nickel Project (ANP) - World Class Deposit

High grade Mineral Reserve of 27.2 Mt of 1.69% Ni giving a 28 year mine life. 119Mt Resource (M&I) @ 1.27% Ni¹.

Robust Feasibility Study

NPV₈ **US\$401 million** and IRR 20% generates **over US\$1.6 billion** in free cash flow over LOM.

On track to produce in 2021

Stage 1 Production of 14,500 tonnes of nickel per year with option to expand output.

Low Cost Proven Processing Technology

ANP will utilise Rotary Kiln Electric Furnace (RKEF) process, currently in operation in 40 mines globally.

Vermelho Nickel Cobalt Project (VNCP) – Tier 1

Acquisition from Vale (estimated US\$200 million of spend), DFS complete. Horizonte's second development project.

District Scale Development Potential

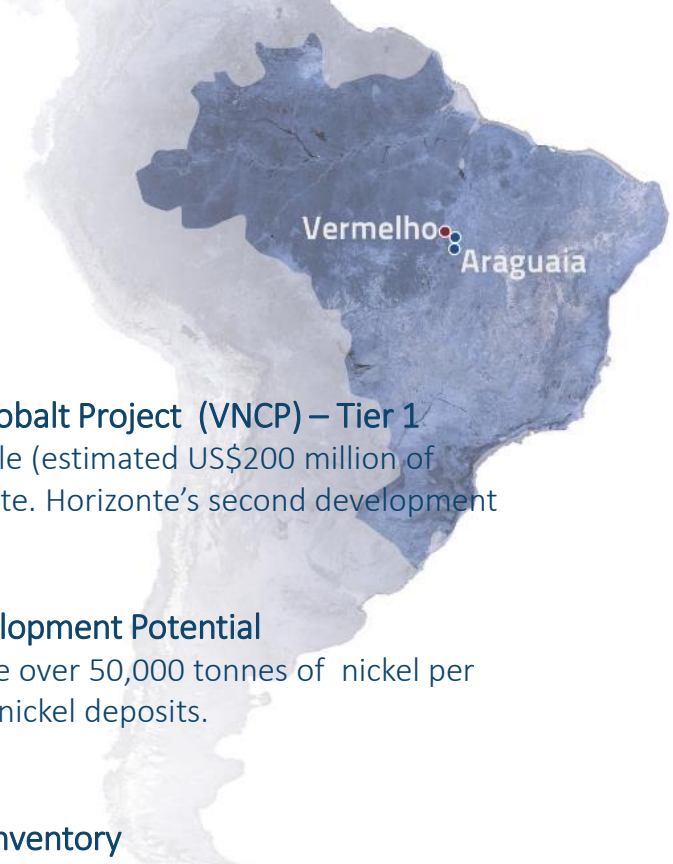
Potential to produce over 50,000 tonnes of nickel per year. 100% owned nickel deposits.

Significant Metal Inventory

Combined metal in the ground (M&I) of 3.21Mt contained Ni and 94kt Co².

Strong Nickel Fundamentals

Demand growing and limited new nickel projects. Wood Mackenzie long-term forecast of US\$26,450/tonne Ni.



¹Source: Horizonte Minerals Araguaia Nickel Project Feasibility Study, October 20018: 119Mt Resource, Measured and Indicated, at 1.27% Ni, 0.9% Ni cut-off, inclusive of Reserves

²ANP values at 0.90% Ni Cut-Off, VNCP values at 0.90% NiEq Cut-Off

Araguaia FS Highlights

Significant cash generation around **US\$1.6B** net cash flow*

NPV_g of US\$401M at US\$14,000/t Ni, **US\$740M** at consensus price of US\$16,800/t Ni

Rapid payback period of 4.2 years*

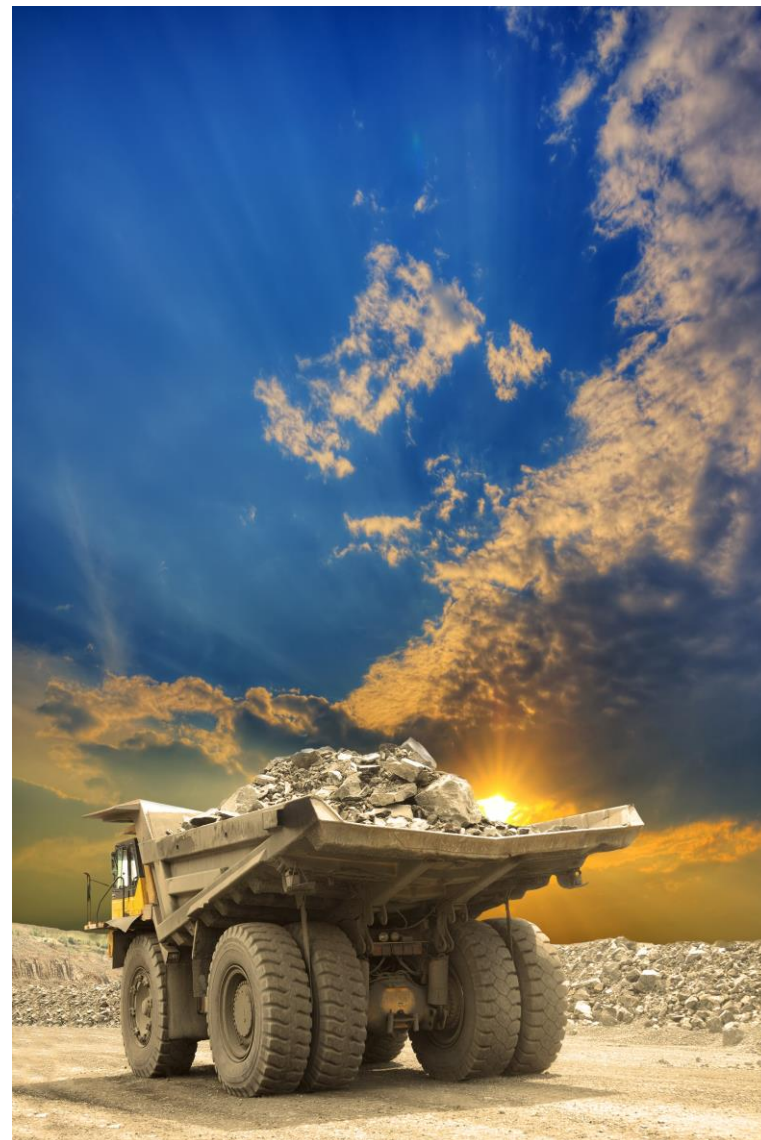
IRR over 20% at Nickel Price of US\$14,000/tonne

Low Capital Intensity US\$443M capital cost

Low cost C1 Cost (Brook Hunt) US\$8,193/t Ni

Long life initial mine life 28 years with potential to expand production and/or mine life

*Net cash flow and Payback period results based on nickel price of \$14,000/tonne. Additional results for bank Consensus price of \$16,800/t provided in Slide 14.



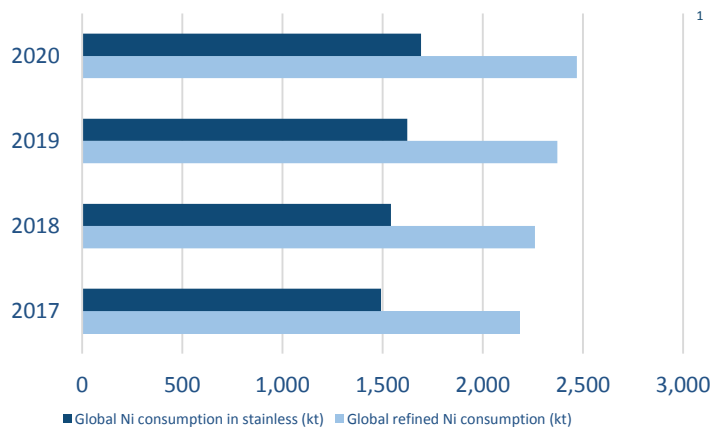


Nickel Market



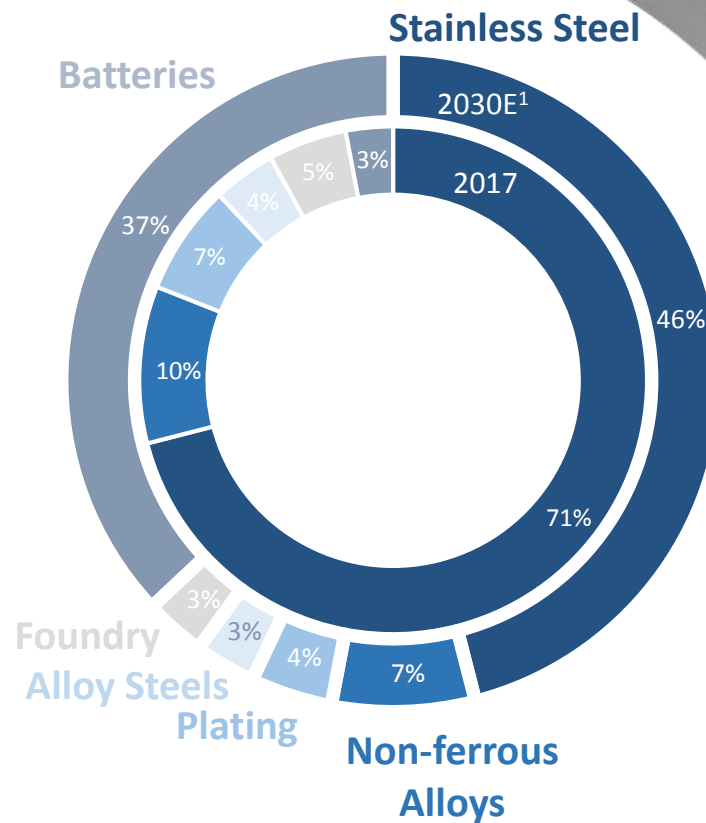
Current demand vs 2030E – Stainless to dominate

- Approximately two thirds of global nickel production is currently used to produce stainless steel.
- Demand for nickel from the battery market will reshape the nickel industry over the next decade, however stainless growth is forecast to be 12% over the next 4 years.
- Stainless steel industry will continue to be the largest nickel consumer and will remain the main nickel price driver.



¹ Source: Wood Mackenzie

² Source: Vale's expected demand growth from the battery market by 2030.

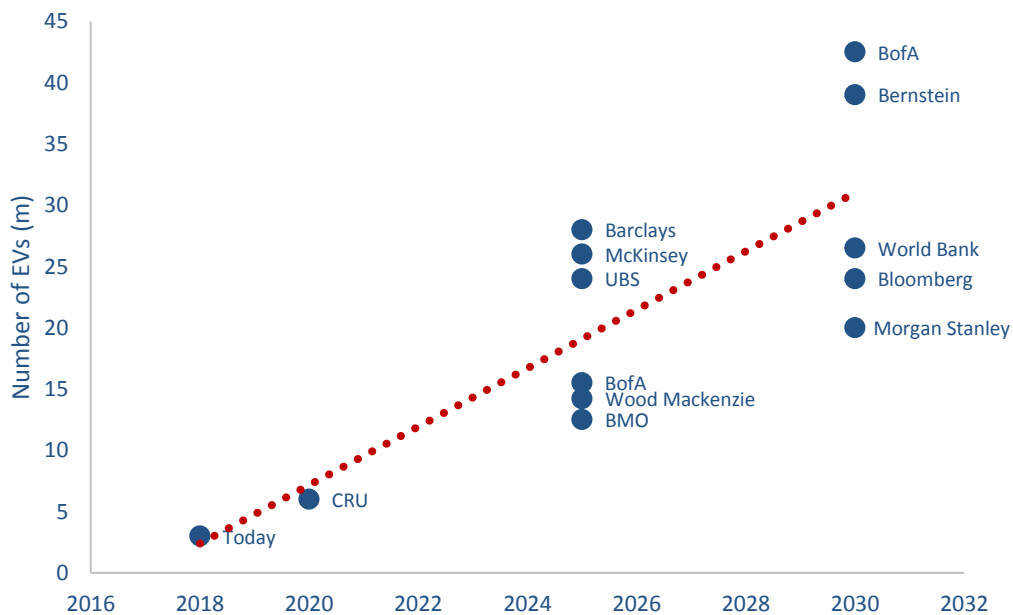




Future EV Demand

Growing EV Market

The number of EVs is set to increase from 3 million today to approximately 30 million by 2030 (consensus forecast¹), which will require approximately **1.1 million tonnes of new nickel²**, a 50% increase on current global nickel consumption (~2.2Mt).



Nickel Demand Implications

	Grid Storage			Non-ICE Vehicles		
	2020	2025	2030	2020	2025	2030
Ni (kt)	20	71	150	66	299	985

Estimated average metal use per vehicle³



¹ Source: Consensus forecasts from public announcements and media

² Glencore forecast by 2030 to meet the Clean Energy Ministerial's EV 30@30 sales target of 30 million vehicles

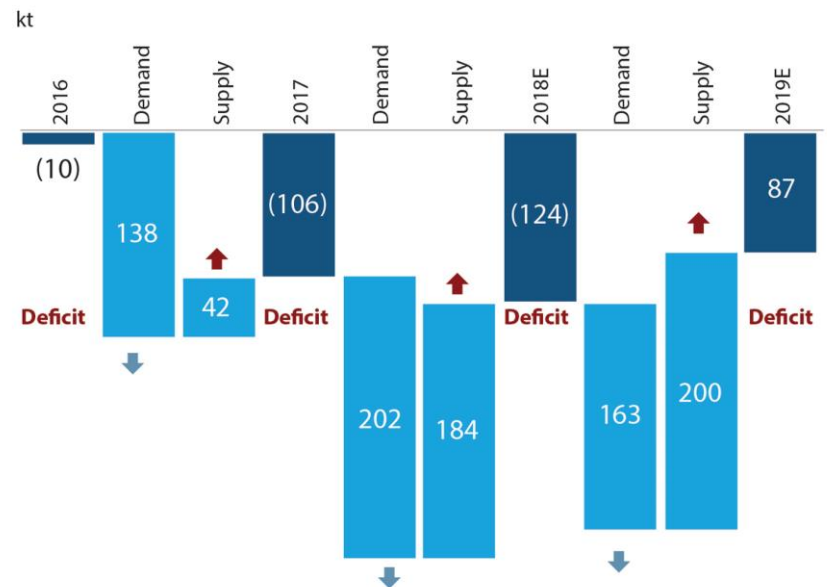
³ Glencore, BAML 2018 Global Metals, Mining & Steel Conference



Nickel Supply

- Since 2011, global FeNi production stands at c.20% of world finished nickel supply, increasing from 302 kt in 2011 to 398 kt in 2017 and an anticipated 433 kt in 2018.
- Continued limits on Indonesian ore exports and the consequent drop in output of Chinese NPI exacerbates the growing deficit.
- Depletion of reserves; Cerro Matoso, Nickel West, Murrin Murrin and Long Harbour, further reduces forecast supply in the early 2030's.
- Onça-Puma and Falcondo have second lines that are currently idle, 45 ktpa.
- Excluding NPI, PT Antam's Halmahera (14 ktpa), (2019), and Horizonte (14 ktpa), (2021), are the only additional near term FeNi production.

Nickel Market Balance: Sizeable Deficit to Extend in 2018



Deficit forecast for 2018E revised from -15kt⁽¹⁾ to -124 kt:

- Faster-than-expected expansion of stainless output in Indonesia and China
- NPI output curtailments due to environmental restrictions in China

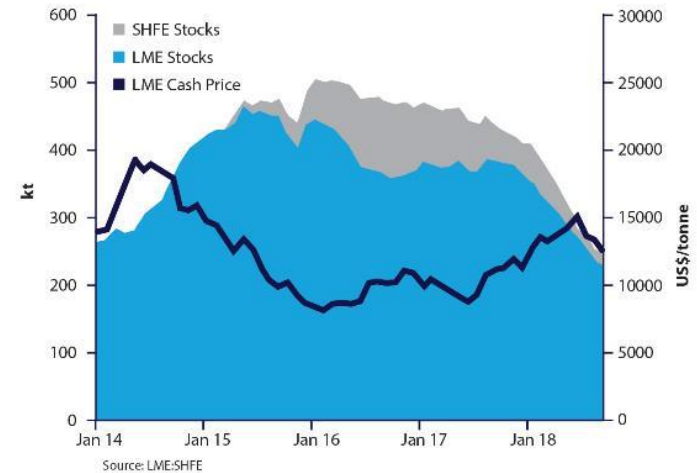
Nickel Market Balance Source: Norilsk Nickel



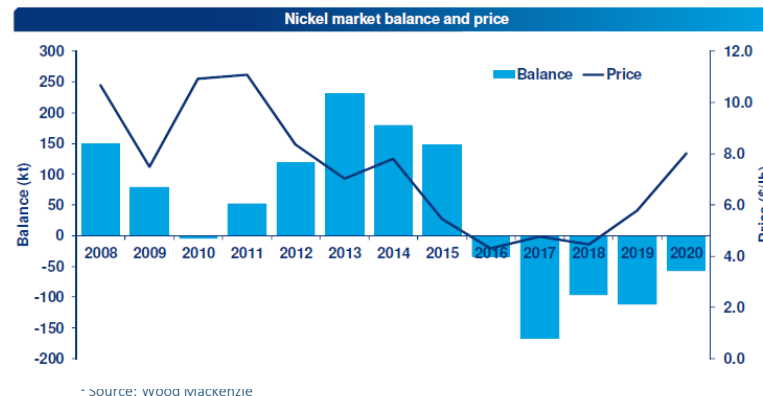
Nickel Price: Factors

- Nickel production is expected to reach 2.26 Mt in 2018, up 6.2% on 2017, with continued growth forecast, reaching 2.61 Mt by 2025¹.
- Wood Mackenzie have a short term Ni price forecast of US\$13,000 -US\$15,000 / t Ni, increasing to a long term incentive price of US\$26,450 / t Ni.
- LME and SHFE stocks have fallen steadily from 380kt in Oct 17 to 220kt in Oct 18.
- Fundamentals indicate real underlying demand from both stainless and non-stainless sectors (EV) is strong.

Nickel Stock Drawdown Against Ni Price:



Wood Mackenzie Ni Price Forecast





Nickel Price: Views



“From 2020 the battery opportunity will open up”
Forecast at US\$17,081/t in 2020



“We do see nickel prices rising over the medium and longer term”
Forecast at US\$15,500/t in 2020



“Nickel prices are expected to gradually move higher over the next half decade as inventories normalize”
Forecast at US\$16,500/t in 2020

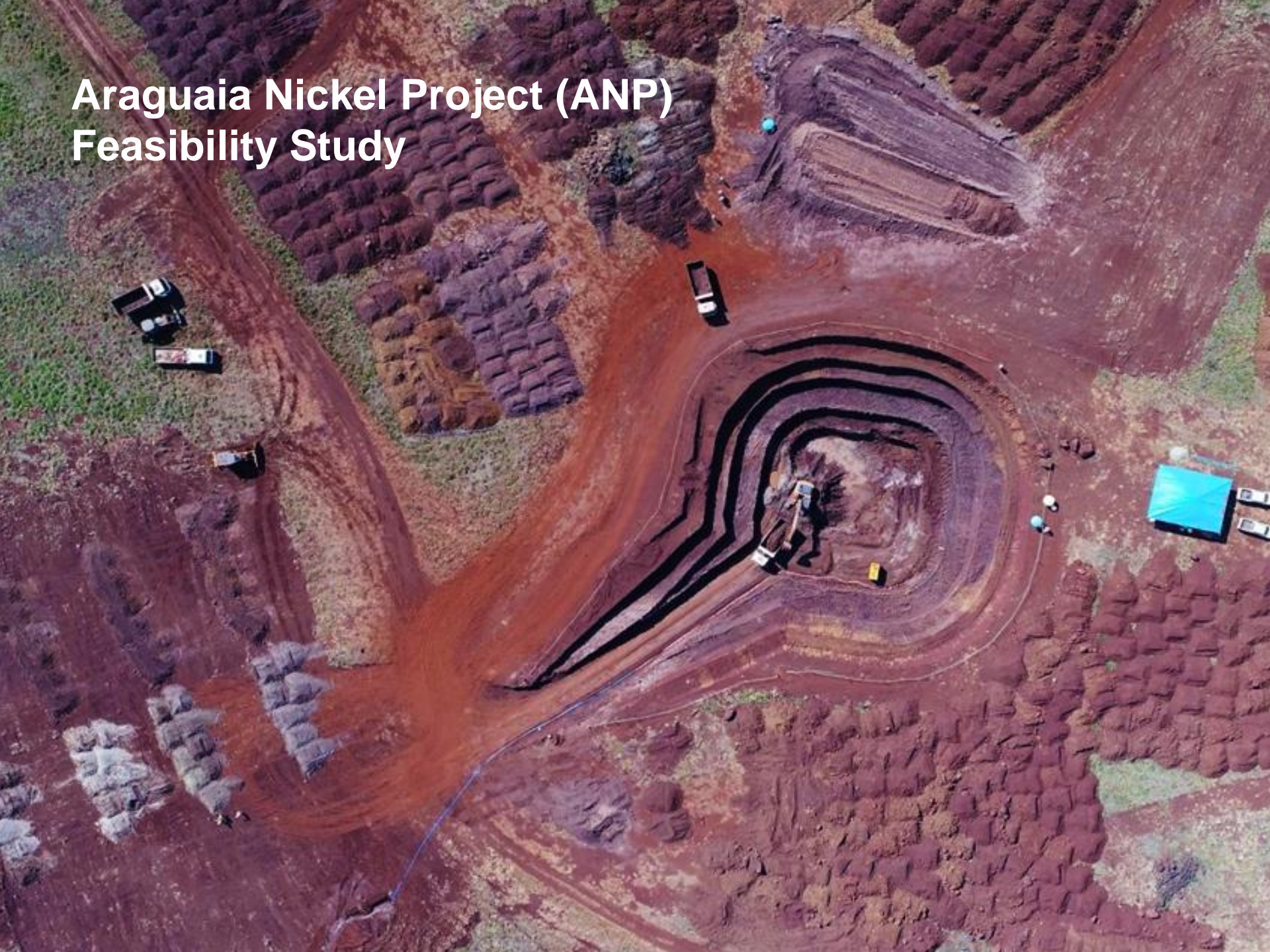


“EV crowding out stainless steel, as a meaningful demand-driver”
Forecast at US\$16,000/t in 2020



“Wood Mackenzie's long-term incentive price currently stands at about US\$26,450/t (US\$12.00/lb)”

Araguaia Nickel Project (ANP) Feasibility Study



ANP Feasibility Study

STAGE ONE

14,500 tpa nickel

STAGE TWO POTENTIAL

Second line up to 29,000 tpa nickel



HIGH GRADE

Initial 10 years of production averaging **1.9% nickel feed grade** placing ANP on upper quartile of the grade curve.



PROVEN PROCESS

Low cost proven RKEF technology currently in operation in 40 mines globally



LOW CAPITAL INTENSITY

On the low end of the global cost curve and in the lower quartile for laterite operations

US\$
31,000/t
Ni

HIGH GRADE PRODUCT

Production of high grade FeNi30 product – low impurity for sale to the stainless steel sector

FeNi
30

LONG LIFE & SCALABLE

FS shows a 28 year mine life with scalable resource to support over 60 years

28 yr
LOM

INFRASTRUCTURE

Well developed infrastructure around the project utilising third party port facilities



ADVANCED PERMITTING

Permitting in final stages with ANP scheduled to be **construction ready** early 2019



Ausenco

SNOWDEN

ERM



Feasibility Study in Numbers

BASE CASE US\$14,000/tonne Ni	
Capital Cost	US\$443M
Net Cash Flow	US\$1.6B
Post-Tax IRR	20.1%
Post-Tax NPV _g	US\$401M
Production Payback (years)	4.2
Lowest quartile C1 Cash (Ni Laterite)	US\$8,193/t Ni

MARKET CONSENSUS US\$16,800/tonne Ni	
Capital Cost	US\$443M
Net Cash Flow	US\$2.6B
Post-Tax IRR	28.1%
Post-Tax NPV _g	US\$740M
Production Payback (years)	3.3
Lowest quartile C1 Cash (Ni Laterite)	US\$8,193/t Ni



Notes:

- Short-Term Wood Mackenzie forecast of \$14,000 applied as base case.
- Market Consensus: Canadian Imperial Bank of Commerce ("CIBC") Capital Markets consensus forecast long term Nickel price compiled by 21 international banks as of September 2018
- FS to AACE Class 3 costs combined accuracy of - 10%+15%
- Brazilian Real to US \$ exchange rate applied = 3.5:1



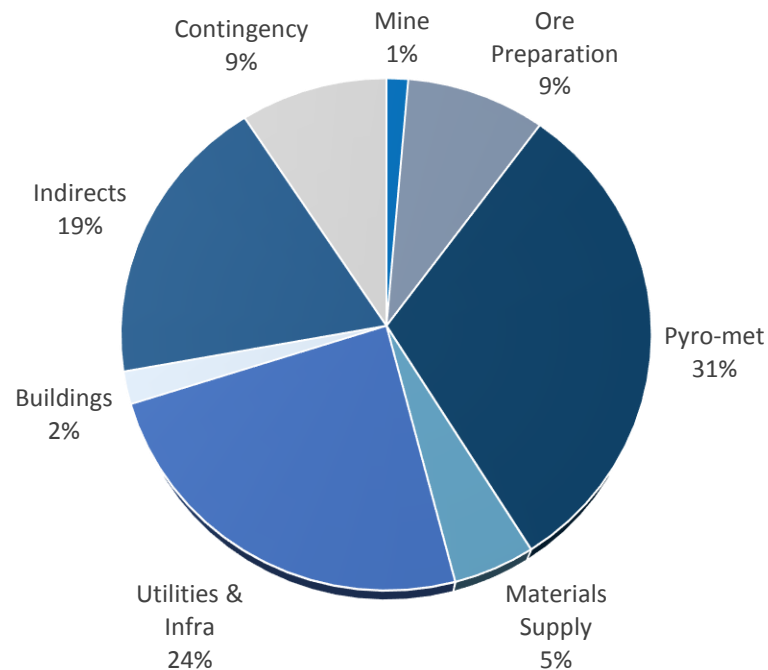
Capital Funding Requirement*

Capital Cost Estimates*

Initial capital cost of US\$443 million is estimated for Araguaia


Area Name	Costs (US\$'000)
Mine	6,003
Ore Preparation	38,731
Pyrometallurgy	137,518
Materials Supply	21,413
Utilities & Infrastructure	106,918
Buildings	9,095
Indirects	82,409
Contingency	40,989
Total	443,076

Capital Cost Breakdown



Sustaining capital of US\$143 million is spread over LOM

*Undertaken to AACE class 3 standard with combined accuracy of - 10%+15%. The capital and operating costs are as of Q3 2018.

An aerial 3D architectural rendering of an industrial plant. The main building is a large, irregular structure with a light blue roof, outlined in a darker blue. Inside and around this building are various pieces of industrial equipment, including pipes, tanks, and smaller structures. To the left, there are several long, white cylindrical storage tanks. In the bottom left corner, there is a separate area with a parking lot, a road, and several smaller buildings. The entire facility is set on a brown, dirt-like ground, surrounded by green grass and some trees in the background. Two callout boxes with blue borders and white backgrounds provide additional information.

Designed for Stage2:
second RKEF process line
doubling production

Stage 1, FS released
October 2018



RKEF Process

Low Capital Intensity

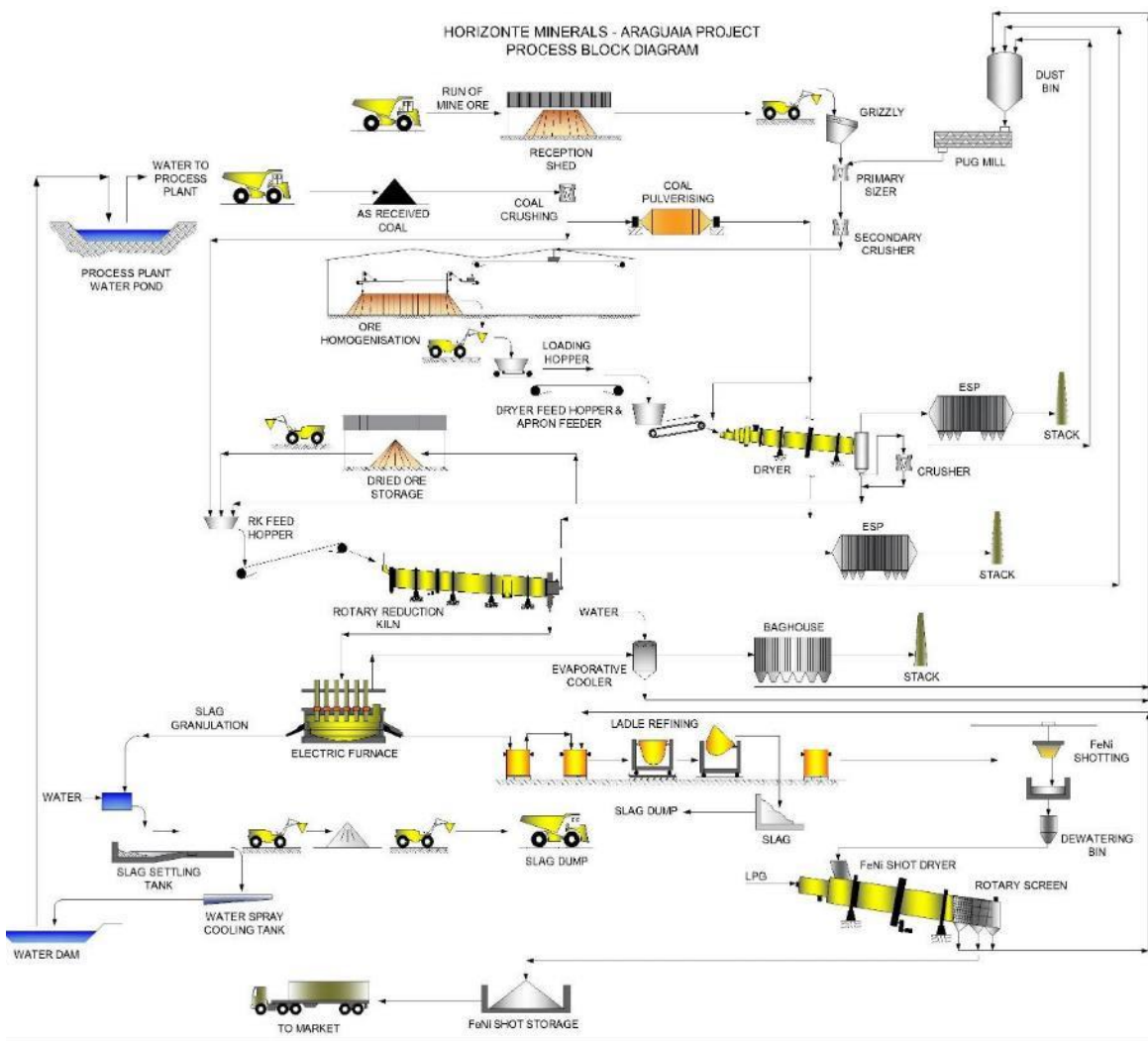
Proven RKEF process – low capital intensity of US\$31,000/t Ni.

Scalable

Stage 1 flow sheet designed to process 900,000t producing 14,500tpa Ni.
Designed for addition of a second RKEF line increasing production up to 29,000tpa Ni.

High Grade Product

FeNi30 product for the stainless steel sector – containerised and shipped directly to clients via Vila do Conde Port.





Environment and Permitting

Working to Global Sustainability Standards, including Conama resoluções (Brazilian); IFC Performance Standards 1,2, & 5; and standards on habitats, GHG emissions and Climate.

10 years of community engagement conducted in the region.

Approved Social and Environmental Impact Assessment (SEIA), with the award of the Preliminary Environmental Licence (Licença Prévia- LP).

Advanced Permitting. Water permit for full-scale operation granted, environmental controls plans submitted to agency and all construction-ready approvals anticipated by Q1 2019.

Limited Regional Impacts, mine is located in a farming area, no state forest or Indigenous reserves.



Extensive baseline data collected in the region.



Community Contributions

Community contributions are expected to total over US\$700 million during the 28 year Life-of-Mine



Conceição do Araguaia Municipal's urban área.

JOB CREATION

Over 1000 jobs during construction and approximately 500 jobs in operational phase.



WAGES

Over US\$280 million in employee and contractor wages.



COMPANY TAXES

Over US\$400 million in company taxes



DIRECT SOCIAL INVESTMENT

Training & entrepreneurship, health programmes and Local Municipal development



Araguaia Funding and Development Plan





Funding Strategy

“Araguaia is currently unleveraged and in a strong position with no agreed offtake, royalty or nickel stream, giving maximum value and flexibility going into the financing process”

Project Development

- Currently funded until the beginning of project finance
- Pre-production capital of US\$443M
 - Target project finance package of 60 to 65% debt balance equity

Debt

- Undertake project finance discussions/negotiations
- Target syndicate of commercial banks
- ECA options for equipment: UK, Germany & China

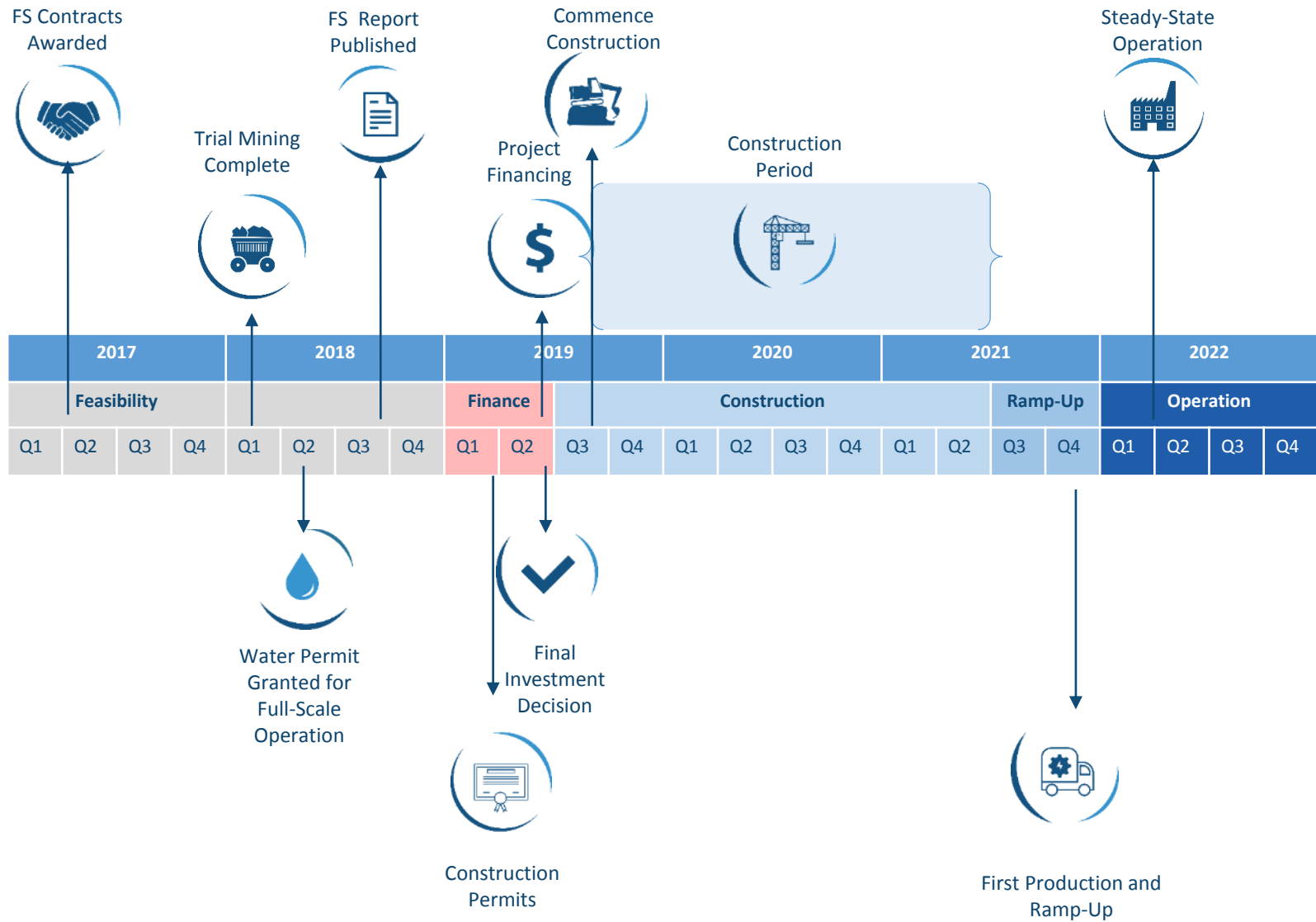
Offtake Agreement

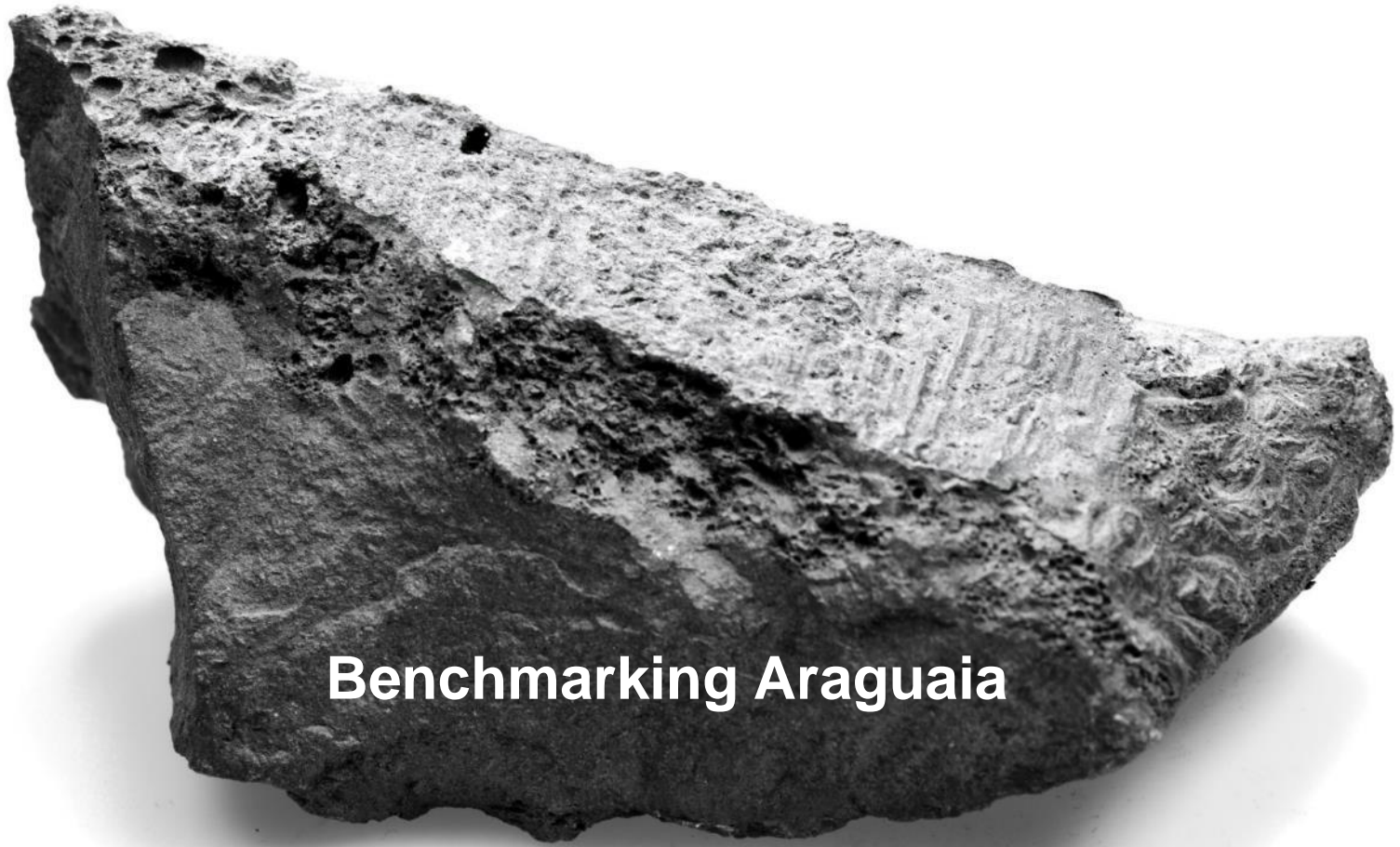
- Part of wider finance package to maximise value to existing shareholders
- Target stainless steel mills and end users





Development Timeline



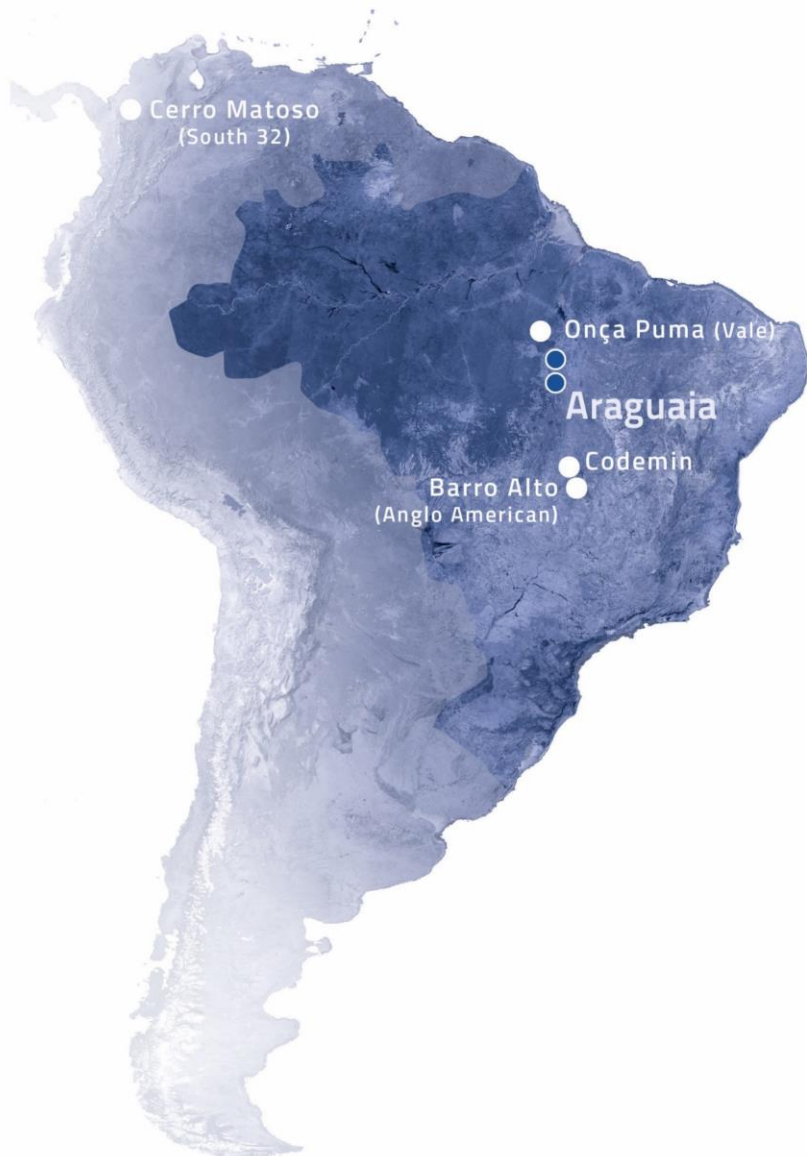







Benchmarking Araguaia



Peer Group Comparison

Araguaia benchmarked with South American producing ferronickel operations:
ANP - higher grade and lower potential C1 cost.



Proven & Probable Mineral Reserve Estimates ¹ and C1 Cost for Producers ²					
Deposit	Owner	Reserve Ore dry mass (kt)	Contained Ni metal (kt)	Ni (%)	C1 Cost (\$US/t Ni)
Araguaia	 HORIZONTE MINERALS PLC	27,290	461	1.69	8,193
Cerro Matoso	 SOUTH32	37,000	444	1.20	9,805
Onça Puma	 VALE	106,500	1,629	1.53	10,184
Barro Alto	 ANGLo AMERICAN	41,900	586	1.40	7,366
Codemin	 ANGLo AMERICAN	7,800	98	1.26	9,149

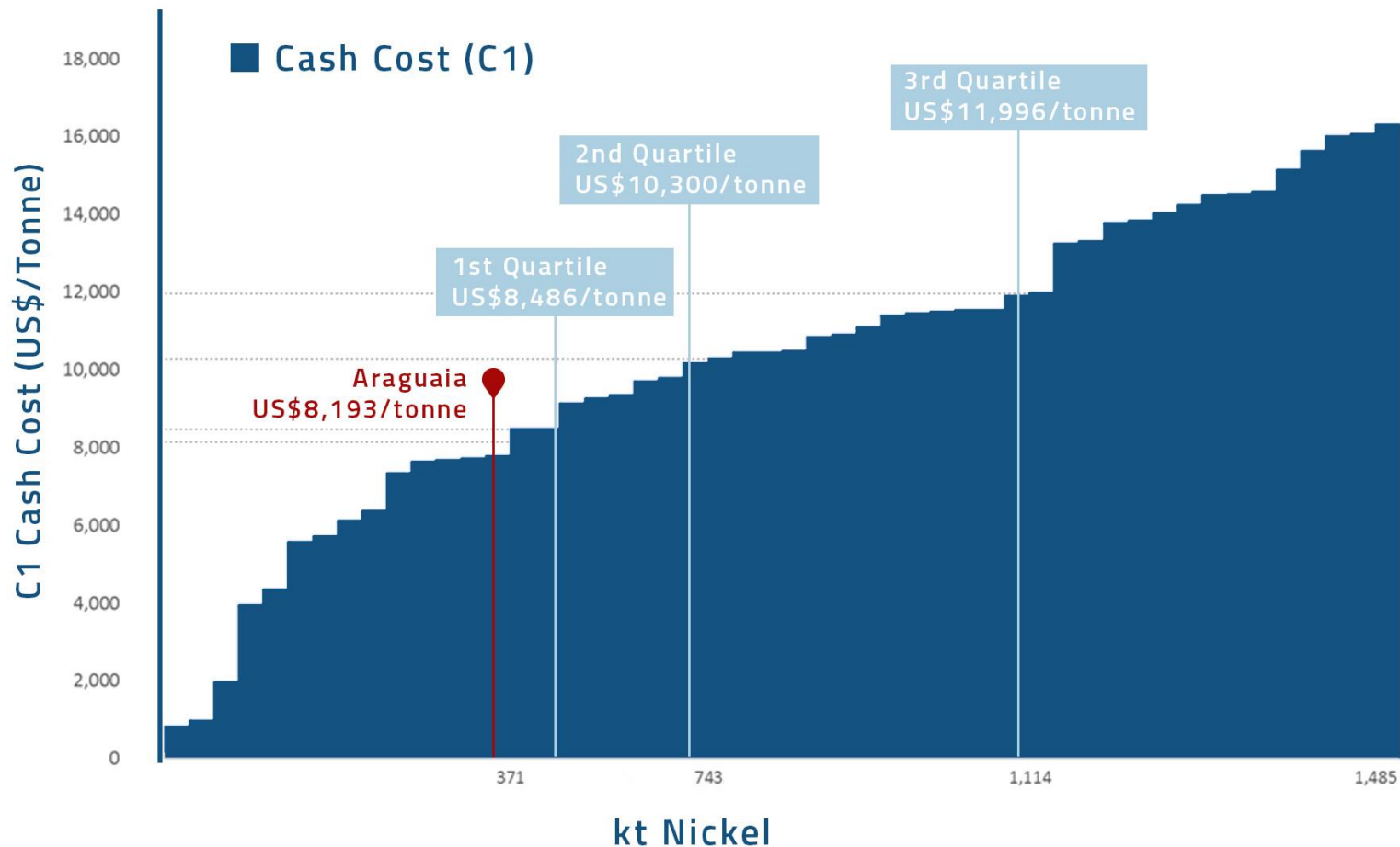
¹ Mineral Reserve Estimates: Araguaia = Horizonte's Feasibility Study for Araguaia 2018; Cerro Matoso = South 32 Annual Report 2018; Onça Puma = Vale's Form 20-F 2017; Barro Alto and Codem = Anglo American's Ore Reserves and Mineral Resources 2017 Report.

² C1 (Brook Hunt) data on Cost/US\$t provided from Wood Mackenzie database.



Lower quartile of C1 cost curve for laterites

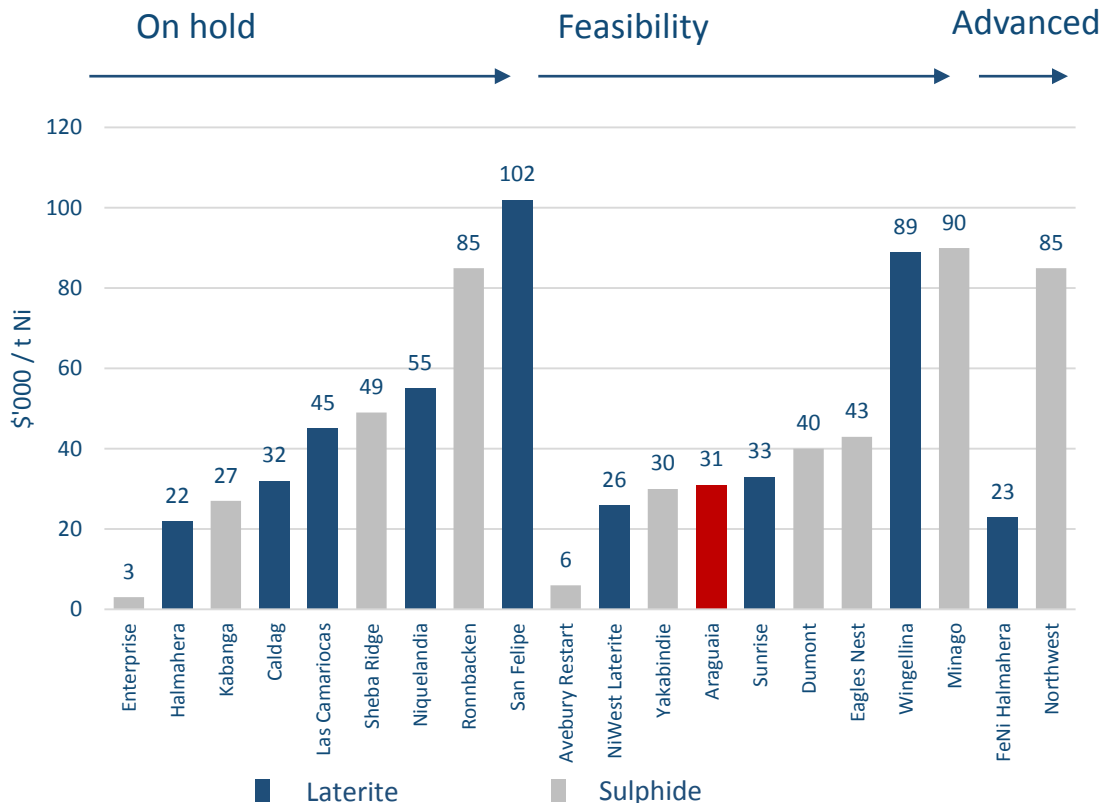
Araguaia positioned in the lower quartile for laterite production C1 (Brook Hunt) Cash Cost



Source:Wood Mackenzie

Low Capital Intensity

Capital intensity as \$US'000 /t Ni of annual production



Source: Wood Mackenzie, UBS analysis

IRR at US\$20,000/tonne

- UBS Research estimates that 26 out of 41 nickel projects deliver a 15% IRR at a long term Ni price of US\$20,000/t.
- Araguaia has an IRR of 36.2% at this price.

Capital Intensity

- Average capital intensity of US\$44k/t Ni.
- Araguaia US\$31k/t Ni.



Investment Highlights



Scalable Production

Total district potential nickel production 55,000 to 60,000 tpa nickel

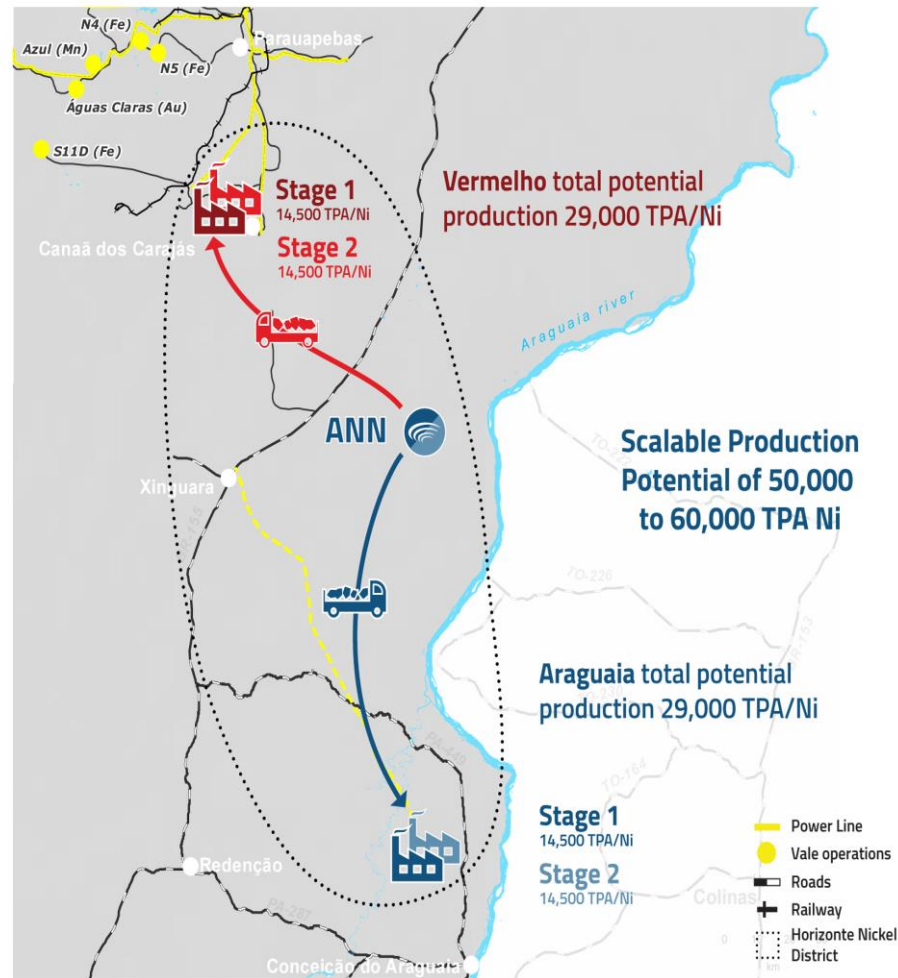
Combination of two 100% owned Tier 1 projects – creating a large, high-grade and flexible resource, consolidating a nickel district.

ANP Potential Production 29,000 tpa nickel

- Araguaia Stage 1 - RKEF plant 14,500 tpa nickel - planned production 2021.
- Araguaia Stage 2 – second RKEF line doubling capacity.

VNCP Potential Production 29,000 tpa nickel

- Vermehlo Stage 1 - RKEF plant to produce 14,500 tpa with the option of a leach circuit to recover the cobalt in the limonite ore.
- Vermehlo Stage 2 - second RKEF line doubling capacity.





Investment Summary

Economics

- ANP Base case robust economics – US\$1.6 billion free cash flow, **NPV US\$401 million**, IRR of 20%.
 - ANP Conesus Case - US\$2.6 billion free cash flow, **NPV US\$750 million**, IRR of 28%.
-

Process

- De-risked low cost process route, RKEF used in over 40 operations today.
 - Produce high grade low impurity FeNi30 – supply stainless steel sector.
-

Location

- Close to Carajás mining district, well developed infrastructure including roads, rail, hydroelectric power.
 - Proactive Government support – near term development ready.
-

Commodity

- Robust nickel demand expected to grow 2-3% short to mid term and LME inventory levels drawn down.
 - limited new short term supply - Wood Mackenzie upgraded long-term forecast to US\$26,450/tonne.
-

Scalability

- ANP designed for Stage 2 expansion potential to increase production to 29,000 TPA nickel.
- VNCP Stage 1 & Stage 2 RKEF plant 14,500 to 29,000 TPA – total potential 50,000 to 60,000 TPA nickel.



Experienced Team in Resource Projects & Operations

Non-Exec Board

David J. Hall - Chairman

- 30 years in exploration, projects and operations in over 40 countries. Extensive South America and Brazil experience. Previously Minorco, Anglo American Plc and AngloGold.
- Responsible for exploration around the Cerro Vanguardia gold mine in Argentina, Morro Velho and Crixas mines in Brazil and the La Recantada gold deposit in Peru.

Owen Bavinton - Non Executive Director

- Previously Group Head of Exploration and Geosciences at Anglo American Plc.
- Extensive nickel experience both in Brazil and internationally.
- Notable resource projects include: Lisheen (zinc in Ireland); Skorpion (zinc in Namibia); Loma de Niquel / Barro Alto (nickel in Venezuela/Brazil).

Alexander N Christopher - Non Executive Director

- Over 30 years of experience in mineral exploration and mining.
- Teck Resources Senior Vice President of Exploration, Projects and Technical Services.
- Extensive resource experience on Tier 1 projects and operations in Canada, Chile and USA, including: copper, zinc & lead, oil sands and steelmaking coal commodities.

William Fisher - Non Executive Director

- Extensive industry experience in major and junior exploration and mining companies.
- Currently on the Boards of Goldquest and Treasury Metals.
- Led GlobeStar Mining Corp. from exploration to become a base metal producer in the Dominican Republic which developed and operated the Cerro de Maimon mine.

Allan M Walker - Non Executive Director

- Over 30 years of experience in energy and natural resources project finance.
- Director of Credit Suisse's project finance team in Brazil.
- Mr. Walker was head of power and infrastructure in London for Standard Bank Plc, a world leader in emerging markets resource banking.

Senior Management

Jeremy J. Martin - CEO and Director

- 20 years geology and mining experience.
- Manged open pit gold mine in Sweden and development stage base metals projects.
- Corp finance and funding experience.
- Founding director in a number of TSX and AIM listed Resource Companies.

Simon Retter - CFO and Company Secretary

- Chartered Accountant.
- Director on a number of listed Resources Companies.
- Experience in public markets, mining sector, reverse takeovers.
- Previously Deloitte and Touche LLP.

Anthony Finch - Feasibility Study Manager

- Over 30 years experience in mining engineering, mining operations and consulting.
- Competent and qualified person in most commodities and most jurisdictions.
- Resource experience includes FS's for : Syrah Resources (Graphite in Mozambique) - Sunridge (Copper Lead Zinc), La Mancha (Gold - Sudan), Uranium One (Tanzania).

Katie Millar - Sustainability & External Affairs Manager

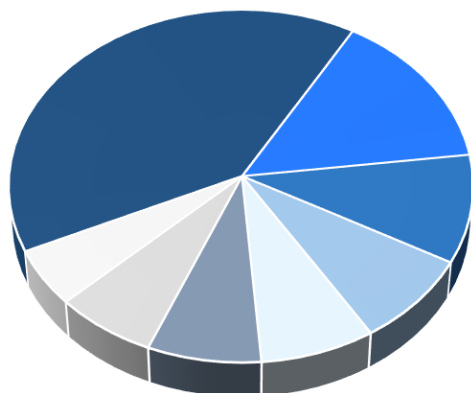
- Corporate Social Responsibility specialist, specialised in Brazilian mining.
- Resource experience (Anglo American Plc): Niobium Feasibility and \$400M construction project (Brazil); Phosphates Feasibility (Brazil); Nickel, Niobium & Phosphates operations (Brazil); Metallurgical Coal Dawson operation (Australia).

Fabiano Araujo - Brazil Country Manager

- Brazilian national, over 25 years experience in mining operations and projects.
- Mining engineer with prior senior positions held in Vale, Snowden and Accelor.
- Significant experience on major iron ore projects including :S11D, Brucutu & Serra Azul (Brazil); Mt Wright expansion (Canada) and Yekepa (Liberia).

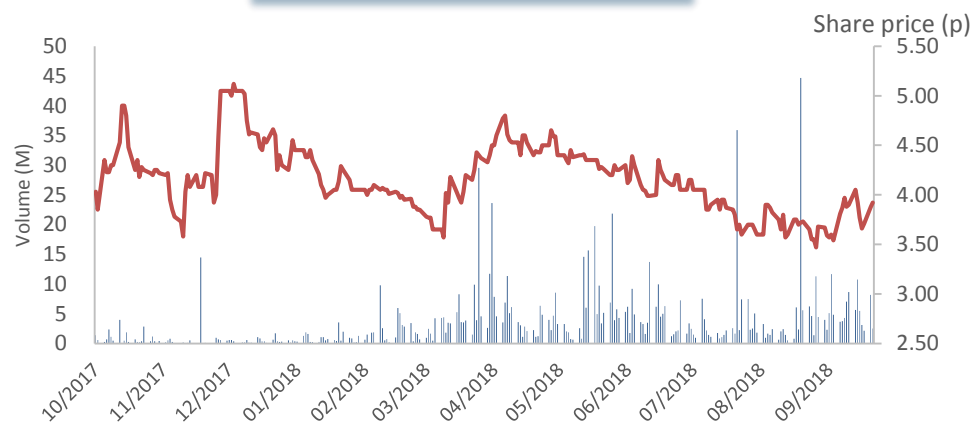
Corporate Snapshot

Key Shareholders



- Teck Resources 14.7%
- Canaccord Genuity Group 9.9%
- JP Morgan 8.2%
- City Financial 7.6%
- Lombard Odier 7.5%
- Richard Griffiths 6.7%
- Glencore 5.2%
- Other 40.6%

HZM AIM share price/volume



Ticker	AIM: HZM	TSX: HZM
Share price	3.65p	C\$0.06
Shares in issue (M)	1,433	1,433
Market Cap	£53M	C\$100M
Cash + Equivalents	£8.9M	C\$14.8M
52 week trading	AIM: 3.3p – 5.2p	(C\$0.04 – C\$0.11)
Nomad & Broker	Numis	n/a
Analyst coverage	Numis/Shard	Paradigm Capital

(SP data from 23.10.18)

(Cash at 30 June 2018)

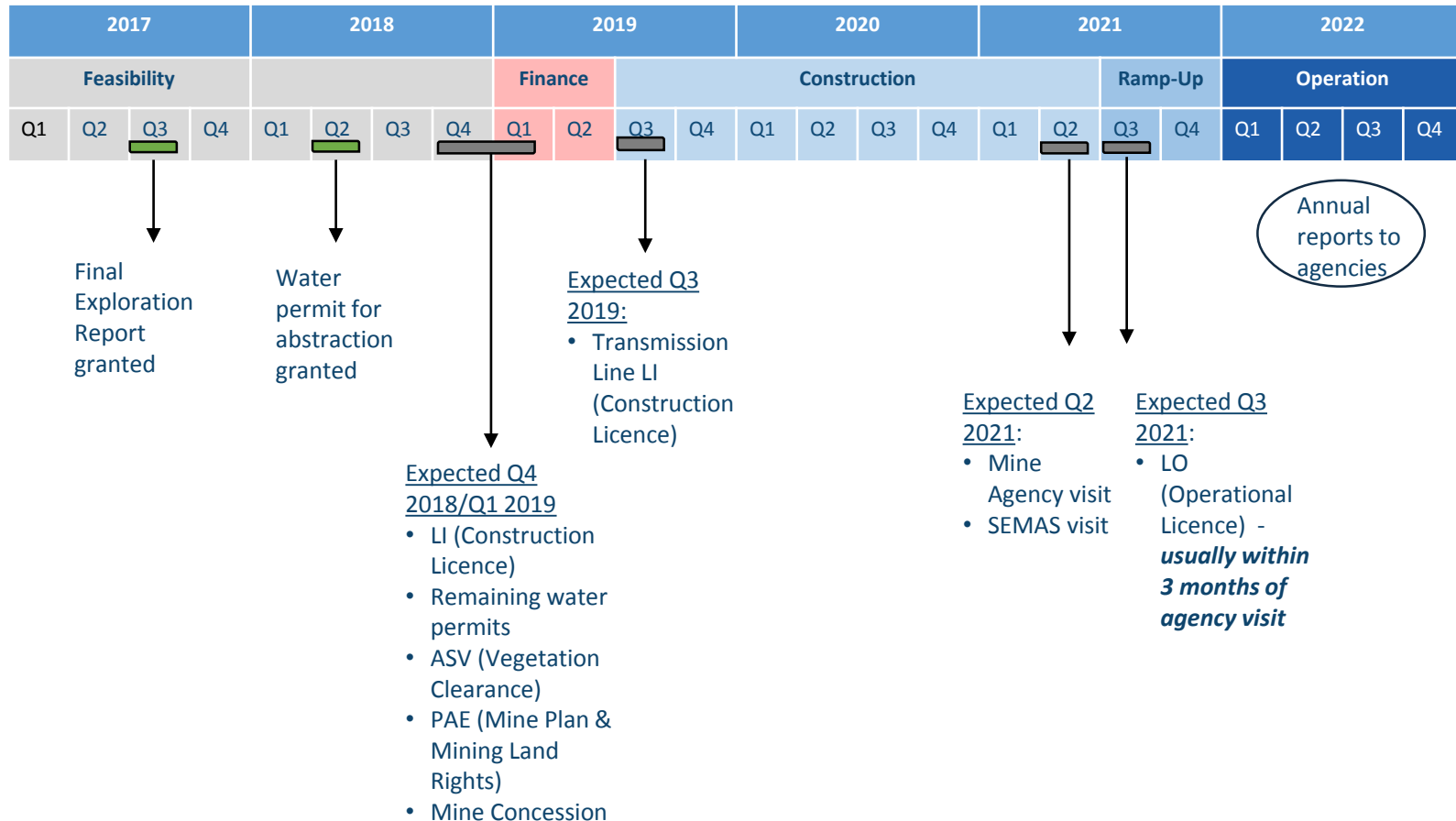


Appendix



Environment & Permitting Schedule

Awarded the Preliminary Environmental Licence (Licença Prévia- LP) in 2016 and on-track for all construction-ready permits by Q1 2019





Environment & Permitting

Permit/Authorisation	Agency*	Project Area**	Status
Exploration Licence (Alvará de Pesquisa)	ANM	ANS and ANN	Granted
Final Exploration Report (Relatório Final de Pesquisa Mineral)	ANM	ANS	Granted
Mine Plan (PAE) – Economic Exploitation Plan (Requerimento de Lavra – Plano de Aproveitamento Econômico)	ANM	ANS ANN	Submitted Q4 2017, expected Q4 2018/Q1 2019 To be submitted Q4 2018
Authorisation of the Mine Servitude Rights (Servidão Mineral)	ANM	ANS ANN	Submitted, expected Q4 2018/Q1 2019 To be submitted Q4 2018
Preliminary Licence (LP, Licença Prévia)	SEMAS	ANS	Granted 2016
Construction Licence (LI, Licença de Instalação)	SEMAS	ANS	Submitted Sep 2017, expected Q4 2018/Q1 2019
Vegetation Clearance Authorization (ASV, Autorização para Supressão Vegetal)	SEMAS	ANS	Submitted, expected Q4 2018, Q1 2019
Fauna Rescue Authorization (Autorização para Resgate de Fauna)	SEMAS	ANS and water pipeline	Submitted, expected Q4 2018, Q1 2019
Fauna Monitoring Authorization (Autorização para Monitoramento de Fauna)	SEMAS	ANS and water pipeline	Submitted, expected Q4 2018/Q1 2019
Water abstraction grant (Outorga captação de água)	SEMAS	ANP	Granted 2018
Water grants (Outorgas para uso de água)	SEMAS	ANS - Dewatering 7 pits	Submitted Q4 2017, expected Q4 2018/Q1 2019
		ANS - Cooling dam	Submitted Q4 2017, expected Q4 2018/Q1 2019
Archaeological Project Approval (Projeto de Arqueologia)	IPHAN (Cultural Heritage)	ANS	Project for sites removal granted 2018
Mine Concession (Portaria de Lavra)	ANM	ANS	Expected Q1 2019
Operating Licence (Licença de Operação)	SEMAS	ANS	Expected during ramp-up 2021
LP and LI Water Pipeline (Licença Prévia e Licença de Instalação para Adutora)	SEMAS	ANP	Submitted Q4 2017 , expected Q1 2019
LP and LI Energy Transmission Line (Licença Prévia e Licença de Instalação para a Linha de Transmissão de Energia Elétrica)	SEMAS	ANP	Environmental Study commenced June 2018, expected Q3 2019
LP Araguaia North (Vale dos Sonhos pit) (Licença Prévia cava Vale dos Sonhos)	SEMAS	ANN	Environmental Study commenced Q3 2018 Submission expected Q3 2019

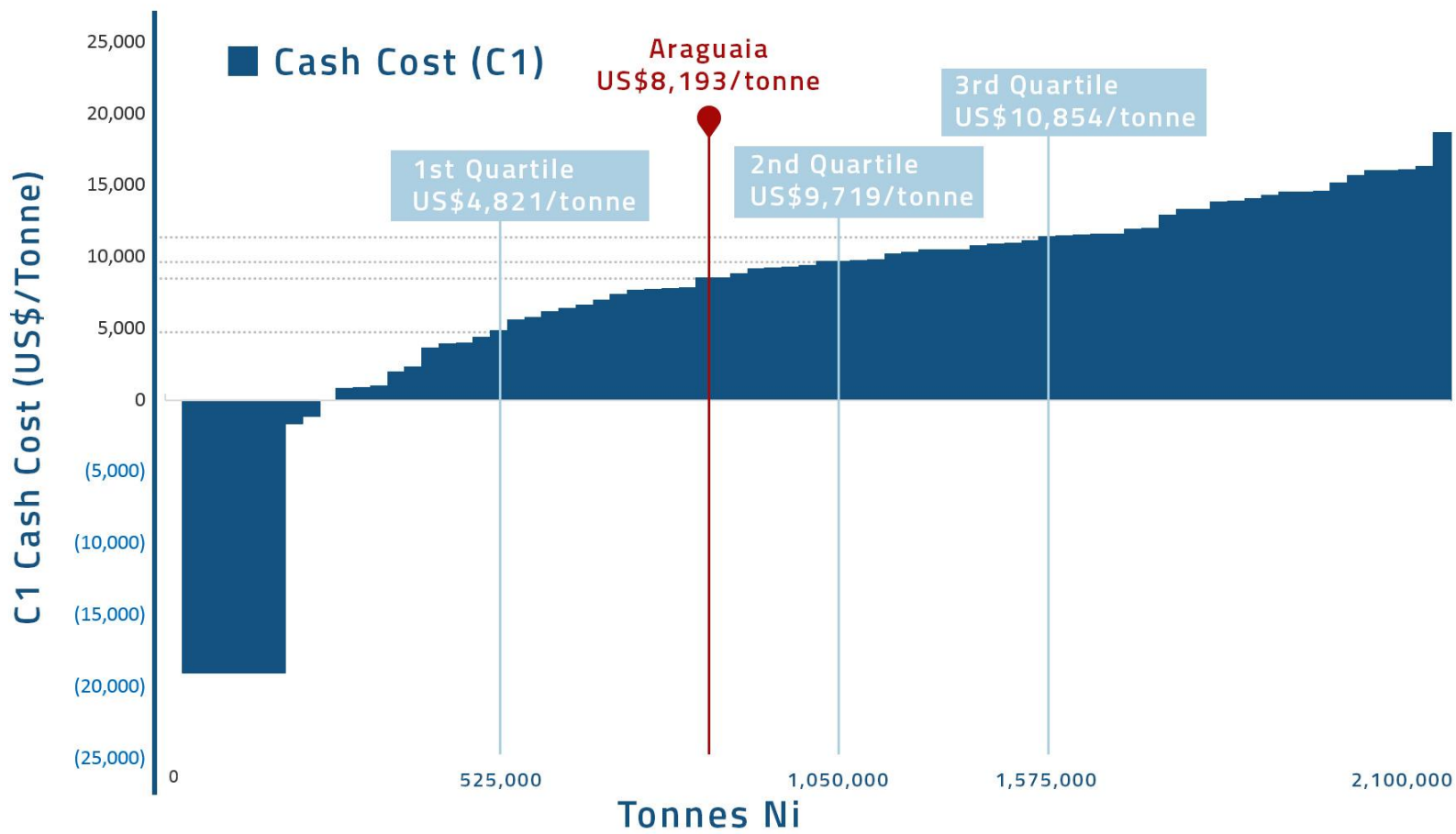
*Agency : ANM = National Mining Agency, SEMAS = State Secretariat for Environment and Sustainability of Pará

**ANS = Araguaia South containing 7 pits and plant , ANN = Araguaia North containing the Vale dos Sonhos pit



Global Cost Comparison

Araguaia position on C1 Cash Cost amongst all nickel producers



Source:Wood mackenzie

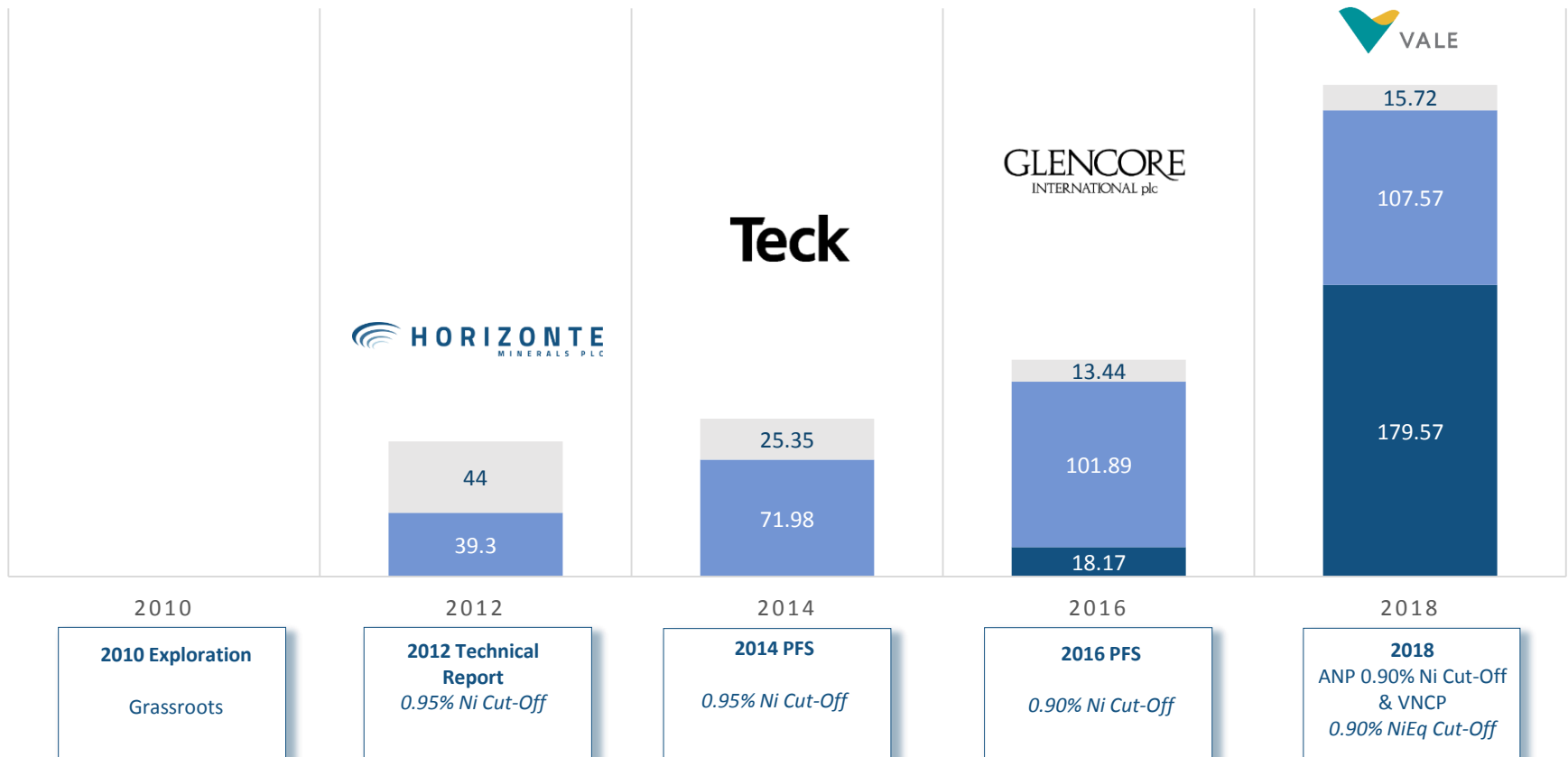


HZM Resource Growth: Over 600% in 6 Years

(Measured + Indicated)

NI MINERAL RESOURCES (MT)

■ Total Measured (MT) ■ Total Indicated (MT) ■ Total Inferred (MT)




Horizonte Minerals: Araguaia Feasibility Study Investor and Analyst Presentation

October 2018



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