WESTERN AREAS LTD

WA MINING CLUB LUNCHEON

"NICKEL…NOT AS FICKLE?"

28 MARCH 2019

www.westernareas.com.au

AGENDA

- Who is Western Areas?
- Odysseus Project
- Innovation
- Nickel Market

DISCLAIMER AND FORWARD LOOKING STATEMENTS

This presentation is being furnished to you solely for your information and for your use and may not be copied, reproduced or redistributed to any other person in any manner. You agree to keep the contents of this presentation and these materials confidential. The information contained in this presentation does not constitute or form any part of any offer or invitation to purchase any securities and neither the issue of the information nor anything contained herein shall form the basis of, or be relied upon in connection with, any contract or commitment on the part of any person to proceed with any transaction.

The distribution of this presentation in jurisdictions outside Australia may be restricted by law, and persons into whose possession this presentation comes should inform themselves about, and observe, any such restrictions. This is not for distribution or dissemination in the U.S.

The information contained in this presentation has been prepared by Western Areas Ltd. No representation or warranty, express or implied, is or will be made in or in relation to, and no responsibility or liability is or will be accepted by Western Areas Ltd, employees or representatives as to the accuracy or completeness of this information or any other written or oral information made available to any interested party or its advisers and any liability therefore is hereby expressly disclaimed. No party has any obligation to notify opinion changes or if it becomes aware of any inaccuracy in or omission from this presentation. All opinions and projections expressed in this presentation are given as of this date and are subject to change without notice.

This document contains forward-looking statements including nickel production targets and cost estimates. These statements are based on assumptions and contingencies that are subject to change without notice, and certain risks and uncertainties that could cause the performance or achievements of Western Areas Ltd to differ materially from the information set forth herein. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as “may”, “will”, “expect”, “intend”, “plan”, “estimate”, “anticipate”, “continue”, and “guidance”, or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and expected costs. Western Areas Ltd undertakes no obligation to revise these forward-looking statements to reflect subsequent events or circumstances. Individuals should not place undue reliance on forward-looking statements and are advised to make their own independent analysis and determination with respect to the forecasted periods, which reflect Western Areas Ltd’s view only as of the date hereof.

The information within this PowerPoint presentation was compiled by Western Areas management, but the information as it relates to exploration results, mineral resources or ore reserves was prepared by Mr Graeme Gribbin, Mr Andre Wulfse or Mr Marco Orunesu-Preiata respectively. Mr Gribbin, Mr Wulfse and Mr Orunesu-Preiata are full time employees of Western Areas Ltd. Mr Gribbin is a member of Australian Institute of Geoscientists (AIG). Mr Wulfse and Mr Orunesu-Preiata are members of Australian Institute of Mining and Metallurgy (AusIMM) and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’(2012 JORC Code). Mr Gribbin, Mr Wulfse and Mr Orunesu-Preiata consent to the inclusion in this presentation of the matters based on the information in the form and context in which it appears.

WHO IS WESTERN AREAS?

www.westernareas.com.au

Low Cash Cost
Nickel Sulphide
High Grade

$134.3M at bank[2]

Decision to mine at Odysseus
MREP project
New Morning

ASX code	WSA
Share price	2.24
Shares outstanding (m)	273.5
Market Cap (A$m) [1]	612.6
Cash (A$m)[2]	134.3

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

FORRESTANIA

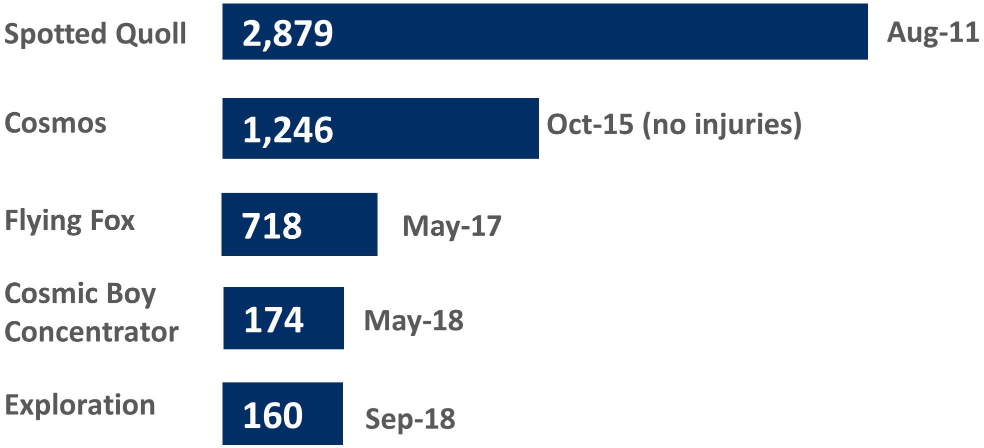
Flying Fox
4.9kt Ni mined HY19
23.7kt Ni reserves
80.0kt Ni resources

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

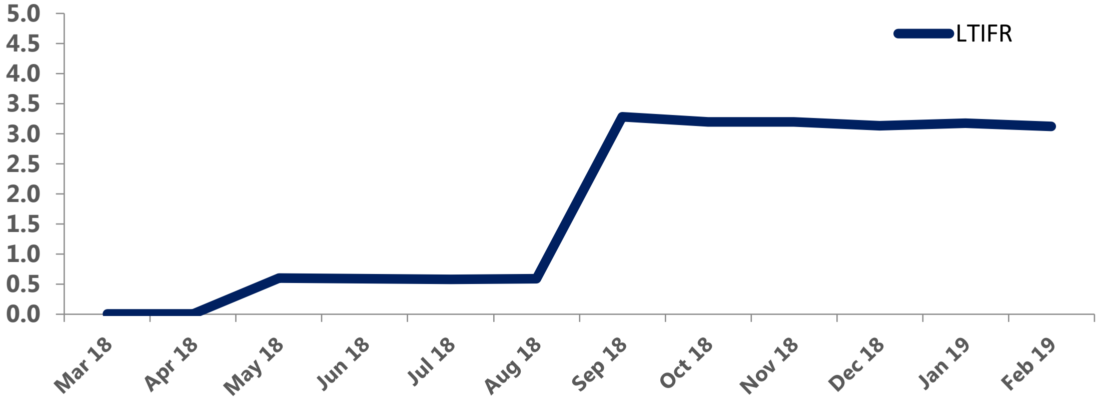
1. Based on share price on 11 March 2019 2. As at 31 December 2018

WESTERN AREAS ARE SAFE AREAS

Days LTI free



12 month LTIFR moving average



Safe operations make efficient operations

WESTERN AREAS SUCCESS TIMELINE

Inc.

Dec 1999
Company incorporated

July 2000
$5m ASX IPO @ 20c

Sept 2003
Discovery at Flying Fox

June 2004
First offtake with LionOre

Dec 2004
Mine development at Flying Fox

Oct 2006
Flying Fox production

Oct 2007
Spotted Quoll discovered

Oct 2009
Spotted Quoll commences. Highest Ni grade globally

Dec 2009
BHP Offtake
Jinchuan Offtake
BioHeap purchase

July 2015
Western Areas debt-free for first time

Oct 2015
Purchase Cosmos from Glencore

Feb 2017
Tsingshan and BHP Offtakes

March 2017
Odysseus PFS

April 2017
MREP project approved

April 2018
Odysseus early works approved

October 2018
Odysseus DFS approved and decision to mine

January 2019
Odysseus decline rehabilitation commences

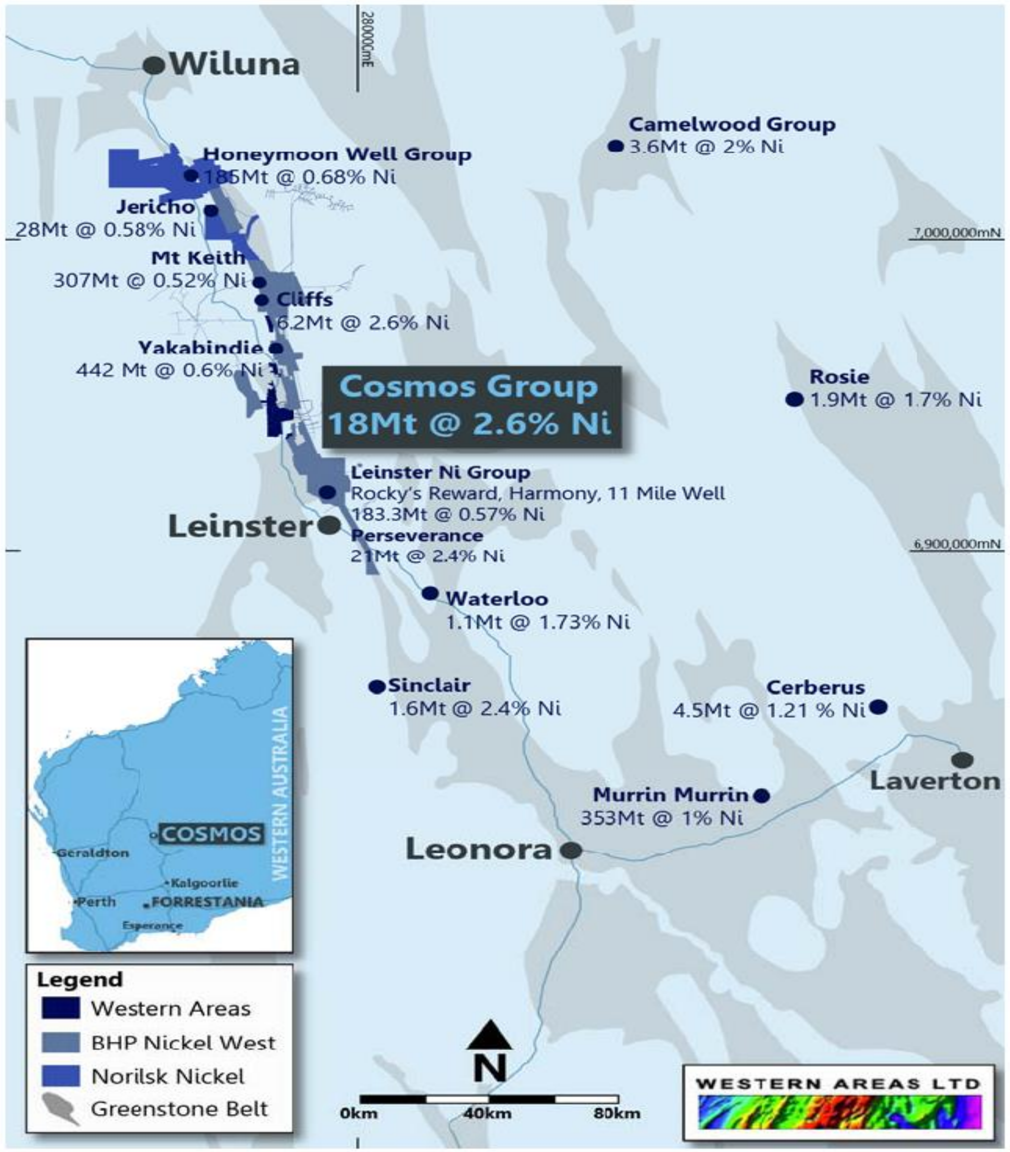
ODYSSEUS-OUR NEW PROJECT
DELIVERING LONG TERM VALUE

COSMOS OVERVIEW

WESTERN AREAS' SECOND OPERATIONAL HUB

Outstanding Nickel Address:

- **Within prolific Leinster – Wiluna Nickel camp;**
- **Jubilee Mines sold in 2007 to Xstrata for A$3.1B!;**
- **WSA purchase from Glencore Oct 2015 for $24M;**
- **WSA PFS completed in March 2017; and**
- **WSA DFS completed in Oct 2018 with Board approval to start mining.**



BUILDING RELATIONSHIPS

COSMOS SITE READY FOR ACTION!

ODYSSEUS – EARLY WORKS NEARING COMPLETION

Early Works Activities

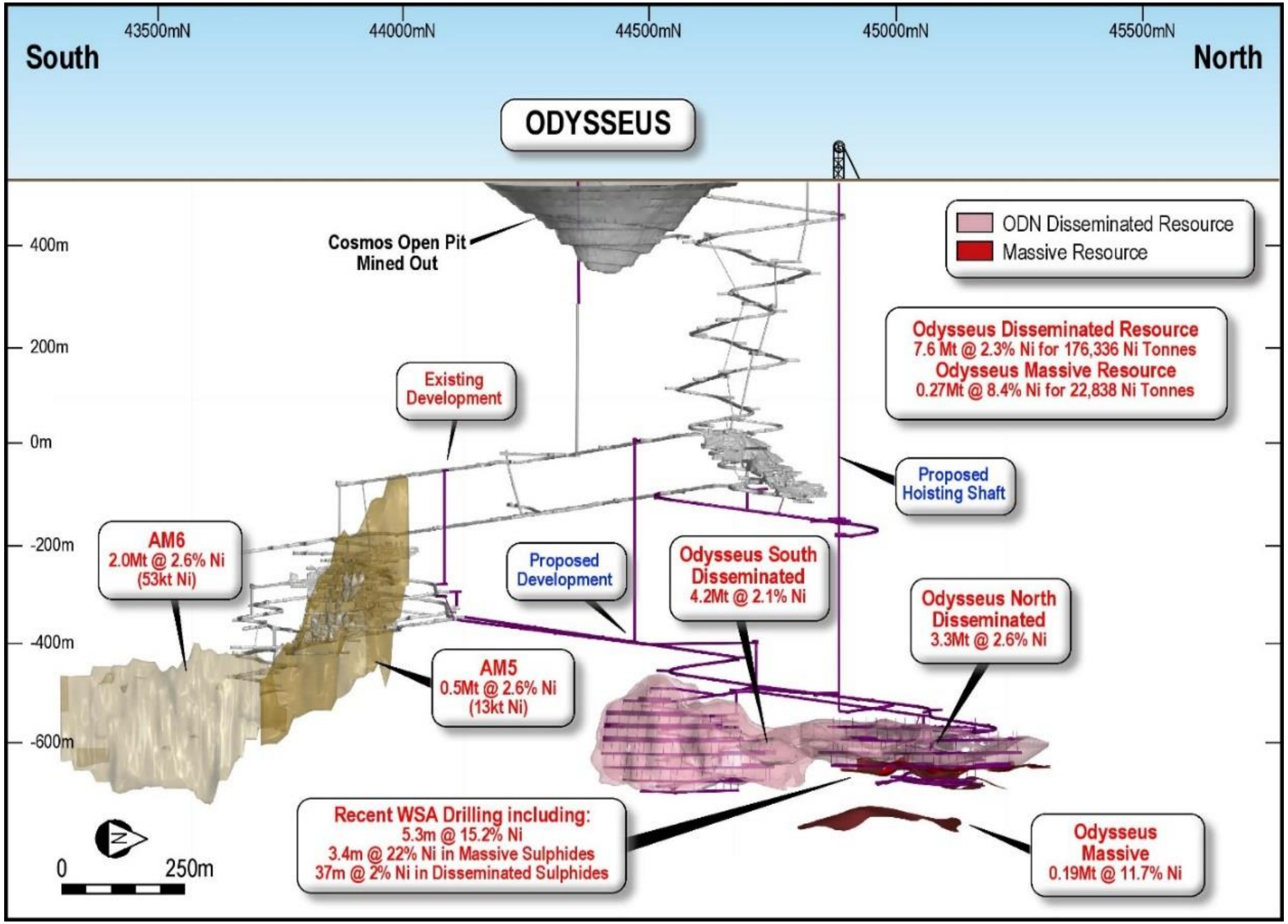
- ✓ Barminco decline rehabilitation commenced (Jan 2019) – already 2km of decline completed;
- ✓ De-watering on schedule;
- ✓ Schlumberger pump for underground dewatering installed and operational;
- ✓ Camp commissioned with over 150 rooms available out of 520.

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 <u>(not included in DFS)</u>
  - ✓ Record massive sulphide intersections



WESTERN AREAS LTD

SHAFT INFRASTRUCTURE

- **WSA has secured a high quality, second hand head gear and winder from Impala Platinum;**
- **Shaft infrastructure will be dismantled, refurbished in South Africa and shipped to Perth;**
- **Significant economical benefit versus trucking.**

Key Metrics:

- **5.5m diam. raise bore;**
- **4 guide ropes per conveyance;**
- **1.27Mtpa (ore and waste);**
- **12 t skips;**
- **1 truck required to feed shaft;**
- **4.5 MW peak power.**

INNOVATION

BIOHEAP LABORATORY

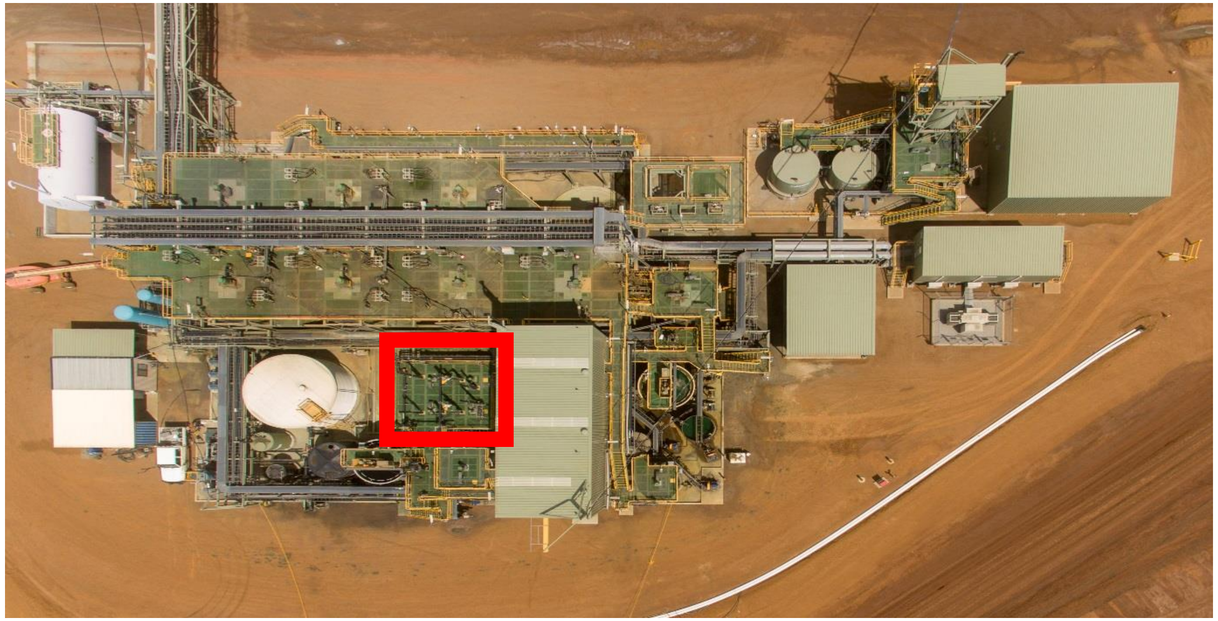
MILL RECOVERY ENHANCEMENT PROJECT (MREP)

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

- 1,400 tpa capacity
- Tailings stream from Cosmic Boy - applies BioHeap Leach, then passes to precipitation



Back End – Precipitation

- 4,000 tpa capacity
- 1,400 tpa - leached material from BioHeap front end
- 2,600tpa - other sources of nickel in solution eg. heap leach elsewhere in Forrestania, or mill scats treatment

MREP FLOWSHEET

Heap Leach Projects

Cosmic Boy Tailings

5% vol of tailings

15% Ni
2.4% As

MREP
Utilises Bioheap

Leaching Tanks
~1,400 Ni tpa
Precipitation
~4,000 Ni tpa

Ni Sulphate 'crude'

Add Sodium Sulphide

Ni Sulphide 45-50% Ni

INCREASED PAYABILITY

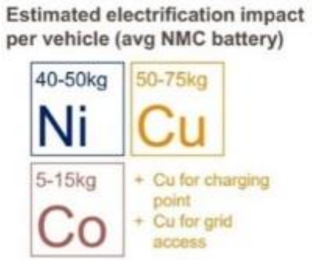
Product Flexibility

Separate high grade conc. 45-50% Ni (bagged)

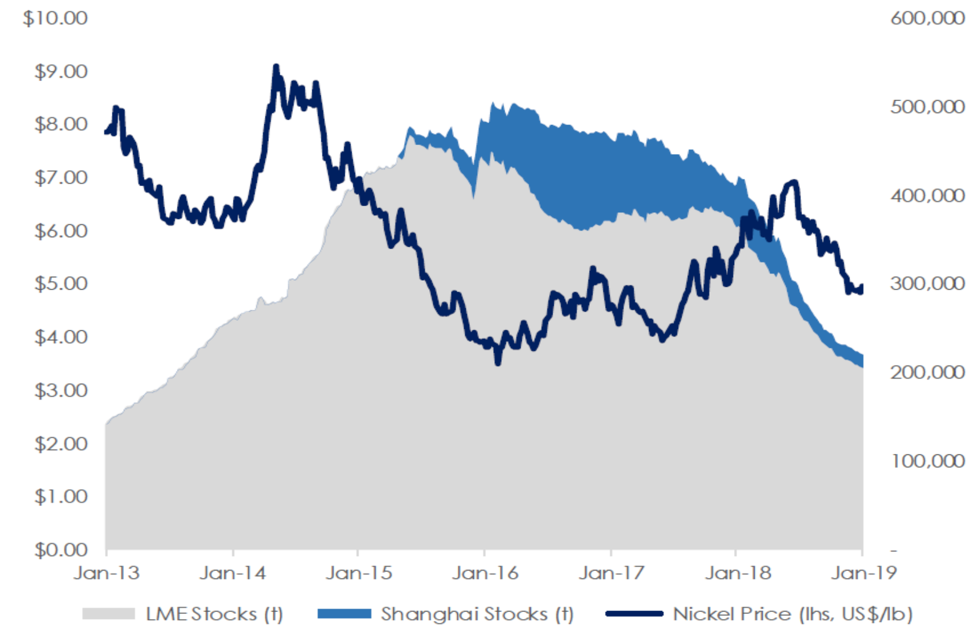
NICKEL MARKET

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.



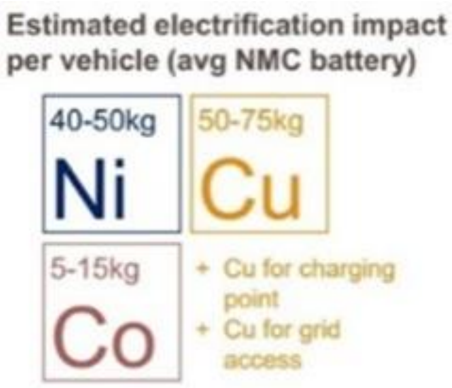
LME and SHFE Nickel Stocks vs Nickel Price*



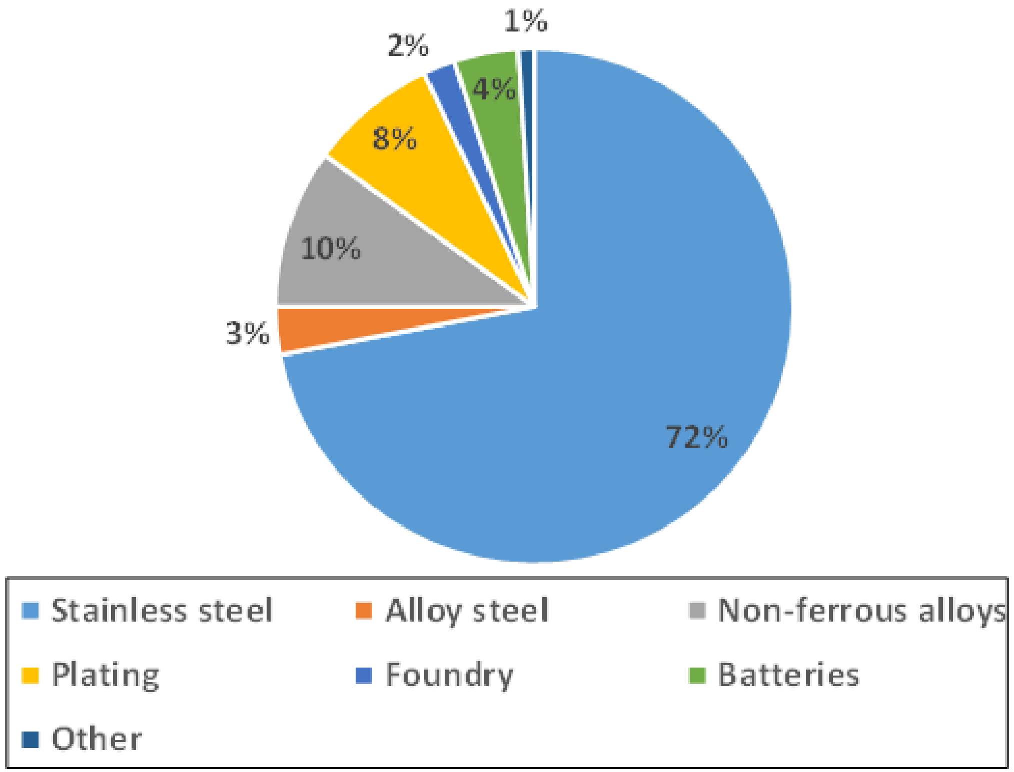
Source: Global Mining Research, Bloomberg

NICKEL CONSUMPTION OUTLOOK – STAINLESS DOMINATES

- Stainless steel consumption growing at 5%+-a-year trend;
- Non-ferrous alloys booming due to strong aerospace and recovery in oil and gas investment;
- **Nickel use in batteries growing by 30–40% a year from low base due to growing nickel use in lithium ion batteries for the electric vehicle industries.**



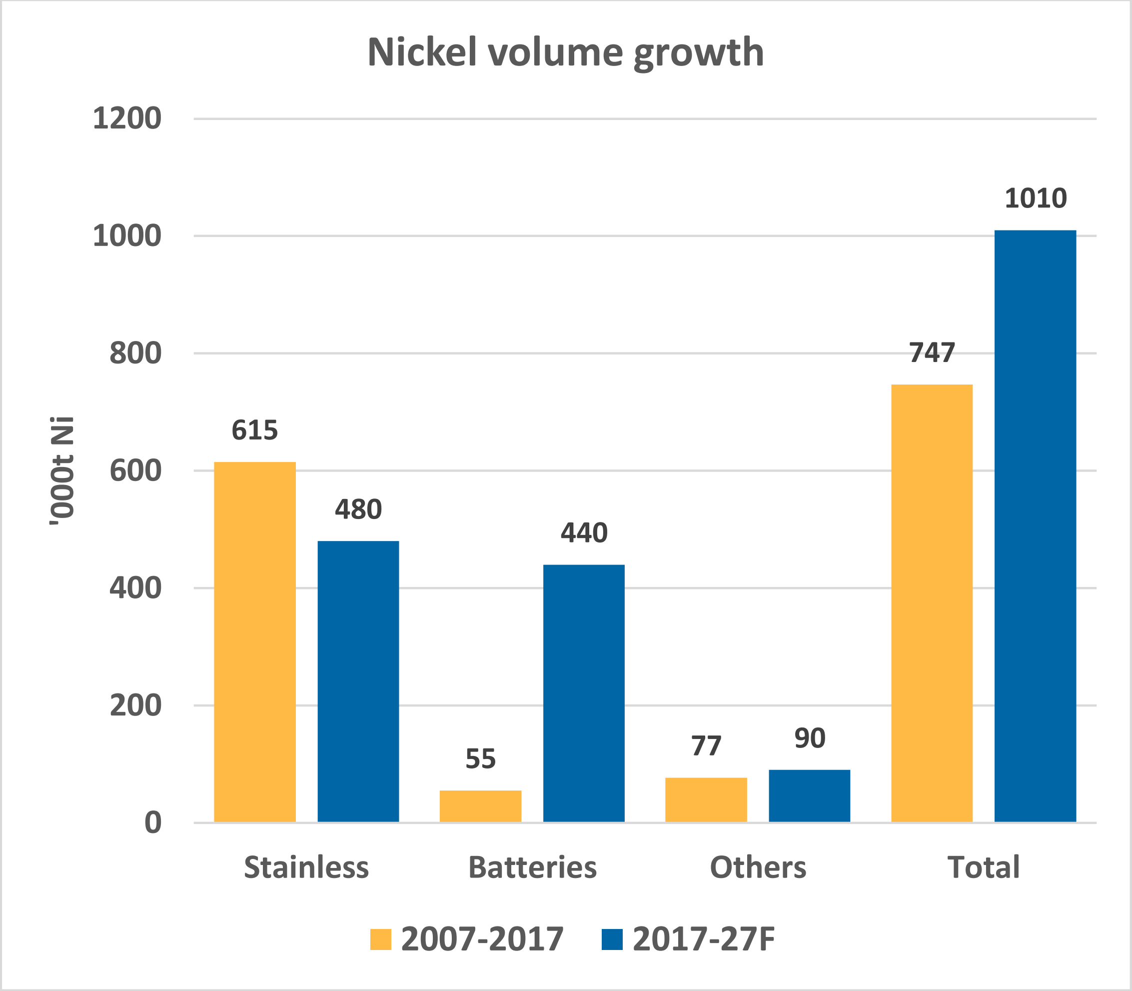
2018 primary nickel consumption by first use 2.2mt



Source: CRU, Macquarie Commodities Strategy, February 2019

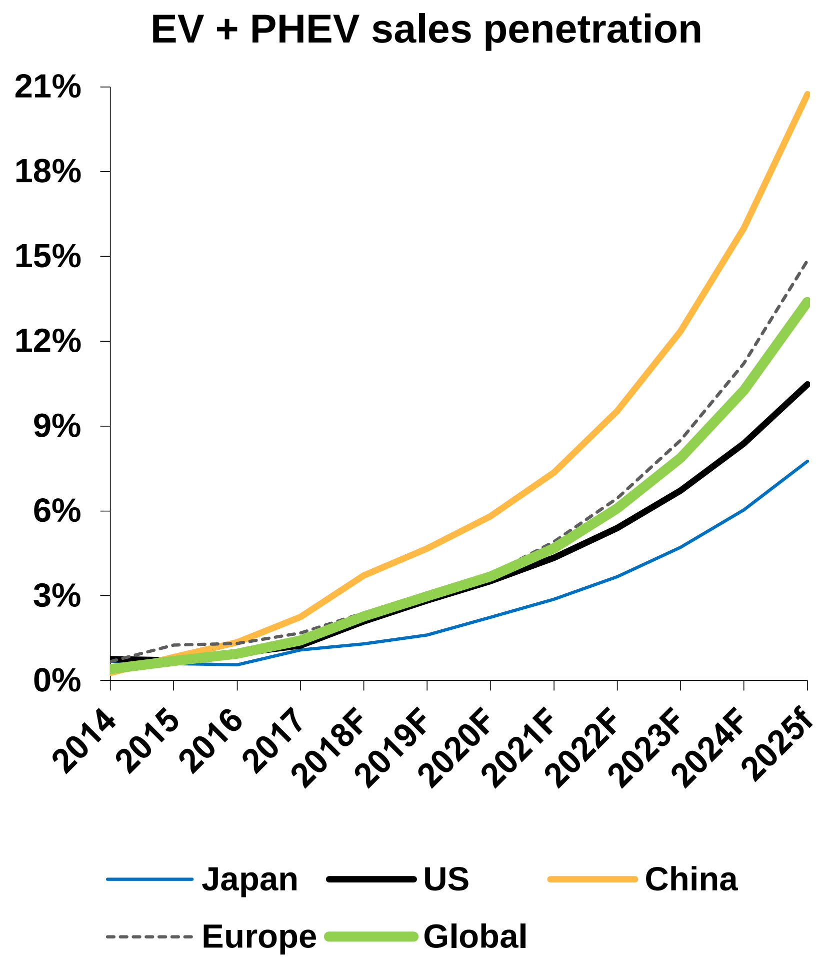
WHERE WILL NICKEL GROW IN THE NEXT TEN YEARS?

- Stainless will remain the largest growth area;
- Battery market set to grow almost as fast as stainless in volume, but from a much lower base;
- **Estimated additional 1mt of nickel units needed in next ten years.**



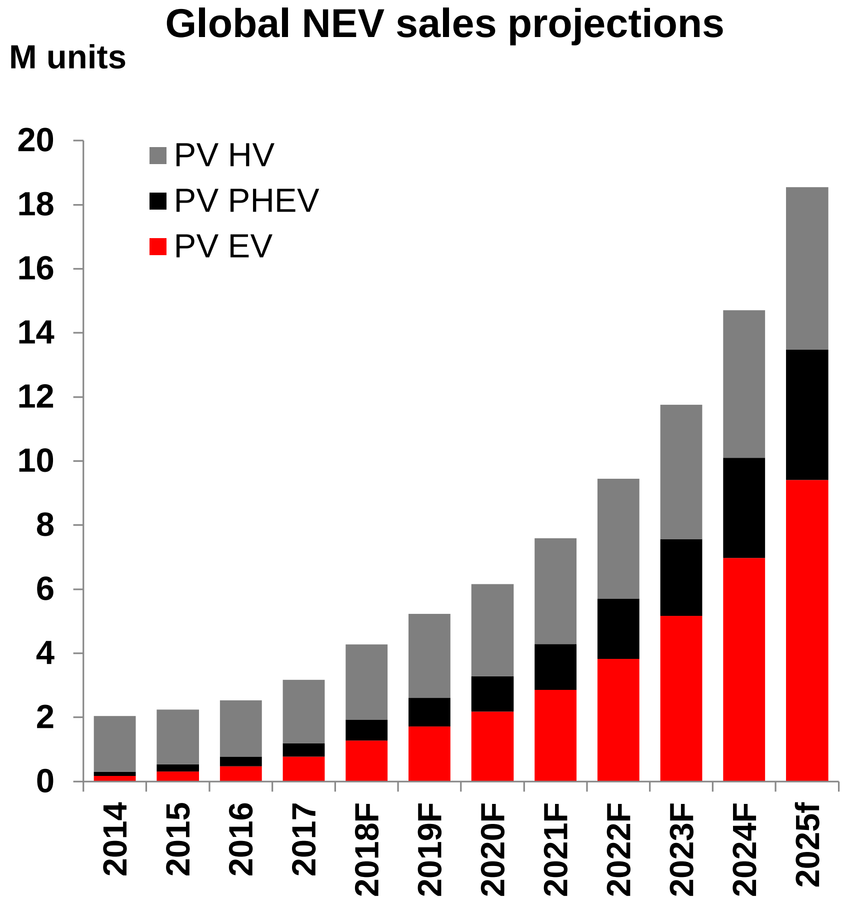
Source: CRU, INSG, Macquarie Commodities Strategy, February 2019

ELECTRIC VEHICLE SALES - CHINA LEADING THE WAY!



China leads the way, as pollution and the chance to become a leading automaker motivates subsidies for EVs

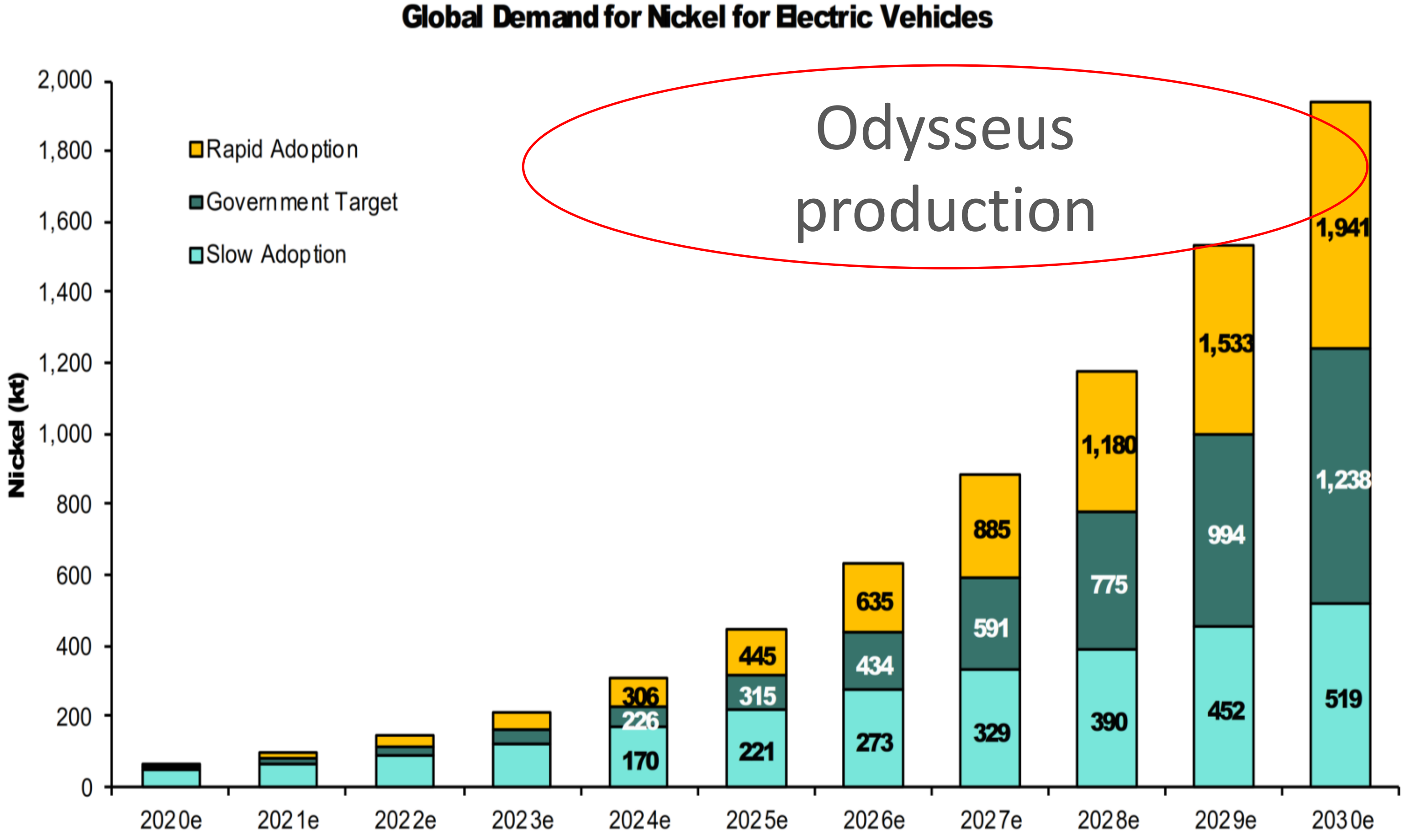
PV excluding HV to reach ~6M units by 2022 and 13.5M units by 2025



Source: Industry data, Macquarie Commodities Strategy, February 2019

FUTURE ELECTRIC VEHICLE DEMAND FOR NICKEL

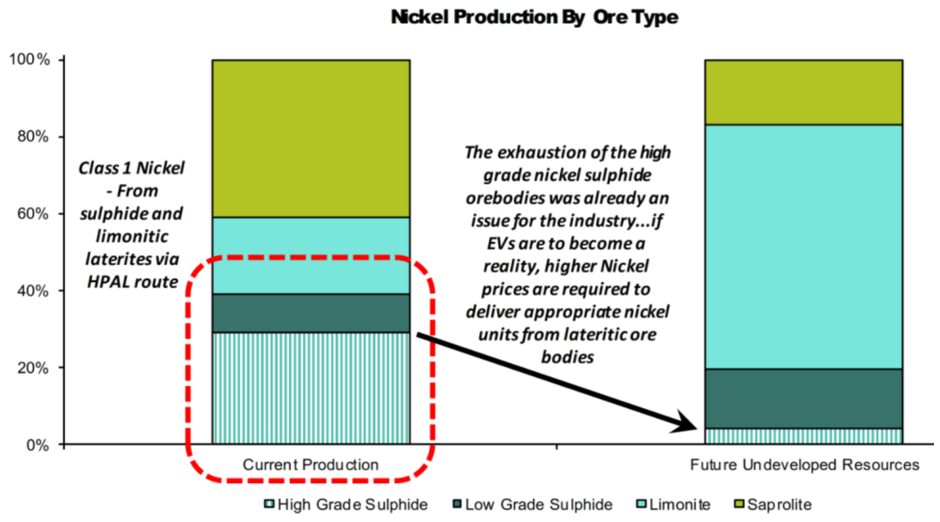
- Potentially very significant incremental demand versus a current nickel market size of c.2,200kt
- Research indicates NCM 811 will be the fastest growing battery combination by 2025!



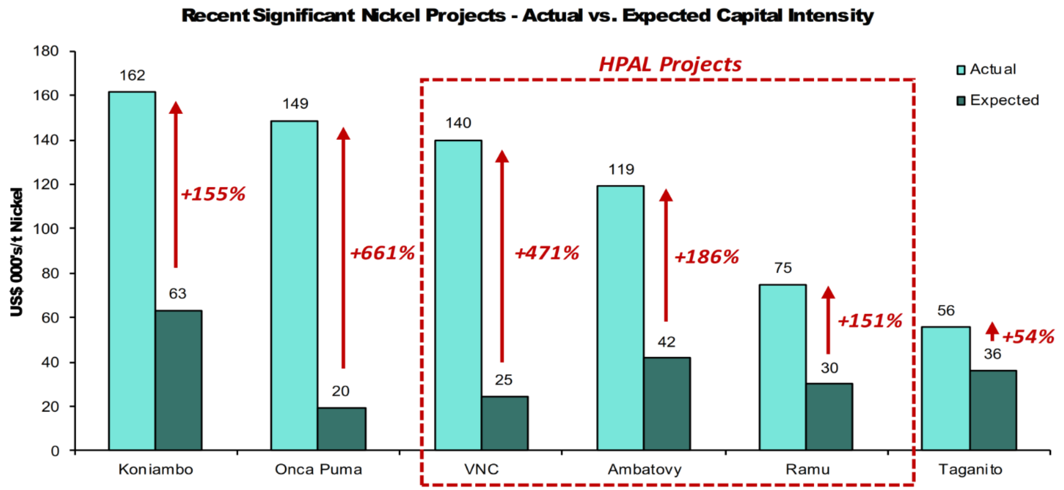
Source: Bernstein - June 2018

CHEMISTRY FAVOURS NICKEL SULPHIDE FOR BATTERIES

.. But there is very little Nickel sulphide left to be developed



And laterites via HPAL are serial disappointments



NICKEL DEFICITS NOW A REALITY !

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**.

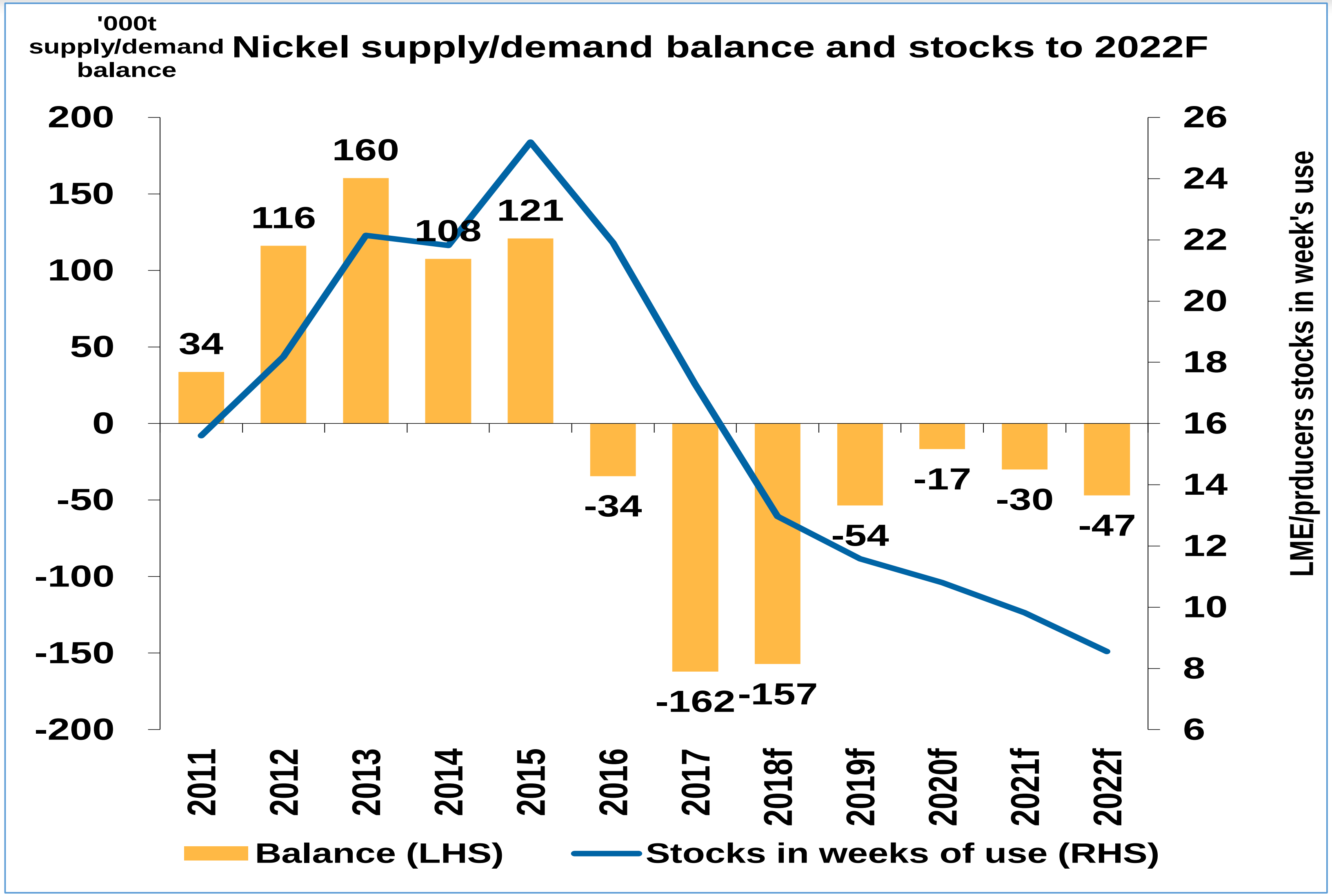
Deutsche, July 18

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, Feb 2019

WESTERN AREAS LTD

WWW.WESTERNAREAS.COM.AU | ASX:WSA

PO BOX 1891 West Perth 6872 | +61 8 9334 7777