



Investor Presentation

2019

www.harmony-minerals.com

A world class Nickel / Cobalt project

WITH PGM POTENTIAL





The electrification of motive power and the battery storage market is set to be the biggest energy transformation in history.

A 10% shift in the global car fleet to electric vehicles will create an additional Nickel demand of 400,000 tonnes, in a 2m tonne market.

Harmony Minerals are positioned to meet this predicted demand changing the world.

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Project economics transformed as a result of the continued surge in cobalt prices and improvements in the nickel price

Executive Summary

- ▶ Harmony Minerals Limited is a private UK based mineral development company, which acquired all the mineral assets of African Eagle Resources PLC in 2013
- ▶ Over US\$33mm spent to date on a substantially complete BFS
- ▶ The company is focussing on three Nickel / Cobalt deposits in Tanzania:
 1. Dutwa: well advanced to BFS with significant metallurgical test work completed: 116.7Mt at 0.91% Ni & 0.03% Co. The project is covered by a 75:25 JV with Precious Metals Refining Company (PMRC)
 2. Zanzui: a further 27.1Mt at 0.81% Ni grade and 0.06% Co grade
 3. Nyawa: adjacent to the Dutwa project holds significant upside exploration potential
- ▶ Several drill holes returned attractive cobalt intersects and hit nickel sulphides
- ▶ Dutwa is one of the most advanced and largest global Nickel / Cobalt development projects in Africa
- ▶ Harmony Minerals has raised US\$2mm since October 2018 to fund:
 - ▶ fund an extensive but focussed sulphide drilling programme
 - ▶ carry out metallurgical test work and trade off studies to optimise the current process flow chart
 - ▶ refresh and complete the existing mine plan / BFS, incl. the assessment of the product for the EV market, and;
 - ▶ strengthen its management and corporate team

Dutwa is benefiting from positive price momentum for both Nickel and Cobalt

The company is raising capital, which is competitively priced versus listed peers

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Top African Nickel deposit, with significant Cobalt credit

Executive management based in Tanzania, with extensive in-country experience

Large deposit: 100Mt at 1%+ Ni equivalent grade

Well explored deposit: 90% in JORC indicated category

Exploration upside from underlying sulphide and regional targets

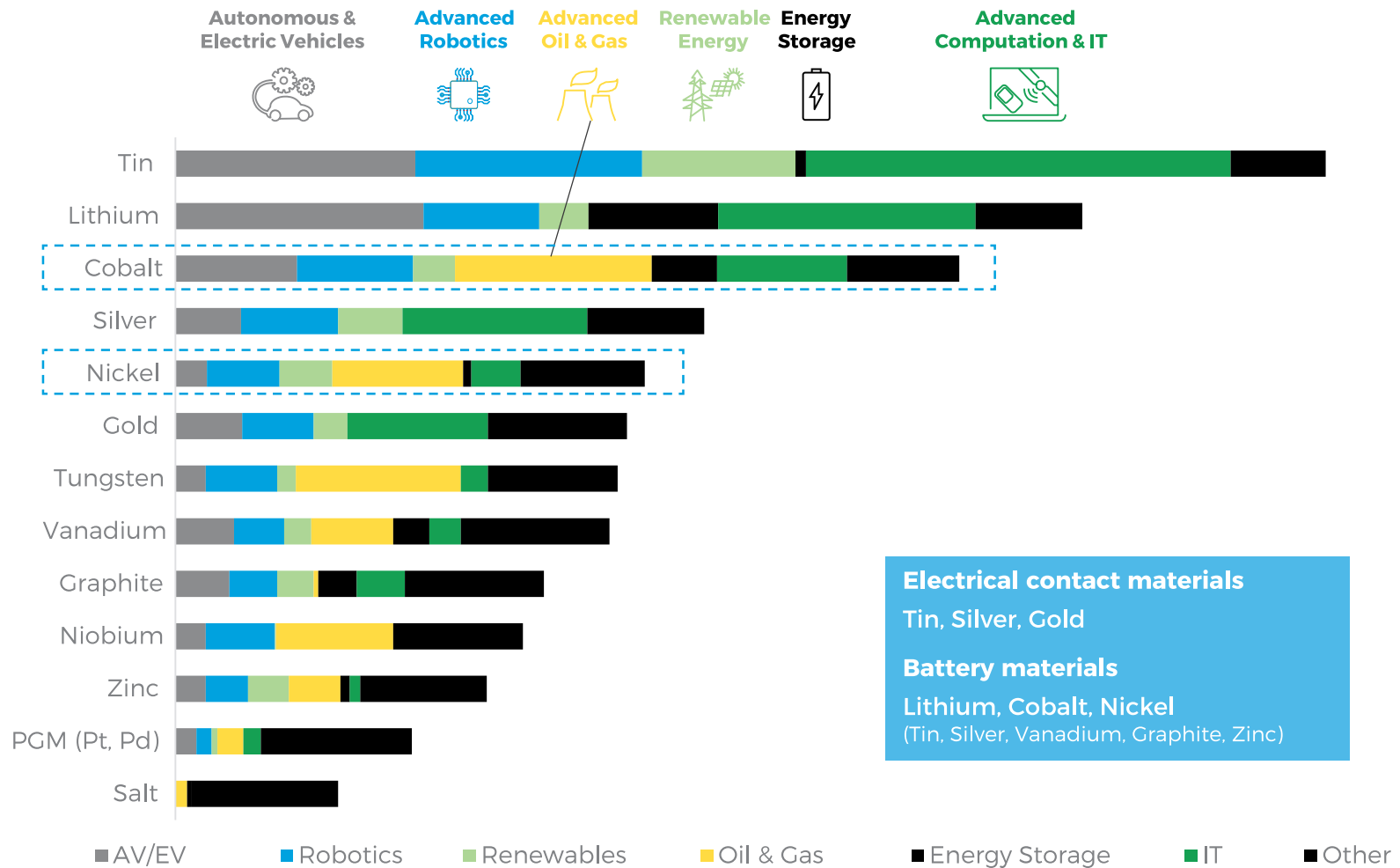
Extensive understanding of the deposit with US\$33mm spent to date

Exposed laterite deposit with ultra-low strip ratios

Low-iron, high Si content allows low acid consumption agitated tank leaching



Dutwa will produce two of the metals most impacted by fast growing new technologies



Source: MIT, Rio Tinto

Game changer – Electronic vehicle market

1 Electric cars and nickel demand

A shift of just 10% of the global car fleet to electric vehicles would create additional demand of 400,000 tonnes of nickel, in a 2m tonne market

2 Lithium-ion batteries

High-purity nickel and cobalt sulphate are key raw material inputs for the rapidly growing battery industry

3 Dominant chemistries

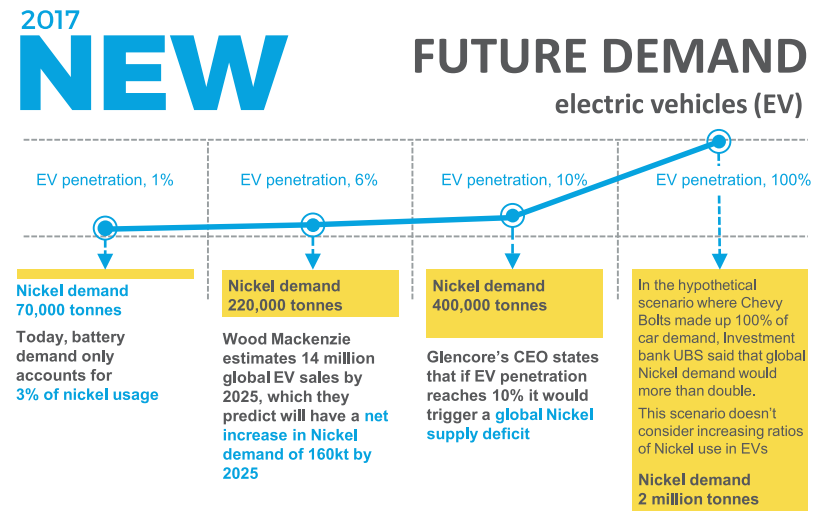
‘Our cells should be called nickel-graphite, because the cathode is nickel and the anode is graphite’
Elon Musk –Tesla 2016

4 Chinese demand

The use of nickel cobalt battery solutions is accelerating in China with a number of the major electric vehicle converting to NCM chemistry

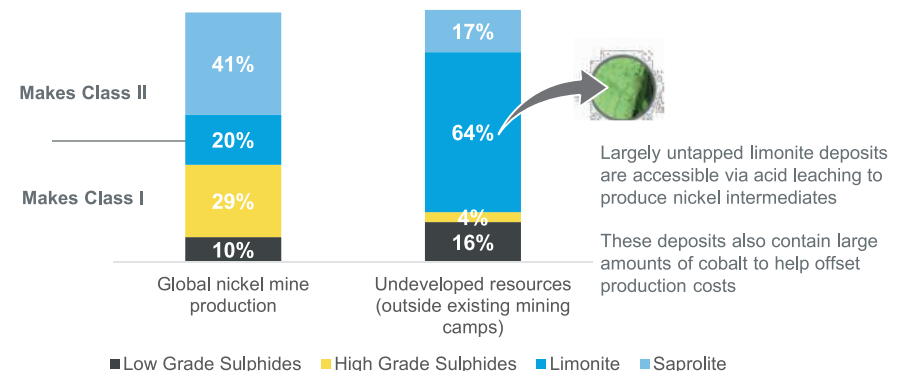
4 Problematic supply chain

65% of global cobalt production originating in the DRC of which 45% is mined artisanally. Significant demand for new supply options



The nickel industry is likely to turn to Limonite deposits in order to meet battery demand

World nickel production and undeveloped resources




Tanzania overview

- Tanzania is located on the East coast of Africa, and has established itself as a major mining destination
- The country is rich in many mineral resources including gold, nickel, cobalt & diamonds
- The mining sector contributes 4% of GDP (~US\$1.7bn)

Mining economics

- The corporate tax rate is 30% for mining activities
- Depreciation allowance of 100% in year of expenditure
- Royalty rate of 6%, and 1% clearing fee on all mineral exports
- 16% free carry for the government has been enacted, but is still needs to be fully implemented

Source: SNL, Reuters, PwC

Company	Project	2017 production
 ANGLOGOLD ASHANTI	Geita	540koz Gold
 ACACIA	North Mara, Buzwagi, Bulyanhulu	768koz Gold
 SHANTA GOLD	New Luika	80kozGold
 PetraDiamonds	Williamson	225k carats Diamonds
 BARRICK GLENCORE	Kabanga	Nickel project



Challenges of operating in Tanzania

H E The President John Pombe Magufuli was elected as president in November 2015 upon pledges to tackle corruption and introduce large-scale reforms; since taking office there have been significant changes to the mining industry;

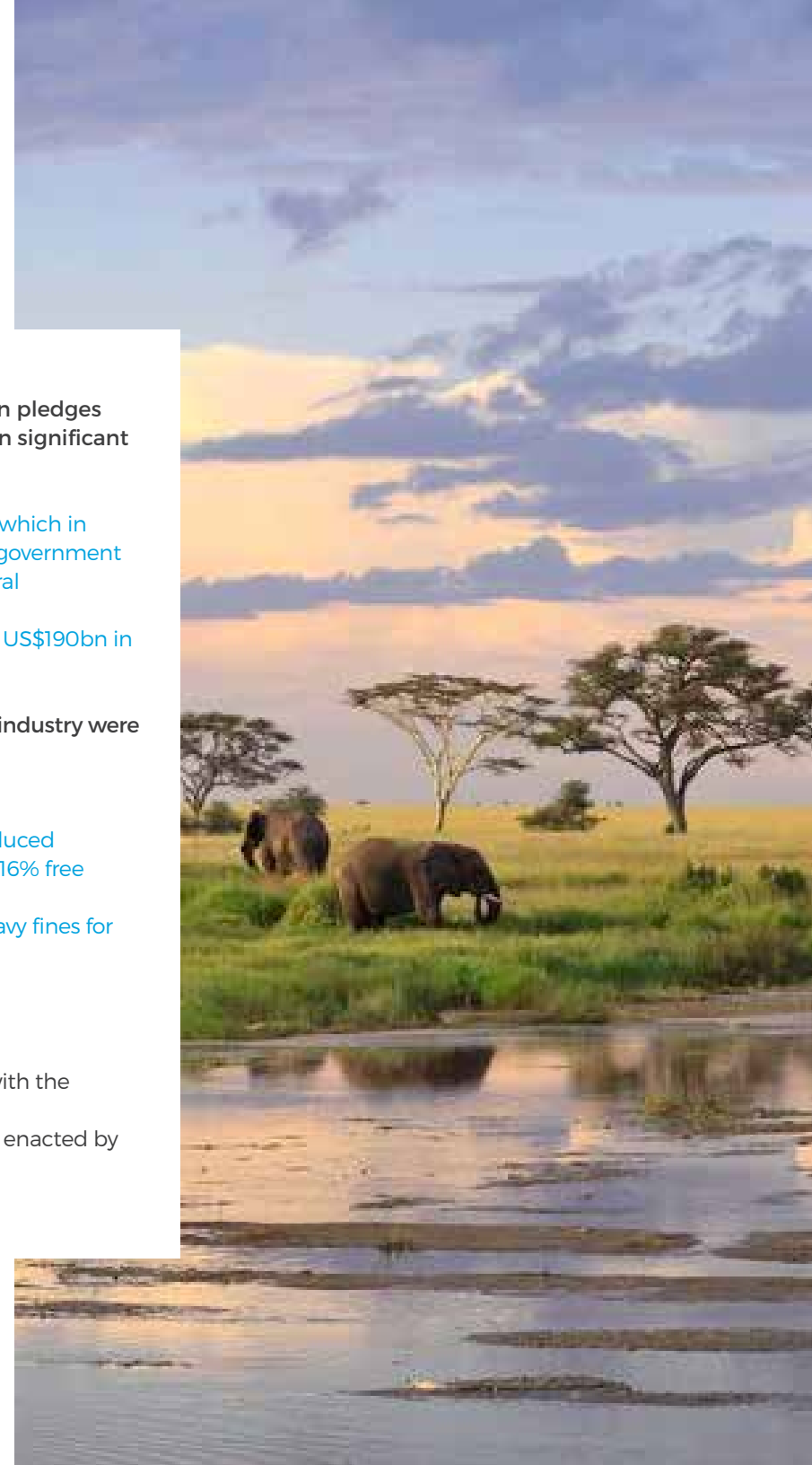
- ▶ H E The President John Pombe Magufuli demanded audits on historic mineral exports, which in some cases have found mineral exports were being underreported in the opinion of the government
- ▶ In March 2017 the Ministry of Minerals announced a ban on the export of metallic mineral concentrates
- ▶ In July 2017, the government of Tanzania claimed Acacia mining owed the government US\$190bn in unpaid taxes and penalties, Acacia settled via Barrick for US\$795mm

As a result of the investigations, a new Finance Act and legislative Bills affecting the mining industry were enacted in 2017;

- ▶ Royalties increased from 4% to 6%
- ▶ A 1% clearing fee on the value of all minerals exported from the country has been introduced
- ▶ The regulations also propose a 5% ownership by Tanzanian indigenous companies and 16% free carried interest for the government
- ▶ It also limits on ownership of mining assets by foreign owned banks and introduced heavy fines for any non compliance

Harmony Minerals position in Tanzania

- ▶ Harmony Minerals has an experienced management team who have good relationships with the Government entities
- ▶ Harmony Minerals is able to comply with all aspects of the Finance Act and legislative Bills enacted by the government in 2017



Harmony Minerals - project overview

- Harmony Minerals Limited is a private UK company focussing on Nickel & Cobalt projects in Tanzania
- Company acquired all of the Tanzanian assets of African Eagle Resources in 2013
- Led by Nick Clarke, and supported by senior management with significant experience working in Tanzania
- The current drilling campaign and metallurgy work is focussed on targeting nickel sulphide deposits, as well as expanding the Co and Ni resources
- Optimisation of existing studies also provides significant upside to historic project economics

Dutwa

- Comprised of the Ngasamo and Wamangola hill-top deposits
- 116.7Mt resource at 0.91% Ni and 0.03% Co grade
- 42,864m of RC drilling and 8,147m of diamond drilling has been completed

Zanzui

- 50km south of the Dutwa and Nyawa projects
- 27.1Mt resource at 0.81% Ni and 0.06% Co

Nyawa

- Highly prospective licence adjacent to the Dutwa project, with identified Nickel Sulphide targets
-



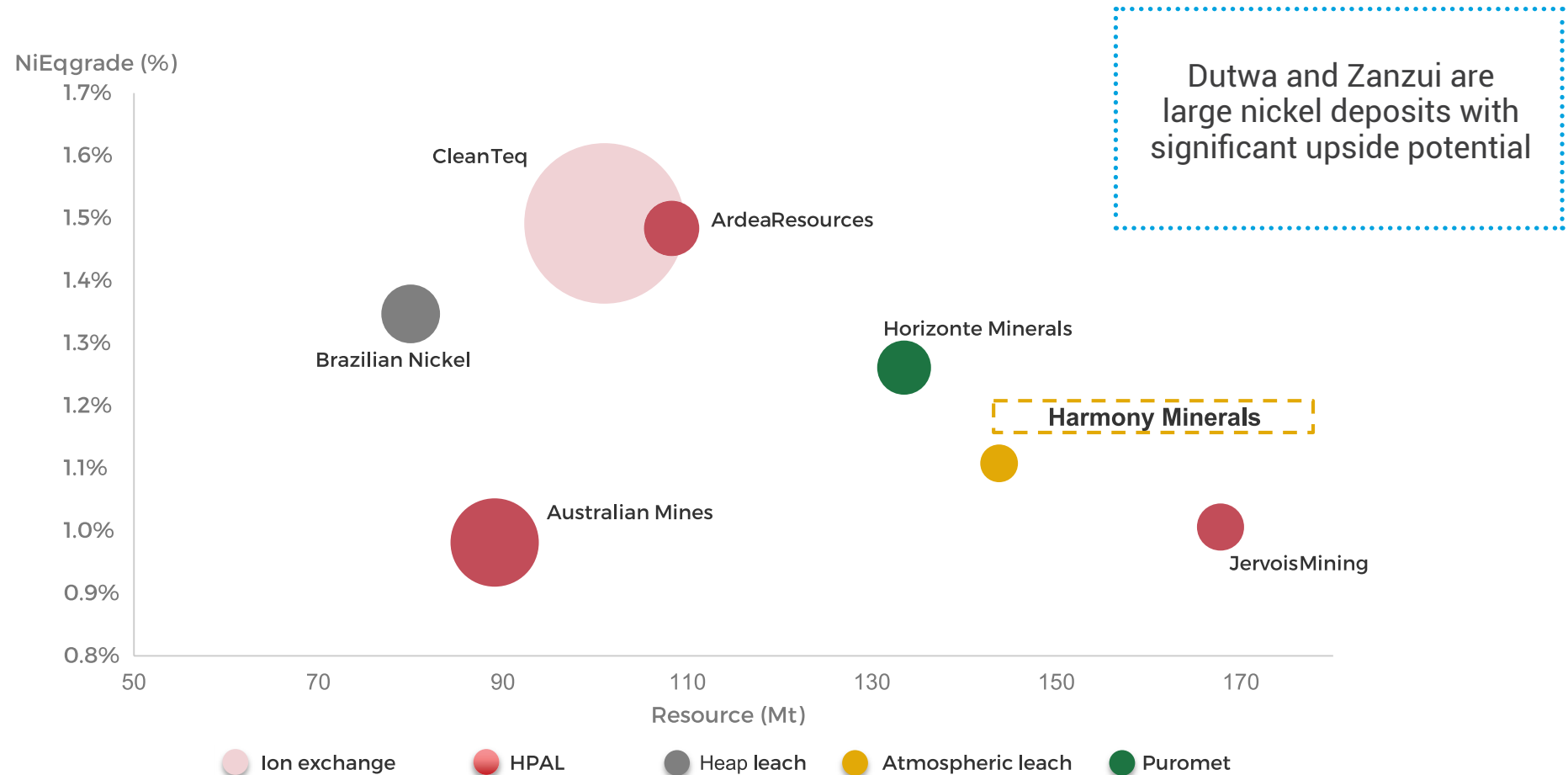
Harmony Minerals positioning against peers

								
General	Project	Nico Young	Araguaia	KNP	Sunrise	Piaui	Sconi	Dutwa & Zanzui
	Exchange							N/A
	Country	Australia	Brazil	Australia	Australia	Brazil	Australia	Tanzania
	Stage	PFS underway	PFS complete	PFS in progress	DFS in progress	Pilot plant stage	BFS in progress	FS in progress
Operations	Process	HPAL / Heap leach	Puromet	HPAL	Ion exchange	Heap leach	HPAL	Under review
	Resource (M, I & I Mt)	168	133	108	101	70	89	144
	Ni grade (M, I & I %)	0.59%	1.26%	0.79%	0.59%	1.00%	0.58%	0.90%
	Ni contained (M, I & I kt)	990	1683	856	596	700	516	1,294
	Co grade (M, I & I %)	0.06%	-	0.10%	0.13%	0.05%	0.06%	0.03%
	Co contained (M, I & I kt)	100.7	-	108.3	131.3	35.0	51.7	43.1
	NiEq contained (M, I & I kt)	1,688	1,683	1,606	1,506	942	874	1,593
	Ni production (ktpa)	N/a	14.5	20.0	18.7	25.0	24.4	26.0
	Co production (ktpa)	N/a	-	-	3.2	0.9	3.0	0.6
Valuation	Market capitalisation (US\$mm)	65.1	81.1	82.5	629.1	N/a	193.8	N/a
	EV (US\$mm)	51.9	67.9	71.0	599.1	N/a	181.5	N/a
	EV / M, I & I resource (US\$ / t)	30.7x	40.3x	44.2x	397.7x	N/a	207.6x	144.1x1

Based on the EV / resource multiple of peers, the valuation of Harmony Minerals is US\$230mm

Source: Capital IQ, Company information 4 July 2018 Notes: Peers selected based on comparable pre-production projects. NiEq calculated based on Ni and Co products only. 1EV / Resource for Harmony Minerals is calculated as the average of the peers. * Currently not listed, but planning to list in the UK in 2018

Harmony Minerals has a large and an expanding resource and a low entry valuation vs peers



Source: Capital IQ, Company information 4 April 2018
 Notes: Bubble size represents the EV of each entity
 NiEq calculated based on Ni and Co products only
 Harmony Minerals' valuation based on capital expenditure to date, Brazilian Nickel valued at US\$80mm

Experienced Board of Directors and management



Mr. Rui M.C.C De Sousa - Chairman

- 35+ years' experience in the energy sector. He was formerly a director of Gazprombank-Invest (Lebanon) SAL, the Chairman of Carbon Resource Management Ltd. and the President of Quantic Mining. He is currently a director of Quantic Limited and Non-Executive Chairman of SOCO energy
- Holds a Degree in Political Science from Geneva University



Mr. Nicholas A. Clarke, BSc (Hons) ACSM - Managing Director

- Has previously worked in the oil industry with Halliburton Co., Schlumberger Ltd, and Fearnol Ltd where he was promoted to CEO
- Founded Quantum Energy Group Ltd, a gas trading company which was acquired by Macquarie, and Carbon Resource Management Ltd, a carbon and emissions trading company which was then acquired by Vitol Group
- Since 2010, Mr Clarke has been a private investor in resource companies
- Holds a degree in Mining Engineering from the Camborne School of Mines



Mr. Mark Stanley - Director, Country Manager

- Has worked at De Beers Consolidated Mines in Kimberley as a miner and Mine Overseer, as well as been a senior executive of his Dar Es Salaam based family business H.J. Stanley & Sons
- Graduated in 1983 with a degree in Mining Engineering from the Camborne School of Mines



Mr. Mark Davey - Chief Geologist

- Geological consultant with over 25 years' experience in precious and base metals exploration including 18 years focussing on Africa
- Has work for CRA in Australia, Anglo American in Zambia and as for 10+ years as Exploration Manager for African Eagle Resources and now Harmony Minerals
- Graduate of Goldsmiths College, University of London and the Royal School of Mines, London



Mr. Benjamin Safi - Geologist

- Professional geologist with 20 years' experience working in gold, industrial minerals and base metals exploration.
- Senior Management roles up to a Chief Geologist for Twigg Gold Ltd.
- Good knowledge and skills in geophysical, geochemical and geological exploration techniques
- Has been involved in gold and base metals exploration in the Lake Victoria Goldfields, Lupa Goldfield and Proterozoic Ubendian Belt of Tanzania.
- Holds a BSc (Hon) in geology from University of Dar es Salaam and a MSc.



Market Backdrop

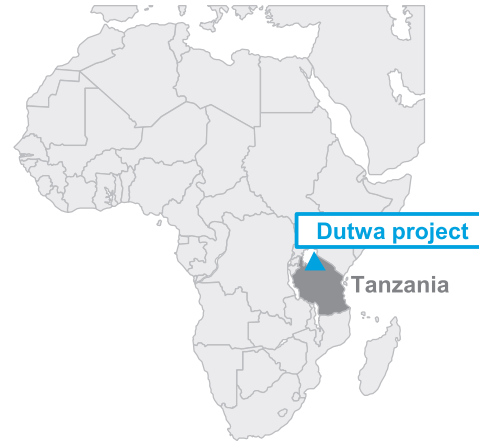
Company overview

Market position

Assets overview

- + Dutwa project
 - + Zanzui project
 - + Nyawa project
-

Dutwa Project overview



History

- ▶ The Dutwa Project is located in Northern Tanzania and a maiden resource was declared by African Eagle Resources in 2008
- ▶ Since 2008 the project has expanded and now includes two hill top deposits, Wamangola and Ngasamo, which form thick residual lateritic caps on the tops of low ridges 7km apart
- ▶ To date a total 44,344m of RC drilling and 8,147m of diamond drilling has been completed
- ▶ Mineral Resource estimates were declared for Ngasamo and Wamangola in 2012 and 2013 receptively giving the project a combined Resource of 116.7Mt @ 0.91% nickel and 0.026% cobalt (>90% in indicated category)
- ▶ A Bankable Feasibility Study was started in 2011, however this was suspended in 2013 due to a downturn in the commodities market
- ▶ In August 2013, Harmony Minerals acquired a controlling interest in the project, which the company is continuing to develop

Current Status

- ▶ Due to recent improvements in the commodities markets, Harmony Minerals have restarted the development of the Dutwa project.
- ▶ Once further drilling, studies and metallurgical work are complete, the company intends to IPO to raise the funds required for construction of the project.
- ▶ The hill-top deposits ensure a very low strip ration of 0.28:1, and approximately 68% of the deposit (Ferruginous Siliceous ore) is believed to be amenable to simple, low energy beneficiation.
- ▶ The original Bankable Feasibility Study showed that for Atmospheric tank leach (H_2SO_4) is most favourable to overall economics and operating environment and possesses a lower risk profile than either High Pressure Acid Leach or Heap Leach. Preliminary designs on processing plant, tailings storage facility, ore and waste rock storage have also completed, with further trade off studies to be undertaken in the near future to confirm the process design.
- ▶ Based on the above parameters the current estimated production rate would be 3Mtpa for a 17 year mine life and an average Life of Mine production rate of 26,000t Nickel and 530t Cobalt.
- ▶ Once further drilling, studies and metallurgical work are complete, the company intends to IPO to raise the funds required for construction of the project.



Dutwa project mineral resource statement

Mineral Resource evolution

- **November 2008:** Maiden mineral resource estimate declared by SRK Consulting for Wamangola Hill of 31Mt at 1.1% Ni
- **September 2010:** Snowden declared mineral resource estimate at Ngasamo Hill of 36.6Mt at 1.0% Ni and 0.03% Co
- **September 2012:** Wamangola mineral resource estimate updated by Snowden Mining Consultants for 57.9Mt at 0.9% Ni
- **November 2012:** Snowden Mining Consultants declared maiden resource of 27.1M at 0.81% Ni and 0.05% Co at Zanzui
- **February 2013:** Ngasamo mineral resource estimate updated to 58.8Mt at 0.94% Ni and 0.27% Co

Dutwa Combined Minerals Resource Estimate, as at February 2013, Ni Cut-Off @ 0.55%

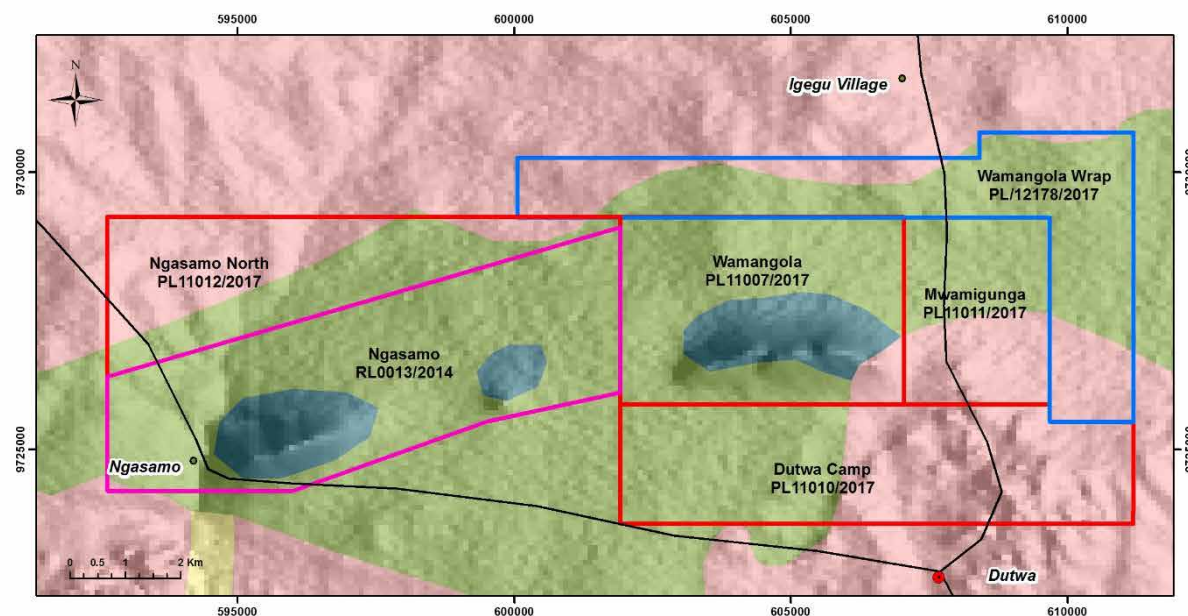
JORC (2004) Resource Category	Lithology	Tonnes (Mt)	Ni (%)	Co (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	MgO (%)	CaO (%)	Contained Ni (t)
Indicated	FeSi	79.3	0.89	0.029	72.02	2.41	12.52	5.14	0.21	702,981
	Trans	25.9	0.96	0.021	52.45	1.49	12.08	19.02	0.94	249,639
	Saprock	4.6	0.94	0.022	39.35	0.38	8.16	32.41	0.78	42,792
	Total	109.8	0.91	0.027	66.04	2.11	12.23	9.55	0.41	995,411
Inferred	FeSi	1.5	0.85	0.028	71.72	2.64	12.43	5.42	0.27	21,587
	Trans	2.9	0.98	0.018	53.60	1.56	10.99	20.19	0.80	14,846
	Saprock	2.9	0.86	0.017	41.18	0.48	8.30	31.06	0.82	24,708
	Total	6.9	0.89	0.021	55.09	1.51	10.40	19.29	0.61	61,141
	Grand Total	116.7	0.91	0.026	65.39	2.07	12.12	10.12	0.42	1,056,553

Source: Snowden Mining Consultants February 2013 Ngasamo Mineral Resource Estimate & September 2012 Wamangola Mineral Resource Estimate

Note: Dutwa Mineral Resource Statement excludes Zanzui resource

Dutwa licence overview

- Prospecting licences have been renewed in 2017, and meetings held with the Government in 2018 to gain assurance over the licences
- Licences renewals for 4 years from January 2017 with 2 further renewals possible
- PRMC holds the main Ngasamo licence and is in the process of renewing it and transferring the title to Dutwa Minerals in exchange for 25%



Name	Licence No	Area (km ²)
Ngasamo north	PL11012/2017	14.17
Ngasamo	RL0013/2014	25.7
Wamangola	PL11007/2017	17.32
Wamangola wrap	PL12178/2017	18.81
Dutwa camp	PL11010/2017	19.45
Mwamigunga	PL11011/2017	8.87
Total		104.32

All Dutwa licences are part of a 75:25 Joint Venture between Blackdown Minerals Ltd and Precious Metals Refining Limited

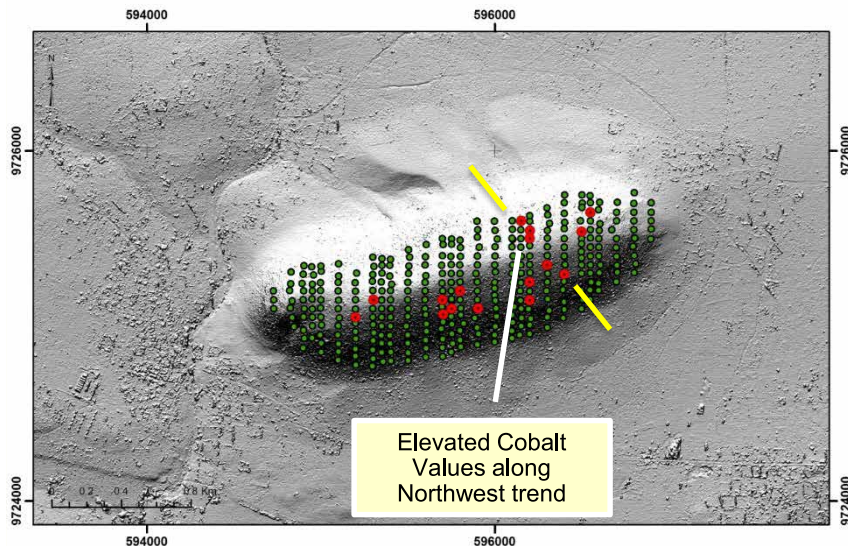
Dutwa elevated cobalt values provide a real upside

Ngasamo results

- ▶ 16 RC drill holes returned significant cobalt intersections (>0.2%Co) during definition of the nickel laterite deposit
- ▶ Values up to 3m @ 0.68% Co returned

Hole No	Depth (m) From	Intersection (m)	Grade (Co%)
NGRC050	51	15	0.55
NGRC059	0	6	0.63
NGRC060	0	3	0.68
NGRC105	15	6	0.50
NGRC125	6	3	0.62
NGRC139	12	6	0.58

* 0.2% Co Cut Off

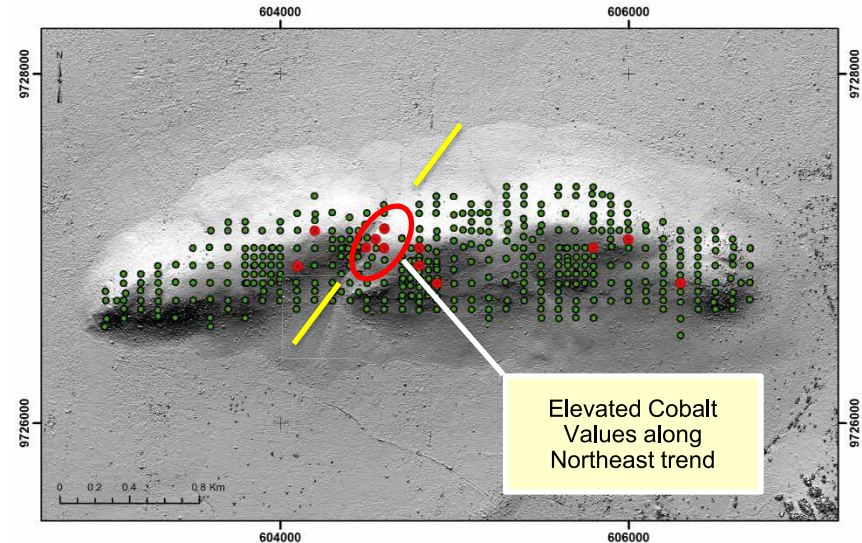


Wamangola results

- ▶ 14 RC drill holes returned significant cobalt intersections (>0.2% Co) during definition of the nickel laterite deposit
- ▶ Values up to 6m @ 1.68% Co returned

Hole No	Depth (m) From	Intersection (m)	Grade (Co%)
DTRC026	9	18	0.72
<i>Incl.</i>	15	6	1.08
DTRC030	24	9	1.29
<i>Incl.</i>	27	6	1.68
DTRC023	9	12	0.58
DTRC132	21	6	0.46

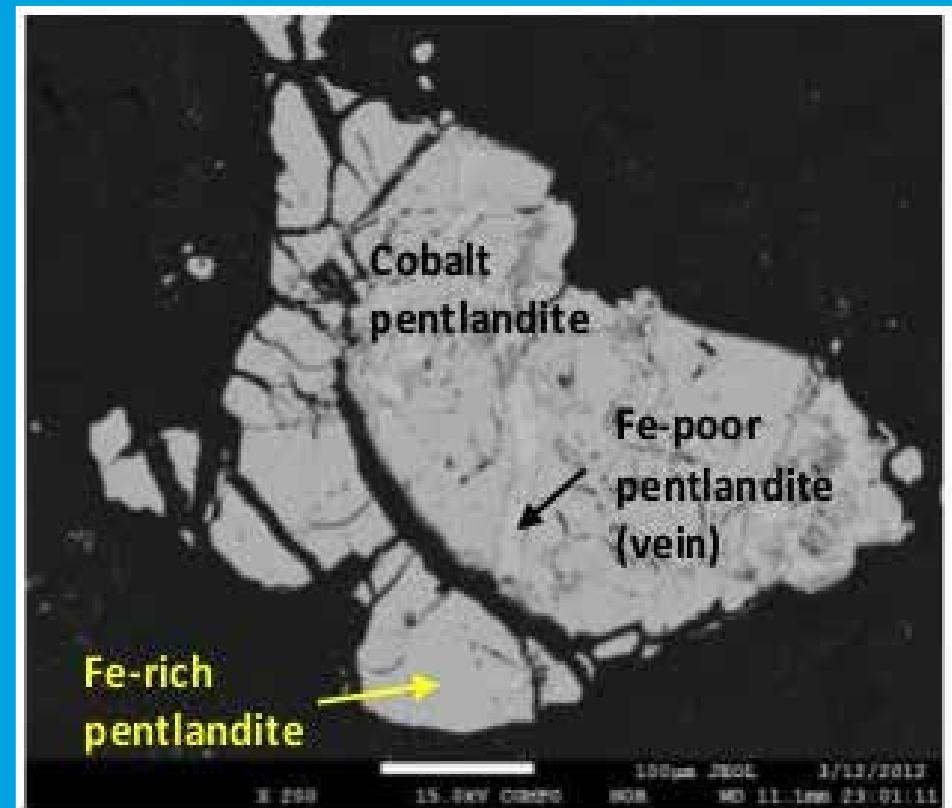
* 0.2% Co Cut Off



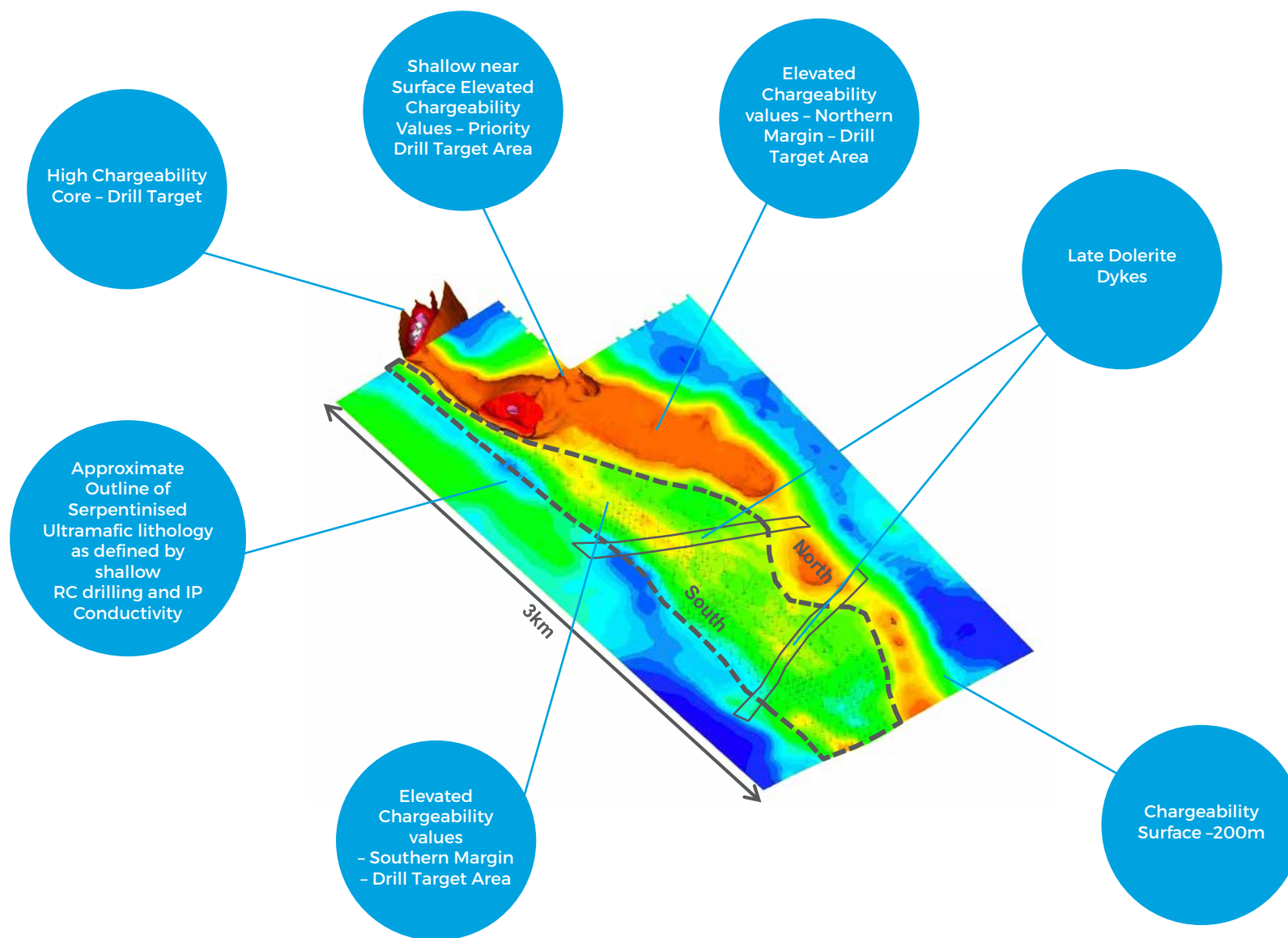
Dutwa sulphide potential

- ▶ Assay results of Ni sulphide material returned significant values including 12m @ 0.65% Ni from 42m.
- ▶ Thin section analysis, by Rhodes University SA, confirmed the presence of nickel sulphide mineralisation
- ▶ Rhodes University reported elevated values of Pt + Os
- ▶ Cobalt rich Pentlandite/cobalt poor Pentlandite and Platinum mineralisation identified
- ▶ Fracturing of the pentlandite grains indicates that the mineralisation is of a primary sulphide
- ▶ Only the first 139 holes (~18%) – all at Wamangola - assayed for PGEs
- ▶ 8 holes intersected Ni sulphide and/or PGE's
- ▶ Potential shear zone – northern Ngasamo/southern Wamangola - may indicate prior contiguous deposit
- ▶ Sulphide mineralisation observed at Wamangola may repeat at Ngasamo
- ▶ Independent review – “Remobilised PGE mineralisation in the laterite profile and particularly in the lowermost portion of existing holes is an encouraging sign and sufficient justification for a staged exploration programme.....”

Thin Section Analysis of Hole DTRC147



Nickel sulphides - identified targets from IP work



Tanzanian Sulphide & PGM Potential

- ▶ Tanzania currently a focus for nickel sulphide exploration
- ▶ Indicated resources of 50Mt & Inferred resources of 104Mt Ni have been delineated in Tanzania & Burundi

Glencore / Barrick Gold - Kabanga

Category	Tonnage (Mt)	Ni (%)
Measured/Indicated	37.20	2.63
Inferred	21.00	2.60

MidUral Group - Musongati

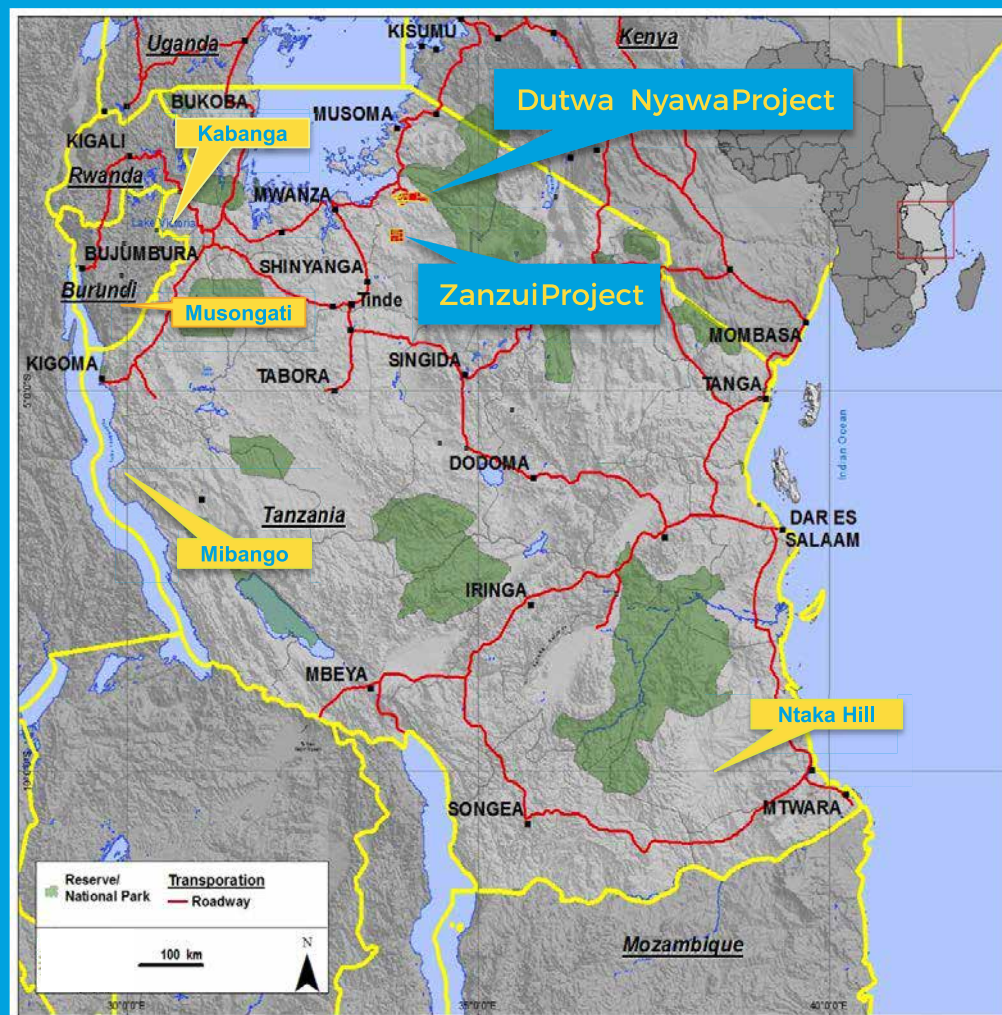
Category	Tonnage (Mt)	Ni (%)
Measured/Indicated	29.10	1.60
Inferred	184.7	1.3

Indiana Resources - Ntaka Hill

Category	Tonnage (Mt)	Ni (%)
Measured/Indicated	20.32	0.58
Inferred	35.93	0.66

Indiana Resources - Mibango

Category	Tonnage (Mt)	Ni (%)
Inferred	113.10	0.82





Market Backdrop

Company overview

Market position

Assets overview

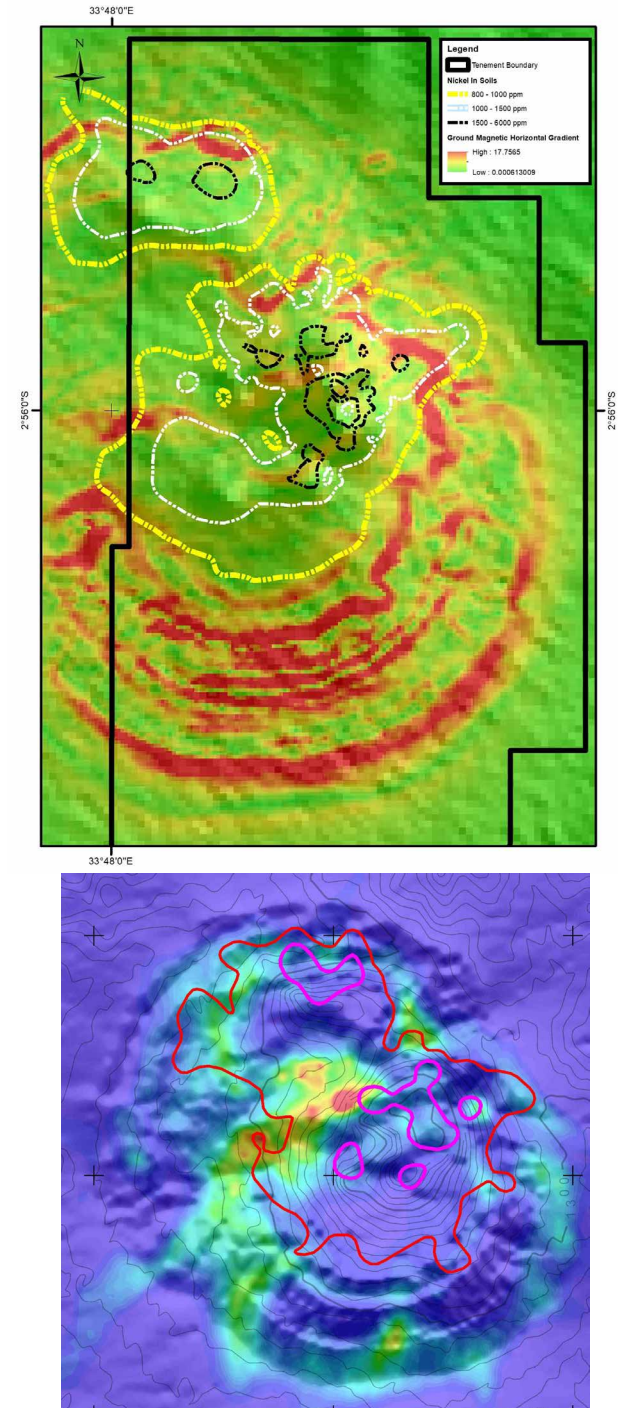
- + Dutwa project
 - + Zanzui project
 - + Nyawa project
-

Potential to increase resources at Zanzui

- ▶ Zanzui project is located 50km south of Dutwa and Nyawa projects.
- ▶ AFE targeted the lateritic cap at Zanzui after successes at the Dutwa Project, with results showing lithological similarities to the Dutwa deposit.
- ▶ A JORC inferred resource estimate was prepared from the drilling data, which comprised of 75 vertical reverse circulation holes drilled on a staggered pattern of 100m x 200m for a total of 4,363 metres of drilling. The contained metal content of the deposit is currently estimated to be 219kt Nickel and 16kt Cobalt
- ▶ African Eagle as part of their exploration programme also undertook a 2008 Versatile Time Domain Electromagnetic (VTEM) survey which also highlighted a number of potential sulphide targets for follow-up investigation. The sulphide/PGE potential of the area is further enhanced by an intersection of platinium of 1.24 in historical (UNDP) diamond drilling in the early 1980's.
- ▶ Harmony's current focus is following up on the sulphide potential of Zanzui.

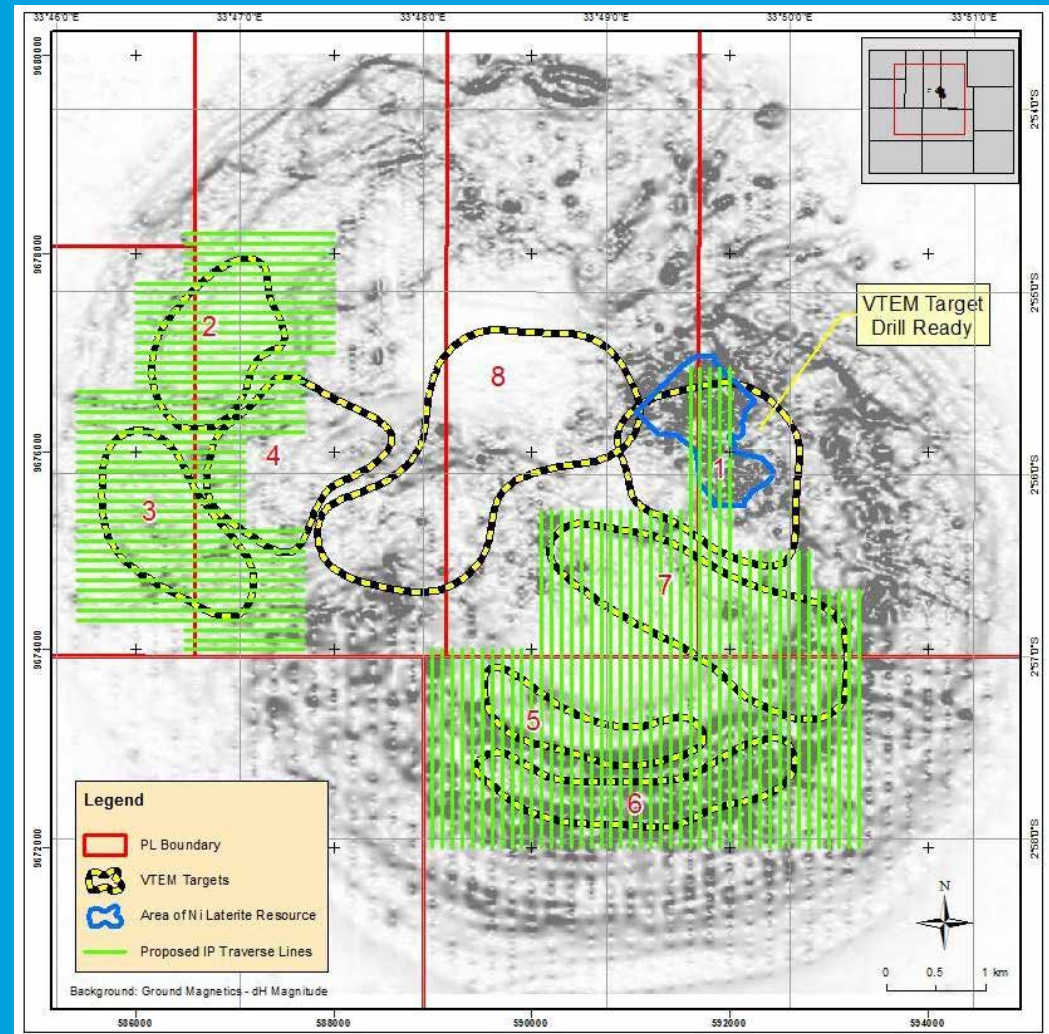
	Lithology	Tonnes (Mt)	Ni (%)	Co (%)	Contained Ni (kt)
Inferred	FeSi	23.2	0.81	0.06	187.9
	Transitional	3.4	0.81	0.06	27.5
	Saprock	0.4	0.71	0.03	2.9
Total inferred		27.1	0.81	0.06	219.5

Source: Snowden Mining Consultants November 2012 Zanzui Mineral Resource Estimate



Zanzui upside Nickel sulphide exploration

- ▶ Primary target will be massive nickel sulphides
- ▶ Target 1 considered drill ready
- ▶ Phase 1:
 - ▶ Ground EM and IP
 - ▶ Selected assay of existing RC chips for PGEs
 - ▶ Targets 2 to 6, Ground EM (245 line km) with follow up IP
- ▶ Phase 2:
 - ▶ Diamond Drilling Target 1
 - ▶ Drill Approximately 3000m NQ core. Target depth 350m
- ▶ Phase 3:
 - ▶ Follow up RC drilling of Ground EM/IP
 - ▶ Approximately 5000m RC Drilling
 - ▶ All samples (3m Composites) to be analysed for Nickel - Cobalt - PGE's





Market Backdrop

Company overview

Market position

Assets overview

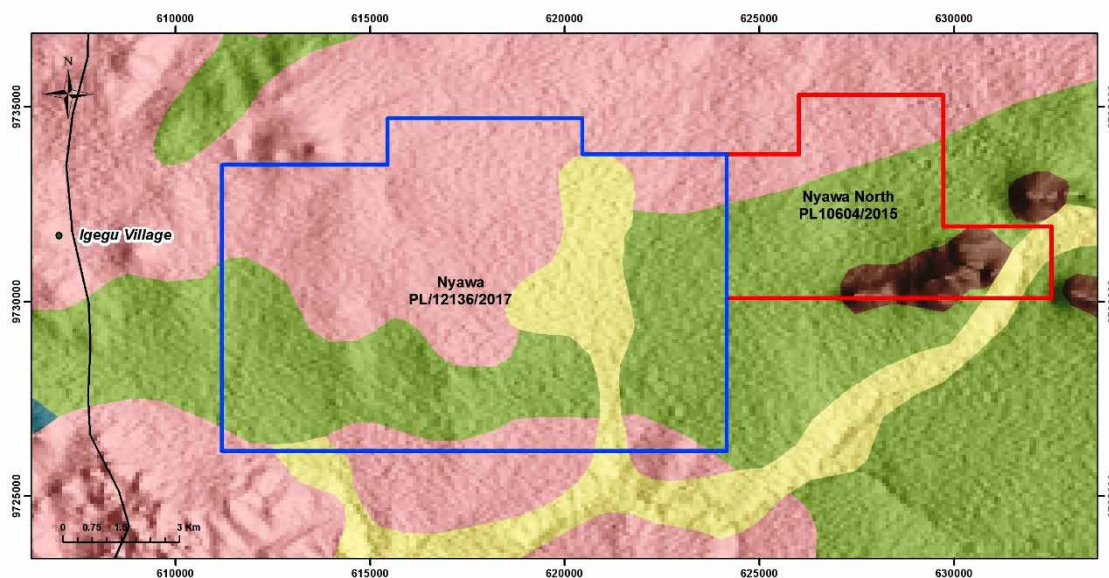
- + Dutwa project
- + Zanzui project
- + Nyawa project

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Nyawa overview

Geology

- ▶ A licence covering 102km² of prime, under explored, greenstone in the Lake Victoria Goldfields.
- ▶ Located 6km east of 116Mt Dutwa Nickel Deposit and the historical Ngasamo Gold Mine the Nyawa licence forms part of the Kilamafeda (Swahili = "Money Hills") Greenstone Belt and is underlain by Nyanzian Greenstone including Banded Iron Formation and a previously undiscovered, large, ultramafic body (Nyawa Ultramafic).
- ▶ Nyanzian Greenstone including Banded Iron Formation and a previously undiscovered, large, ultramafic body (Nyawa Ultramafic) which forms part of the Kilamafeda (Swahili = "Money Hills") Greenstone Belt

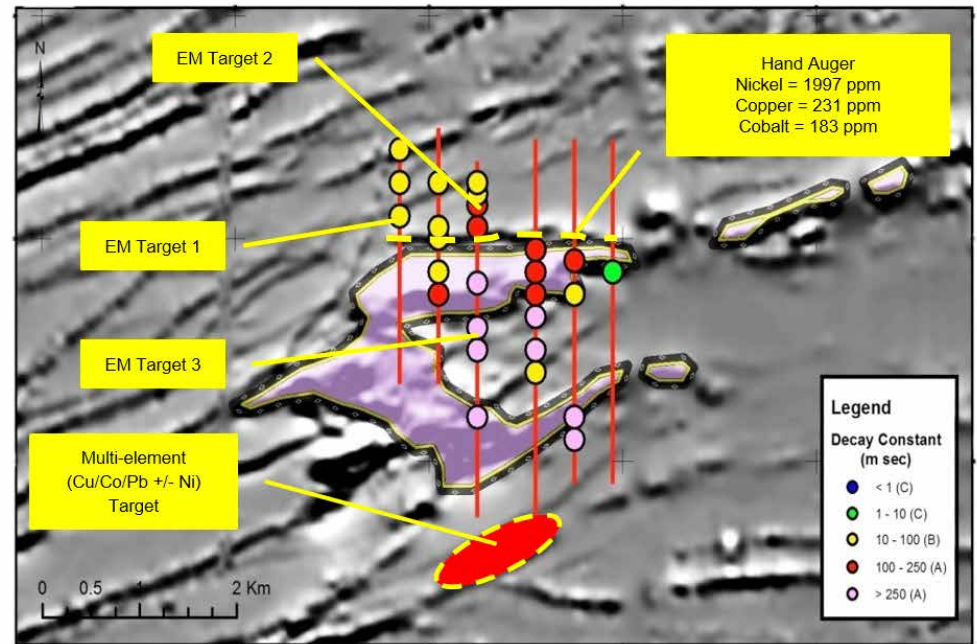


Name	Licence No	Area (km ²)
Nyawa/ Gilya	PL/12136/2017	102.22
Nyawa North	PL10604/2015	31.3
Total	Total	133.52

Nyawa – Overview and sulphide potential

Base Metal Targets

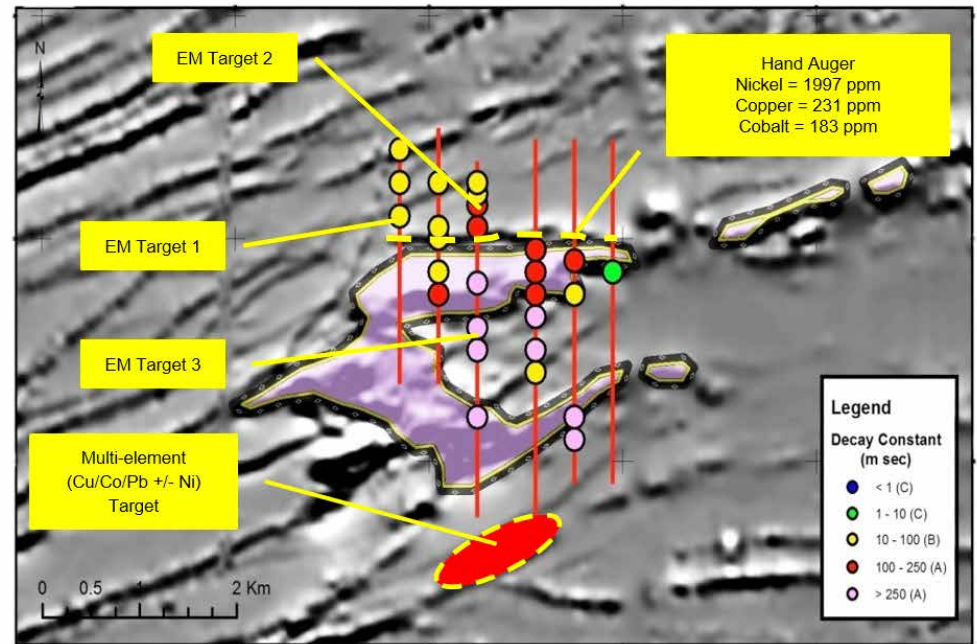
- ▶ A previously undiscovered and untested Ultramafic body covering approximately 3+ km²
- ▶ Historical geochemical hand augering returned elevated Ni-Cu-Co values on its northern margin
- ▶ Follow up, broadly spaced, EM survey indicates a number of strong, potentially massive sulphide (Nickel?) targets along the contact of the ultramafic body and along strike from the elevated auger results.
- ▶ Preliminary modelling of the EM results indicates target depth of less than 200m
- ▶ Strong multi -element (Cu/Co/Pb) Auger target south of the Nyawa Ultramafic
- ▶ Ground magnetics indicates probably extension to ultramafic to the east northeast



Nyawa – Gold exploration upside

Gold Targets

- ▶ Quality regional geophysical (ground magnetics) and geochemical database from previous exploration highlighting the potential for a number of shallow high grade gold deposits
- ▶ Drill ready targets including NAN Corridor and Nyawa Ultramafic body
- ▶ Significant exploration upside with a number of other prospective targets identified from initial geophysical and geochemical data
 - ▶ Sagunada Target –low level gold values (masked by transported overburden) co incident with strong, 6km, ESE trending magnetic anomaly. Proposed infill mechanical augering with follow up drilling.
 - ▶ Nyawa Hill Target –East /West trending soil anomaly, associated with contact of Banded Iron Formation –potentially high grade gold target. Proposed infill mechanical augering with follow up drilling.





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