

Nickel


PANORAMIC
RESOURCES LTD



Ramping Up Savannah

Cobalt

Noosa Mining and Exploration Investor Conference

18 July 2019

Copper

No New Information or Data

This presentation contains references to Production Targets, exploration results, and Mineral Resource and Ore Reserve estimates, all of which have been cross referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Production Targets, Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

Forward Looking Statements

This presentation may contain certain “forward-looking statements” which may not have been based solely on historical facts, but rather may be based on the Company’s current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the Countries and States in which we operate or sell product to, and governmental regulation and judicial outcomes. For a more detailed discussion of such risks and other factors, see the Company’s Annual Reports, as well as the Company’s other filings. The Company does not undertake any obligation to release publicly any revisions to any “forward-looking statement” to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

Creating long-term value for shareholders



Corporate

Savannah

Gold

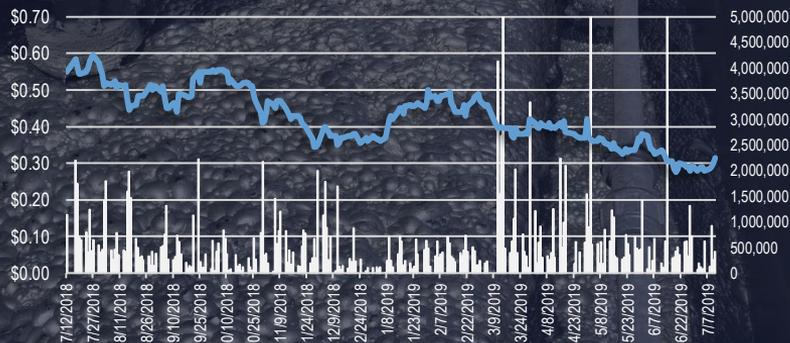
PGMs

Summary

Resources and Reserves

Corporate Overview

Index	S&P/All Ordinaries
ASX Ticker	ASX:PAN
Shares on issue	553.6M
Share Price	\$0.365 (17 July 2019)
Market Cap	~\$202M
Cash	\$26.6M (30 June 2019)
Listed Investments	~\$6.8M (Horizon Gold, GME, others)
Bank debt	\$40M (drawn-down at 30 June 2019)
Enterprise Value	~\$208M



30-day average daily volume	~350,000
90-day average daily volume	~400,000
52 week Low-High	\$0.275 - \$0.63

BOARD

A few new faces



Brian Phillips
Non-Exec Chairman



Peter Harold
Managing Director



Peter Sullivan
Non Exec Director



Nicholas Cernotta
Non-Exec Director



Rebecca Hayward
Non Exec Director



Trevor Eton
CFO/Co Secretary

SHAREHOLDER COMPOSITION

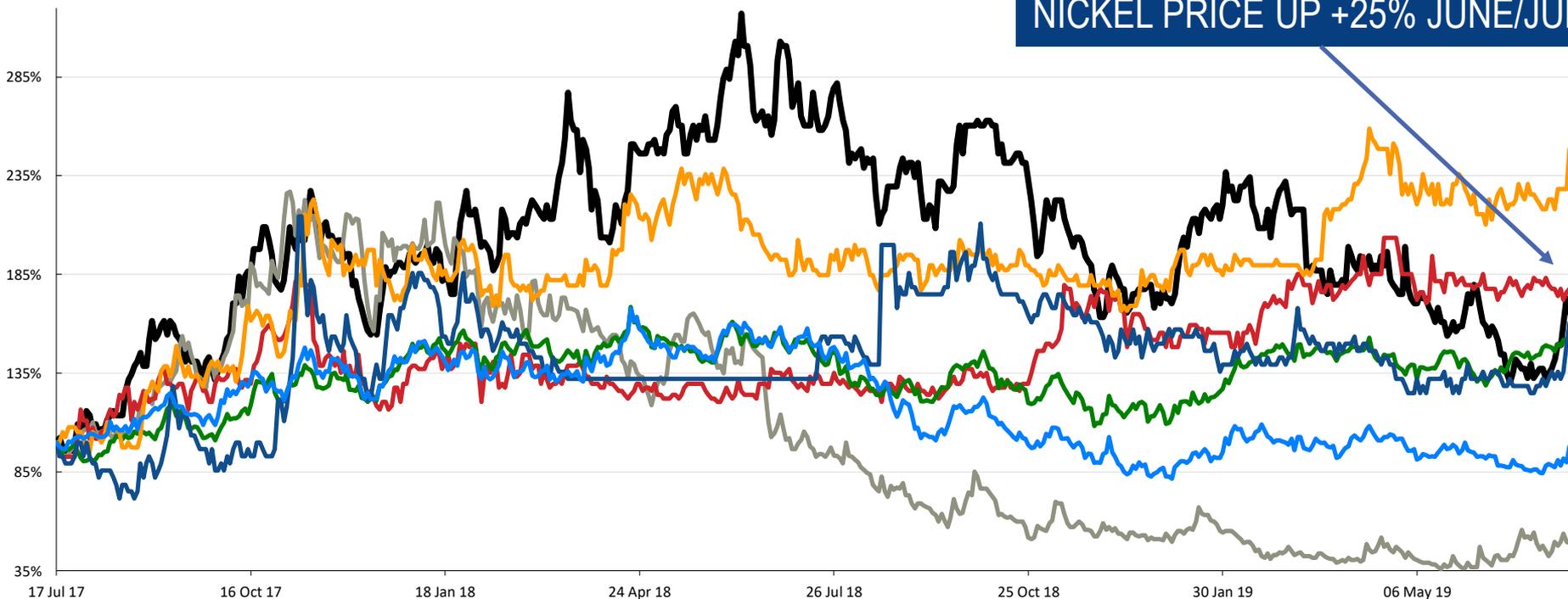
Strong institutional support



Two Year Performance

PAN.ASX CLQ.ASX CZI.ASX IGO.ASX
MCR.ASX POS.ASX WSA.ASX

NICKEL PRICE UP +25% JUNE/JULY

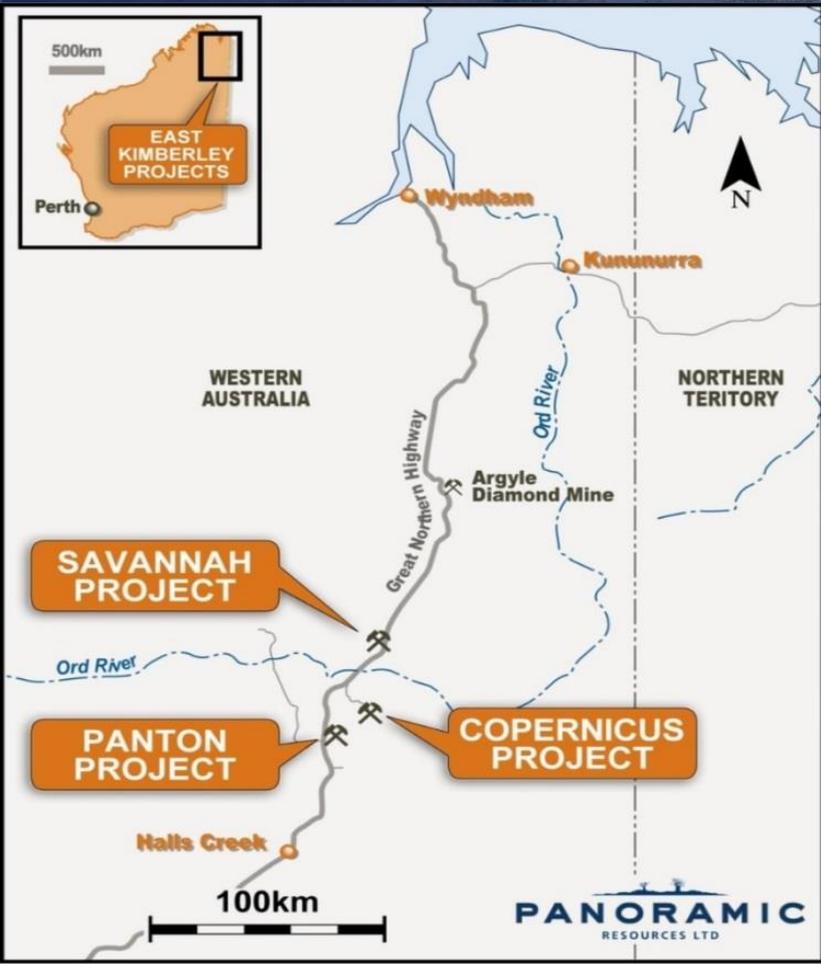


SAVANNAH

Nickel – Copper – Cobalt



Savannah - Summary



Resources*

- 218,300t Ni
- 99,100t Cu
- 14,900t Co

Reserves*

- 112,600t Ni
- 52,400t Cu
- 7,600t Co

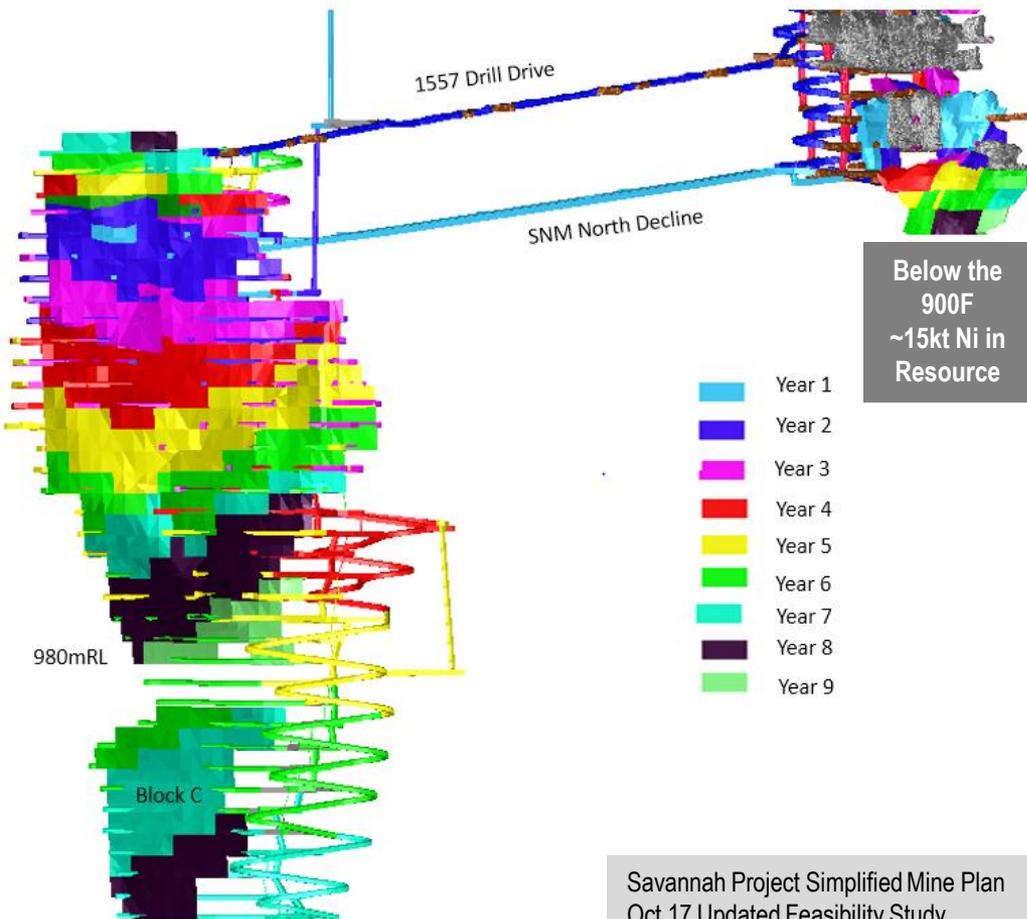
Significant Milestones

- Jun 18 - New Offtake with Sino/Jinchuan
- Jul 18 - A\$40M loan facility with Macquarie
- Jul 18 - Re-start decision made
- Dec 18 - Recommissioned mine and mill
- Feb 19 - First concentrate shipment
- Jul 19 – Improved performance in June Qrt

Existing Infrastructure

- Underground mine
- 1Mtpa processing plant (SAG mill and conventional flotation)
- Mobile mining fleet
- 200 person village
- Tailings storage facility
- 12 MW power station (owned by CPM/Pacific Energy)
- Other associated infrastructure

* Refer Resources and Reserves Tables



Savannah Orebody

- Forecast mine production of **1.68Mt @ 1.18% Ni for 19,800t Ni contained***
- Started mining Savannah ore in Dec 2018
- Resources below 900 Fault not included in mine plan (**0.90Mt @ 1.65% Ni for 14,900t Ni**)

Savannah North Orebody

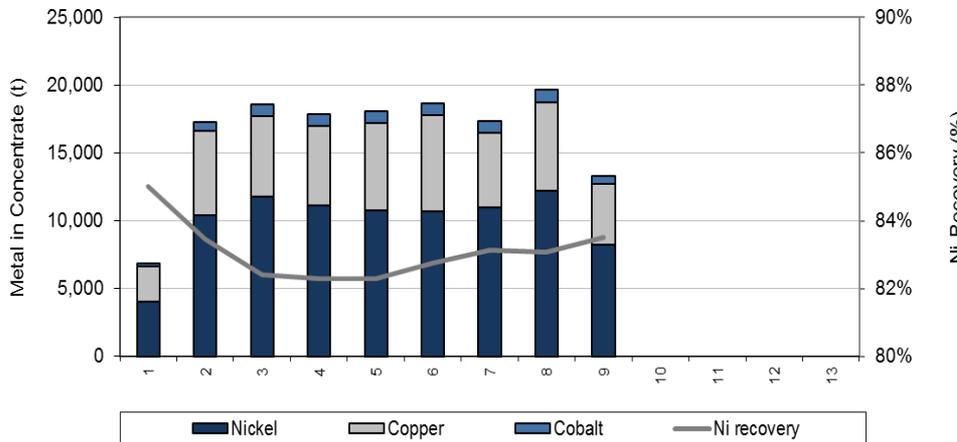
- Forecast mine production of **5.97Mt @ 1.49% Ni for 88,900t Ni contained***
- Development of twin decline has commenced
- 900 metre ventilation shaft construction underway
- First ore production scheduled for Q42019

Cautionary Statement

Approximately 1.1% of nickel in the Production Target is from material classified as Inferred Resource. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

**Refer Company ASX announcement dated 27 October 2017 titled "Updated Savannah Feasibility Study. Enhances fundamentals for a decision to restart"*

Metal in Concentrate (tonnes per year)



Production Profile

Product

- Bulk Ni-Cu-Co concentrate
Average grade 8% Ni, 5% Cu, 0.6% Co
- Low impurities and attractive Fe:MgO and Ni:Fe ratios
- Ideal feed for Ni smelters

Annual metal in concentrate from Savannah North

- 10,800t Ni
- 6,100t Cu
- 800t Co

LOM metal in concentrate

- 90,200t Ni
- 50,700t Cu
- 6,700t Co



Loading concentrate in the Wyndham Shed



Highly Marketable Ni-Cu-Co Concentrate

- **Term** - Four years, Feb 2019 – Feb 2023
- **Buyer** - Sino Nickel (JV between Jinchuan and Sino Mining)
- **Quantity** - 100% pa
- **Metal Payabilities** - improved payabilities for certain contained metals compared to previous Sales Agreement
- **General terms:**
 - **Product** - sulphide concentrate with a typical specification of 8% Ni, 4.5% Cu, 0.6% Co, 46% Fe, <1.0% MgO
 - **Load Port** - Wyndham, Western Australia
 - **Payable metals** - Ni, Cu and Co
 - **Price basis**
 - agreed % of LME cash price for nickel and copper
 - agreed % of Metal Bulletin (MB) cobalt price

Preliminary June 2019 Quarter Results - New Marks Set

Safety

Significant improvement in performance

No LTIs

Development

↑ **38%***
to 869m

Ore Mined

↑ **31%***
141,613t
1.27% Ni, 0.61% Cu & 0.06% Co

Ore Milled

↑ **15%***
140,806t
1.27% Ni, 0.64% Cu & 0.06% Co

Metallurgical Recoveries

Ni recovery ↑ **19%***
84.8% Ni, 91.1% Cu & 88.2% Co

Metal Production

Ni ↑ **64%***
1,518t Ni, 814t Cu & 80t Co
in concentrate

Concentrate Shipped

↑ **68%***
21,467dmt

Savannah North Development

improvement in twin decline and raise bore advance rates

Nickel Price

has improved (spot US\$5.90/lb), but remains volatile

SAVANNAH MINE LIFE



8.3 YEARS

LONG MINE LIFE

+8.3 Years with excellent potential for mine life extension through exploration success

NPV



IMPRESSIVE FINANCIALS

\$380M NPV and 200% IRR at US\$6.75/lb Ni

PRODUCTION PER ANNUM



10,800t Ni
6,100t Cu
800t Co

AVERAGE FORECAST PRODUCTION**

10,800t Ni pa

6,100t Cu pa

800t Co pa

PROCESSING PLANT



MAJOR INFRASTRUCTURE IN PLACE

- » Mining fleet
- » 200 person village
- » 1Mtpa process plant
- » Underground mine

SUSTAINING CASH COSTS



US\$3.50/lb
payable Ni

OPERATING CASH COSTS

US\$2.40/lb payable Ni

SUSTAINING CASH COSTS

US\$3.50/lb payable Ni

JOB CREATION



NEW JOBS

+250 new jobs

COMMITMENT



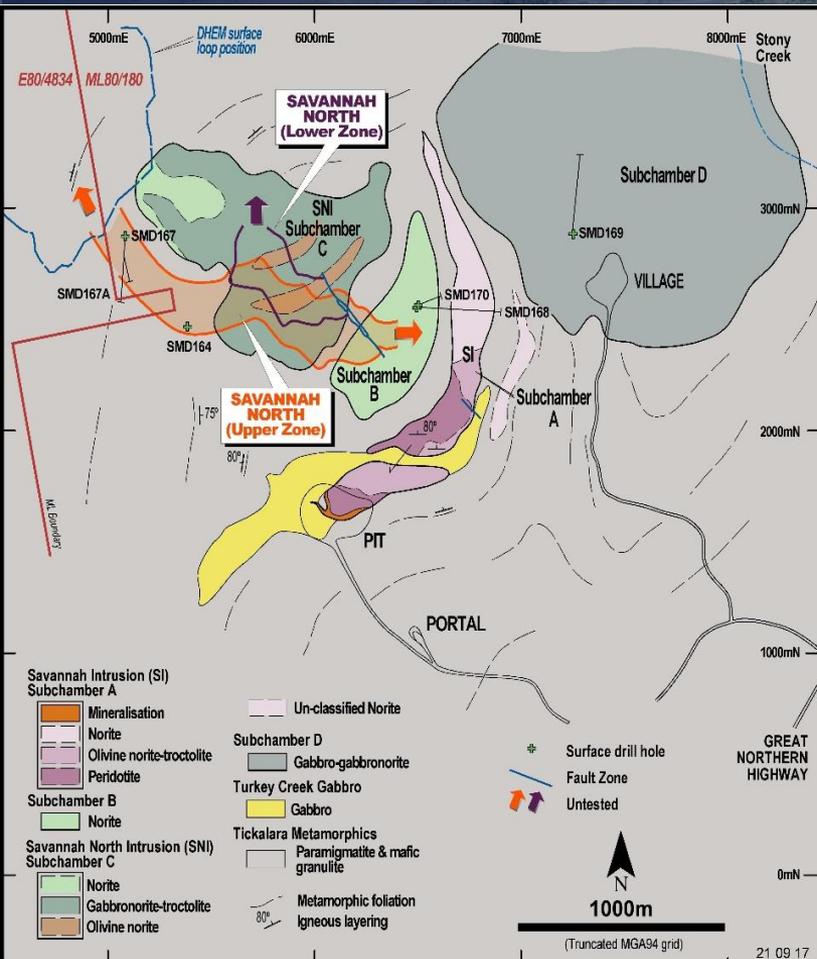
SAFELY HOME
EVERY DAY

COMMITMENT TO SAFETY

*Refer Company ASX announcement dated 27 October 2017 titled "Updated Savannah Feasibility Study. Enhances fundamentals for a decision to restart"

Cautionary Statement

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Committed to growth through exploration

- **Accessing Savannah North higher grade orebody (scheduled for Q4 2019)**
- **Increasing the Resource base through exploration success**
 - **Resource open** - Savannah North Resource drilling programs have not closed off the mineralisation
 - **Potential strike length of the Upper Zone is ~2km** based on the large, highly conductive on-hole EM responses identified in surface drill holes:
 - SMD164, Section 5400mE¹
 - SMD167 & SMD167A, Section 5100mE²
 - **Approximately half of the potential Upper Zone mineralisation has been tested by resource drilling**
 - **The Lower Zone Resource remains open down dip to the northwest**

1. Refer Company ASX announcement dated 28 October 2015, titled "Quarterly Report for the Period Ending 30 September 2015"
 2. Refer Company ASX announcement dated 31 January 2017, titled "Quarterly Report for the Period Ending 31 December 2016"

LONDON METAL EXCHANGE

FRI 22 JULY 12:43



FRI 22 JULY 12:43

NICKEL PRICE OUTLOOK



Nickel: A Market On The Cusp Of Change



EV Batteries
5%

Other
2%

Plating
6%

Special Steel
6%

Alloys
8%

Stainless Steel
73%

Demand
by
End-Use



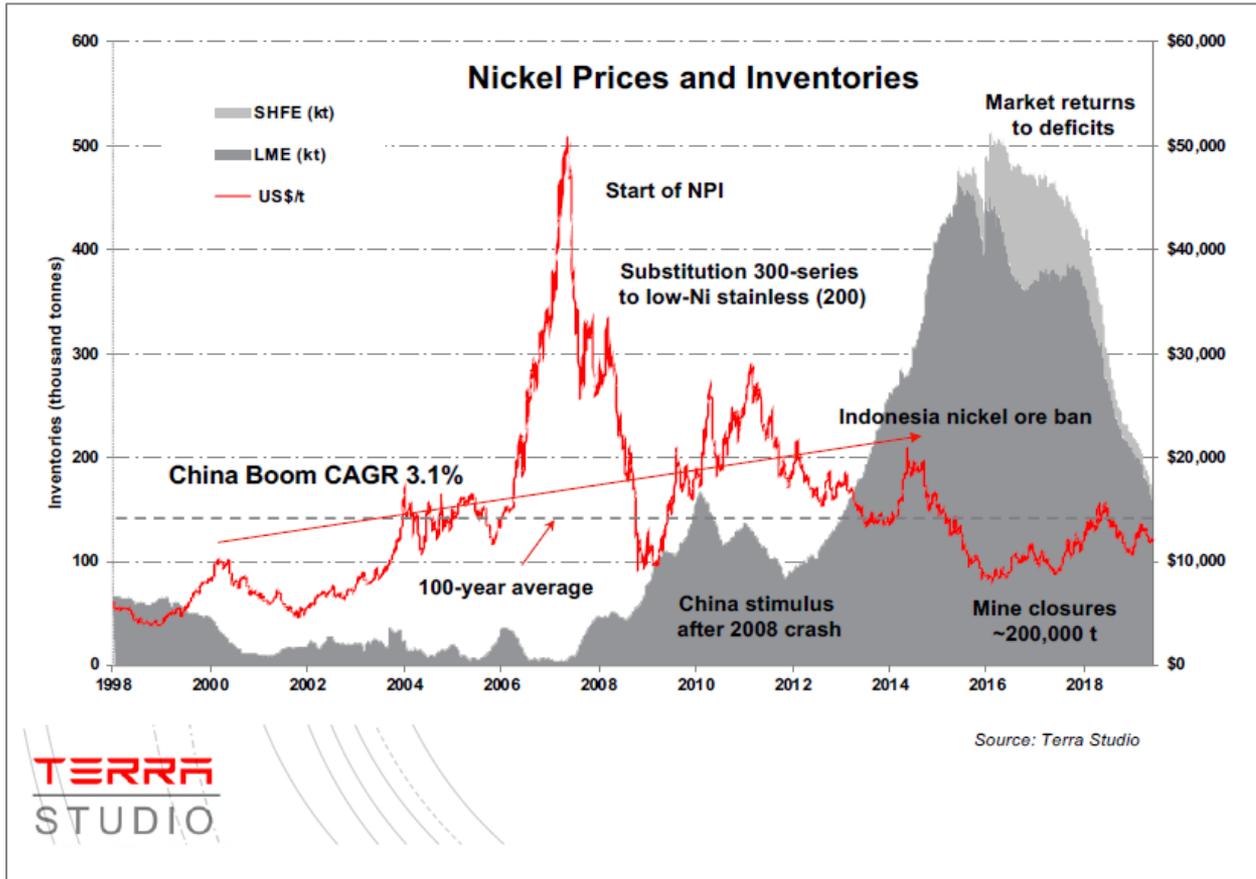
Nickel demand from EVs expected to exceed nickel production from existing operations

- Stainless steel remains the main driver of nickel demand
- EV battery demand to become the primary driver
- Forecast nickel use in batteries to grow >9% by 2023 then exponential growth, not only in the number of EVs that are expected to be produced, but also in the nickel intensity of individual batteries

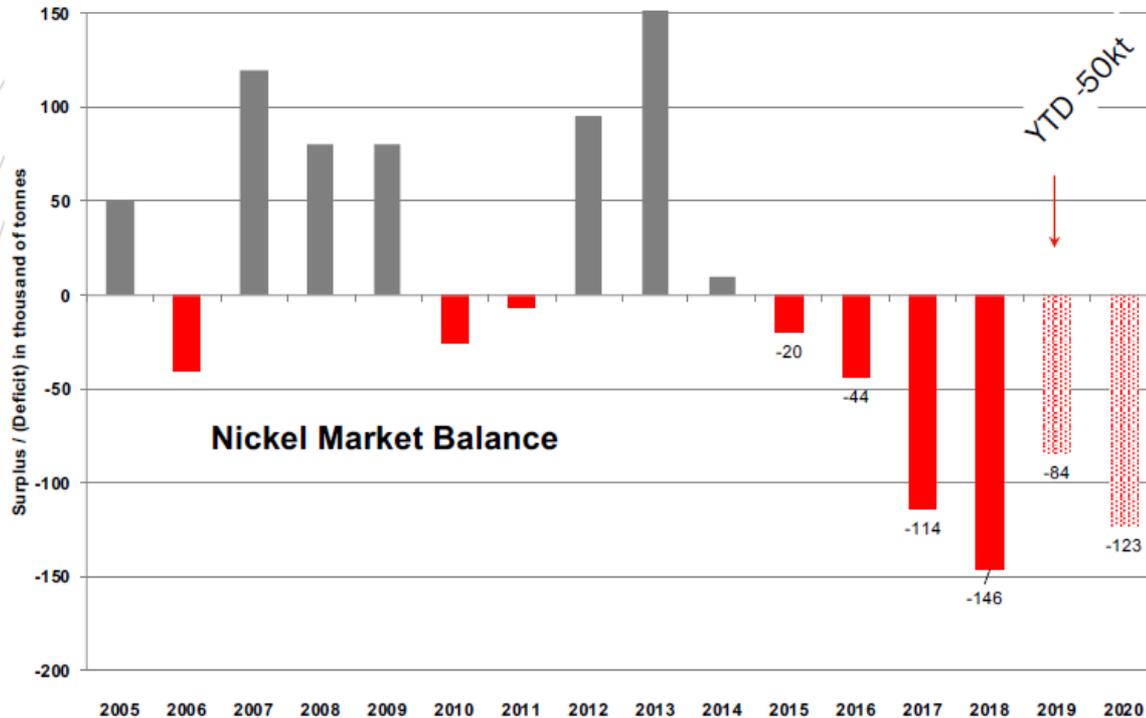
CRU Group Principal Consultant
Alex Laugharne

EV/Energy Revolution a Major Disruptive Event

Historical View On The Nickel Market



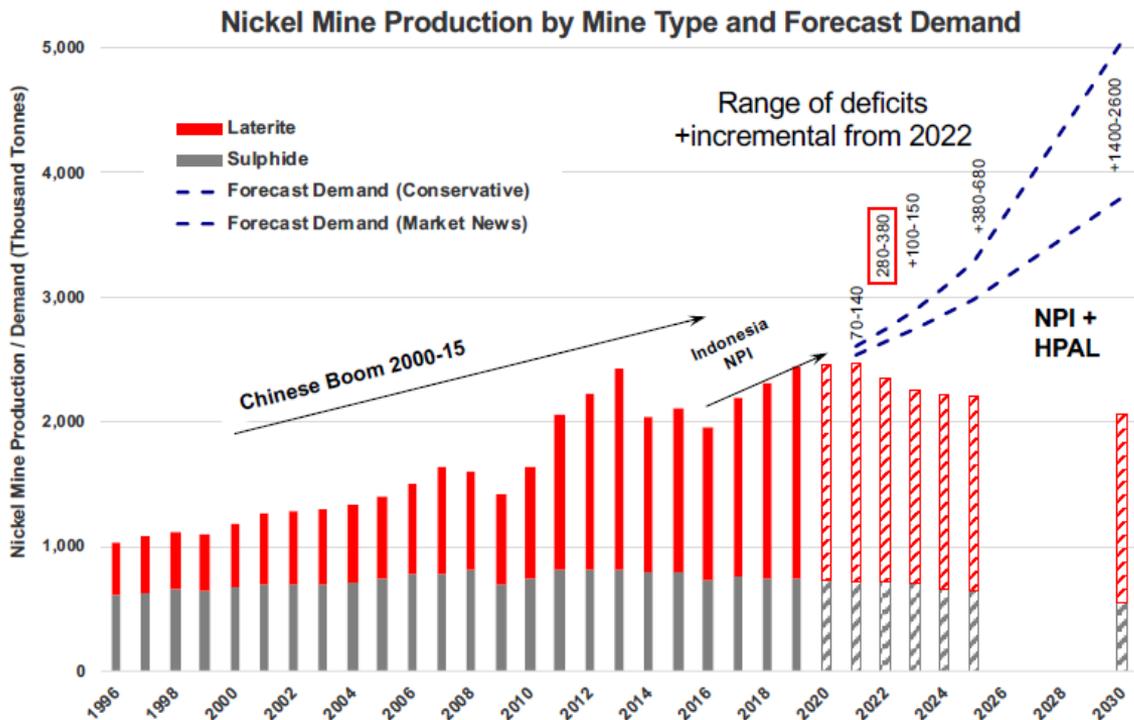
- Supply response (+technology and substitution) generated considerable inventories
- NPI now 35% of global nickel supply vs ~0% in 2006
- Low-point \$8,000/t, 80% of sector losing money
- **Nickel market deficits since 2015 have decreased the level of inventories from a peak of 511kt in January 2016 to less than 150kt currently**



Source: INSG

- The market growth acceleration has resulted in significant market deficits since 2015
- YTD deficit 50kt
- **By the end of 2020, the official inventories of 150kt could vanish unless higher nickel prices allow mine restarts or new projects**

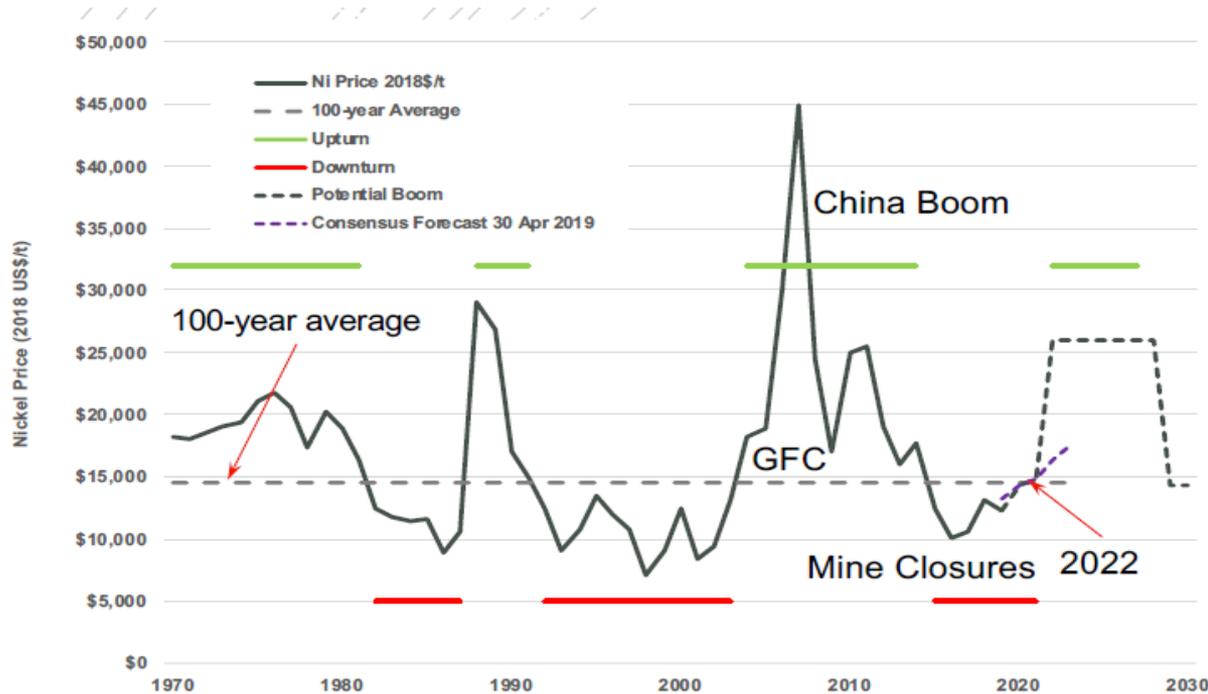
2022: Start Of A New Nickel Boom



Source: Wood Mackenzie for mine supply

- ~2022 = Balance point
- From ~2022 = Start of new Ni boom
- Very limited supply response from nickel sulphide mines during Chinese boom and high nickel prices
- Bulk of supply growth to come from lateritic projects from Australia, Indonesia and the Philippines

Long Term Analysis of Nickel Price Cycles

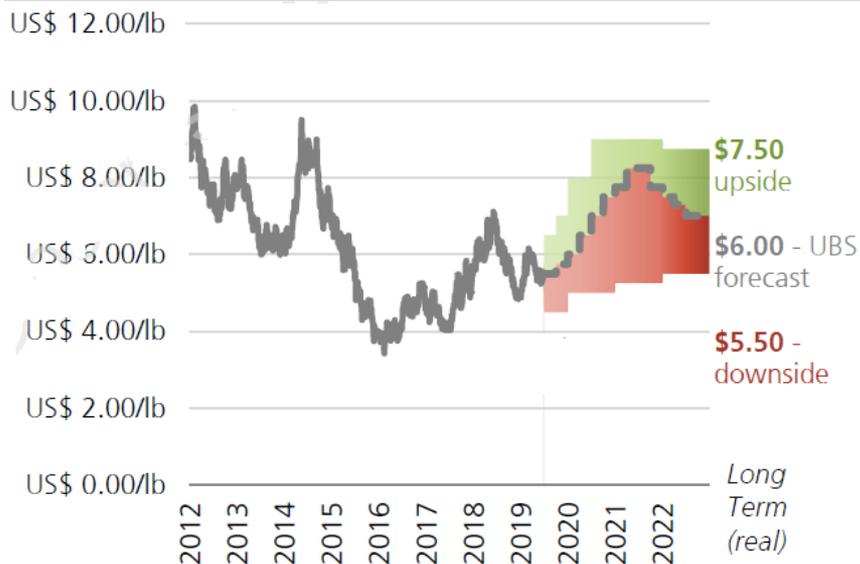


Source: Federal Reserve Bank, USGS, S&P, Terra Studio

- EV/Energy revolution is a major disruptive event
- Price history shows sharp switch from bust to boom
- Medium to long-term outlook excellent
- Factors affecting short-term:
 - US-China trade dispute
 - Slowing Chinese economy
 - Short selling
- Latest consensus forecast going in the right direction
- Considering the high demand pressure over time and the supply constraints, a high price cycle is likely to last for a few years

Leveraged to Nickel Price

Nickel (US\$/lb)



Source: Bloomberg & UBS estimates.

UBS Commodity Price Forecasts (June 19)

■ 2019	\$ 5.59/lb
■ 2020	\$ 6.75/lb
■ 2021	\$ 8.00/lb
■ 2022	\$ 7.20/lb
■ 2023	\$ 7.00/lb

- Further inventory falls
- Ongoing conventional demand
- Dramatic growth in nickel-rich battery demand
- On a 2-3 year view, Nickel remains UBS top commodity pick

Upside Case vs UBS Base Case (June 2019)

Commodity	2019E	2020E	2021E	2022E	2023E
Nickel (US\$/lb)	6.21 (5.59)	8.50 (6.75)	9.00 (8.00)	8.75 (7.20)	8.50 (7.00)

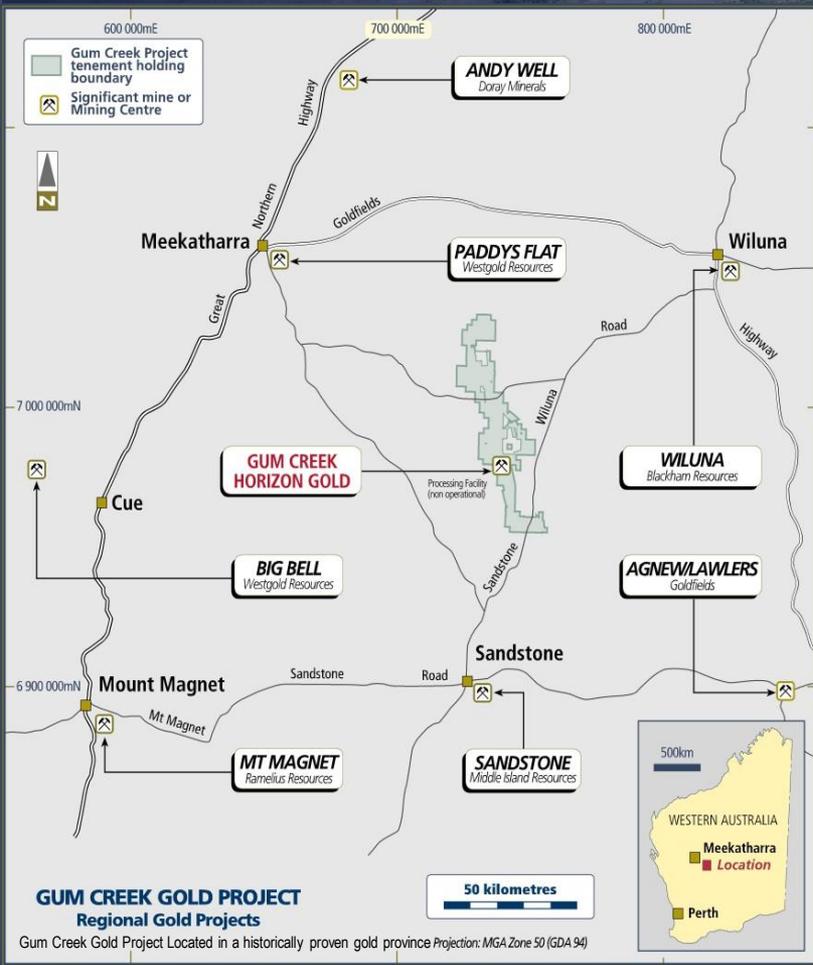
Upside Scenario : U.S.-China trade negotiations post the G20 meeting result in better-than-expected outcomes. Re-emergence of stimulus measures announced & implemented from the Chinese government, an uptick in infrastructure spend is in our base case. A better-than-expected outcome on trade would likely have knock on effects for the broader global economy with most signals turning negative to begin 2019.

OTHER ASSETS

Gold, Platinum, Palladium



Horizon Gold Limited (HRN) - Gum Creek Gold Project (PAN 51%)



IPO of Horizon, spun out from Panoramic

- Shares on issue 76.5M
- Market capitalisation \$15M
- Cash (31 March 2019) \$4.1M
- Panoramic interest 51%

Location - 640km NE of Perth, Western Australia

Historic production - >1Moz gold

Large tenement package - 80km of strike length along the Gum Creek Greenstone belt

Recent Exploration

- Butcherbird Shear 8m @ 19.7g/t Au*
- Altair 55m @ 3.32% Zn & 0.52% Cu**
- Resource Upgrade New Swift Open Pit Resource

* Horizon ASX Announcement dated 24 September 2018, ** Horizon ASX Announcement dated 23 October 2018

Horizon Gold - Increase in Mineral Resources

Mineral Resources Statement at 30 June 2019

Resource	Resource Date	Cut-off grade (g/t Au)	Mineralisation Type	Indicated		Inferred		Total		Contained Gold (oz)
				Tonnes	Au (g/t)	Tonnes	Au (g/t)	Tonnes	Au (g/t)	
Open Pit Resources										
Swan OC	May-19	0.5	Free Milling	80,000	8.8	880,000	6.8	960,000	7.0	216,000
Swift OC	May 19	0.5	Free Milling	100,000	5.0	740,000	7.5	840,000	7.2	195,000
Heron South	Aug-16	0.5	Refractory	1,140,000	2.2	2,000	1.3	1,140,000	2.2	80,000
Howards	Jul-13	0.4	Free Milling	5,250,000	1.1	720,000	1.0	5,970,000	1.1	204,000
Specimen Well	Aug-16	0.5	Free Milling			360,000	2.0	360,000	2.0	23,000
Toedter	Aug-16	0.5	Free Milling			690,000	1.5	690,000	1.5	34,000
Shiraz	Jul-13	0.4	Refractory	2,480,000	0.8	440,000	0.8	2,920,000	0.8	78,000
Underground Resources										
Swan UG	May-19	2.5	Free Milling	10,000	12.9	280,000	8.4	280,000	8.6	78,000
Swift UG	May-19	2.5	Free Milling			70,000	4.9	70,000	4.9	10,000
Kingfisher UG	Aug-16	3.5	Free Milling			390,000	6.1	390,000	6.1	77,000
Wilson's UG	Jul-13	1.0	Refractory	2,130,000	5.3	140,000	6.0	2,270,000	5.4	391,000
Total				11,190,000	2.0	4,700,000	4.3	15,890,000	2.7	1,388,000

- Total Mineral Resources increase by **138,000oz** to 15.9Mt @ 2.7 g/t Au for **1.39 million ounces contained gold***
- New Swift Open Pit Resource of **840,000t @ 7.2 g/t gold for 195,000oz***
- Undertaking a Scoping Study on toll treating vs onsite processing of Swan/Swift
- The change in the Total Mineral Resources inventory relates to updated Mineral Resource Estimates (MRE) completed for the Swan and Swift deposits by Mining Plus in 2018/19.
- The updated in situ, drill-defined, open pit and underground MRE for the Swan and Swift deposits have been reported at cut-off grades of 0.5 g/t Au within an A\$2,000/oz pit shell optimisation and 2.5 g/t Au beneath the pit optimisation.

PGMs – Panton and Thunder Bay North Projects

RESOURCE

PANTON PROJECT

- Located only 60km from Savannah
- BFS completed by previous owners
- Rise in Pd price has PAN reviewing project
- Exploration Upside identified

2.1Moz of Pt+Pd*

RESOURCE

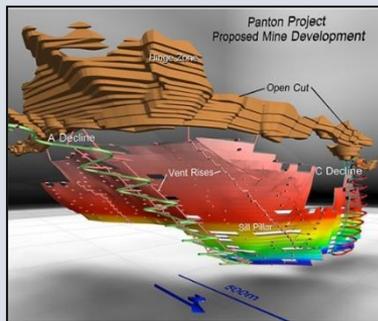
THUNDER BAY NORTH

- Located in Ontario, Canada
- PEA completed by previous owner
- Binding Letter of Agreement signed for the sale of TBN to Benton Resources Inc of Canada for CAD\$9M**

0.7Moz of Pt+Pd*

Recent positive testwork by Panoramic

- Improved recovery and higher grade PGM concentrate
- Potential for Cr by-product
- Further testwork required to confirm Cr concentrate
- Scoping Study next step



Terms of Deal with Benton**

- Definitive Agreement - Both parties will use best efforts to complete and sign the Definitive Agreement within 60 days of the date of the Letter Agreement.
- Deposit - Benton will pay PAN a CAD\$250,000 deposit provided the Definitive Agreement is signed within 60 days of the date of the Letter Agreement. The deposit will be offset against the Purchase Price.
- Completion of Transaction - will take place 60 days after signing of the Definitive Agreement. The completion date can be extended by up to 30 to 90 days if certain conditions precedents have not been satisfied to enable those conditions precedents to be satisfied.

*Refer PGM Resource Table

**Refer ASX Announcement dated 2 July 2019

Ramp up production at Savannah

Operate safely

Unlock the value of the Savannah North Orebody

Unlock PGMs project value (TBN dealt, Panton under review)

Study value adding options for Savannah

Unlock value in Horizon Gold (PAN 51%)



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VALUE FOR SHAREHOLDERS**

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APPENDICES



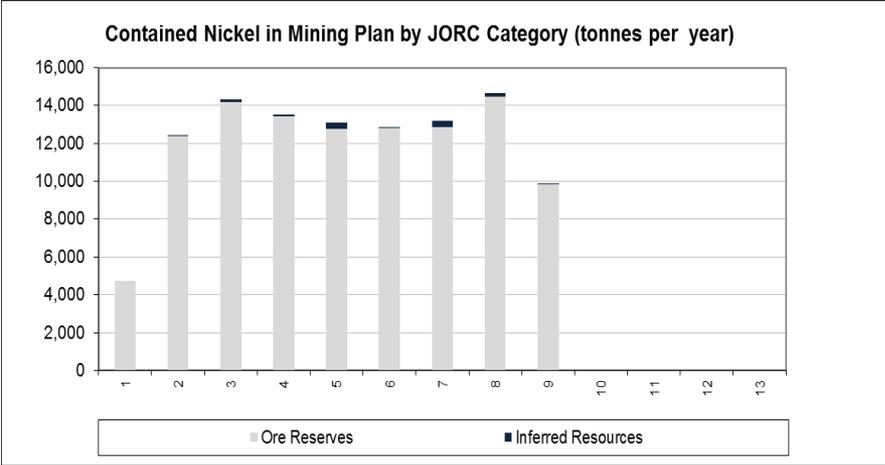


1. INFERRED RESOURCES IN SAVANNAH MINE PLAN

Classification	Tonnage Mt	Grade Ni%	Grade Cu%	Grade Co%	Contained Ni (t)	Contained Cu (t)	Contained Co (t)
Ore Reserves	7.58	1.42	0.68	0.09	107,500	51,200	7,200
Inferred Resource	0.06	1.91	0.69	0.13	1,200	400	100
Total	7.65	1.42	0.68	0.10	108,700	51,700	7,300

The Updated FS mine plan has only ~1.1% material classified as Inferred Resource

Cautionary Statement
 There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.



A light grey silhouette of a landscape featuring two baobab trees on a horizon line, positioned above a dark grey horizontal bar.

RESOURCES AND RESERVES

No New Information or Data

The Mineral Resource and Ore Reserve estimates tabled below have been previously reported, and the relevant market announcements cross referenced. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

RESOURCES: Nickel-Copper-Cobalt at 30 November 2018

Resource	Equity	Metal	JORC Compliance	Measured		Indicated		Inferred		Total		Metal Tonnes
				Tonnes	(%)	Tonnes	(%)	Tonnes	(%)	Tonnes	(%)	
Savannah Project												
Savannah (above 900)	100%	Nickel	2012	1,275,000	1.51	759,000	1.20	-	-	2,034,000	1.39	28,300
		Copper			0.87		0.90		-		0.88	17,900
		Cobalt			0.07		0.07		-		0.07	1,400
Savannah (below 900)	100%	Nickel	2012	780,000	1.64	125,000	1.72	-	-	905,000	1.65	14,900
		Copper			0.76		0.75		-		0.76	6,900
		Cobalt			0.10		0.09		-		0.10	900
Savannah North (Upper)	100%	Nickel	2012	-	-	4,229,000	1.64	1,759,000	1.25	5,987,000	1.53	91,300
		Copper			-		0.65		0.49		0.60	36,100
		Cobalt			-		0.12		0.10		0.11	6,800
Savannah North (Lower)	100%	Nickel	2012	-	-	2,697,000	1.96	853,000	2.02	3,549,000	1.97	70,100
		Copper			-		0.98		0.93		0.97	34,400
		Cobalt			-		0.14		0.13		0.14	4,900
Savannah North (Other)	100%	Nickel	2012	-	-	242,000	2.22	493,000	1.67	735,000	1.85	13,600
		Copper			-		0.50		0.53		0.52	3,800
		Cobalt			-		0.14		0.11		0.12	900
Total (Equity)		Nickel										218,300
		Copper										99,100
		Cobalt										14,900

Qualifying Statement and Notes

Notes:

- *Since 30 June 2018, the Lanfranchi Project has been sold and removed from the Resources table*
- *Figures have been rounded and therefore may not add up exactly to the reported totals*
- *All resources are inclusive of reserves*
- *Savannah Project Resource cutoff grade is 0.50% Ni*

Cross references to previous Company ASX announcements:

- *Savannah (above 900) - refer to ASX announcement of 30 September 2016, titled "Mineral Resources and Ore Reserves at 30 June 2016"*
- *Savannah (below 900) - refer to ASX announcement of 30 September 2015, titled "Mineral Resources and Ore Reserves at 30 June 2015"*
- *Savannah North – refer to ASX announcement of 24 August 2016, titled "Major Resource Upgrade for Savannah North"*

Competent Person's Statement

The Mineral Resources and Ore Reserves Statement has been compiled by Mr John Hicks. Mr Hicks is General Manager Exploration, is a full-time employee of Panoramic Resources Limited, and is also a shareholder and holder of performance rights in relation to Panoramic Resources Limited. Mr Hicks is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Hicks has sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Hicks consents to the inclusion of the material in this presentation in the form and context in which it appears.

No New Information or Data

The Mineral Resource estimates tabled above have been previously reported, and the relevant market announcements cross referenced. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

RESERVES: Nickel-Copper-Cobalt at 30 November 2018

Reserve	Equity	Metal	JORC Compliance	Proven		Probable		Total		Metal Tonnes
				Tonnes	(%)	Tonnes	(%)	Tonnes	(%)	
Savannah Project										
Above 900 Fault	100%	Nickel	2012	1,365,000	1.15	194,000	1.24	1,558,000	1.16	18,100
		Copper			0.66		1.28		0.74	11,500
		Cobalt			0.06		0.07		0.06	900
Savannah North	100%	Nickel	2012	-	-	6,650,000	1.24	6,650,000	1.42	94,500
		Copper			-		1.28		0.61	40,900
		Cobalt			-		0.10		0.10	6,700
Total (Equity)		Nickel						8,208,000	1.37	112,600
		Copper							0.64	52,400
		Cobalt							0.09	7,600

Notes:

- Since 30 June 2018, the Lanfranchi Project has been sold and removed from the Reserves table
- Figures have been rounded and therefore may not add up exactly to the reported totals
- Savannah Project Reserve cutoff grade is 0.80% Ni

Cross references to previous Company ASX announcements:

- Refer to ASX announcement of 30 September 2016, titled "Mineral Resources and Ore Reserves at 30 June 2016"
- Refer to ASX announcement of 2 February 2017, titled "Savannah Feasibility Study. Ten year life with minimal restart capital requirements"

No New Information or Data

The Nickel Ore Reserve estimates tabled above have been previously reported, and the relevant market announcements cross referenced. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of the estimates of Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed

RESOURCES: Platinum Group Metals at 30 November 2018

Resource	Equity	JORC Compliance	Tonnage	Grade									Contained Metal		
				Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Ni (%)	Co %	Pt-Eq (g/t)	Pt (oz ,000)	Pd (oz ,000)	
Thunder Bay North															
Open Pit	100%	2004													
Indicated			8,460,000	1.04	0.98	0.04	0.07	1.50	0.25	0.18	0.014	2.13	283	267	
Inferred			53,000	0.96	0.89	0.04	0.07	1.60	0.22	0.18	0.014	2.00	2	2	
Underground	100%	2004													
Indicated			1,369,000	1.65	1.54	0.08	0.11	2.60	0.43	0.24	0.016	3.67	73	68	
Inferred			472,000	1.32	1.25	0.06	0.09	2.10	0.36	0.19	0.011	2.97	20	19	
Sub-total – Thunder Bay North (Equity)			10,354,000	1.13	1.07								377	355	
Panton															
Top Reef	100%	2012													
Measured			4,400,000	2.46	2.83	-	0.42	-	0.08	0.28	-	-	348	400	
Indicated			4,130,000	2.73	3.21	-	0.38	-	0.09	0.31	-	-	363	426	
Inferred			1,560,000	2.10	2.35	-	0.38	-	0.13	0.36	-	-	105	118	
Middle Reef	100%	2012													
Measured			2,130,000	1.36	1.09	-	0.10	-	0.03	0.18	-	-	93	75	
Indicated			1,500,000	1.56	1.28	-	0.10	-	0.04	0.19	-	-	75	62	
Inferred			600,000	1.22	1.07	-	0.10	-	0.05	0.19	-	-	24	21	
Sub-total – Panton (Equity)			14,320,000	2.19	2.39								1,008	1,102	
Total - PGM (Equity)													1,385	1,456	

Qualifying Statements and Notes

Notes

Thunder Bay North Open Pit Resource: The open pit Mineral Resource is reported at a cut-off grade of 0.59 g/t Pt-Eq within a Lerchs-Grossman resource pit shell optimized on Pt-Eq. The strip ratio (waste:ore) of this pit is 9.5:1. The platinum-equivalency formula is based on assumed metal prices and overall recoveries. The Pt-Eq formula is: $Pt-Eq\ g/t = Pt\ g/t + Pd\ g/t \times 0.3204 + Au\ g/t \times 0.6379 + Ag\ g/t \times 0.0062 + Cu\ g/t \times 0.00011 + Total\ Ni\ g/t \times 0.000195 + Total\ Co\ g/t \times 0.000124 + Rh\ g/t \times 2.1816$. The conversion factor shown in the formula for each metal represents the conversion from each metal to platinum on a recovered value basis. The assumed metal prices used in the Pt-Eq formula are: Pt US\$1,595/oz, Pd US\$512/oz, Au US\$1,015/oz, Ag US\$15.74/oz, Cu US\$2.20/lb, Ni US\$7.71/lb, Co US\$7.71/lb and Rh US\$3,479/oz. The assumed combined flotation and Platsol™ process recoveries used in the Pt-Eq formula are: Pt 76%, Pd 75%, Au 76%, Ag 55%, Cu 86%, Ni 44%, Co 28% and Rh 76%. The assumed refinery payables are: Pt 98%, Pd 98%, Au 97%, Ag 85%, Cu 100%, Ni 100%, Co 100% and Rh 98%.

Thunder Bay North Underground Resource: The underground mineral resource is reported at a cut-off grade of 1.94g/t Pt-Eq. The Pt-Eq formula is: $Pt-Eq\ g/t = Pt\ g/t + Pd\ g/t \times 0.2721 + Au\ g/t \times 0.3968 + Ag\ g/t \times 0.0084 + Cu\ g/t \times 0.000118 + Sulphide\ Ni\ g/t \times 0.000433 + Sulphide\ Co\ g/t \times 0.000428 + Rh\ g/t \times 2.7211$. The assumed metal prices used in the Pt-Eq formula are: Pt US\$1,470/oz, Pd US\$400/oz, Rh US\$4,000/oz, Au US\$875/oz, Ag US\$14.30/oz, Cu US\$2.10/lb, Ni US\$7.30/lb and Co US\$13.00/lb. The assumed process recoveries used in the Pt-Eq formula are: Pt 75%, Pd 75%, Rh 75%, Au 50%, Ag 50%, Cu 90%, and Ni and Co in sulphide 90%. The assumed smelter recoveries used in the Pt-Eq formula are Pt 85%, Pd 85%, Rh 85%, Au 85%, Ag 85%, Cu 85%, Ni 90% and Co 50%. Ni and Co in sulphide were estimated by linear regression of MgO to total Ni and total Co respectively. The regression formula for Ni in sulphide (NiSx) is: $NiSx = Ni - (MgO\% \times 60.35 - 551.43)$. The regression formula for Co in sulphide (CoSx) is: $CoSx = Co - (MgO\% \times 4.45 - 9.25)$.

Cross references to previous ASX announcements:

- *Thunder Bay North Open Pit Resources – refer to Magma Metals Limited (ASX:MMW) announcement of 7 February 2011, titled “Positive Scoping Study for Thunder Bay North Project”*
- *Thunder Bay North Underground Resources – refer to Magma Metals Limited (ASX:MMW) announcement of 23 February 2012, titled “Magma Metals Increases Mineral Resources at TBN to 790,000 Platinum-Equivalent Ounces”*
- *Panton - refer to the Company’s ASX announcement of 30 September 2015, titled “Mineral Resources and Ore Reserves at 30 June 2015”*

No New Information or Data

The Mineral Resource estimates tabled above have been previously reported, and the relevant market announcements cross referenced. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.