

# 2018 Annual General Meeting

## 21 November 2018



**Managing Director's Presentation**  
**Peter Harold**

[www.panoramicresources.com](http://www.panoramicresources.com)

**ASX: PAN**

# Disclaimer

## No New Information or Data

This presentation contains references to 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 Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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.

# Agenda

Company Overview

Savannah

Metal Price Outlook

Other Assets

FY2019 Goals



# Corporate Directory

## Capital Structure and Enterprise Value

Index	S&P/All Ordinaries
ASX Ticker	ASX:PAN
Shares on issue	494.5M
Share Price	\$0.425 (20 November 2018)
Market Cap	~\$210M
Cash	\$10.8M (30 September 2018)
Listed Investments	~\$9M (Horizon Gold, GME, others)
Bank debt	Nil
Enterprise Value	~\$190M

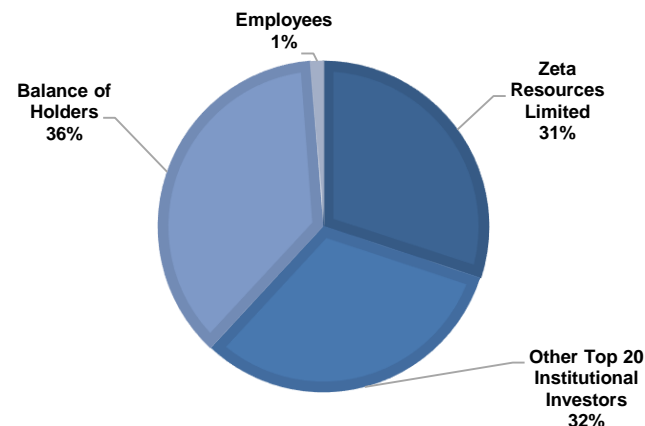
## Metrics

30-day average daily volume	580,000
90-day average daily volume	750,000
52 week Low-High	\$0.33 - \$0.67

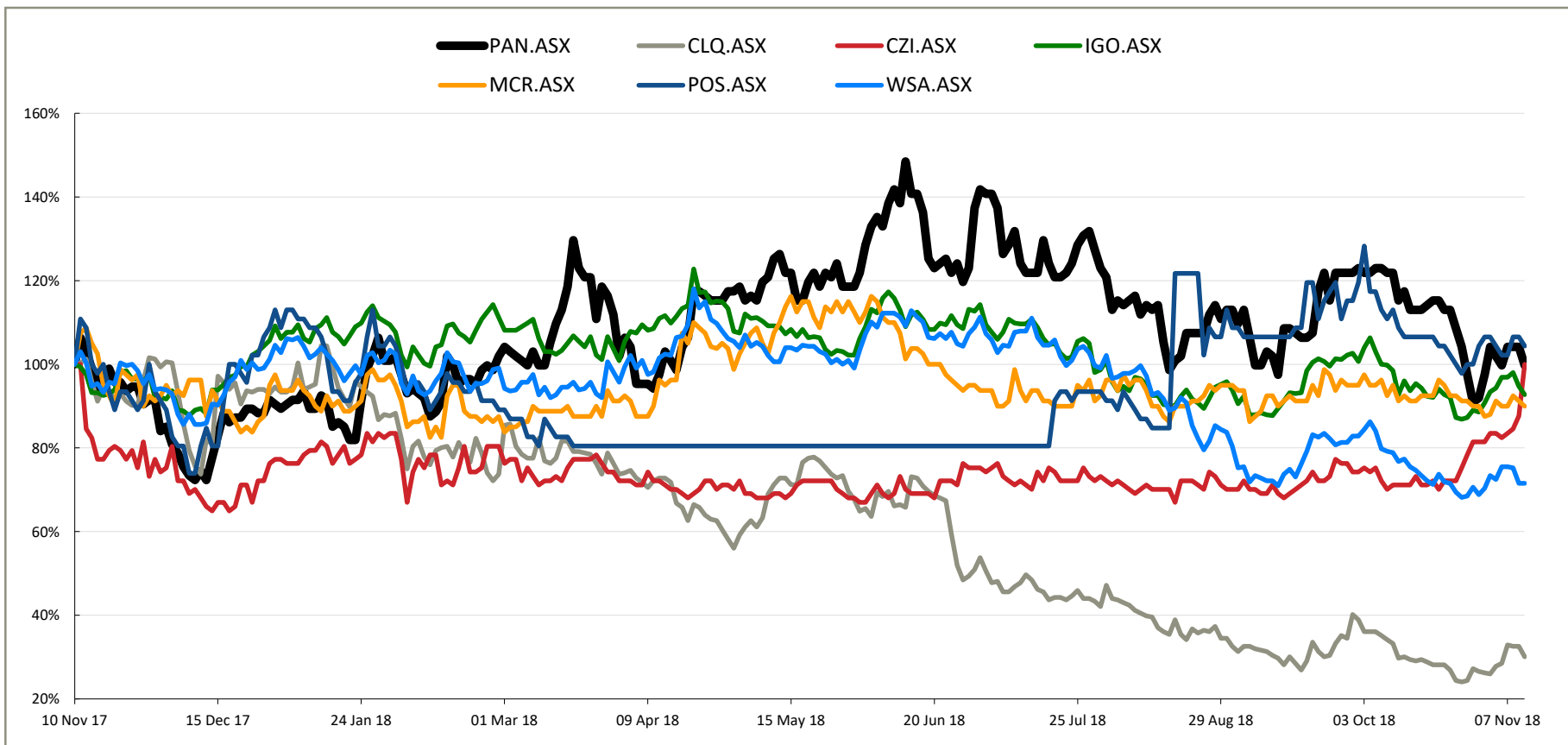
## Board

Brian Phillips	Non Executive Chairman
Peter Harold	Managing Director
John Rowe	Non Executive Director
Peter Sullivan	Non-Executive Director
Nicholas Cernotta	Non-Executive Director
Rebecca Hayward	Non-Executive Director
Trevor Eton	CFO/Company Secretary

## Shareholder spread +50% institutional



# Performance against our peers in last 12 months





# SAVANNAH



# Savannah Feasibility Study Delivers

## SAVANNAH MINE LIFE



**8.3 YEARS**

Long mine life with excellent potential for mine life extension through exploration success

## Average annual production forecast\*

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

**Short lead time to production**  
Q1 2019

## PRODUCTION PER ANNUM



## NPV



**Pre-production ramp up capital ~\$A36M**

## Operating Cash Costs

US\$2.40/lb payable Ni

## Sustaining Cash Costs

US\$3.50/lb payable Ni

## Impressive financial metrics

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

## SUSTAINING CASH COSTS



**JOB  
CREATION**  
  
**~250**  
**NEW JOBS**

## Major Infrastructure in place

Mining Fleet  
200 Person Village  
1Mtpa Process Plant  
Underground Mine

**Job Creation**  
~250 new jobs

## COMMITMENT



**Experienced Perth Corporate  
and Savannah teams in place**

### 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"

# Robust Project Economics

- Updated Feasibility Study October 2017
- Economics at Base Case and Long Term US\$ commodity prices and US\$:A\$ FX rates



Financial Metrics	Units	Base Case Prices	Long Term Prices*
Commodity Price Assumption - Ni	US\$/lb	5.50	6.75
Commodity Price Assumption - Cu	US\$/lb	3.10	2.72
Commodity Price Assumption - Co	US\$/lb	28.00	26.00
US\$:A\$ Exchange Rate Assumption	US\$	0.78	0.75
Revenue	A\$M	1,470	1,720
Up-front Capital ( <i>pre-production</i> )	A\$M	36	32
LOM Capital ( <i>inclusive of up-front capital</i> )	A\$M	240	230
Operating costs plus royalties	A\$M	900	920
Pre-tax cash flow	A\$M	<b>330</b>	<b>570</b>
Pre-tax NPV (8% discount rate)	A\$M	210	380
IRR	%	<b>100</b>	<b>200</b>
C1 cash costs ( <i>Ni in concentrate basis</i> )	A\$/lb Ni	1.90	2.10
	US\$/lb	<b>1.50</b>	<b>1.60</b>
Operating cash costs ( <i>payable Ni basis</i> )	A\$/lb Ni	3.10	3.40
	US\$/lb	2.40	2.60
Sustaining cash costs ( <i>operating cash costs plus sustaining capital, payable Ni basis</i> )	A\$/lb Ni	4.50	4.80
	US\$/lb	<b>3.50</b>	<b>3.60</b>





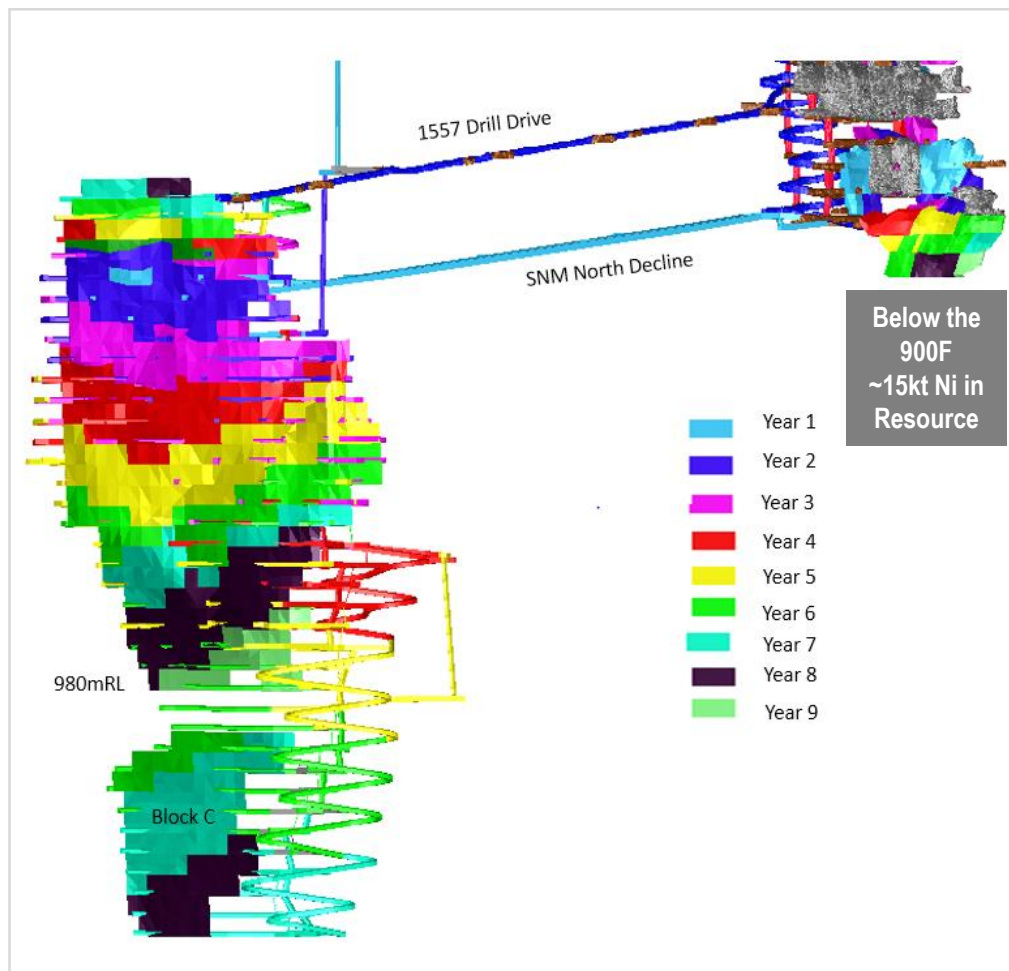
# Simple Mine Plan

## Savannah Orebody

- Forecast mine production of **1.68Mt @ 1.18% Ni for 19,800t Ni contained**
- Restart mining 100% Savannah ore then transition to Savannah North
- 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**
- Commence development on re-start
- First ore 9 months after commencing access development and full production after 15 months





# Significant Metal Production

## Product

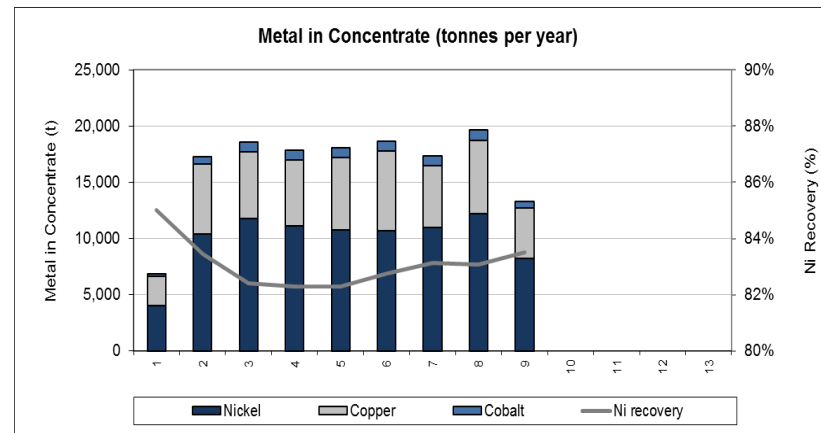
- **Bulk Ni-Cu-Co concentrate**  
Average grade 8% Ni, 5% Cu, 0.6% Co
- Low impurities and attractive Fe:MgO and Ni:Fe ratios
- Ideal feed for Ni smelters

## Annual metal in concentrate

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

## LOM metal in concentrate

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



# Competitive Offtake Agreement

- **Term** - Four years
- **Buyer** - Sino Nickel (JV between Jinchuan and Sino Mining)
- **Quantity** - 100% of annual production
- **Metal Payabilities** - improved payabilities for certain contained metals compared to previous Sales Agreement
- **Previous Agreement** - superceded by new 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 Ni and Cu
    - agreed % of Metal Bulletin Co price



Between 2004 and 2016, Panoramic shipped  
>1.2Mdm of nickel-copper-cobalt  
concentrate worth \$1.4 billion

# Financed with Debt and Equity

- **Project Loan**
  - **Principal** – up to A\$40 million
  - **Margin** – competitive margin
  - **Availability** – signing loan docs and outstanding CPs
  - **Repayment Schedule** – quarterly from Mar 2020-Dec 2021
  - **Loan Covenants and project ratios** – customary for this size of facility
- **Hedging**
  - For delivery between February 2019 and June 2021:
    - 7kt Ni at average forward price of A\$8.51/lb
    - 3kt Cu at average forward price of A\$3.71/lb
  - The volume of Ni and Cu hedged represents ~20% of contained metal produced
- **Equity**
  - \$20.9 million before costs via a 1 for 7 Entitlement Offer at 34 cents in February 2018



Official signing of the Savannah Financing Facility Documentation

# Re-start Well Underway

- **Phase 1 – March 2018**
  - MACA Interquip started refurbishment of processing plant
  - Transferred mobile equipment and stores from Lanfranchi
  - Commenced tailings storage facility 3m lift
  - Ventilation intake pilot hole contract awarded
  - Major contract negotiations commenced
- **Phase 2 – from 16 July 2018**
  - **Formal board resolution to re-start**
  - Continue plant refurbishment
  - Personnel onboarding commenced
  - Recommission mobile and fixed plant continued
- **Phase 3 – Q4 2018**
  - Recommission processing plant
  - Recommission underground mine
- **Phase 4 – Q1 2019 first shipment of concentrate**



Re-installing the surge bin following installation of new liners



Tailings Storage Facility 3m wall lift



# Re-start well underway



Rehabilitation of Underground



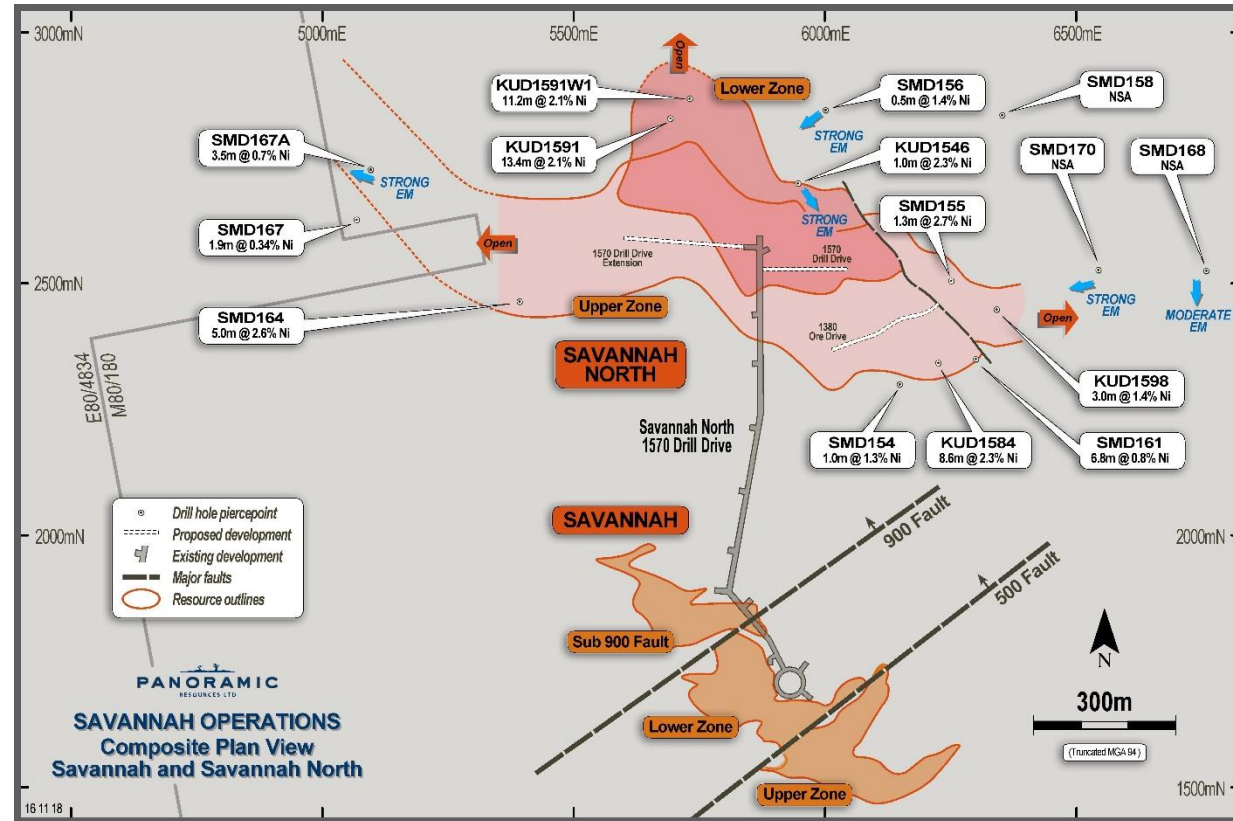
Refurbishment of tails thickener



Savannah North raise bore rig and platform

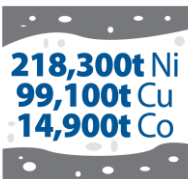
# Upside – potential 2km strike at Savannah North

- Resource open
- Potential strike length of the Upper Zone is ~2km based on the large, highly conductive on-hole EM responses
  - SMD164, Section 5400mE
  - SMD167 & SMD167A, Section 5100mE
- Only half of the potential Upper Zone mineralisation has been tested by resource drilling
- The Lower Zone Resource remains open down dip to the northwest



# Savannah to deliver value to shareholders

## RESOURCES



- Savannah is a significant Australian base metal project
- Project fully financed and on track for first shipment Q1 2019

## PROJECT FINANCIALS



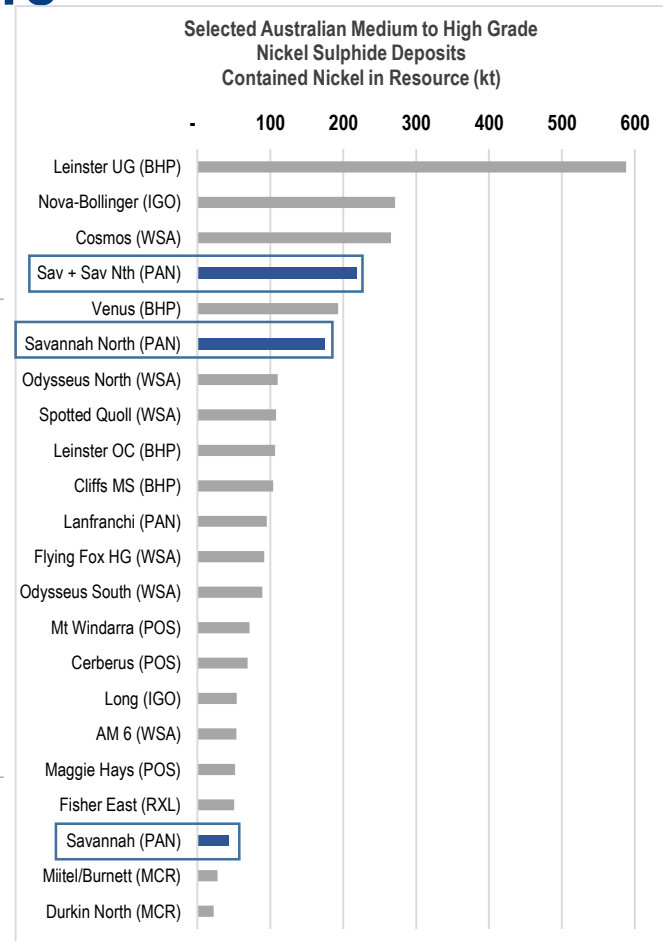
### Updated Oct 2017 Feasibility Study confirms

- +8 year mine life
- Robust at current commodity prices and US\$:A\$ FX
- Competitive operating **cash costs of US\$2.40/lb payable Ni**
- Low re-start capex
- Highly leveraged to nickel, copper and cobalt prices

## EXPLORATION



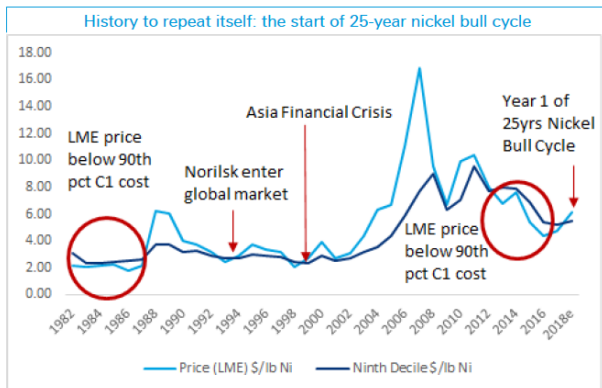
- Excellent potential for further exploration success and mine life extension
- Drilling to test exciting targets underway





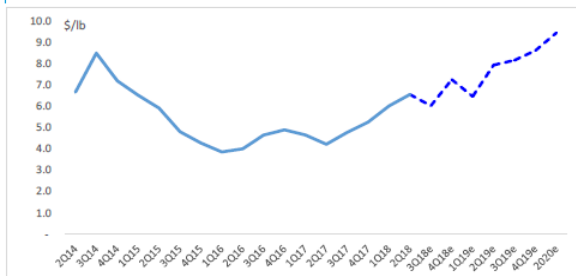
# METAL PRICE OUTLOOK

# Leveraged to Nickel Price



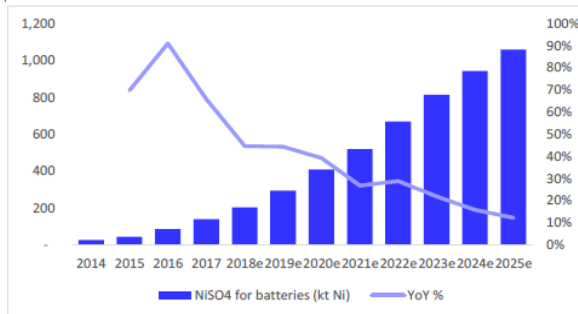
Source: Wood Mackenzie, LME, Deutsche Bank

Thus... we believe LME Ni price will continue to rally above \$9/lb



Source: Deutsche Bank, LME

Ni for batteries to be the key catalyst for the next decade



Source: Deutsche Bank

## Deutsche Bank Commodity Price Forecasts

- 2018 - \$7.02/lb
- 2019 - \$8.42/lb
- 2020 - \$9.45/lb
- 2021 - \$9.35/lb

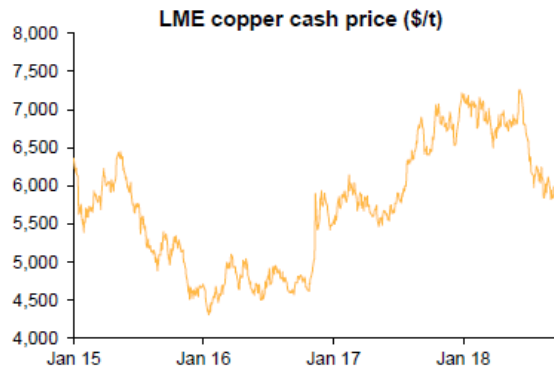
Source: Deutsche Bank November 2018

*"Our expectation of strong LME Nickel price, the global benchmark price of the metal, in 2018 has played out well since our October 2017 report on the price and cost relationship. Based on the study of historical nickel pricing since in the past 37 years, **2018 will be the start of the 25 years Nickel Bull Cycle**" – Deutsche Bank Research, Nov 18.*



# Leveraged to Copper Price

Trade war punishes copper...



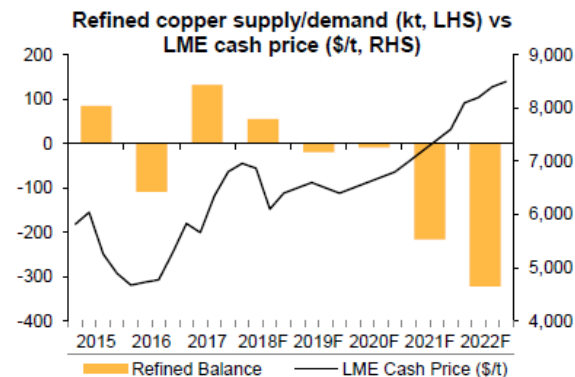
Source: LME, Macquarie Commodities Strategy, September 2018

## Macquarie Copper Price Forecasts

- 2019 - \$2.95/lb
- 2020 - \$3.02/lb
- 2021 - \$3.31/lb
- 2022 - \$3.77/lb

Source: Macquarie Bank – September 2018

Tighter, but still some way from the big deficits



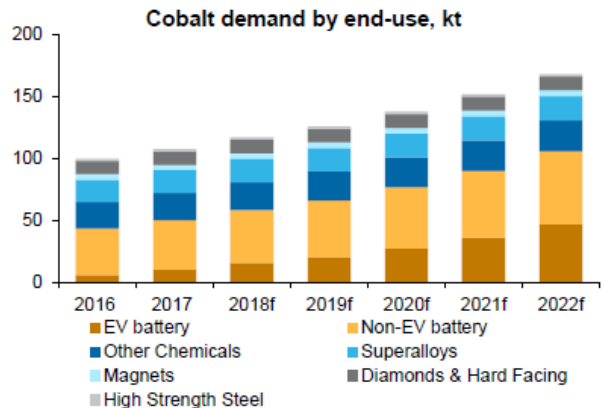
Source: LME, CRU, WM, ICSG, Macquarie Commodities Strategy, September 2018

## Commodities Compendium – Macquarie Bank, March 2018

*“We see a very small surplus in 2019 (<100kt), followed by the rather thrilling prospect of ballooning deficits as head grades slip away and trigger-shy miners are still loathe to develop projects. The building consensus around this has led to a deeper, more powerful undercurrent of investor allocation into either copper itself or its key producers. We see prices by 2022 averaging above US\$8,000/t (US\$3.60/lb). Beyond that, even higher prices are likely”*

# Leveraged to Cobalt Price

9.5% demand CAGR on EV battery demand growth



Source: EV research, Macquarie Commodities Strategy, September 2018

## Macquarie Cobalt Price Forecasts

- 2019 - \$17.80/lb
- 2020 - \$18.50/lb
- 2021 - \$24.30/lb
- 2022 - \$36.50/lb

Sources:

Macquarie Research – March & September 2018

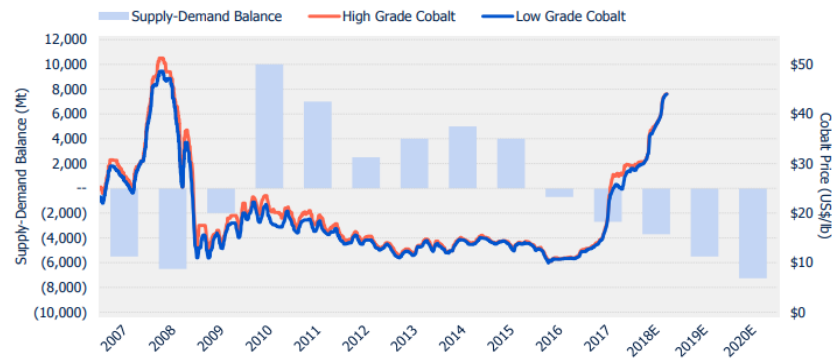
Cobalt 27 Capital Corp - corporate presentation, November 2018

## Cobalt 27 Capital Corp comments

- Cobalt today is ~105,000 tonne market
- Forecasted demand of ~190,000 tonnes by 2025
- ~2/3 of demand growth is from EV batteries (CAGR ~30%)
- Majority of mined cobalt located in DRC, a relatively unstable country
- 15% of DRC output is produced by unregulated artisanal miners

### Supply-Demand Balance and Historical Cobalt Prices (Nominal)<sup>1</sup>

Tonnes | Metal Bulletin High-Low Averages (US\$/lb)



Source: Darton Commodities, Metal Bulletin

(1) Cobalt prices per Metal Bulletin as of April 20, 2018

# Nickel Price and FX Rate NPV Matrix

Strongly leveraged to nickel price and US\$:A\$



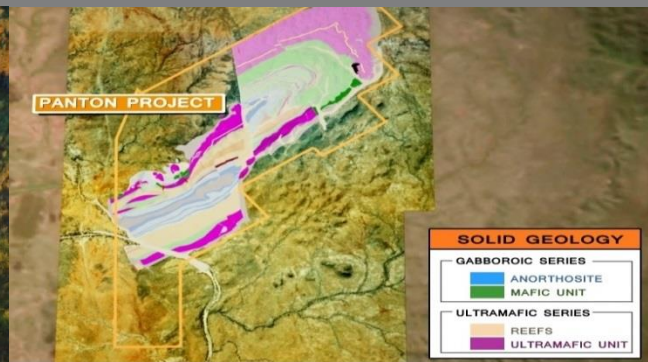
US\$1.00/lb increase in nickel price adds **~A\$160M** to pre-tax NPV



US\$0.05 cent decrease in the US\$:A\$ exchange rate adds **~A\$50M** to pre-tax NPV

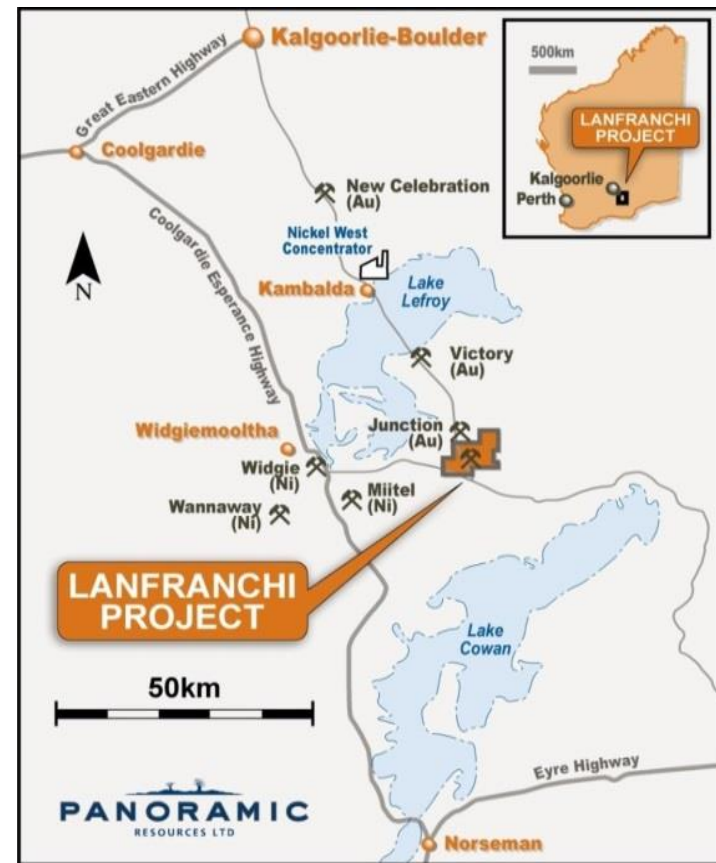
Pre-tax NPV <sub>8</sub> (\$'M)		Nickel Price US\$/lb)					
		5.00	6.00	7.00	8.00	9.00	10.00
US\$:A\$ FX Rate	0.65	270	453	635	790	946	1,102
	0.70	207	377	546	690	835	979
	0.75	153	312	469	604	739	874
	0.80	105	254	401	528	654	781
	0.85	63	203	342	461	580	699

## Other Assets



# Lanfranchi – Sale to Black Mountain Metals LLC

- Binding Sale and Purchase Agreement signed – September 2018
- Total Cash Consideration - \$15.1M
  - Deposit paid - \$1.51M
  - Due on completion - \$11.99 million
    - *expected to be during the December 2018 quarter*
  - Deferred consideration - \$1.6M
- The sale of Lanfranchi is consistent with Panoramic's strategy to focus its efforts on Savannah Ni-Cu-Co Project





# Gum Creek Gold Project - 51% of Horizon Gold (ASX:HRN)

## RESOURCE



## PRODUCTION



## EXPLORATION



## IPO of Horizon, spun out from Panoramic

- Shares on issue 76.5M
- Market capitalisation \$15.3M (at 20c a share)
- Cash (30 September 2018) \$5.0M
- Panoramic interest 51%

**Location** - 640km NE of Perth, Western Australia

**Historic production** - >1Moz gold

**Large Resource Base** - 1.25Moz Au

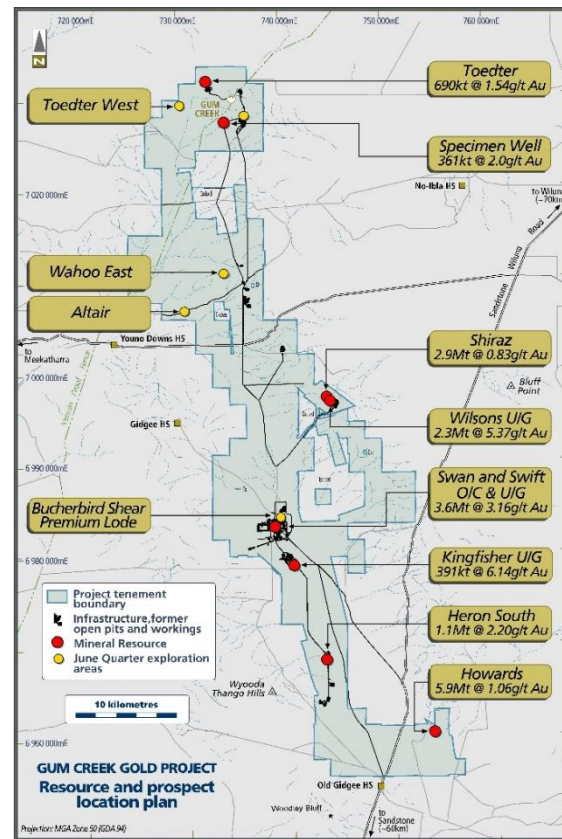
**Large tenement package** - 80km of strike length along the Gum Creek Greenstone belt

## Exploration Targets

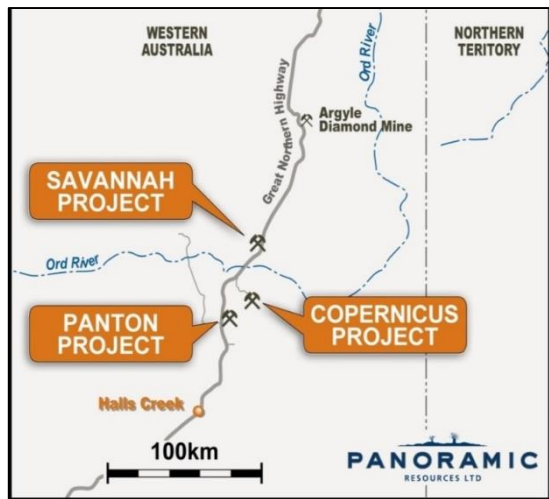
- Swan Premium 30,000oz to 100,000oz\*
- Butcherbird Shear 270,000oz to 810,000oz\*

## Recent Exploration

- Butcherbird Shear 8m @ 19.7g/t Au\*\*
- Altair 55m @ 3.32% Zn & 0.52% Cu\*\*\*

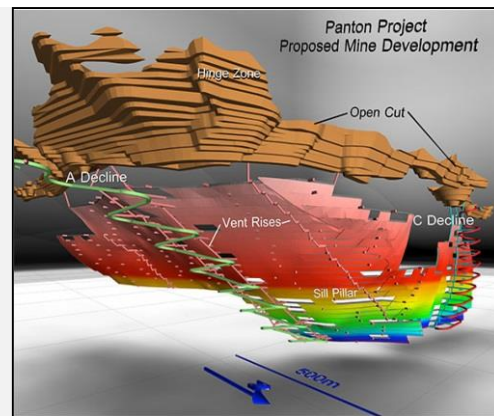


# Platinum Group Metals



## Panton Project

- Located 60km from Savannah
- Resources<sup>1</sup> containing 2.1Moz of Pt+Pd
- Feasibility Study by previous owner:<sup>2</sup>
  - Open pit plus underground mining
  - 600,000tpa throughput rate
  - 83,000oz Pt+Pd+Au per year
- Opportunities
  - High grade PGM conc
  - Chromite conc



## Thunder Bay North Project

- Located in Ontario, Canada
- Resources<sup>1</sup> containing 0.7Moz of Pt+Pd
- Rio Tinto earn in and JV option
  - Consolidates PAN's Thunder Bay North Project and Rio's Escape Lake Project
  - Earn in Option - Rio spending up to C\$20M over 5½ years to earn 70% interest, expenditure to-date ~C\$8M

1. Refer Company ASX release dated 29 September 2017 titled "Mineral Resources and Ore Reserves as at 30 June 2017"

2. Refer Platinum Australia Limited (ASX: PLA) release dated 20 March 2012 titled "Panton Review Study Results"

# FY2019 Goals

Smooth restart of Savannah

Study value adding options for Savannah

Further drilling at Savannah North



Operate safely

Advance PGM projects

Make a difference





# ASX : PAN

## [www.panoramicresources.com](http://www.panoramicresources.com)

### Mission Statement

We strive to achieve excellence in all aspects of our business to provide long term capital growth and dividend return to our shareholders, a safe and rewarding work environment for our employees, and opportunities and benefits to the people in the communities we operate in.