

# INDEPENDENCE GROUP NL

## J.P. Morgan Clean Energy Metals Corporate Day

*Andrew Eddowes, Head of Corporate Development*



**ASX:IGO / ADR:IIDY**

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- There are a number of risks specific to IGO and of a general nature which may affect the future operating and financial performance of IGO and the value of an investment in IGO including and not limited to economic conditions, stock market fluctuations, commodity demand and price movements, access to infrastructure, timing of environmental approvals, regulatory risks, operational risks, reliance on key personnel, reserve and resource estimations, native title and title risks, foreign currency fluctuations and mining development, construction and commissioning risk. The production guidance in this presentation is subject to risks specific to IGO and of a general nature which may affect the future operating and financial performance of IGO.
- Any references to IGO Mineral Resource and Ore Reserve estimates should be read in conjunction with IGO’s 2017 Mineral Resource and Ore Reserve announcement dated 23 October 2017 and lodged with the ASX, which is available on the IGO website.
- All currency amounts in Australian Dollars unless otherwise noted.
- Net Debt is outstanding debt less cash balances.
- Cash Costs are reported inclusive of Royalties and after by-product credits on per unit of payable metal basis, unless otherwise stated.
- IGO reports All-in Sustaining Costs (AISC) per ounce of gold for its 30% interest in the Tropicana Gold Mine using the World Gold Council guidelines for AISC. The World Gold Council guidelines publication was released via press release on 27 June 2013 and is available from the World Gold Council’s website.
- Underlying EBITDA is a non-IFRS measure and comprises net profit or loss after tax, adjusted to exclude tax expense, finance costs, interest income, asset impairments, redundancy and restructuring costs, depreciation and amortisation, and once-off transaction costs.
- Underlying NPAT comprises net profit (loss) after tax adjusted for; post tax effect of acquisition and integration costs, and impairments.
- Free Cash Flow comprises Net Cash Flow from Operating Activities and Net Cash Flow from Investing Activities. Underlying adjustments exclude acquisition costs, proceeds from investment sales and payments for investments.

## Presentation Focus

- Corporate overview
- Strong 3Q18
- Nova
- Nova and Fraser Range Exploration
- Energy storage thematic
- IGO opportunities



# Robust balance sheet as focus shifts from construction to delivery and discovery

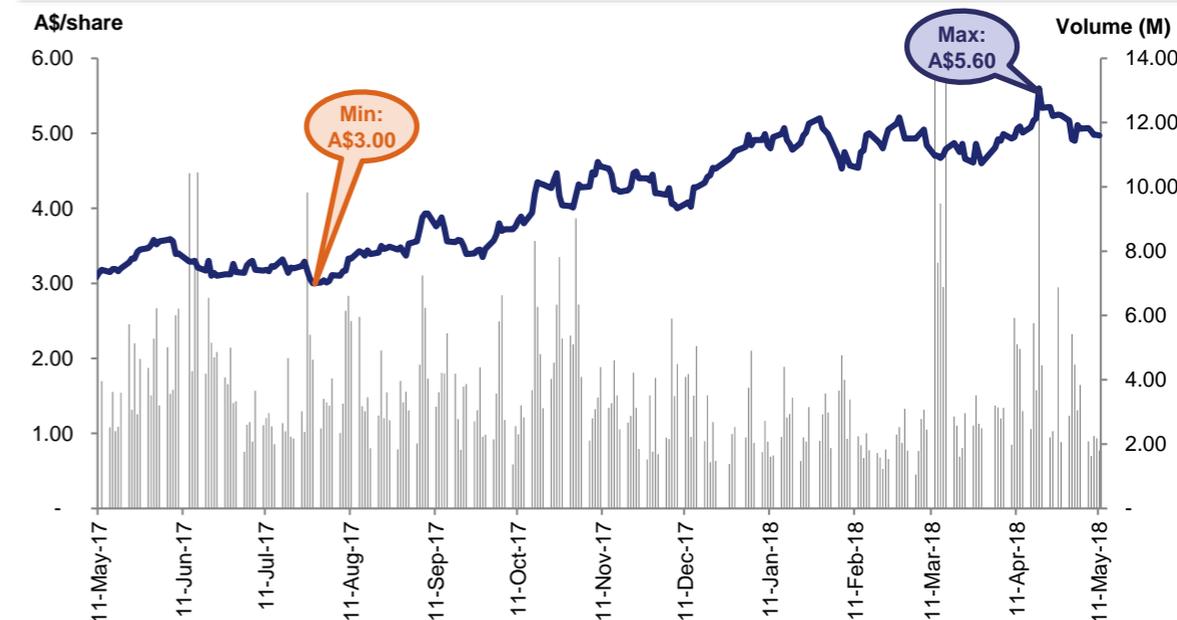
<b>ASX</b>	<b>IGO</b>
<b>Base</b>	<b>Perth, WA</b>
<b>Market Cap<sup>(1)</sup></b>	<b>A\$3 Billion</b>
<b>Cash<sup>(2)</sup></b>	<b>A\$70M</b>
<b>Debt<sup>(2)</sup></b>	<b>A\$143M</b>
<b>Revolver<sup>(1)</sup></b>	<b>A\$200M (undrawn)</b>
<b>Dividend Policy</b>	<b>&gt;30% NPAT</b>

1) As at market close 11 May 2018  
 2) As at 31 Mar 2018  
 3) As at 29 Mar 2018

## Share Ownership

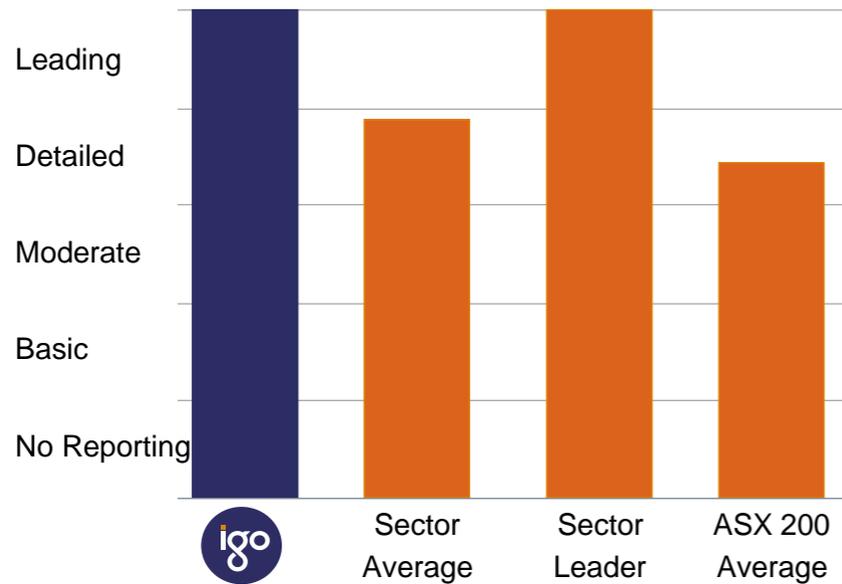
Substantial Holders <sup>(1)</sup>		Institutional Ownership <sup>(3)</sup>	
Mark Creasy	16%	Australia	66%
FIL	9%	USA	21%
T Rowe Price	8%	UK & Europe	10%
CBA	6%	ROW	3%
Ausbil	5%		

## Share Price Performance<sup>(1)</sup>



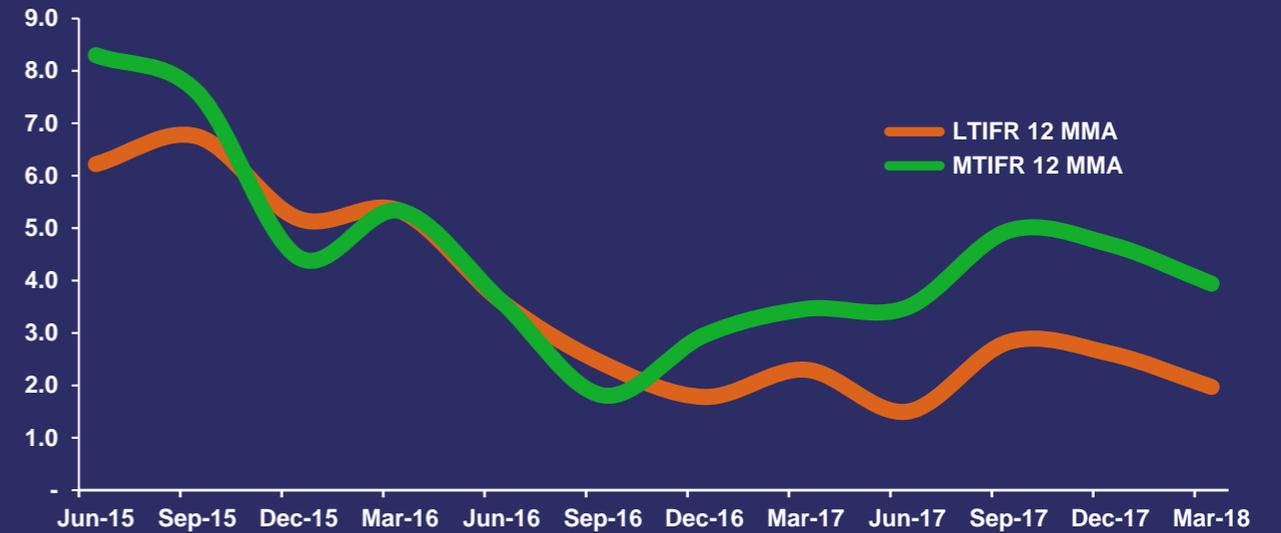
# Embedded ESG performance & reporting in the business

## ACSI Rating of ASX200 Sustainability Reporting<sup>(5)</sup>

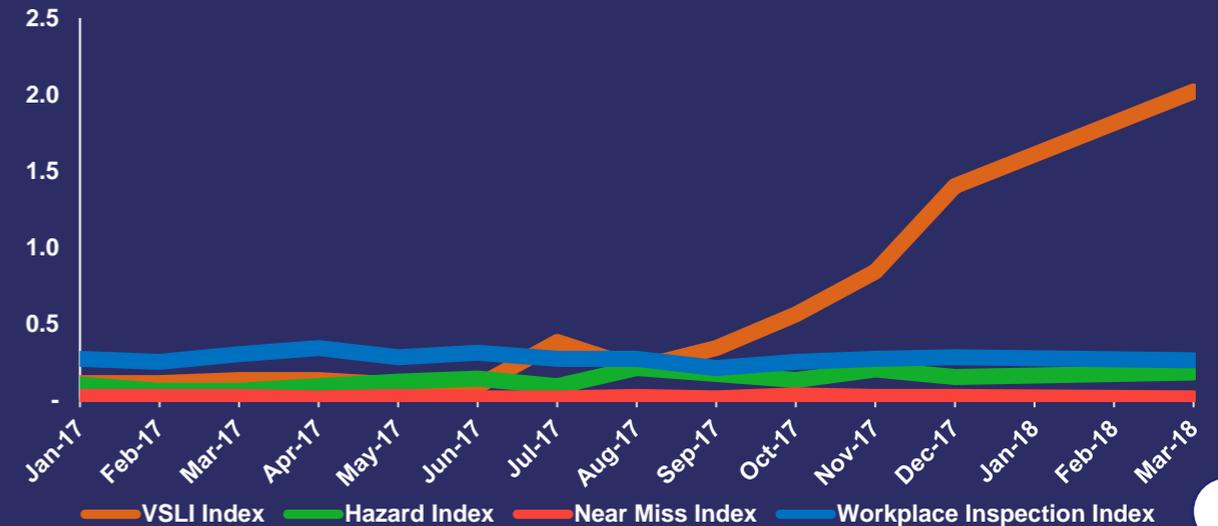


- 1) 12 month moving average MTIFR – Medically Treated Injury Frequency Rate: calculated as the number of medically treated injuries x 1,000,000 divided by the total number of hours worked
- 2) 12 month moving average LTIFR – Lost Time Injury Frequency Rate: calculated as the number of Lost Time injuries x 1,000,000 divided by the total number of hours worked
- 3) Sep-17 LTIFR rate has increased from 2.75 to 2.83 as a result of the reclassification of a single injury from 29 Jul 2017
- 4) In the December 2017 Quarterly Report, a LTIFR of 2.09 was reported for that period. This was subsequently revised to 2.61 as a result of reclassification of injuries
- 5) VSLI: Visual Safety Leadership Interaction

## Key Lag Safety Metrics<sup>(1,2,3)</sup>



## Key Lead Safety Metrics<sup>(5)</sup>



# Strengthening Financial Results



**EBITDA up 14%, strong free cash flow of A\$57M and net debt reduced to A\$73M**

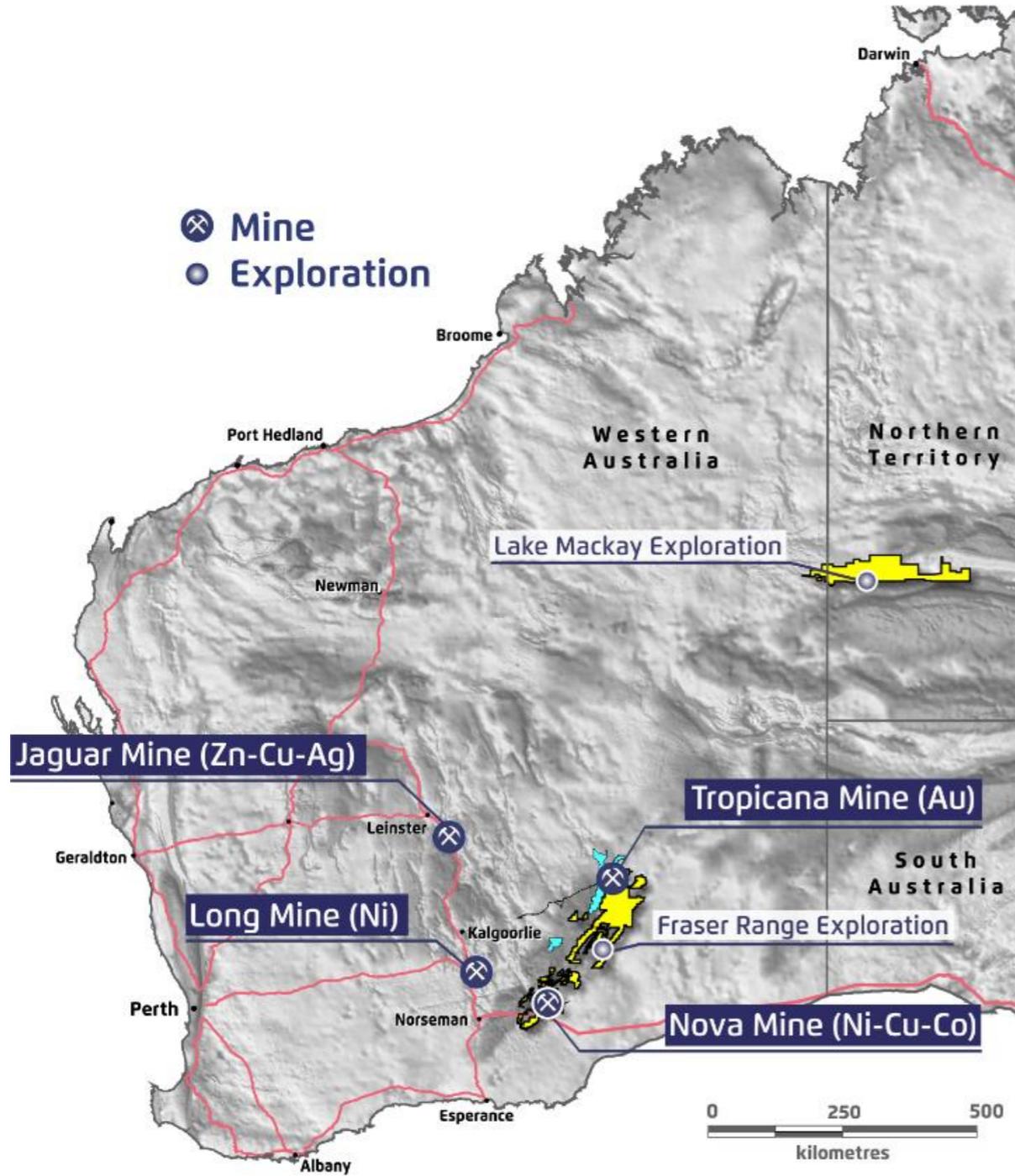
	Units	2Q18	3Q18	YTD	QoQ
Revenue and Other Income	A\$M	207.3	182.7	537.5	(12%)
Underlying EBITDA <sup>(1)</sup>	A\$M	64.5	73.7	207.1	14%
Profit (Loss) After Tax	A\$M	(1.5)	9.2	12.4	n.a
Net Cash from Operating Activities	A\$M	50.8	92.3	203.7	82%
Underlying Free Cash Flow <sup>(2)</sup>	A\$M	11.6	56.5	97.1	387%
Cash	A\$M	51.3	70.3	70.3	37%
Debt	A\$M	171.4	142.9	142.9	(17%)

**Stronger free cash flow driven by higher commodity prices and timing of sales receipt**

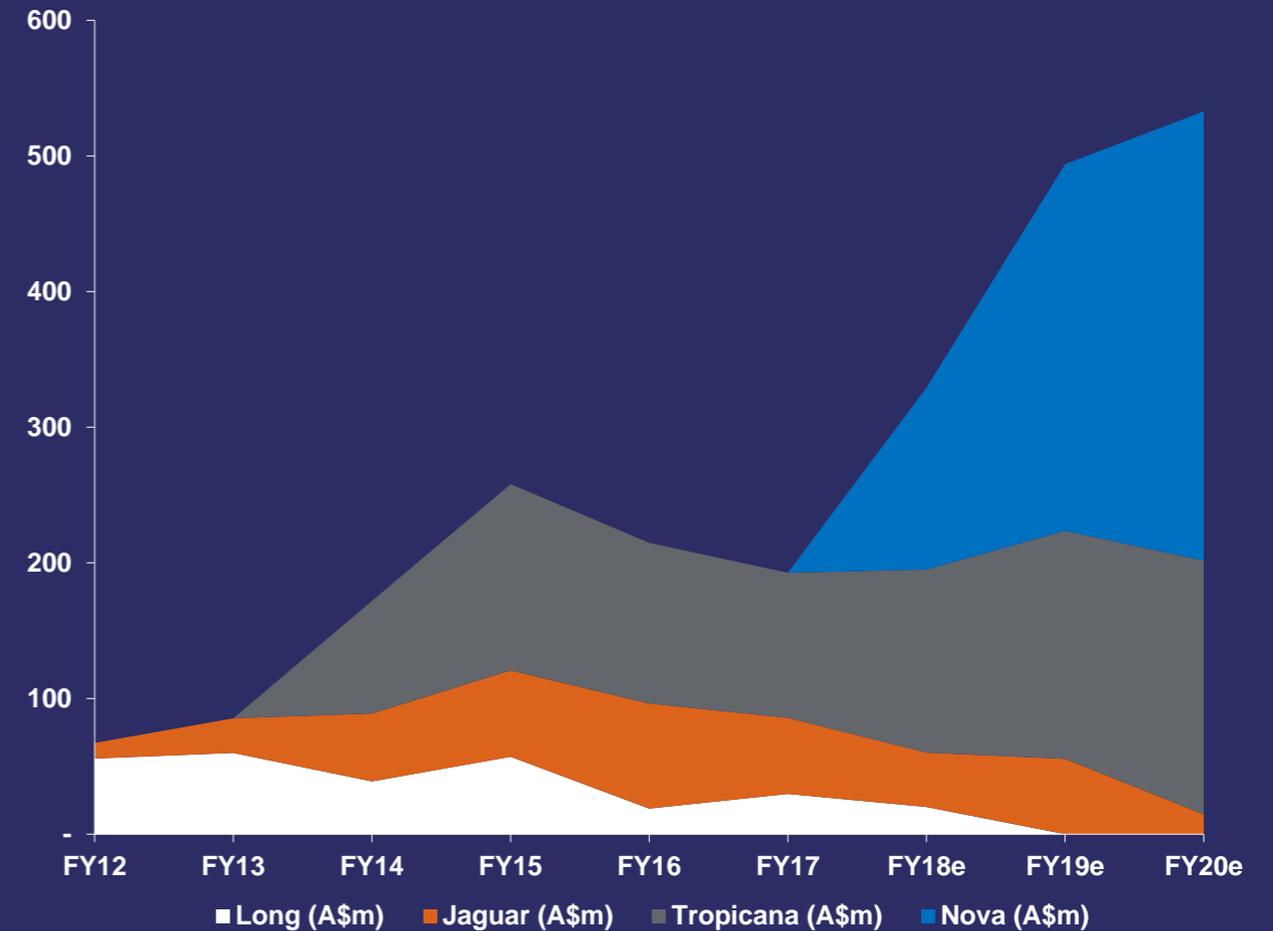
1) Underlying EBITDA is a non-IFRS measure (refer to Disclaimer page)

2) Free Cash Flow comprises Net Cash Flow from Operating Activities and Net cash Flow from Investing Activities

# Focus on quality and long life assets which deliver great financial outcomes



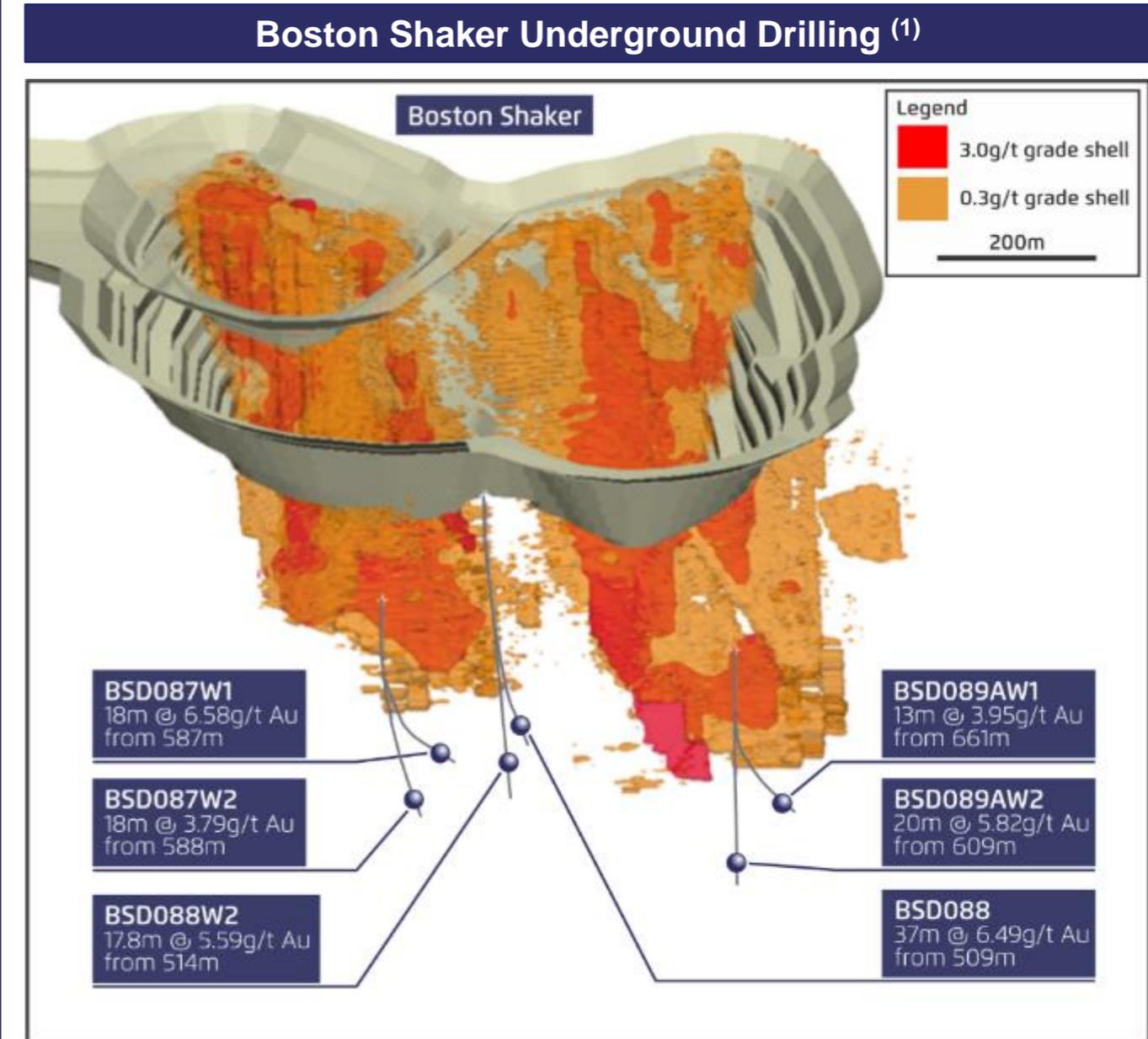
IGO EBITDA Profile (A\$M)<sup>(1)</sup>



1) Macquarie Research – 8 May 2018

# Tropicana Gold Mine

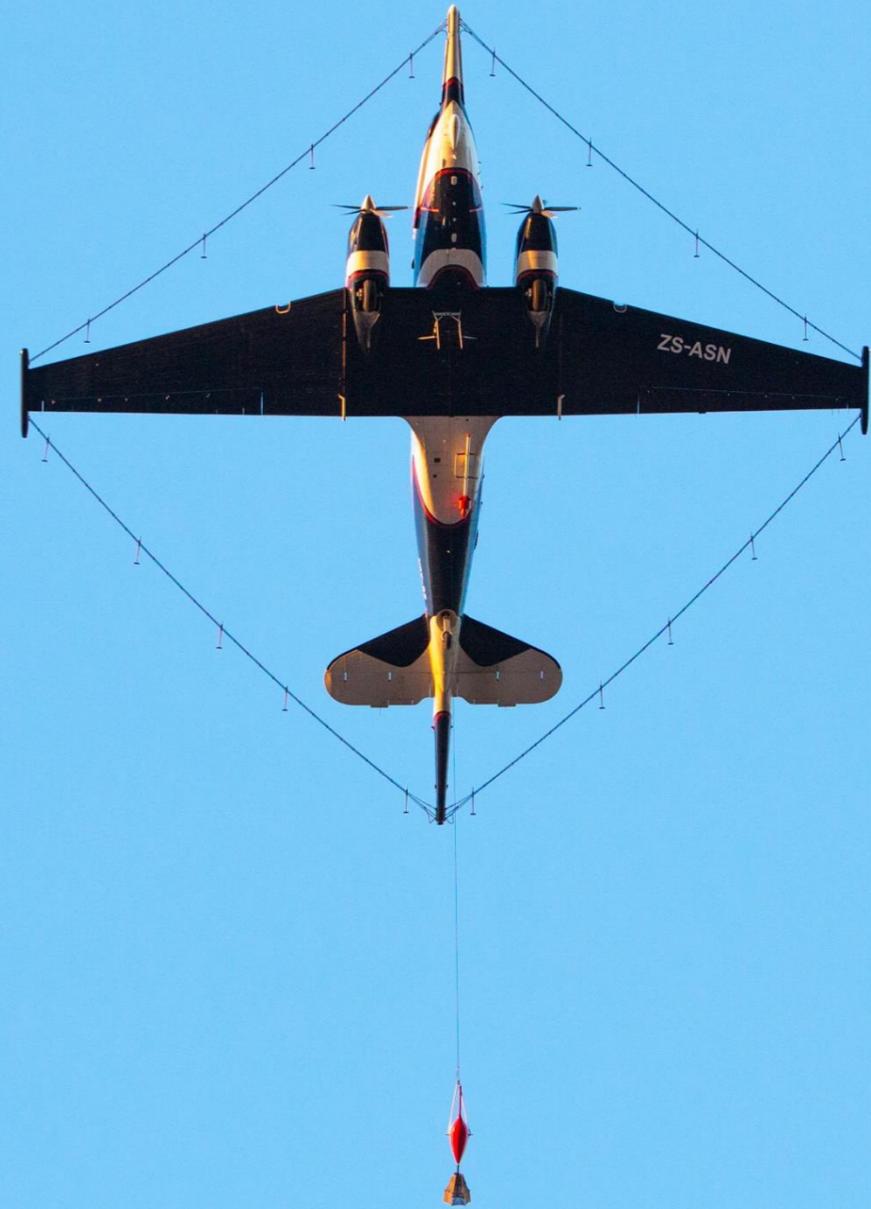
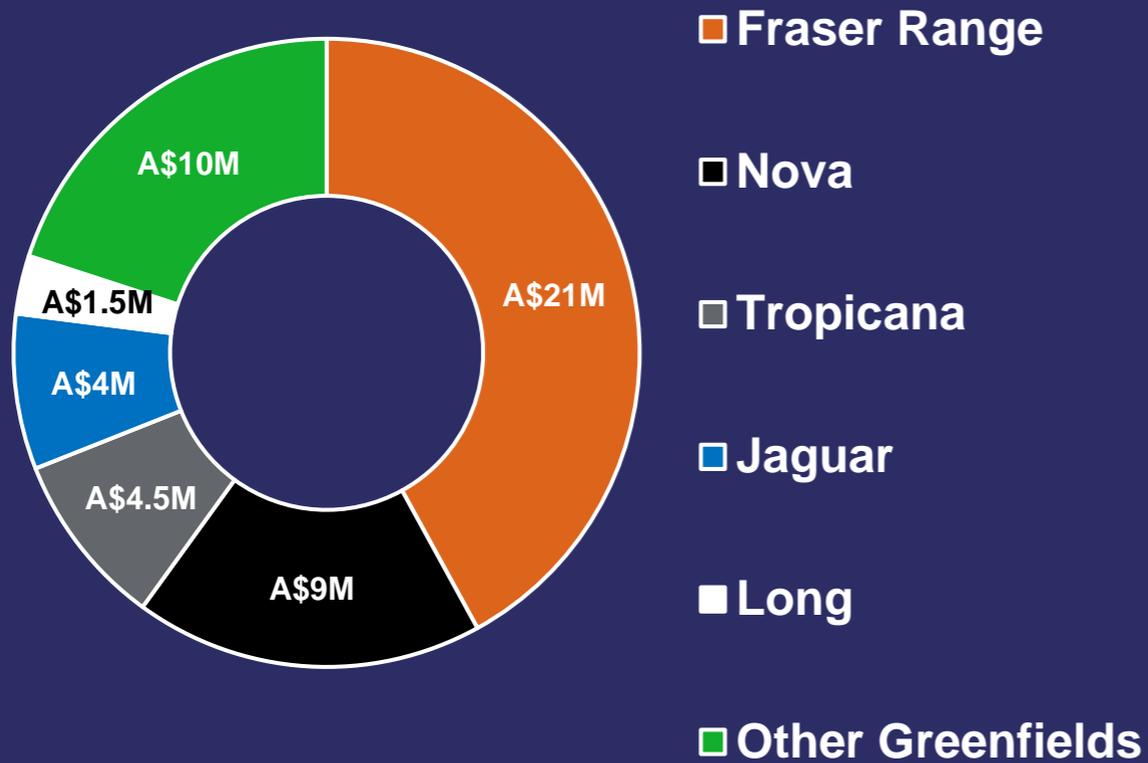
- 465,000oz gold production (100%) at \$1,115/oz AISC<sup>(1)</sup>
- Higher free cash flow FY18-20
  - Higher gold production from grade streaming
- Reserve extension opportunities
  - Boston Shaker underground study during CY18
  - Future underground assessment at Havana and Havana South
  - Regional exploration along 160km of strike on 3,660km<sup>2</sup>



1) Mid-point of FY18 guidance range

1) Refer to ASX release dated 7 Dec 2017: Tropicana JV Commits to Long Island and Increased Milling Capacity

# A\$50M Commitment to Discovery in FY18



# Nova

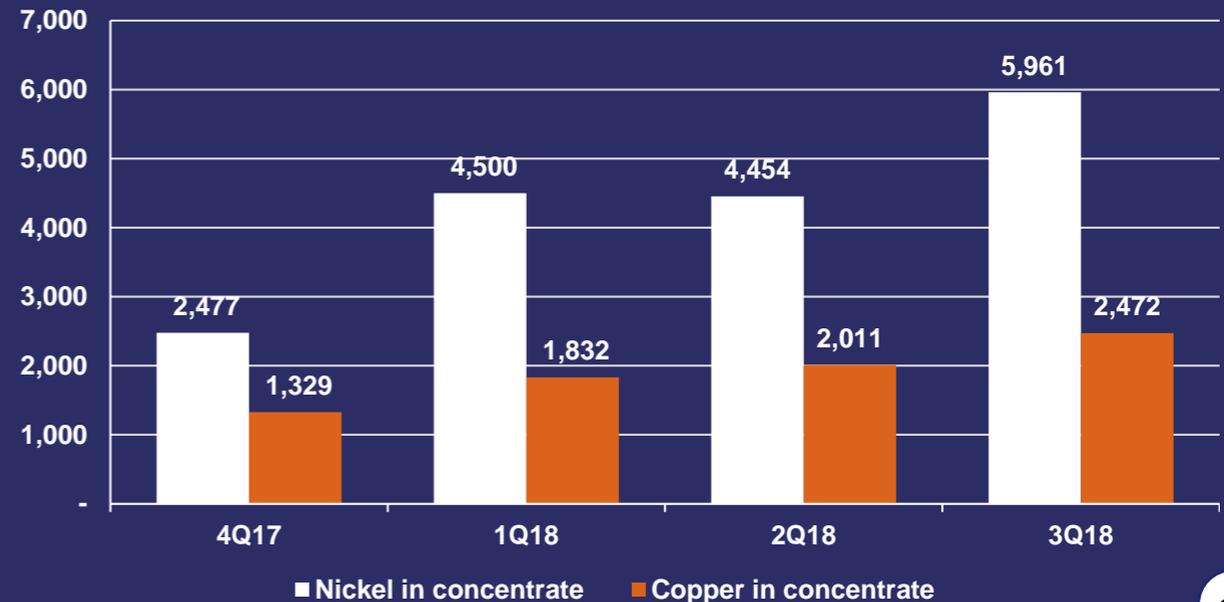




# Nova

- Delivers scale, low cost, long mine life and exploration upside
- Commercial production since 1 July 2017
  - Five years from discovery

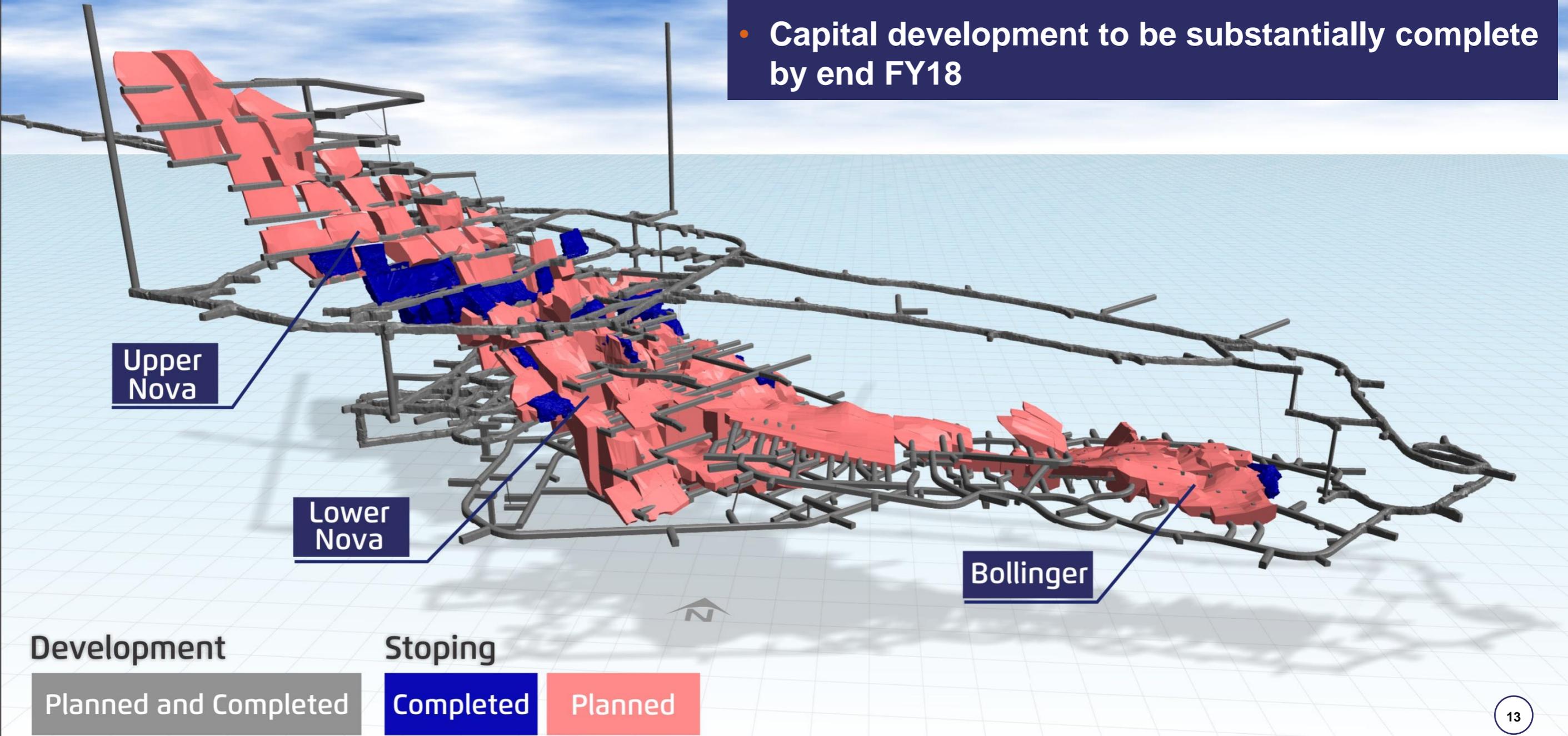
Nova Production (tonnes)

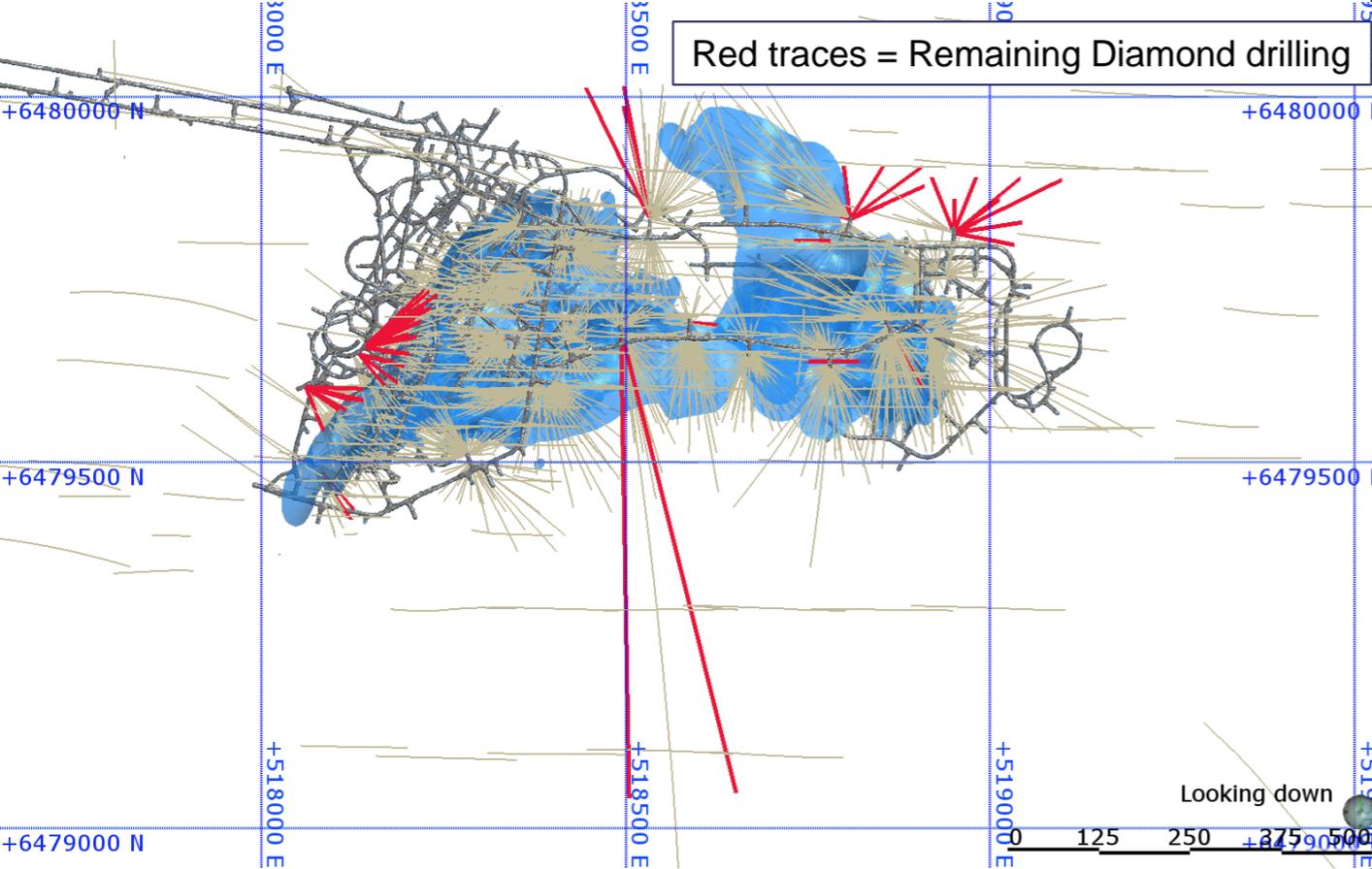


## Successful first three quarters of commercial production

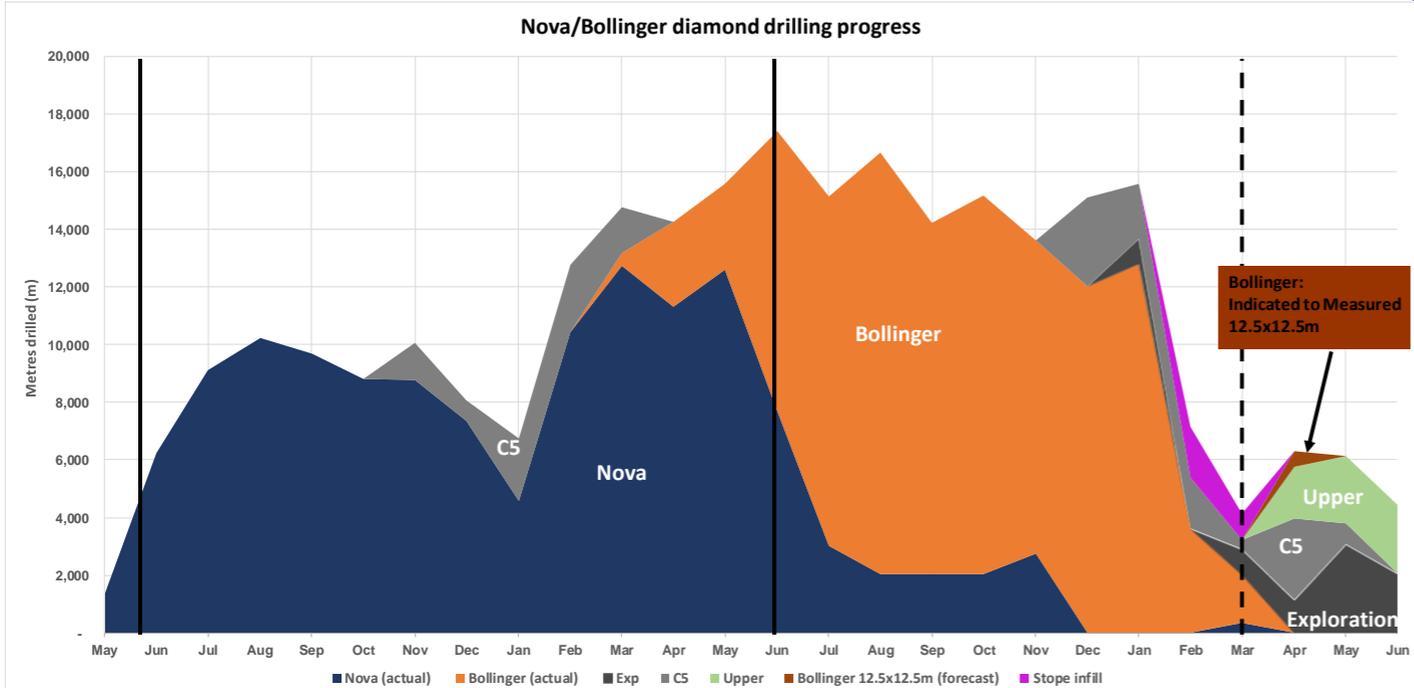
- Achieved nameplate capacity of 1.5Mtpa
- Transitioned to smaller number of larger stopes at Nova and Bollinger
- Metallurgical recoveries performing in line with or better than design recoveries
- Nickel grade consistently increasing

- Nova is a shallow, thick, flat-lying orebody delivering low development costs and low mining costs
- Capital development to be substantially complete by end FY18



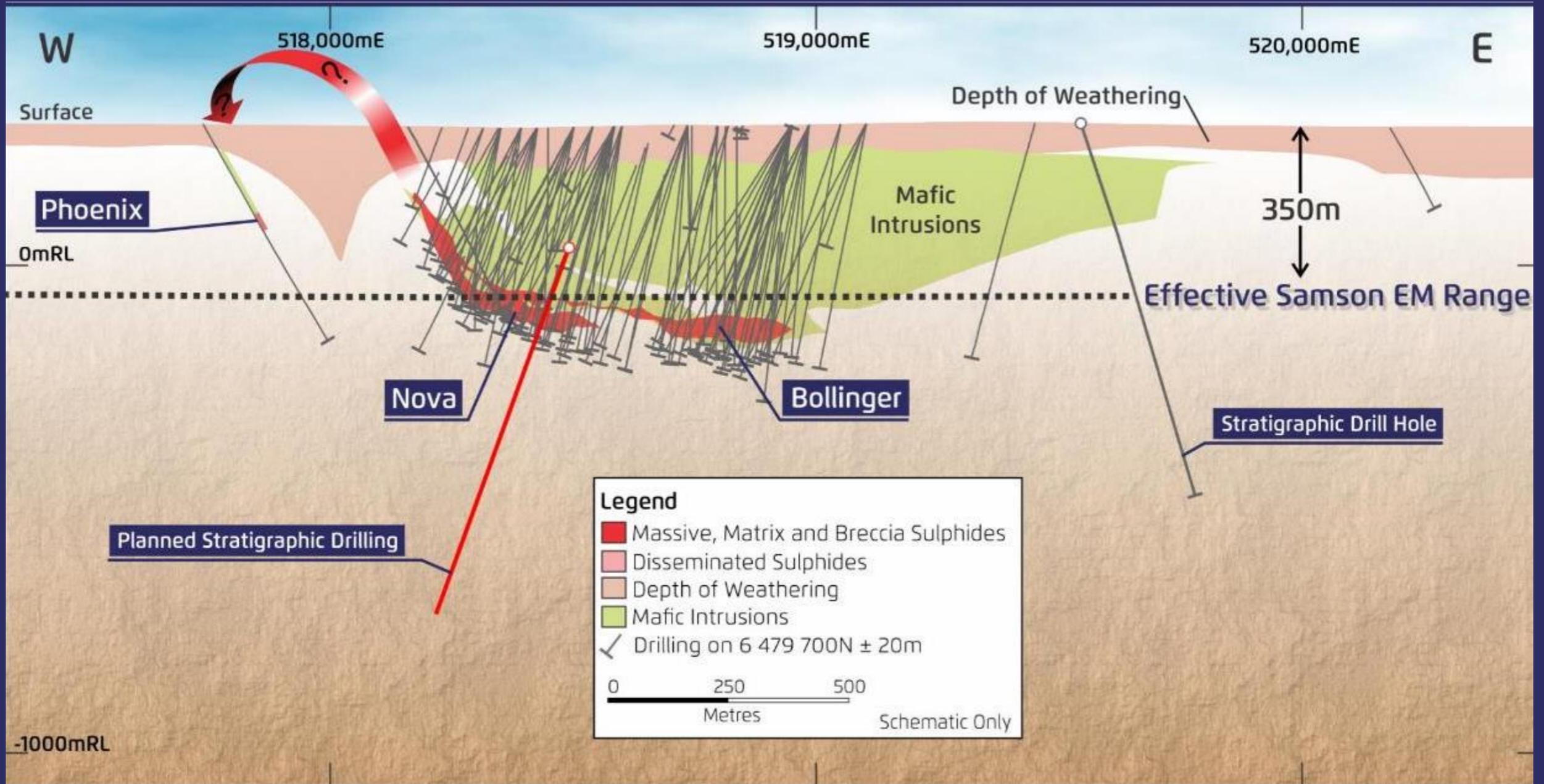


**Resource model largely de-risked with grade control drilling at Nova and Bollinger to be completed by end-FY18**



1) Refer to ASX release dated 26 Jul 2017: Nova Mineral Resource Estimate and Exploration Update

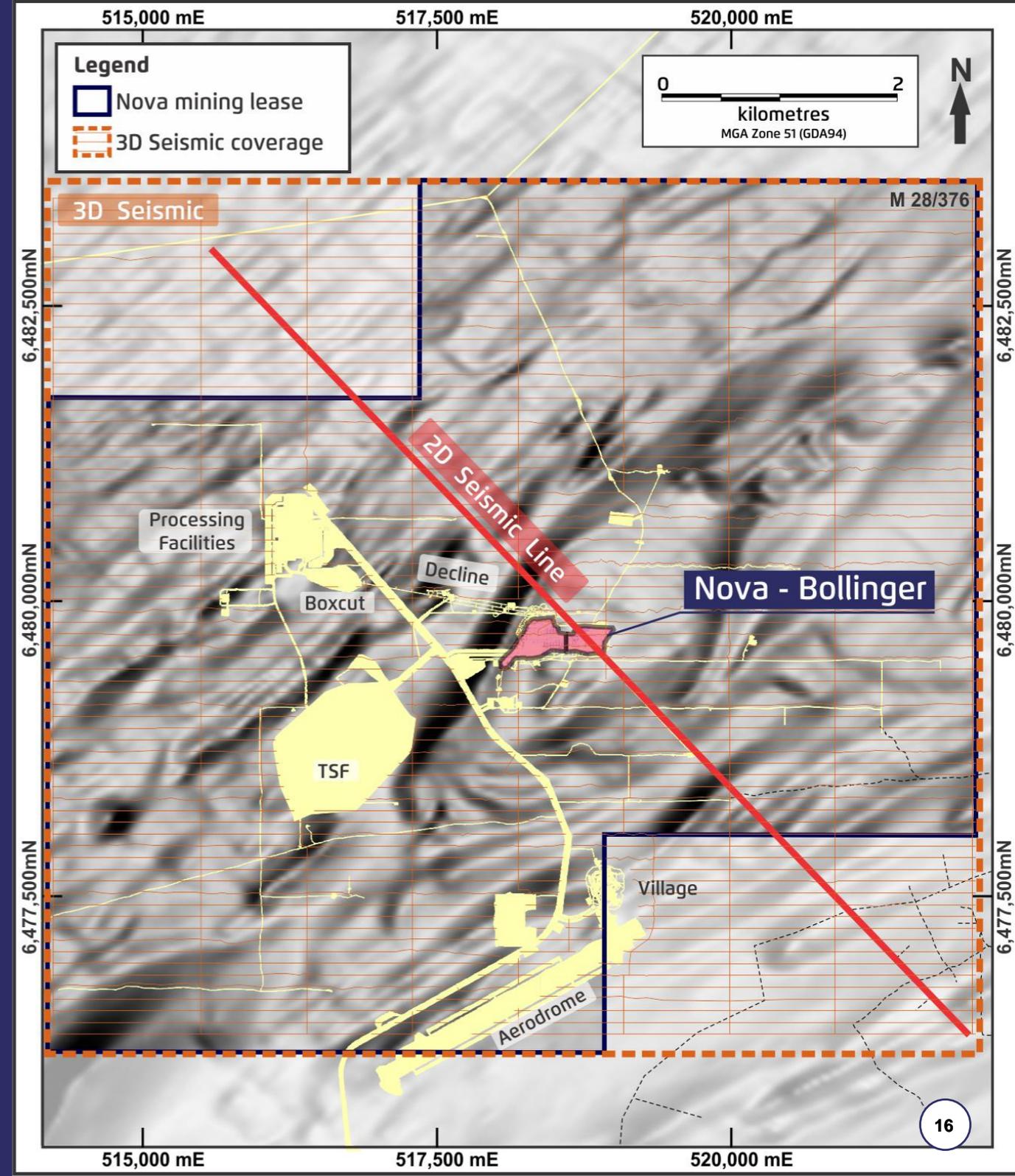
# Nova near mine exploration search space is wide open with focus to date on Nova/Bollinger resource envelope

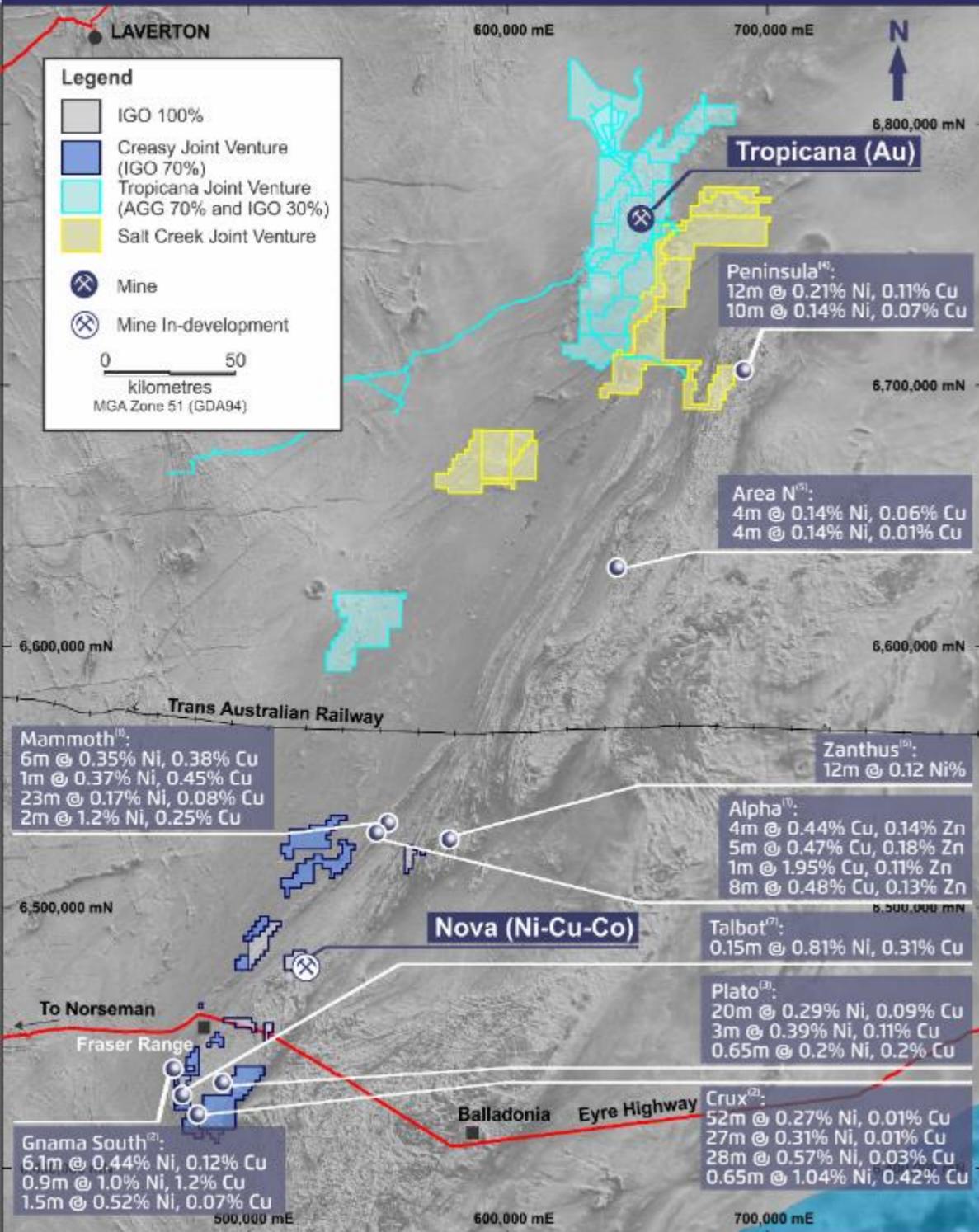


# Understanding the potential extensions of the Nova intrusive

- 58km<sup>2</sup> 3D seismic survey over mining lease completed
- Drilling 3D seismic targets in FY19
- Continued drilling of extension to intrusive to the NW of Nova

**Goal is to expand Nova!**



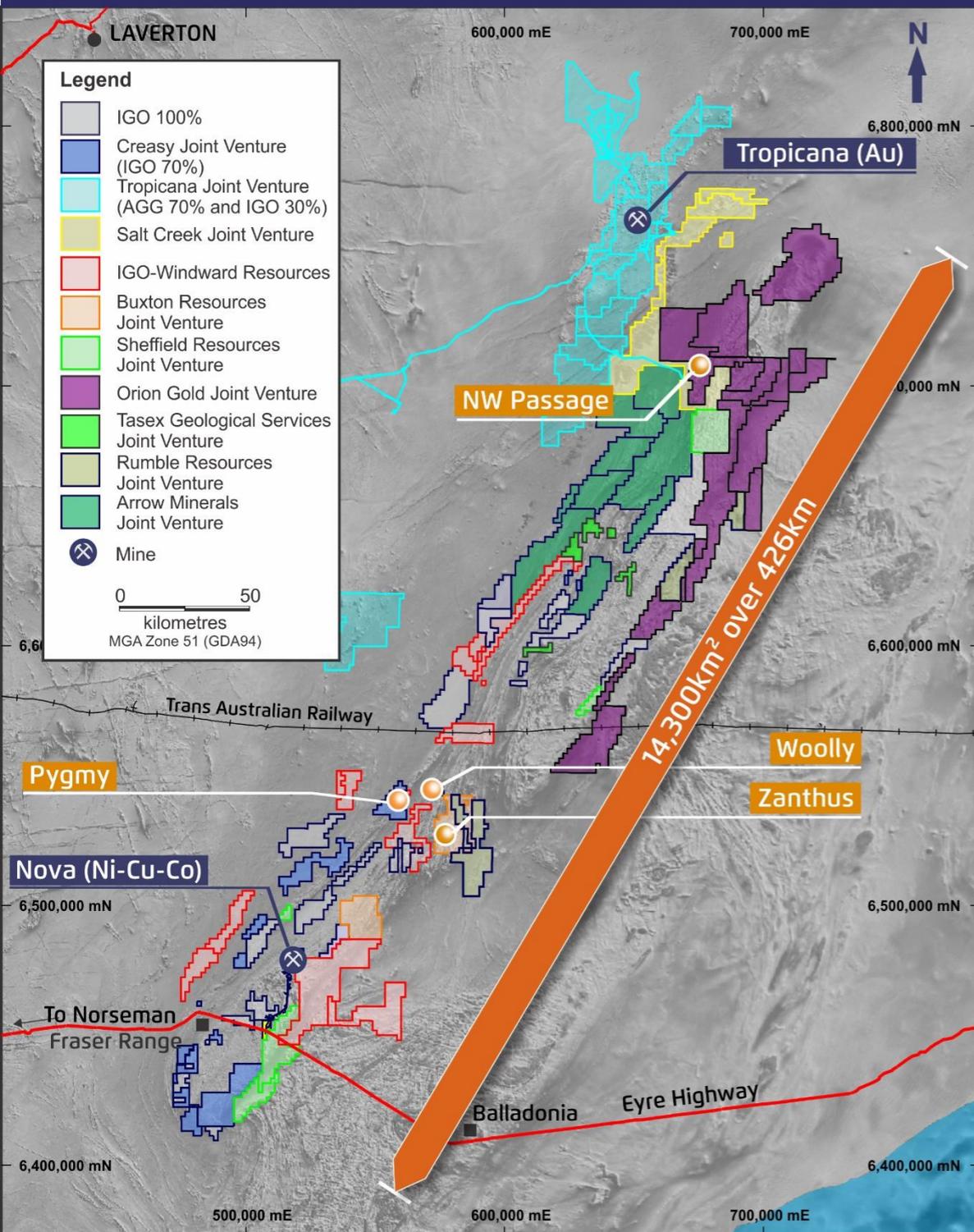


# Why explore the Fraser Range?

- Multiple magmatic intrusions
- Ni/Cu anomalism reported by multiple explorers along belt
- Disseminated and blebby sulphides

Empirical evidence demonstrates belt is fertile

- 1) Classic Minerals ASX Releases: 29 Aug 2013, 12 Dec 2013 and 17 Dec 2016
- 2) Sirius Resources ASX Release: June 2015 Quarterly
- 3) Enterprise Metals EIS Final Drilling Report to DMP: 25 Jul 2014
- 4) Orion Gold ASX Release 17 Mar 2014
- 5) Legend Mining ASX Release 6 Jun 2017
- 6) Buxton Resources ASX Release: 15 Dec 2014
- 7) Newmont report to DMP, 1968
- 8) Arrow Minerals ASX Release: 5 Feb 2018



# Systematic exploration over 14,300km<sup>2</sup> of consolidated tenure

- Multiple EM platforms
- Bedrock geochem using Aircore
- Gravity survey & mapping
- Follow up RC/DDH
- Actively looking for commodities aligned with energy storage thematic
  - DeBeers Database provides a competitive advantage

**Goal is to discover the next Nova!**



# Energy Storage Thematic

# Lithium Ion Batteries



Batteries with nickel-based chemistries have higher energy densities

## NMC

(Nickel, Manganese, Cobalt)

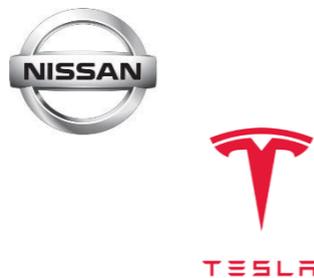
- Current favourite for EV's
- High energy density
- Different variations with different chemical ratios, i.e. NMC 111, 433, 811



## NCA

(Nickel, Cobalt, Aluminium)

- Uses: medical devices, industrial applications, high end BEV's (Tesla)
- High energy density
- Low safety profile, high cost



## LFP

(Lithium, Iron, Phosphate)

- Used in most Chinese EV's and buses
- Low energy density
- Very stable with a long life span

## LMO

(Lithium, Manganese, Oxide)

- Uses: power tools, medical devices
- Low energy density
- Very stable, however very low life span

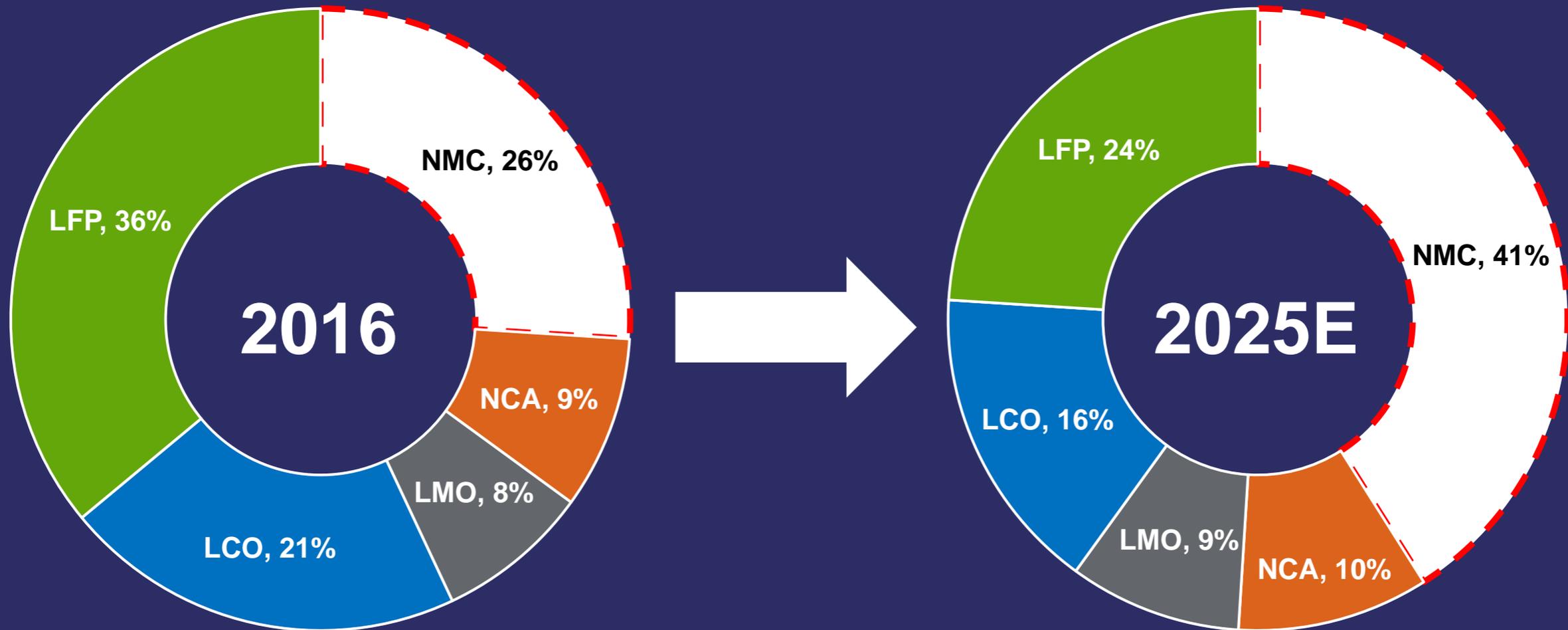


## LCO

(Lithium, Cobalt, Oxide)

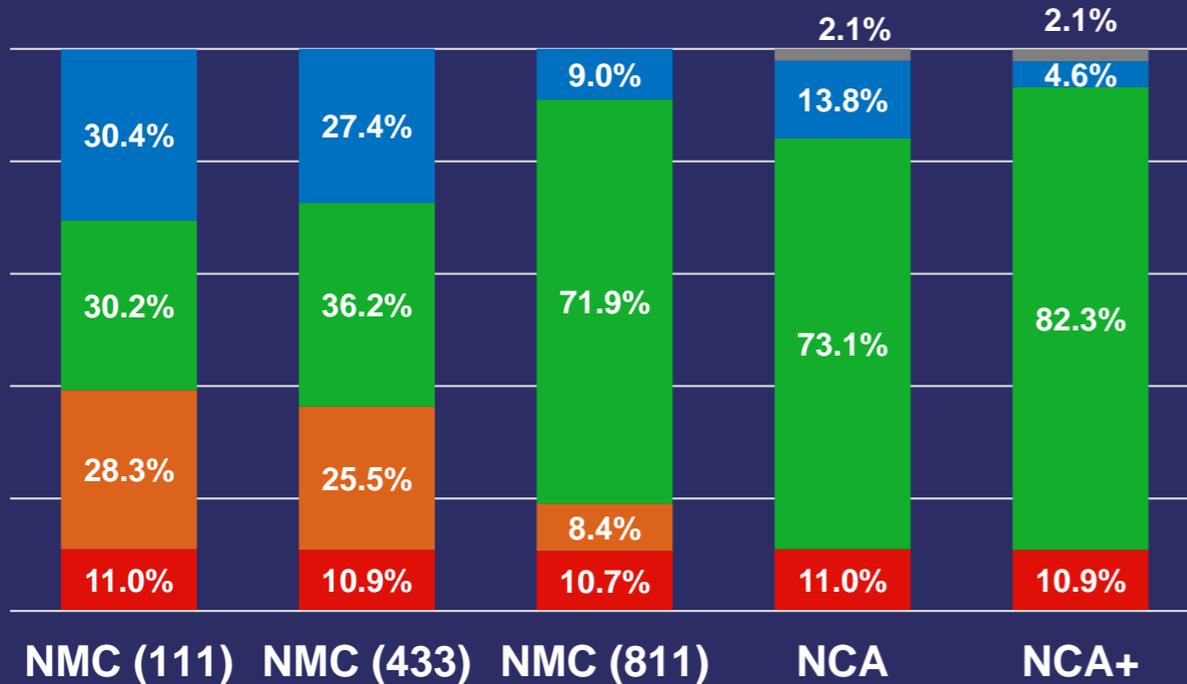
- Uses: smartphones, laptops, cameras
- High energy density
- Very low safety profile – too explosive in EV's

# Cathode active materials allocation is expected to be mostly NMC by 2025



1) Source: BMO Capital Markets: The Lithium Ion Battery and the EV Market, February 2018

Cathode Metal Content<sup>(1)</sup>



■ Aluminium ■ Cobalt ■ Nickel ■ Manganese ■ Lithium

## Evolving EV battery chemistry designed to

- Improve battery performance
- Reduce overall cost
- Cathode component ~18% of battery cost<sup>(1)</sup>
- Enhance EV penetration

1) Source data: Citi EV's putting the pedal to the metal 31 October 2017



## Changing EV battery chemistry will boost Ni demand

- 24kg nickel, 24kg cobalt & 91kg copper

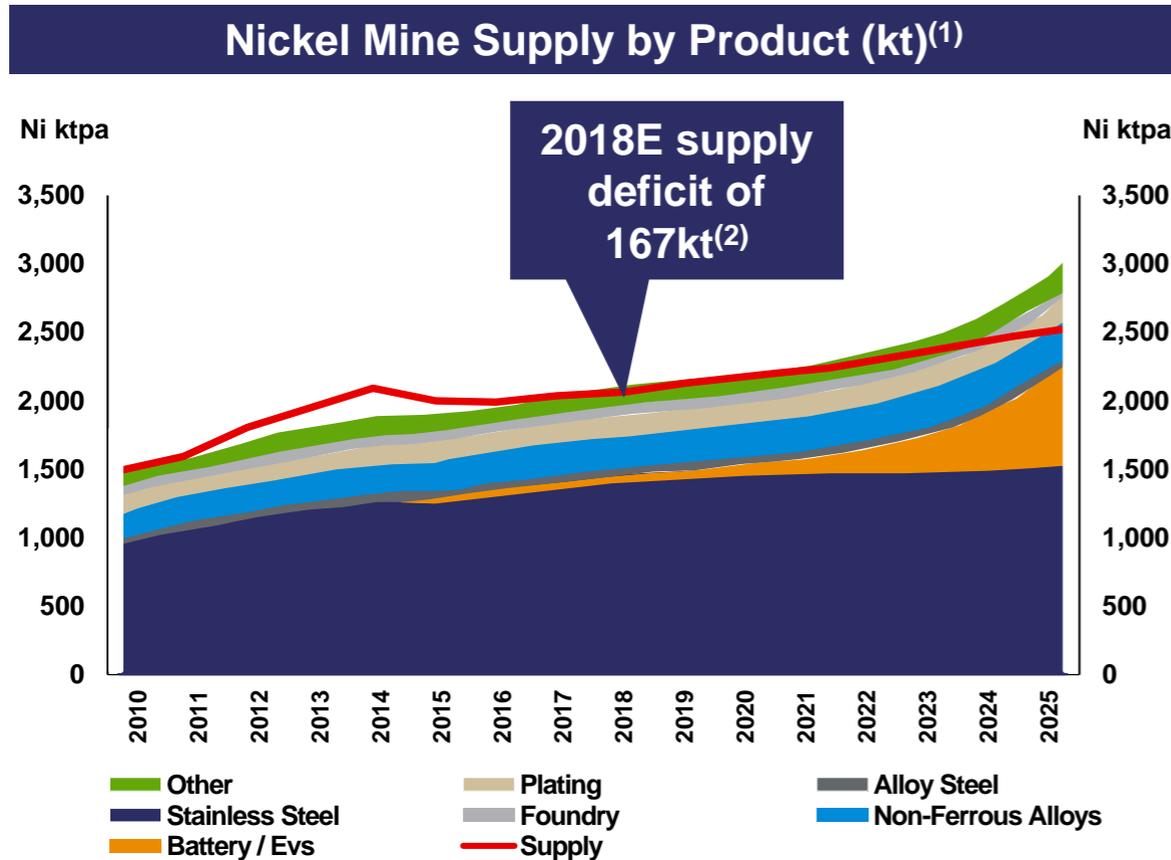
in a 2017 Chevy Bolt<sup>(1)</sup>

For 811 NMC chemistry in a Bolt<sup>(2)</sup>

- Nickel increases by 15kg
- Cobalt decreases by 17kg

1) Source data: UBS Research titled Electric Car Teardown – Disruption Ahead dated 18 May 2017

2) Source data: UBS Research titled Nickel: Electric Vehicle Demand Refinements dated 1 Nov 2017

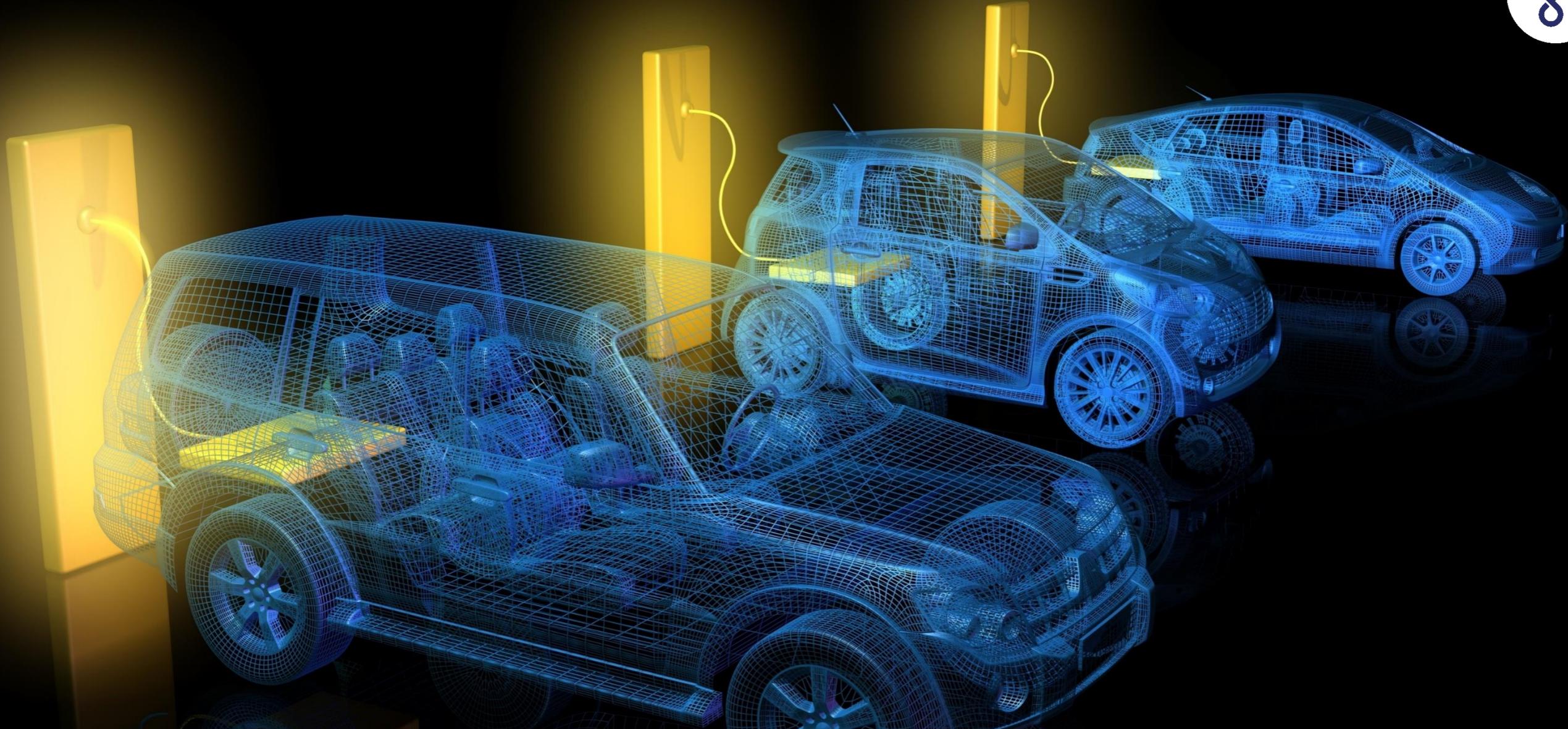


## Nickel to be a big winner from EV demand disruption

- Market in deficit in 2016 & 2017
- Synchronous growth in USA, Europe and Asia
- 300-900kt of additional nickel required by 2025<sup>(1)</sup>

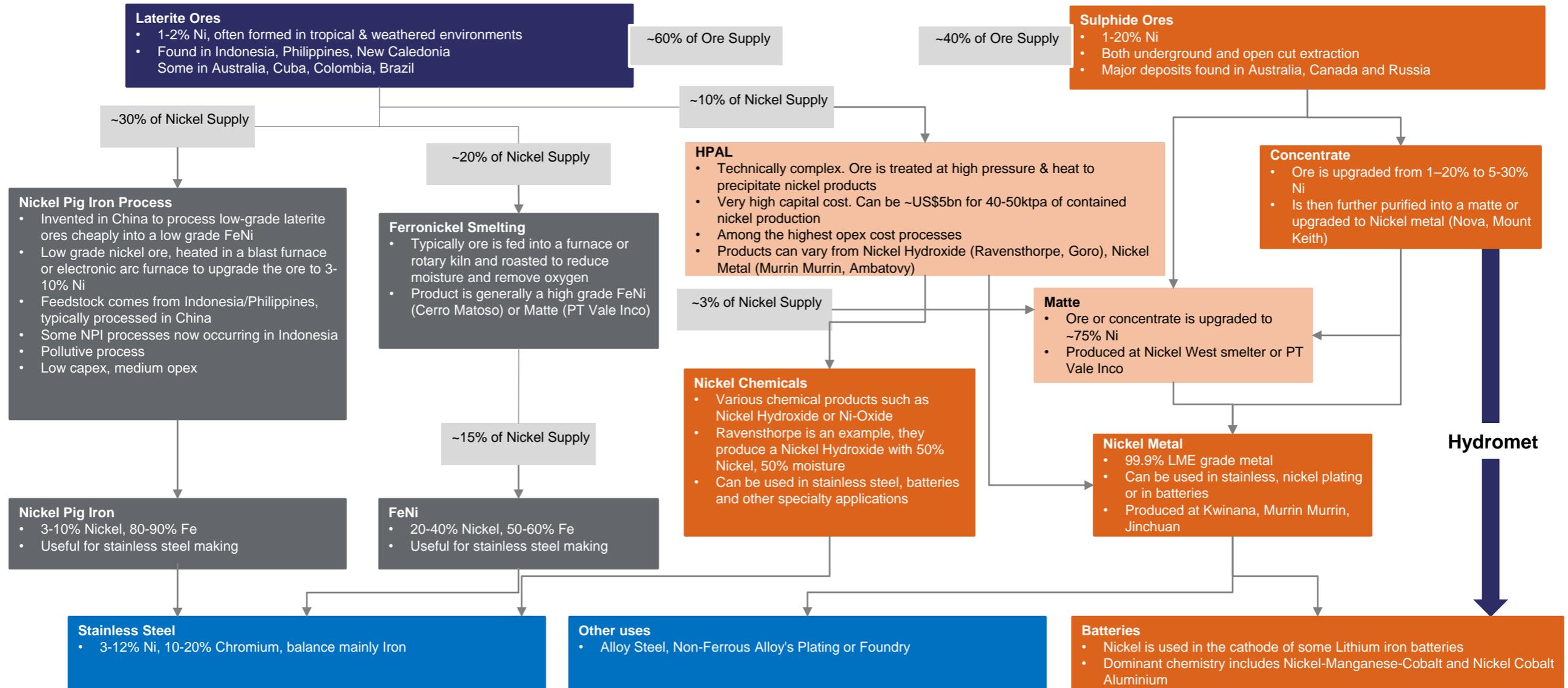
1) Source: UBS Research dated 1 Nov 2017 Nickel: Electric Vehicle Demand Refinements

2) Source: UBS Research dated 18 Jan 2018: Battery Raw Material Update



# IGO Opportunities

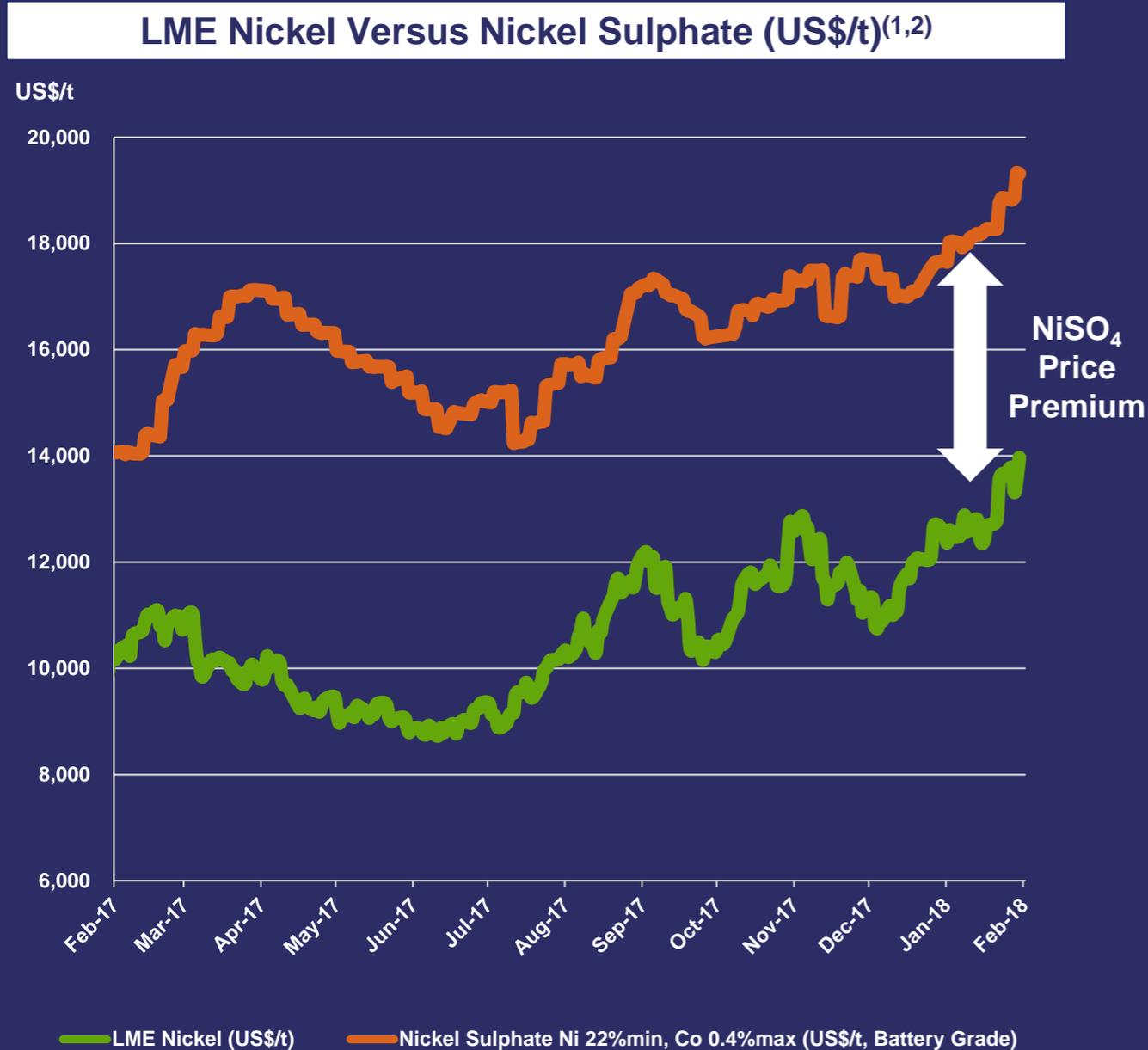
# IGO is one of few nickel sulphide producers globally



1) Source: UBS Research dated 24 Jan 2018: Nickel: How can we supply Electric Vehicles

## Downstream processing opportunity for IGO

- Produce nickel and cobalt sulphates for EV batteries
- Metallurgical testwork commenced in the March 2018 Quarter
- Targeting PFS completion around end-CY18
- Delivers potential for higher payability, premium price and higher concentrator recoveries



1) Source: Asian Metals

2) Nickel Sulphate price converted to per unit of nickel

# Summary

- Focus on quality, long life assets aligned to EV mega trend
- Strong balance sheet with outlook for strong cash flow generation potential
- Potential to unlock additional value
  - Downstream processing to supply nickel sulphate to the EV battery market
  - Focusing on the discovery of additional nickel and battery metals at Nova and Fraser Range





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