

**WESTERN AREAS LTD**



# **CORPORATE PRESENTATION**

MARCH 2019

[www.westernareas.com.au](http://www.westernareas.com.au)



# AGENDA



Corporate



Operations



Growth & Exploration



Nickel Market

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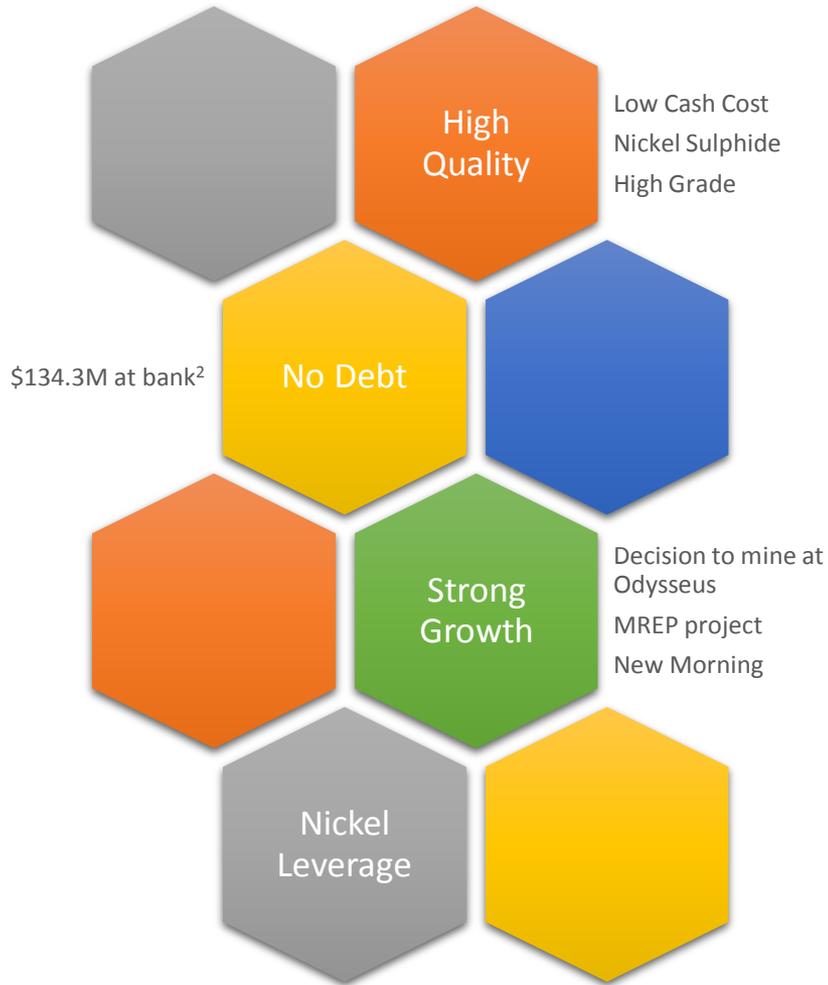
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# CORPORATE



# CORPORATE OVERVIEW



ASX code	WSA
Share price	2.24
Shares outstanding (m)	273.5
Market Cap (A\$m) <sup>1</sup>	612.6
Cash (A\$m) <sup>2</sup>	134.3

## COSMOS Complex

592kt Ni Mineral Resources  
165kt Ni Ore Reserves  
DFS complete

## FORRESTANIA

### Flying Fox

4.9kt Ni mined HY19  
23.7kt Ni reserves  
80.0kt Ni resources

### Spotted Quoll

6.8kt Ni mined HY19  
63.3kt Ni reserves  
88.2kt Ni resources



1. Based on share price on 11 March 2019 2. As at 31 December 2018

# KEY TAKEAWAYS – 1H FY19



## Operations

- Consistent reliable production, 10.8kt Ni concentrate
- 10.4kt Ni concentrate sales
- FY19 production & unit cash cost guidance on track, unchanged
- One LTI – LTIFR at 3.2

## Financial

- Cash at bank A\$134.3m, no debt
- Positive cashflow from operations A\$43m
- Sales revenue A\$123.7m
- Realised Ni price A\$7.45/lb
- Cash costs A\$3.07/lb
- EBITDA of A\$30.6m, 25% margin
- NPAT of A\$0.2m

## Future Growth

- Odysseus DFS completed. Decision to mine. Odysseus is a long life, low AISC project
- A\$21.5m invested in Odysseus early works & feasibility
- MREP premium grade sulphide product sales into spot market
- A\$9.3m exploration

# FY19 GUIDANCE

Target	Updated FY19 Guidance	Comment
Nickel tonnes in Concentrate Production	20,500 to 22,000	Unchanged
Unit Cash Cost of Production (Nickel in Concentrate)	A\$2.80/lb to A\$3.20/lb	Unchanged
Sustaining and Mine Development Capital Expenditure	A\$32.0m to A\$36.0m	Unchanged
Expansion Projects & Feasibility	A\$23.0m to A\$25.0m	A\$5m overhead reallocation
Odysseus Early Works	A\$24.0m to A\$28.0m	Unchanged
Exploration	A\$12.0m to A\$15.0m	Unchanged

- 1H FY19 delivered all metrics within the updated guidance range released during October 2018
- Increased expansion project capital expenditure due to capitalisation of Cosmos mine site care and maintenance costs, rather than remaining an operating cost, following the Odysseus decision to mine

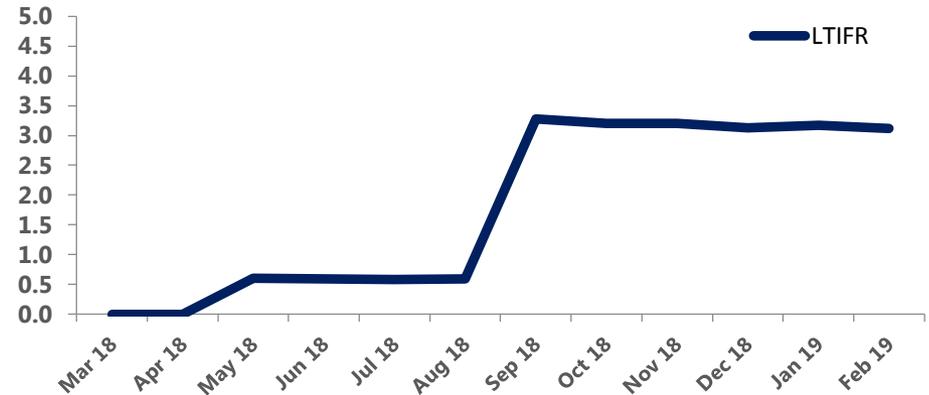
# WESTERN AREAS ARE SAFE AREAS



## Days LTI free

Spotted Quoll	<b>2,879</b>	Aug-11
Cosmos	<b>1,246</b>	Oct-15 (no injuries)
Flying Fox	<b>718</b>	May-17
Cosmic Boy Concentrator	<b>174</b>	May-18
Exploration	<b>160</b>	Sep-18

## 12 month LTIFR moving average



Safe operations make efficient operations

# OPERATIONS

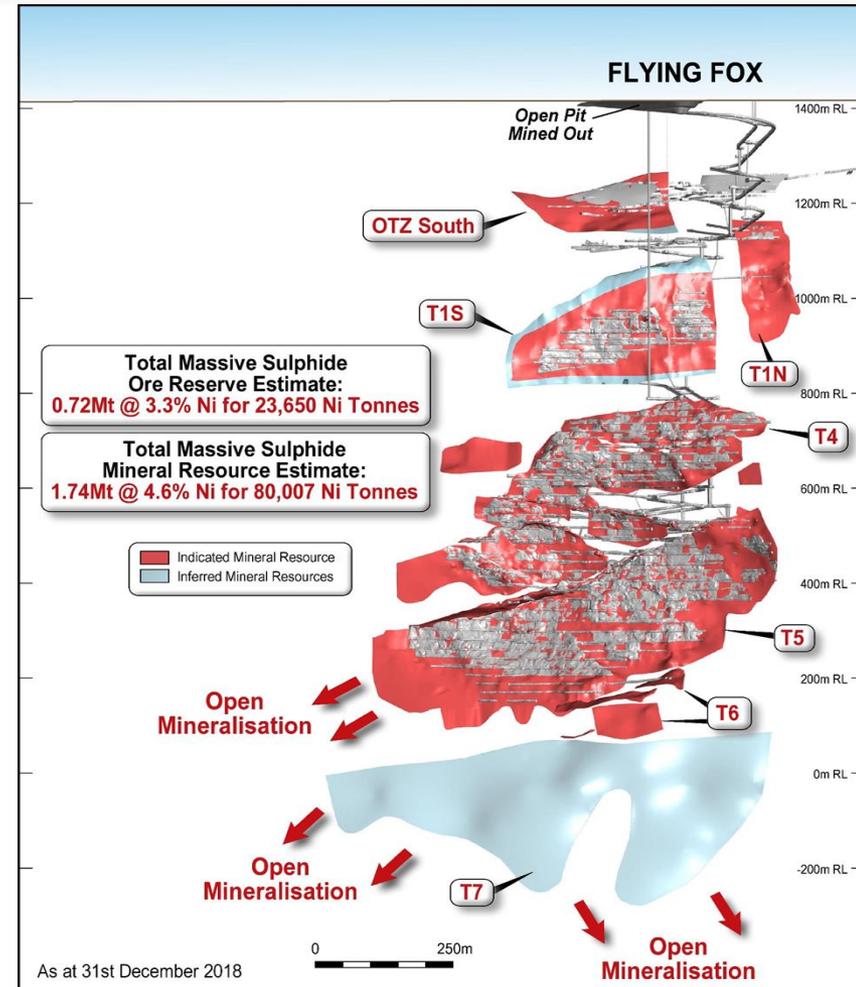


# FLYING FOX MINE

Reserve Contained nickel	<b>0.72Mt @ 3.3% 23,650 Ni tonnes</b>
Resource Contained nickel	<b>1.74Mt @ 4.6% 80,007 Ni tonnes</b>
Mine life (on reserves)	<b>3 years</b>

## Key points

- FY18 production – 10k Ni tonnes
- Has been operating for over 12 years
- Significant low grade disseminated resource – Heap leach evaluation underway



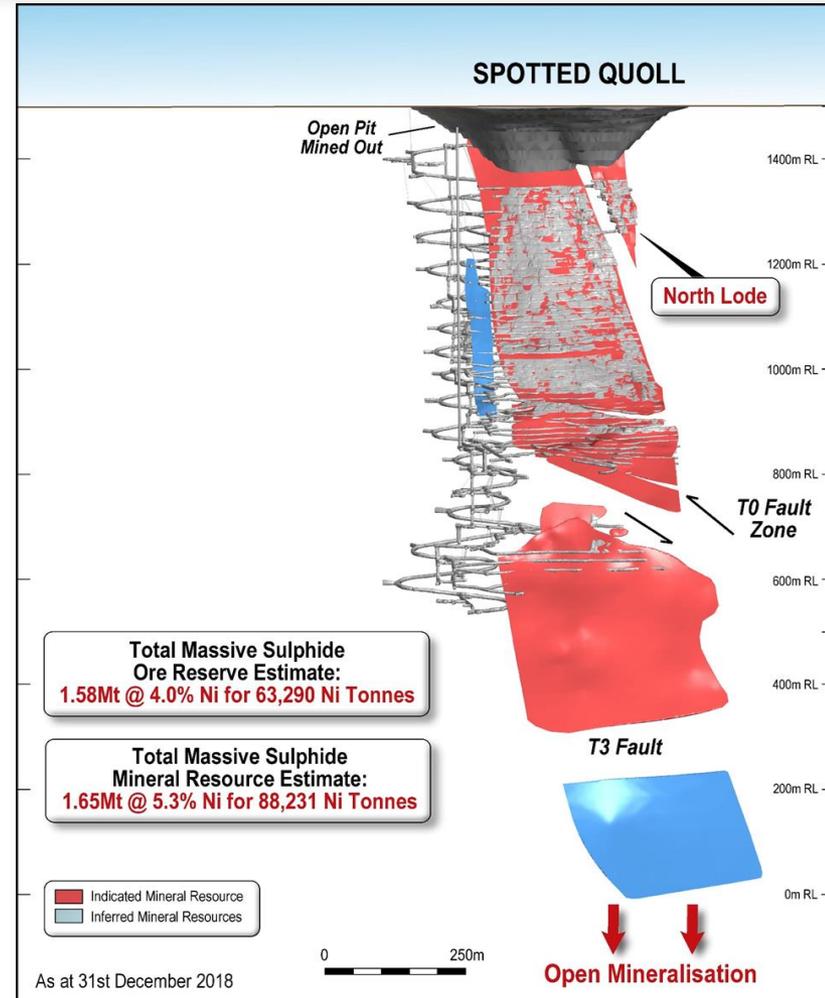
WSA foundation asset within Forrestania

# SPOTTED QUOLL MINE

Reserve Contained nickel	1.58Mt @ 4.0% 63,290 Ni tonnes
Resource Contained nickel	1.65Mt @ 5.3% 88,231 Ni tonnes
Mine life	7 years

## Key points

- Has never recorded an LTI
- FY18 annual production – 14.4k Ni tonnes
- Production has outperformed reserve tonnes and grade consistently
- Top down mining with paste fill
- Resource extension drilling commenced – first drill hole since 2009



WSA Explored, Discovered and Developed

# COSMIC BOY NICKEL CONCENTRATOR

## Concentrator Summary

- Mill processed an annual record of 616,598 tonnes of ore in FY18, for 21,060 nickel tonnes
- 12% above name plate capacity of 550,000 tpa
- Concentrate grades of between 15.0% to 16.0% Ni
  - Premium blending product (Fe/Mg ratio >15:1)
  - Desirable to smelters and roasters

## Export Infrastructure and Logistics

- Export concentrate transported to Esperance Port in containers and shipped through to China
- BHP Nickel West concentrate delivered to Kambalda by road



WSA produces a high quality and in demand nickel concentrate

# OFFTAKE CONTRACTS BEST IN CLASS

*Opening new markets*

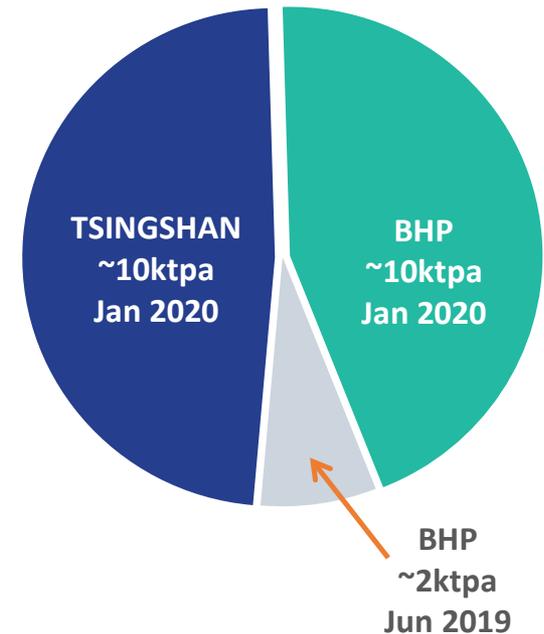
*Superior commercial terms*

*Creating more value from the same nickel product*

*Existing offtake agreement just over 1 year to expiry*

## Our Partners:

- **BHP:** 55%
- **Tsingshan:** 45%
- ✓ China's largest stainless steel producer
- ✓ Consumes ~25% of China's nickel demand
- ✓ Revenue RMB85 billion in 2015, 20k employees



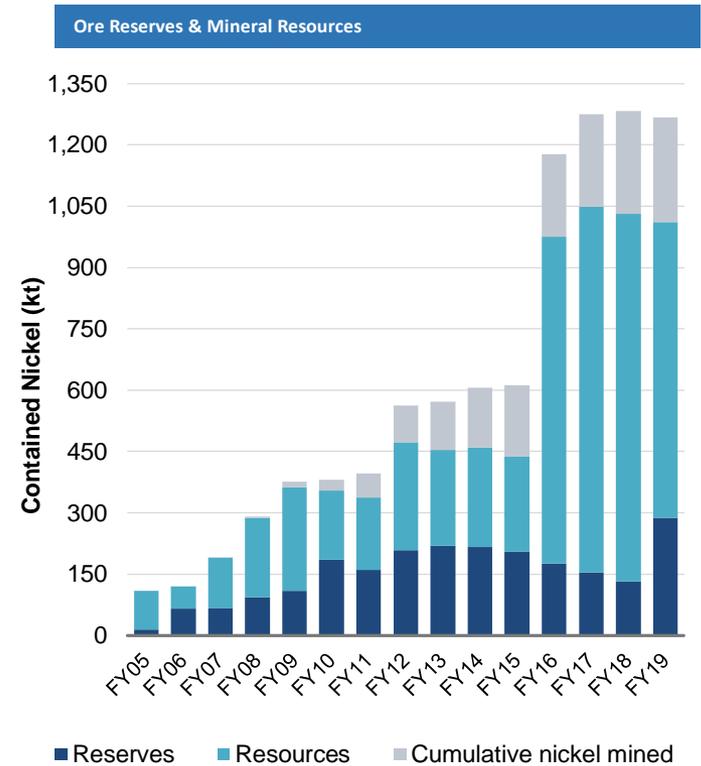
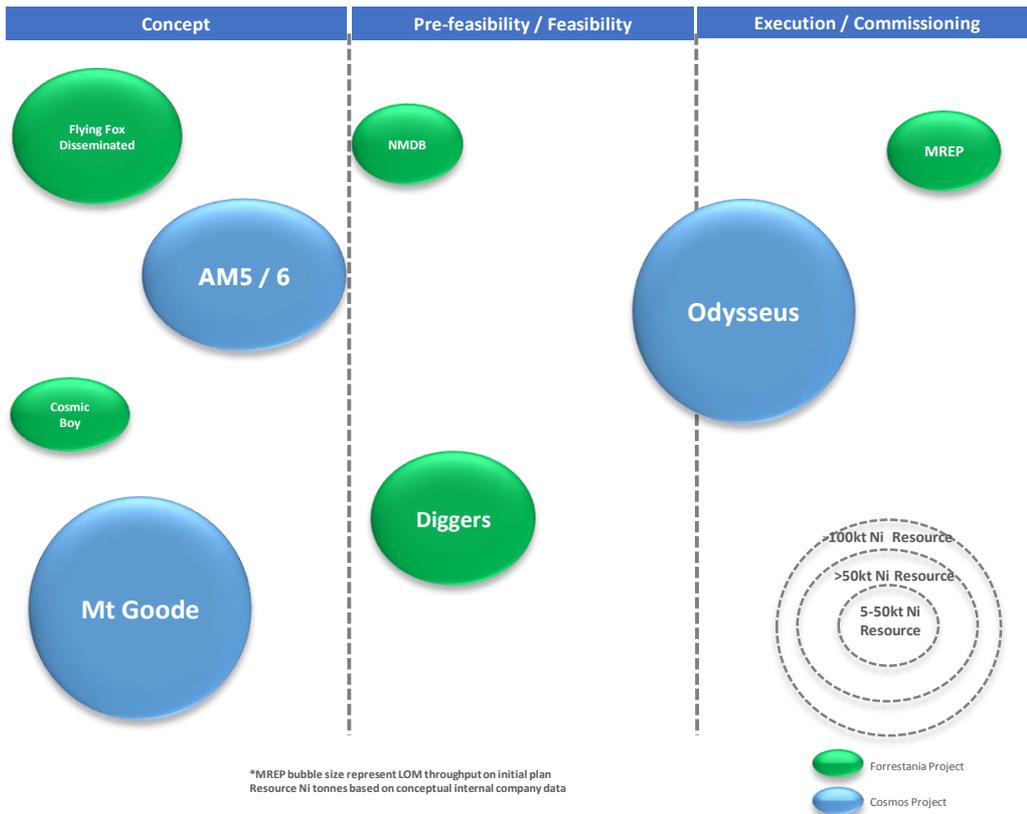
## Roasting

- Creates a high grade nickel oxide that can be blended with laterite ore
- By-product of sulphuric acid for 'pickling' stainless steel
- Most concentrates do not suit roasting
- Proven process - opening up opportunities with Tsingshan

# GROWTH & EXPLORATION OUTLOOK



# NICKEL GROWTH PIPELINE



- Many projects in the pipeline to drive nickel production well into the future
- Ore Reserves have substantially increased in FY19 with Odysseus

# ODYSSEUS – EARLY WORKS NEARING COMPLETION

## Early Works Activities

- Barminto rehabilitation ongoing
- De-watering on schedule
- Water Management Ponds all constructed and operational
- Schlumberger pump for underground dewatering installed and operational
- Camp commissioned with over 150 rooms available out of 520



# ODYSSEUS – NOW A LONG LIFE PROJECT

## Western Areas' Second Operation

### Long life, low cost project

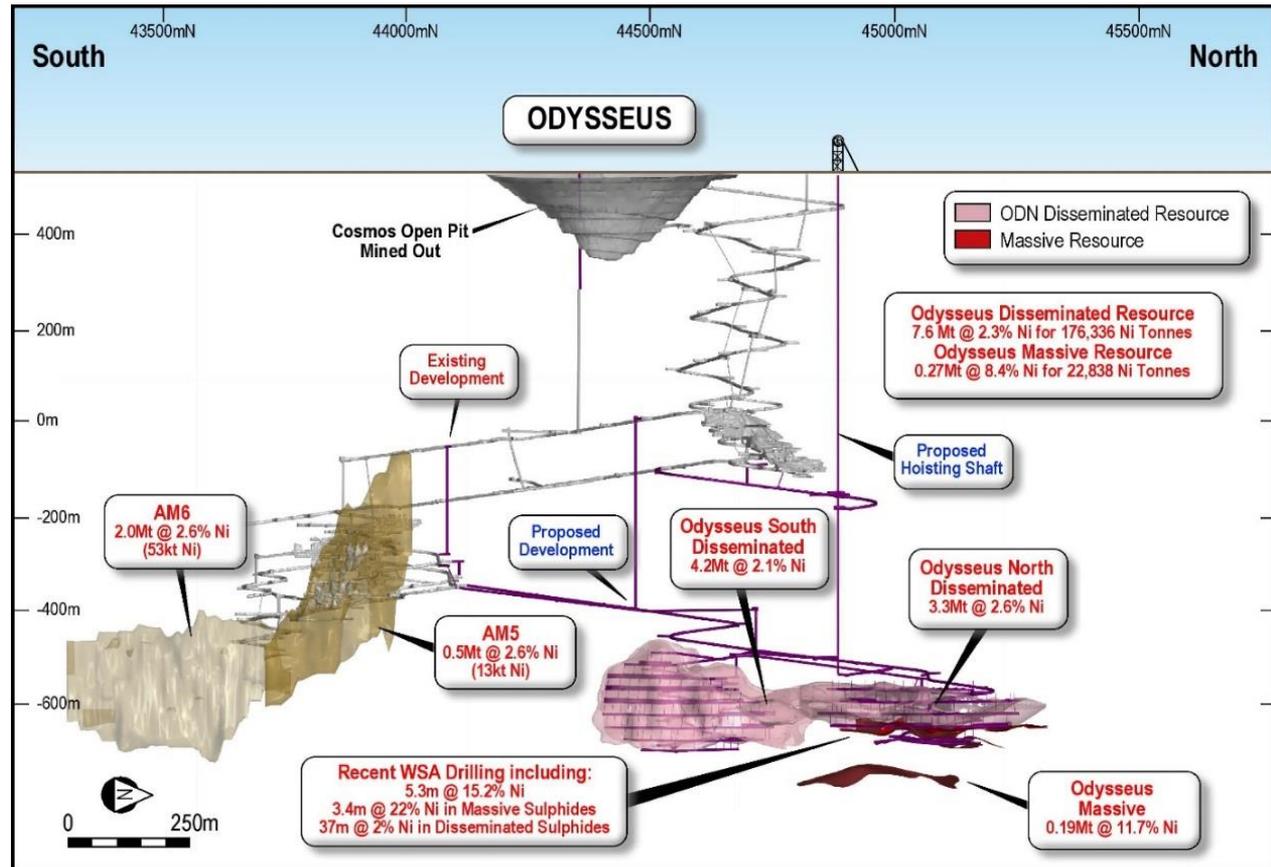
- ✓ Ore Reserve 8.1mt @ 2.0% for 164kt nickel
- ✓ Mine life > 10 years
- ✓ AISC A\$3.50/lb
- ✓ Average nickel in concentrate production >13.0ktpa (14.6ktpa from FY24-FY31)

### Pre-production capex A\$299m includes:

- ✓ Shaft hoisting
- ✓ Larger mill (900ktpa immediately)

### Significant upside:

- ✓ AM5 & AM6 deposits contain an Indicated Mineral Resource of 57.6kt of nickel (not included in DFS)
- ✓ Record massive sulphide intersections



# CAPITAL EXPENDITURE PROFILE AND FUNDING

- ✓ WSA is well funded with \$130m cash and other liquid investments of around A\$25m
- ✓ Major capex not required until FY21
- ✓ Significant optionality on decision-making and spending
- ✓ Already receiving funding interest from offtake providers and third parties, including banks

Capital Costs	
<b>Pre-production total capital cost</b>	<b>\$299m</b>
Comprising: FY19	\$12m
FY20	\$49m
FY21	\$76m
FY22 – 23	\$162m
<b>Post-production LOM</b>	<b>\$82m</b>

Capital costs (A\$m)	Pre-production	Sustaining	Total
Mine development	148	39	187
Mine infrastructure and services	20	24	44
Shaft infrastructure	63	-	63
Plant	48	6	54
Owner's costs	10	4	14
Mine closure and rehabilitation	-	7	7
Contingency	10	2	12
<b>Total</b>	<b>299</b>	<b>82</b>	<b>381</b>

# SHAFT INFRASTRUCTURE

- WSA has secured a high quality, second hand head gear and winder
- Shaft infrastructure will be dismantled, refurbished in South Africa and shipped to Perth



# MILL RECOVERY ENHANCEMENT PROJECT (MREP)

***Produces additional new higher-grade product (45%-50% Ni)***

***Generating value from waste tailings***

***New customers - EV battery market***

- Product specification achieved. Now ramping up leach volume to nameplate capacity (1,400t nickel pa max)
- Filtration and bagging facilities to sell a new high grade nickel sulphide product complete
- Premium payables versus flotation concentrate
- Back-end of plant capable of up to 4,000t of nickel pa – Mill Scats, New Morning, Flying Fox LG to provide future feed options

## Front End – BioHeap Leach

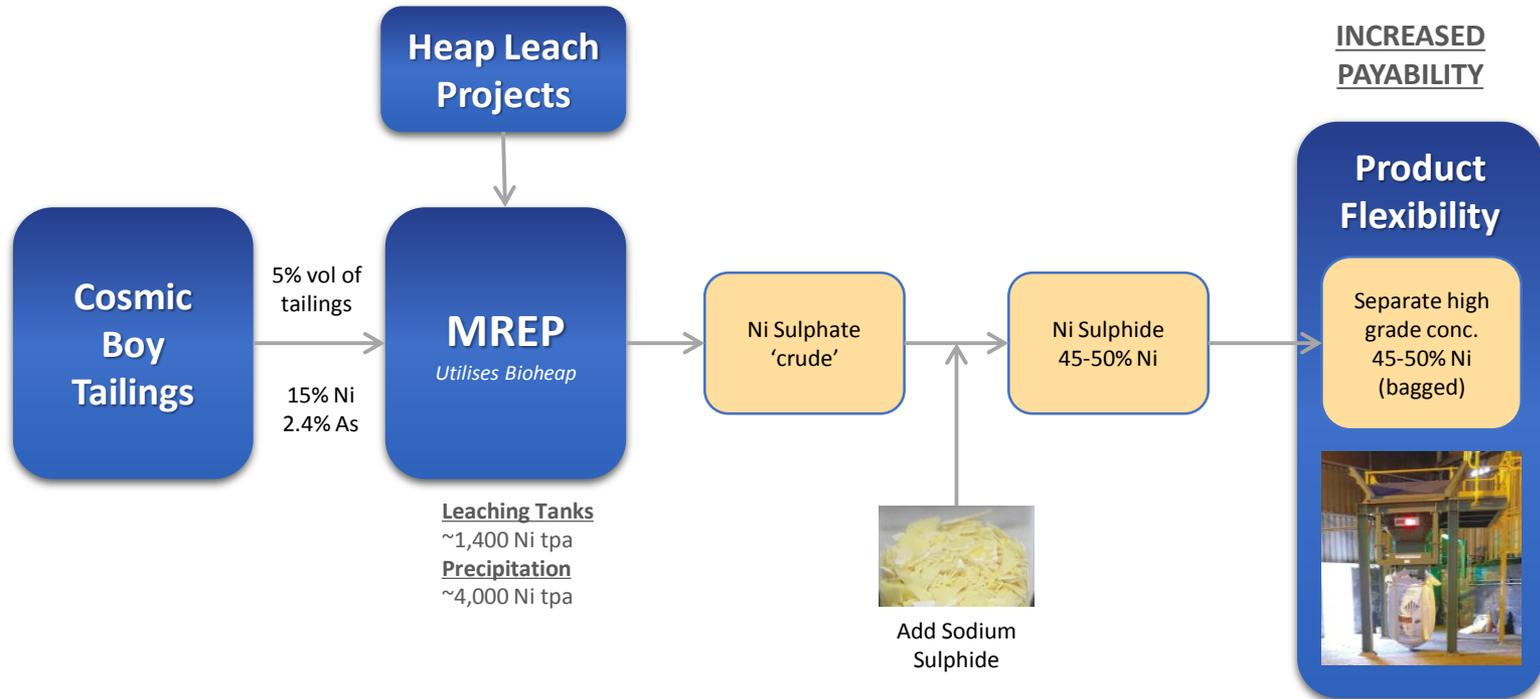
- 1400 tpa capacity
- Tailings stream from Cosmic Boy - applies BioHeap Leach, then passes to precipitation



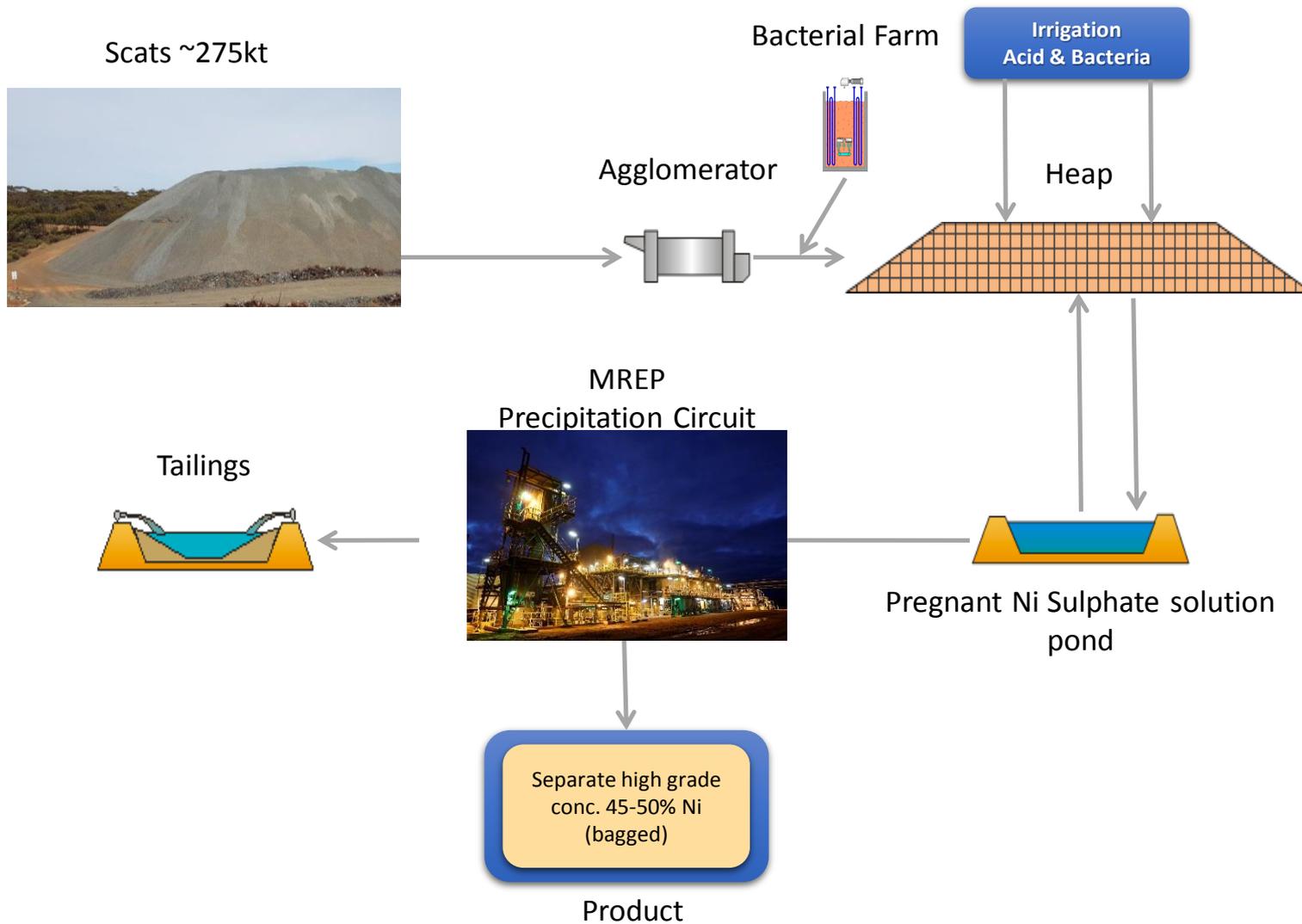
## Back End – Precipitation

- 4000 tpa capacity
- 1400 tpa - leached material from BioHeap front end
- 2600tpa - other sources of nickel in solution eg. heap leach elsewhere in Forresteria, or scats treatment

# MREP FLOWSHEET

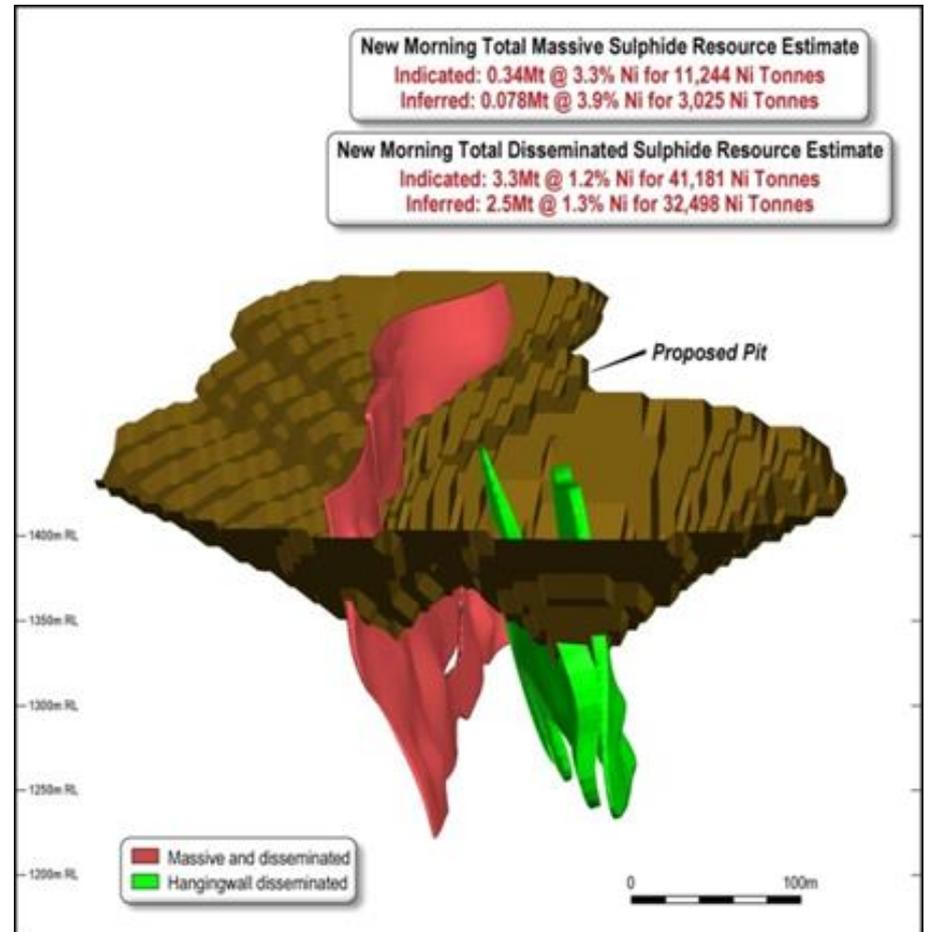


# CONCEPTUAL FLOWSHEET – NICKEL SCATS

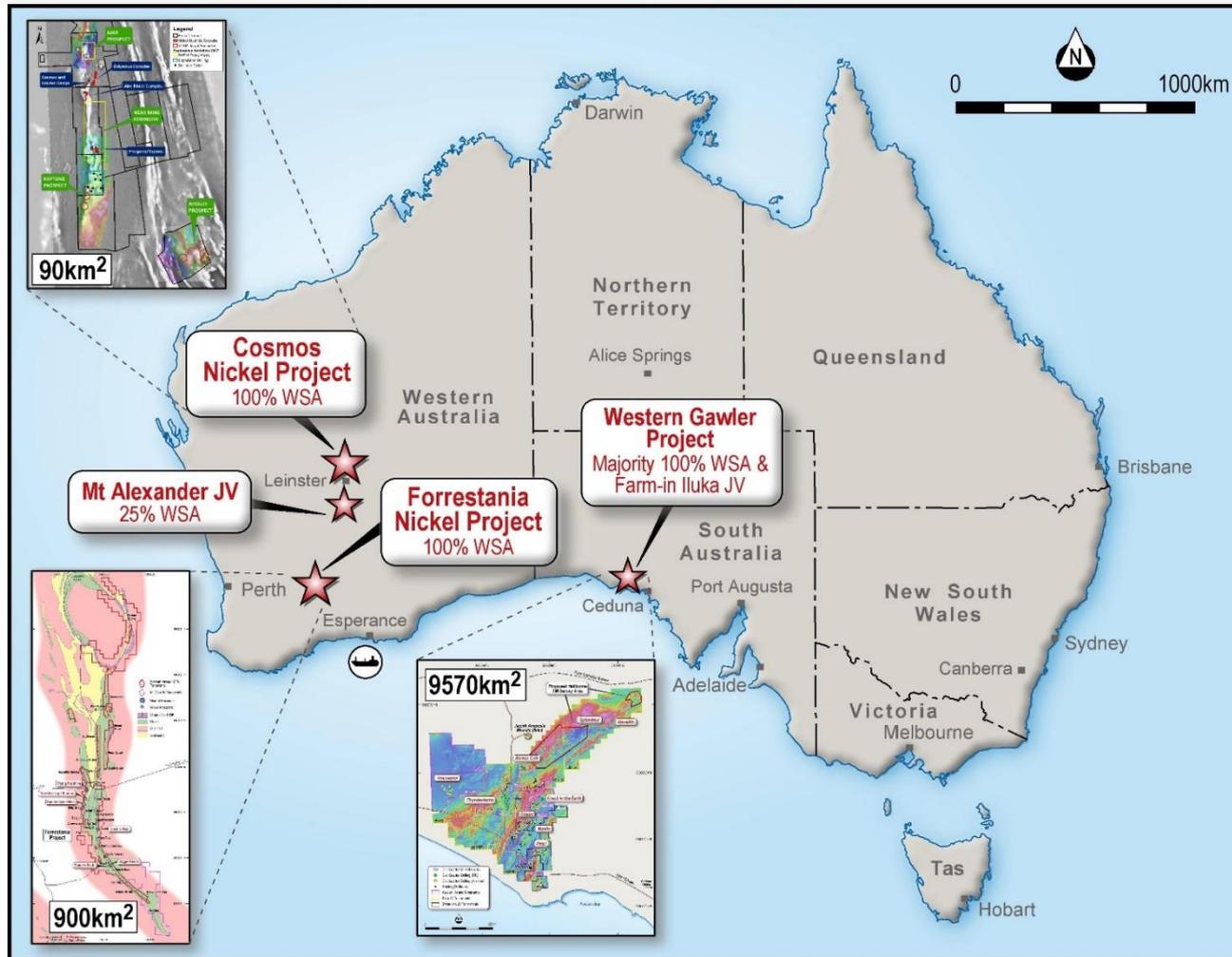


# NEW MORNING / DAYBREAK

- Massive sulphide resource of 418kt @ 3.6% for 14,269 nickel tonnes
- Low grade resource (at 0.5% Ni COG) of 5.8m tonnes @ 1.3% for 73,679 nickel tonnes
- Located 2.5km from Flying Fox and 2.8km from Spotted Quoll
- Open Pit Scoping Study commenced
- BioHeap® testwork ongoing to evaluate heap leach criteria



# EXPLORATION OVERVIEW – KEY TENEMENT HOLDINGS



Balanced exploration portfolio supporting future growth

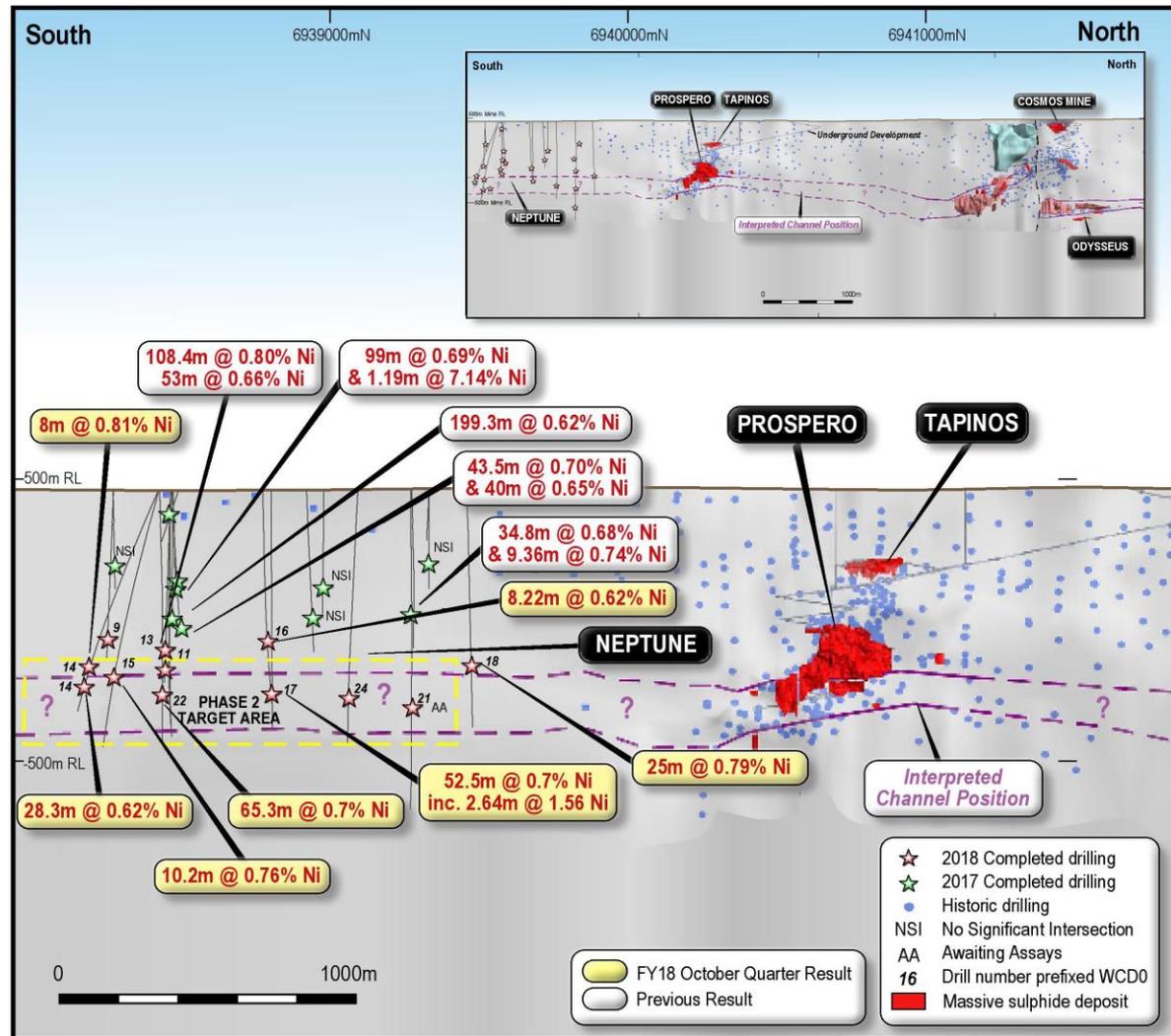
# COSMOS EXPLORATION

## Drilling Results - Neptune

- Phase 2 drilling campaign at Neptune well advanced with mineralisation confirmed over 1km along strike including
  - ✓ 108m @ 0.8% Ni, incl 0.3m @ 4.64% Ni
  - ✓ 16.5m @ 0.72% Ni; and
  - ✓ 0.55m @ 6.83% Ni

## Drilling Results - Odysseus

- Very high grade drill results at Odysseus North, extension to project resource
- Significant exploration upside:
  - ✓ Recent massive sulphide drilling success beneath Odysseus
  - ✓ 3.4m @ 22% Ni



# WESTERN GAWLER PROJECT

## Prospective Greenfields Exploration Asset

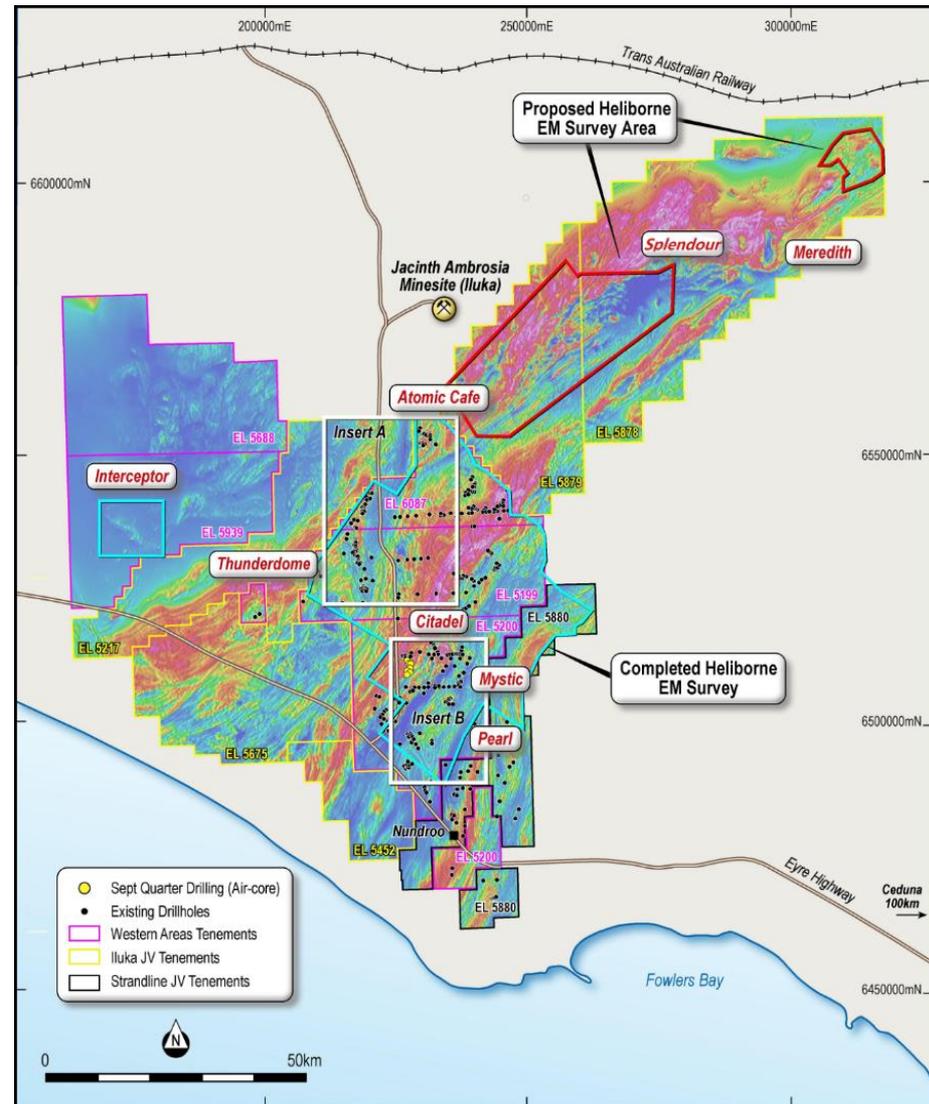
- 4,450km<sup>2</sup> WSA tenement holding
- Ramp-up of exploration activities across FY18
  - 217 drill holes.
  - 149 line kilometers of Moving Loop EM ground surveys
- Regional scale SkyTEM airborne EM survey completed in early FY19
- Identification of Thunderdome as emerging prospective corridor hosting numerous mafic intrusions

## Strategic agreement with Iluka

- Five lease covering an additional 5,070km<sup>2</sup>
- Two stage Farm-in earning up to 75% base and precious metals rights
- Effectively representing close to 100% of the highly prospective Fowler Domain

## Ramp-up of Exploration Activity

- Elevated funding support in FY19
- Integrated series of belt scale exploration campaigns planned
- Strong pipeline of targets identified



# NICKEL MARKET



# WHAT WE ARE SEEING

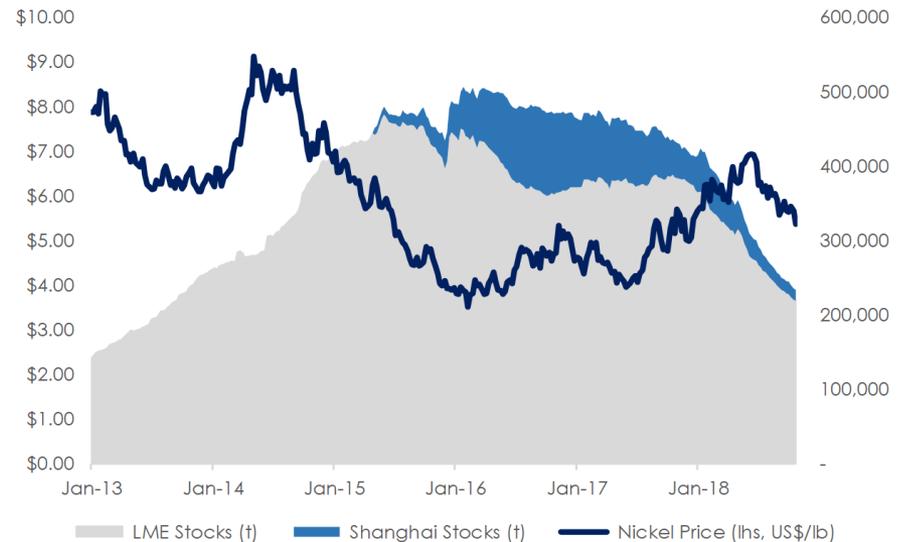
- **Significant increase in inbound off-take enquiries** for Nickel Sulphide concentrate post current contract period, primarily linked to the Electric Vehicle battery sector.
- **Our partner, China's largest stainless steel producer, Tsingshan, has strong growth plan** which will require significant additional nickel units – **reinforcing industry wide trend.**
- **Technology change to NCM 811** which requires even more nickel
- **Current nickel price too low** to incentivise new project development. New mine development can take 3 years – the nickel “pie” is not expanding.
- **May see divergent market in nickel supply** emerging between stainless steel and EV
- **LME and other stockpiles shrinking** on the back of current stainless demand



Estimated electrification impact per vehicle (avg NMC battery)

40-50kg <b>Ni</b>	50-75kg <b>Cu</b>
5-15kg <b>Co</b>	+ Cu for charging point + Cu for grid access

LME and SHFE Nickel Stocks vs Nickel Price\*

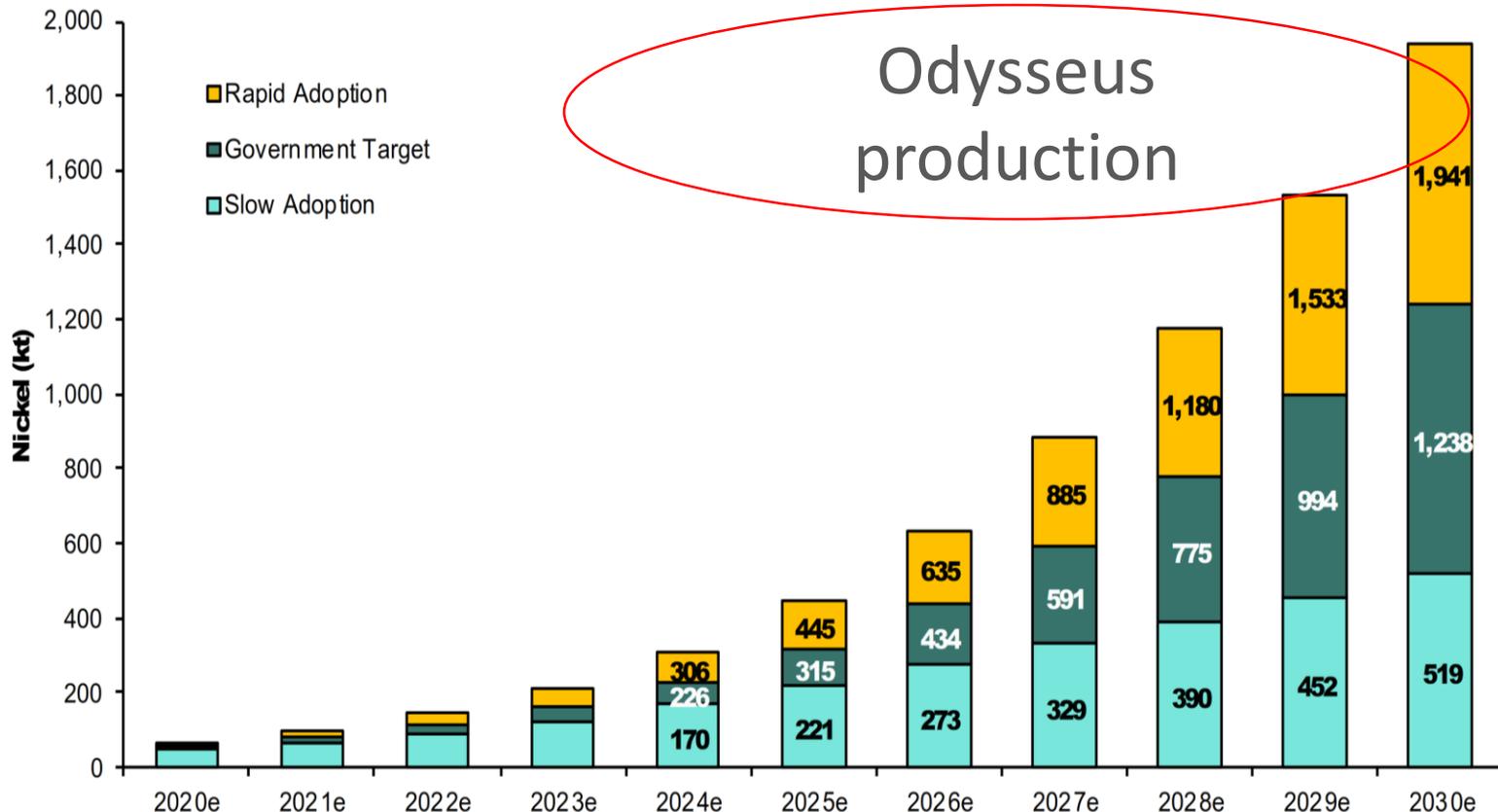


\* GMR Research 2018

# ODYSSEUS IS PERFECTLY TIMED

- Potentially very significant incremental demand versus a current nickel market size of c.2,200kt
- Research indicates NMC 811 will be the fastest growing battery combination by 2025!

### Global Demand for Nickel for Electric Vehicles



Source: Bernstein - June 2018

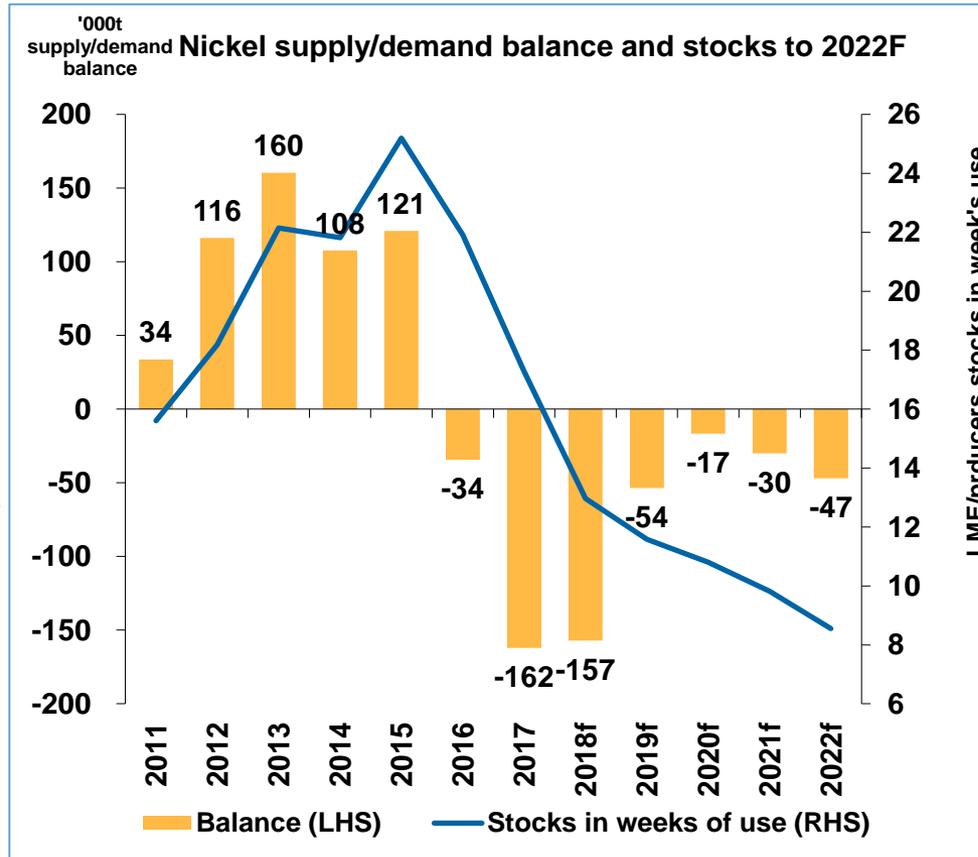
# NICKEL DEFICITS ON THE HORIZON!

Two successive sizeable nickel market deficits, both this year and in 2019, combined with **expectations for continued deficits** through the first half of the 2020's ... point to a **necessity for higher prices.**

*Deutsche, July 18*

There is **consensus** from within the industry, nickel trade bodies and industry consultants, **that the market is in deficit.**

*Bernstein, June 18*



We expect the nickel market to **remain in deficit beyond 2018**, and we believe **higher prices** are required to incentivise new supply to keep up with demand growth.

*J.P. Morgan, July 18*

Source: INSG, CRU, LME, Macquarie Strategy, August 2018

# APPENDIX



# FINANCIAL SNAPSHOT

1st Half Highlights	1H 2019	1H 2018	2H 2018
Mill Production (tonnes Ni)	10,794	10,865	10,195
Sales Volume (tonnes Ni)	10,404	10,614	9,935
Cash Costs (US\$/lb)	2.22	1.94	2.11
Cash Costs (A\$/lb)	3.07	2.49	2.74
Exchange Rate USD/ AUD	0.72	0.78	0.77
Nickel Price (U\$/lb)	5.40	5.31	6.38
Realised Price Before Payability (A\$/lb)	7.45	6.81	8.29
Revenue (\$'000)	123,657	115,812	132,456
EBITDA (\$'000)	30,592	36,384	47,585
EBIT (\$'000)	705	4,846	14,251
NPAT (\$'000)	150	3,506	8,331
Cashflow from Operations (\$'000)	42,994	31,628	45,338
Sustaining Capex ('\$'000)	23,829	28,680	20,132
Growth Expenditure ('\$'000)	29,310	4,990	5,982
Cash at Bank (\$'000)	134,262	132,552	151,643
Dividend (cents)	0.0	0.0	2.0

## Key Takeaways – 1H FY19 v 1H FY18

- Consistent and reliable production and sales volumes.
- Realised price (before payability) increased with nickel production deficit confirmed by drop in LME inventory
- EBITDA A\$30.6m and breakeven NPAT, planned higher costs partly offset by higher nickel price
- Odysseus growth expenditure accelerated to \$21.5m during the half. Initial water management and surface infrastructure works completed. Shaft head gear procured
- Sustaining capex at normal levels

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