

## ASX Announcement 13 December 2023

### NICKEL-COBALT; IONICK METALS' BUSINESS PLAN

Helix Resources Ltd (**ASX:HLX**), (Helix or the Company) is pleased to report 100%-owned subsidiary company, Ionick Metals Ltd (Ionick), has today released a copy of its corporate presentation ahead of a proposed Initial Public Offer (IPO) and ASX listing in 2024.

The corporate presentation outlines the business plan for Ionick - an Australian-focused, large scale and advanced nickel-cobalt development opportunity. The business plan is based on an analysis of existing 'stranded' laterite nickel projects in Australia and a series of 'waypoints' outlining a development pathway to avoid the pitfalls identified.

The presentation also provides an overview of the IPO strategy, the reasoning behind demerging Helix's nickel-cobalt laterite assets into a new ASX-listed vehicle and the factors behind the strong medium to long term market outlook for nickel driven by increased battery demand 'rebalancing' the current over-supply.

A copy of the Ionick presentation is attached.

**This ASX release was authorised by the Board of Directors of Helix Resources Ltd.**



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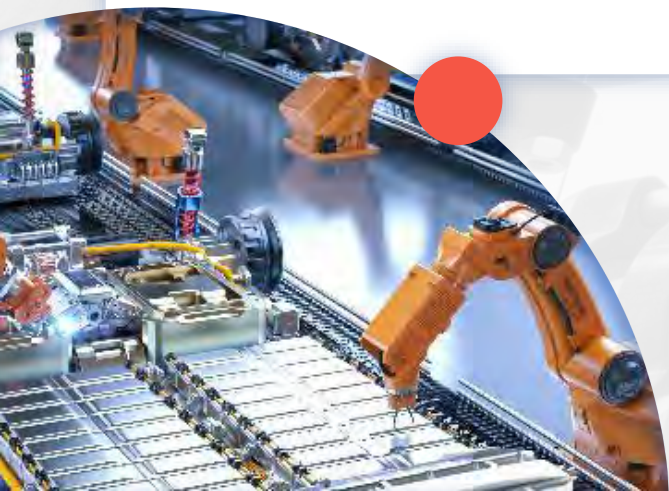
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# Ionick Metals Ltd

The business case for an Australian large scale, advanced nickel-cobalt development opportunity



CORPORATE PRESENTATION  
December 2023





# Acknowledgement of Country

We would like to acknowledge the Traditional Owners of the country where we are working to develop a nickel-cobalt business, in Central Western NSW, the Wangaaypuwan, Ngemba, Ngiyampaa, and Wayilwan peoples.

We recognise the continuing connection to lands, waters and communities. We pay our respect to Aboriginal and Torres Strait Islander cultures and to Elders past and present.



# Ionick is an advanced critical minerals opportunity



## Hidden

advanced nickel projects previously locked-up within copper-focussed Helix Resources (ASX:HLX)



## Robust

high-grade nickel in laterite with important cobalt credits



## Scale

existing laterite nickel mineral resources<sup>1</sup> and numerous prospects as a stepping stone to define a large-scale resource



## De-risking

strong emphasis on mineralogy and established process flow sheets



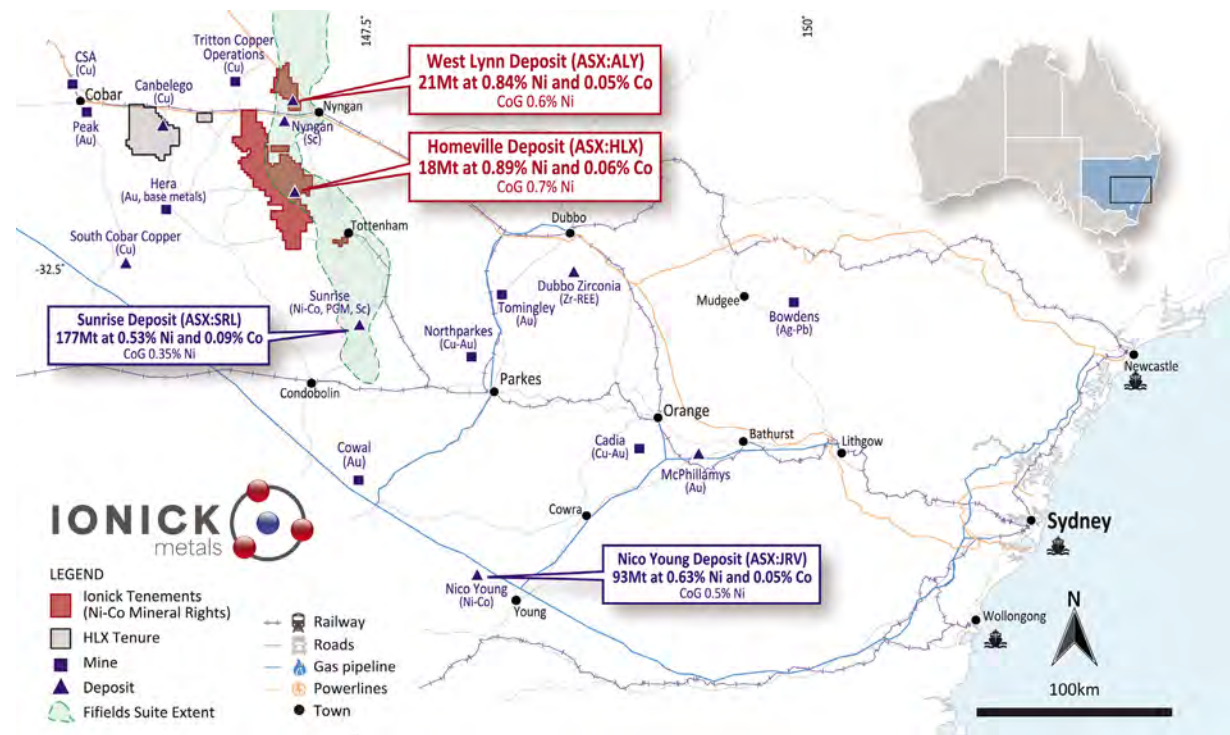
## Sustainably

minimising environmental impacts, maximising ESG credentials for benefit of all stakeholders



## Location

close to infrastructure in Tier-1 jurisdiction



The 'right' dynamics highlighting an outstanding opportunity to develop a large-scale, long-term nickel producer

# Lessons from previous 'stranded' laterite nickel projects in Australia



Too Low Ni Grade Too Much  
'equivalence' (Co, Sc, Pt...)



Too Complex flowsheet –  
'Too-downstream'



Too Many Different  
Strategies



Underfunded



Insufficient Focus on  
'Sustainability Issues'

Not Enough Continuous  
Piloting of Process Flowsheet

# Ionick's Development Strategy

## The Path

“ Forging a development pathway guided by 8 key waypoints, learning from past laterite nickel lessons and navigating around fatal pitfalls to build a large-scale nickel business ”

Ionick has utilised an 'inverted analysis' of risks - adapted from Charlie Munger, Deputy Chair at Berkshire Hathaway Inc. (recently passed away at 99 years of age)



## Ionick's Eight Strategy 'Waypoints'

1

Nickel grade (>0.9% Ni) & tonnage scale

2

Geo-metallurgy

3

Beneficiation of plant feed

4

Simple proven process flowsheets

5

Close to infrastructure

6

Sufficient funding to achieve milestones

7

Nickel market timing & sustainability

8

Experienced team [work in progress]

# Nickel grade (>0.9% Ni) & tonnage

Waypoint

1

## Mineral Resource estimates<sup>1</sup> (MREs)

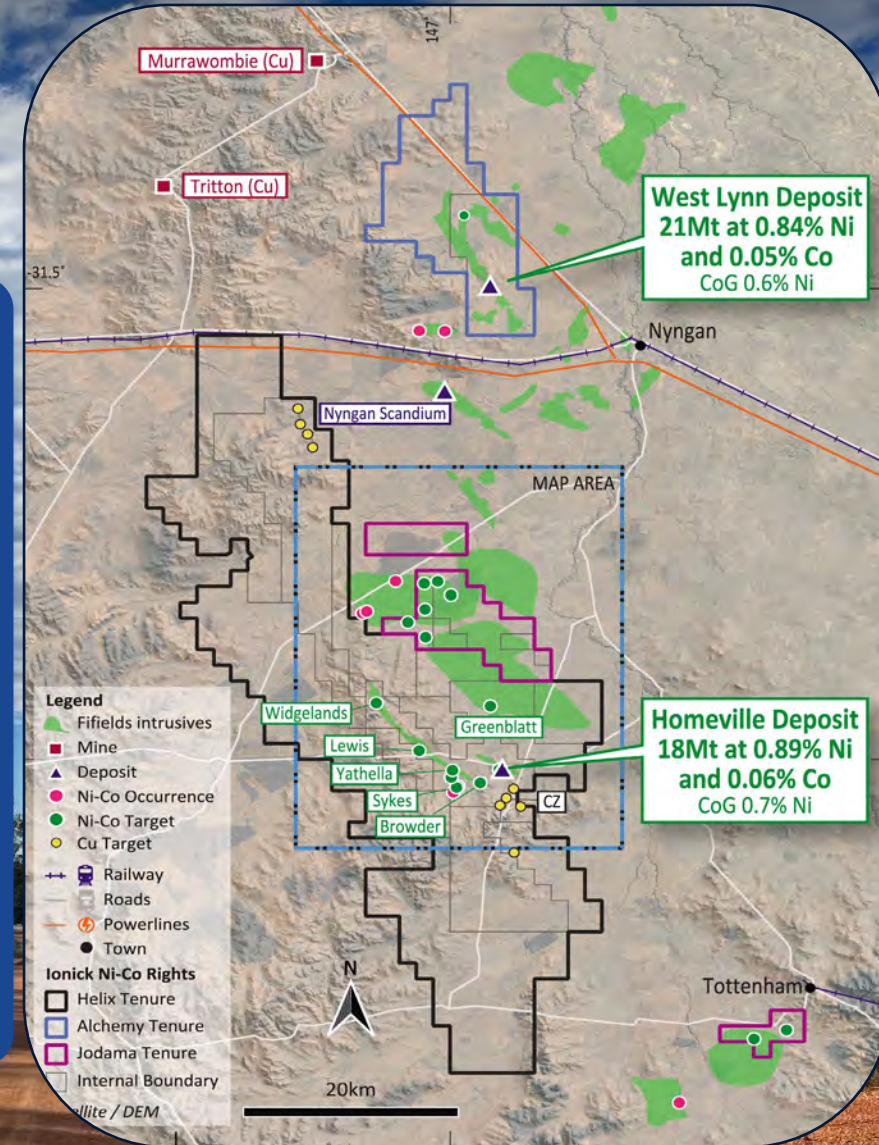
Target Resource  
grade >0.9% Ni  
(Ni content only)

39.2Mt @ 0.86%  
Ni & .05% Co  
(Homeville & West  
Lynn Deposits)

Already ~50%  
of the way

Company objective is  
>80 -100Mt of MRE to  
warrant a feasibility study

Excellent prospects to  
define more – not hard to  
find and drill test



# Nickel grade (>0.9% Ni) & tonnage

MREs and local prospects<sup>1</sup> occur within a major regional 'ultramafic' intrusive suite

Numerous Ni-Co laterite targets identified, including 24 'drill-ready' targets

Ni (and Co) mineralisation is associated with deeply weathered (and lateritised) sheared ultramafic rocks clearly discernible in regional magnetic datasets

Historical drilling delivers encouraging results<sup>2</sup> including

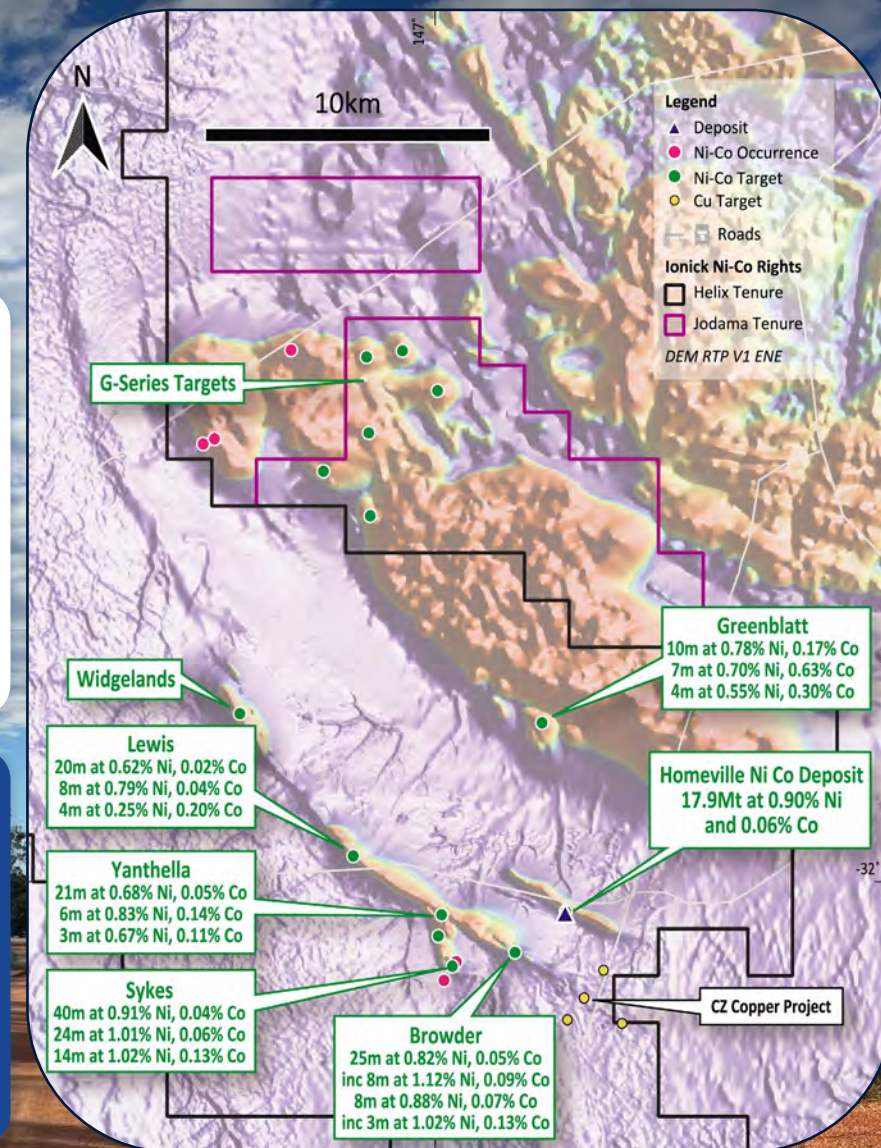
24m @ 1.01%  
Ni & .06% Co

14m @ 1.02%  
Ni & 0.13% Co

40m @ 0.91%  
Ni & .04% Co

Waypoint

1



# Nickel grade & tonnage (target >0.9% Ni)

On a comparative basis with existing  
more advanced nickel laterite projects<sup>1</sup>



Ni grade ranks highly with  
Australian pre-development projects



Grade provides a clear point of  
difference to other NSW projects



'Useful' Co credit

Waypoint

1

Project	Owner	Location	Tonnes (Mt)	Ni Grade (%)	Co Grade (%)	Contained Metal (Kt)		Ni (Eq) Grade (%)
						Nickel	Cobalt	
NSW Projects								
Ionick Metals	tba	NSW	39	0.86%	0.05%	339	21	0.97%
NiCo-Young	ASX:JRV	NSW	93	0.63%	0.05%	589	46	0.73%
Sunrise	ASX:SRL	NSW	177	0.53%	0.09%	935	168	0.72%
WA Projects								
NiWest	ASX:AXN	WA	93	1.06%	0.07%	988	67	1.21%
Central Musgraves	ASX:NC1	WA	216	0.91%	0.07%	1,953	154	1.05%
Kalgoorlie Nickel Project	ASX:ARL	WA	854	0.71%	0.05%	6,101	386	0.81%
Quicksilver	ASX:G88	WA	26	0.64%	0.04%	169	11	0.73%
'Others' in Australia								
Barnes Hill	NQM Plc	Tas	7	0.81%	0.06%	54	4	0.93%
Sconi	ASX:AUZ	Qld	116	0.64%	0.06%	736	71	0.76%
Metal Price assumptions for Ni(Eq) grade estimate			Ni (US\$/t)	Co (US\$/t)				
No metallurgical recovery or payability factors applied to Ni(Eq) Estimate			16,143	33,420	(LME 3-month price 7/12/2023)			

# Geometallurgy

## Geometallurgy drives processing options and capital intensity

Analytical 'chemistry' approach to define the geometallurgical domains in the resource models for metallurgical testwork

### Waypoint

2

#### West Lynn MRE<sup>1</sup> at 0.6% Ni CoG (19 Feb 2019)

Geological Classification	Tonnes Mt	% of MRE By Geo. Class.	Ni %	Co %	Mg %	Fe %	AL %
Laterite	9.04	42%	0.88	0.06	3.50	28.50	3.70
Saprolite	9.95	47%	0.83	0.04	18.90	14.20	1.50
Transition	2.35	11%	0.73	0.03	24.10	12.10	1.10
<b>Total Resource</b>	<b>21.34</b>	<b>100%</b>	<b>0.84</b>	<b>0.05</b>	<b>12.90</b>	<b>20.00</b>	<b>2.40</b>

#### Homeville MRE<sup>2</sup> at 0.7% Ni CoG (28 Sep 2018)

Geological Classification	Tonnes Mt	% of MRE By Geo. Class.	Ni %	Co %	Mg %	Fe %	AL %
Limonite	5.24	29%	0.79	0.10	2.93	33.00	11.05
Saprolite	10.10	57%	0.96	0.04	15.62	18.72	5.37
Serpentinite	2.54	14%	0.83	0.03	20.10	15.69	4.05
<b>Total Resource</b>	<b>17.86</b>	<b>100%</b>	<b>0.89</b>	<b>0.06</b>	<b>12.54</b>	<b>22.48</b>	<b>6.85</b>

## Example

Similar average Fe and Mg MRE grades of ~13 & ~22% respectively.

But - Fe range is 12 to 33% and Mg is 4-24%. Hence need for 'geometallurgical domains' defined by chemical analyses.

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1- West Lynn is 100% Inferred MRE  
2 - Homeville is 12% Indicated & 88% Inferred MRE  
See Appendix A for details.

# Geometallurgy

## Ore chemistry (Fe & Mg) drives process flow sheet options

Two key mineralisation types within the MREs:

- Main mineralisation is Mg-rich (saprolite) ~64% of MRE
- Secondary mineralisation is Fe-rich, ~36% of MRE

Potential Process Routes (refer diagram)

1. **CCAL**: Counter Current Atmospheric Leach
2. **HPAL**: High Pressure Acid Leach
3. **DNI™**: Nitric Acid Atmospheric Leach
4. **ILP**: Inverse Leach Process

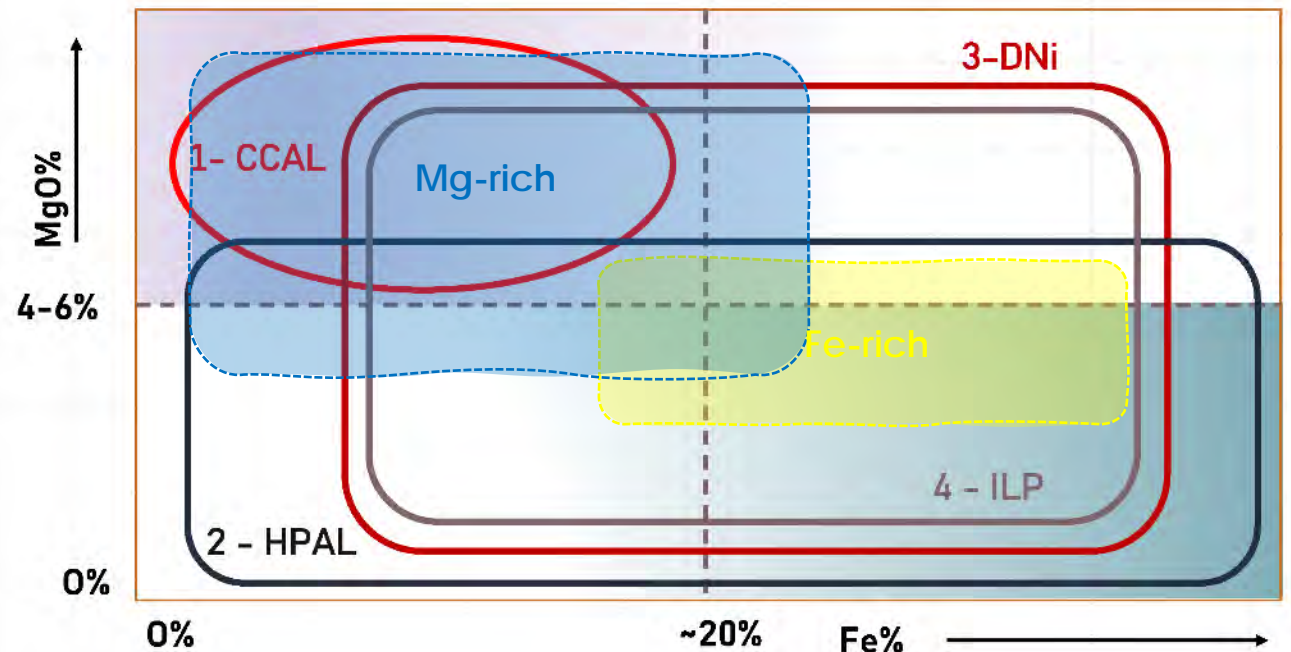
### Next steps

To conduct detailed chemical analysis to better define geometallurgical domains in the orebody models

Waypoint

2

Schematic – Process Routes by Chemistry



# Beneficiation

“Is it possible to ‘upgrade the plant feed’ by removing coarse waste from the Ni & Co mineralisation as the first process step?”

## Objective

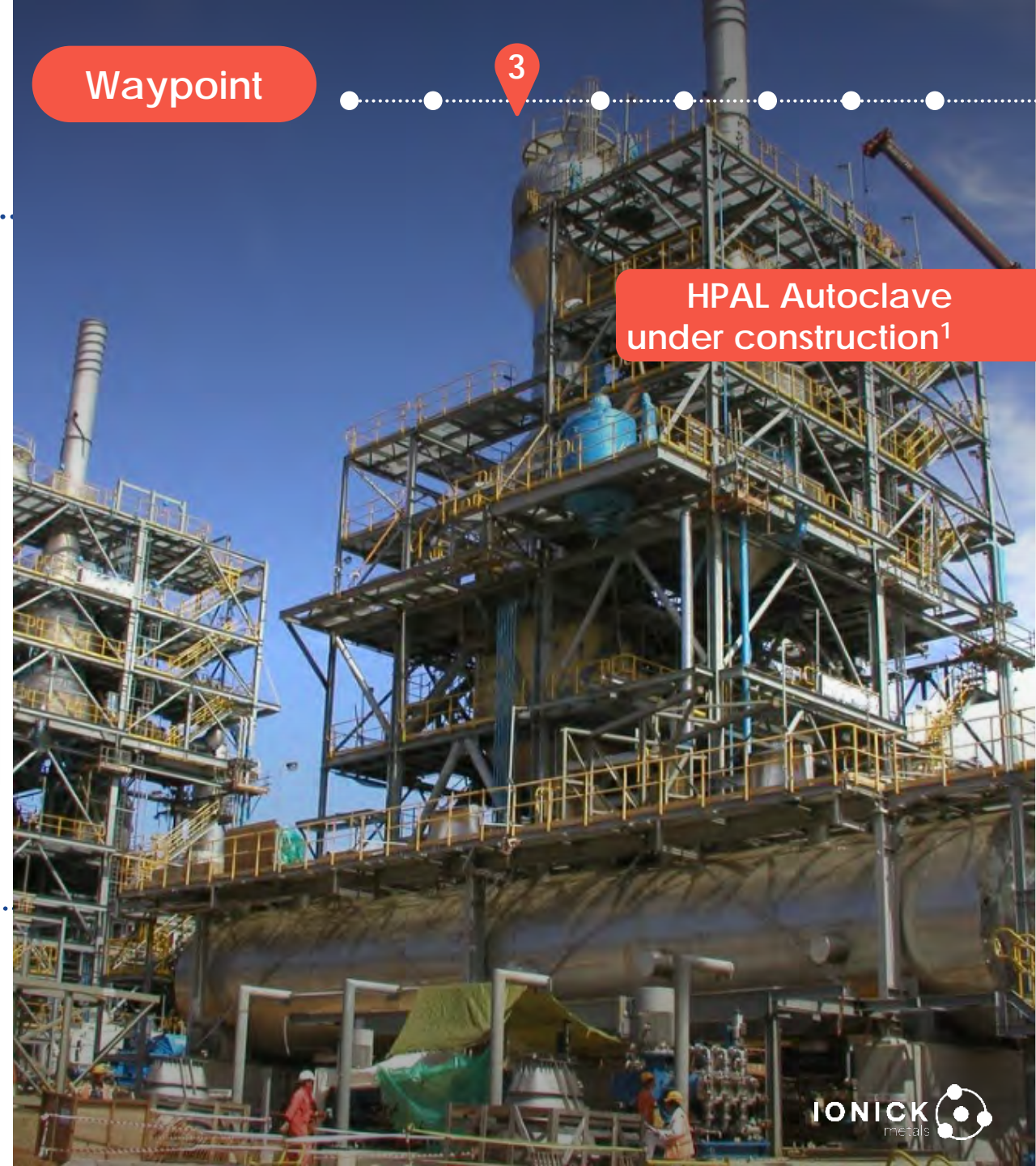
increase metal grade into the process plant

## Potential benefits include

- Lower capital intensity with a smaller scale plant
- Lower unit operating costs
- Enhanced flowsheet performance eg higher recovery and less reagent consumption

Early beneficiation test work is essential

A high-value opportunity which will guide all other metallurgical testwork



# Simple Proven Process Flowsheets

## Aim to reduce risk on start-up cash flow

### Ionick's predevelopment work will focus on:

- established process technology – likely around HPAL
- nickel production with possible by-products such as cobalt
- maximising metal recovery and revenue balanced against process complexity

Ionick plans to position itself in the 'mid-stream' to make an intermediate Ni product - likely Mixed Hydroxide Precipitate (MHP) or similar.

### Keeping it simple and realistic to reduce start-up risks:

- additional metal selectivity adds complexity and risk
- aim for 100% design capacity in 6 months (Type 1) and avoid "nearly 60% in 3 years (Type 4) as per McNulty Curves opposite

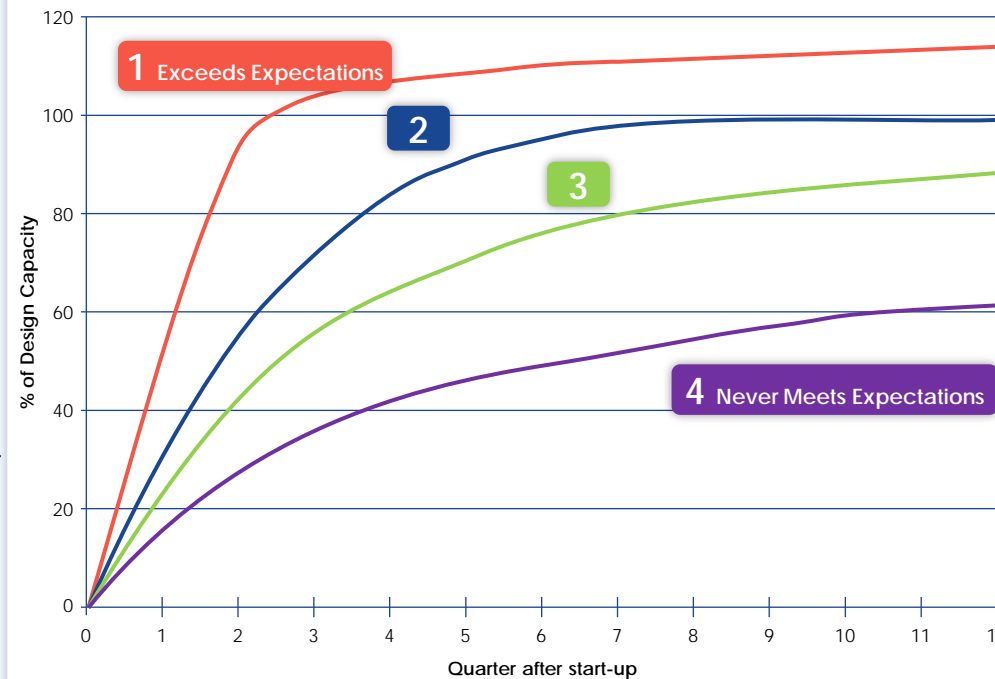
## Waypoint

4

The more process stages, the more complexity, the greater the start-up risk (refer generic McNulty Curves<sup>1</sup> below)

### Rate of Achievement of Design Capacity of Plants after Start-up

Based on 41 mineral processing case studies



### McNulty Curves - Key

#### Type 1

Established technology

#### Type 2

Early-stage commercialisation

#### Type 3

'Fast-track' little geomet or testwork

#### Type 4

Scarce testing, overly complex, disjointed development

**1 - Reference:** McNulty, Terry. (1998). Innovative technology: Its development and commercialization. Managing Innovation in the Minerals Industry. 1-14.

# Simple Proven Process Flowsheets

Proven base case technology,  
HPAL, employed for nearly 60 years

Waypoint

4

Base case

proven, well established flow sheets;  
HPAL / atmospheric leach / saprolite  
neutralisation

## Key

**HPAL** | High Pressure Acid Leach

**ATL** | Atmospheric Tank Leach

**SN** | Saprolite/SapRock Neutralisation

**CCAL** | Counter-current Atmospheric Leach

## Ore Types

**L** | Limonite

**T** | Transition

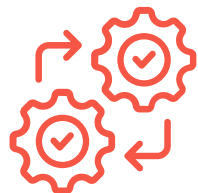
**S** | Saprolite

Process:		DNi Process	HPAL	HPAL/ATL/(SN)	ATL	CCAL	Inverse Leach
Minimum Commercial Feed Rate	mdt/a	0.5	1	1.3	0.5	0.5	0.75
Ore Type(s)		L/T/S	L/T	L/T/S	T/S	T/S	L/T/S
Capital Intensity / Tonne Ore		Medium	High	Medium	Low	Low-Medium	Low-Medium
Operating Cost / Tonne Ore		Medium	Low	Low-Medium	High	High	Low-Medium
Acid Consumption	t/t ore	2.0-2.5	0.25-0.4	0.5-0.65	0.9-1.2	0.6-0.75	0.5-0.65
Acid Type		HNO3	H2SO4	H2SO4	H2SO4	H2SO4	H2SO4
Acid Recycle	%	95-99%	0%	0%	0%	0%	0%
Acid Plant		No	Yes	Yes	Yes	Yes	Yes
Proportion of Energy from Acid Plant	%	0%	30-50%	80-100%	100%	80-100%	80-100%
Heat Energy Source		Fossil fuel	Acid Plant (Sulphur)	Acid Plant (Sulphur)	Acid Plant (Sulphur)	Acid Plant (Sulphur)	Acid Plant (Sulphur)
Electricity Source		Grid	Grid + Generation	Mostly generation	Mostly generation	Mostly generation	Mostly generation
Water Consumption / Tonne Ore		Low-Medium	High	Medium	Medium-High	Medium	Medium
Limestone/Lime Consumption		Nil	High	Medium	High	Medium-High	Medium
Residue as Fraction of Ore Feed Tonnes	%	0.15-0.3	1.2-1.4	1.1-1.3	0.7-1.0	0.5-0.8	1.0-1.3
<b>Products:</b>							
Ni/Co Intermediate		MHP/MSP	MHP/MSP	MHP/MSP	MHP/MSP	MHP/MSP	MHP/MSP
Iron		Hematite	No	No	No	No	No
High Purity Alumina (HPA)		Yes	No	Some	Yes	Yes	Yes
Gypsum		n/a	Possible	Possible	Possible	Possible	Possible
MgO		Yes	No	No	No	No	No

# Close To Infrastructure



Ionick's projects are located within an established mining district



Numerous, nearby producing operations increases access to road, rail, electricity and gas



Access to experienced mining and processing personnel



Ionick, via Helix has strong relationships with local stakeholders and the NSW Regulator

Waypoint



# Sufficient Funding To Achieve Milestones

Raise enough money to reach each milestone

## Stage 1

~\$10M via Ionick IPO

Milestone:

'Scoping' level support for development

- Demonstrate potential for minimum MRE > 80Mt
- Review plausible process options

## Stage 2

Milestone:

'Pre-Feasibility' level support for development

- Define minimum MRE of > 80Mt & preliminary mining studies
- Environmental & land access assessment
- Metallurgical testwork – including continuous piloting work
- Capital & operating cost estimates (+/- 30%)

## Stage 3

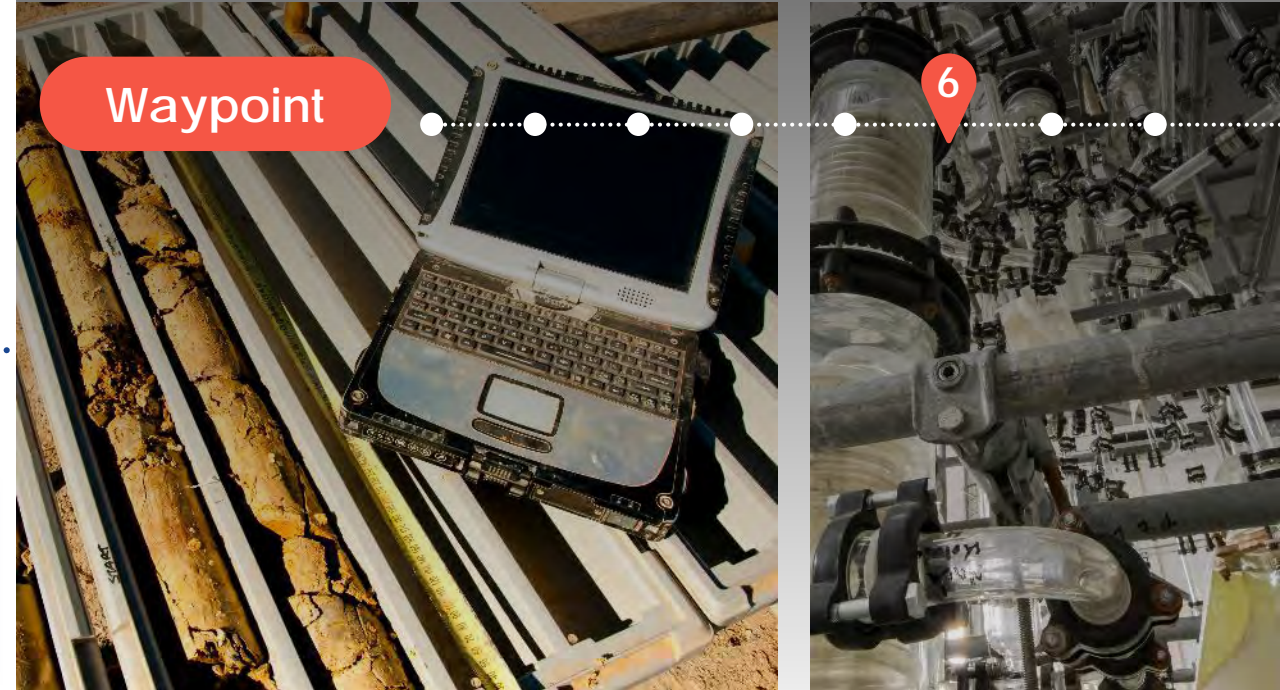
Milestone:

'Feasibility' level support for Financial Investment Decision

- Demonstration plant – addressing debt risk issues

Waypoint

6



# Nickel Market Timing & Sustainability

Excellent medium term nickel market outlook with increased battery demand

Currently - nickel supply and demand in strong growth phase

## Indonesian laterite production surge – created a market surplus

- Current price decline of ~50% past 12 months
- Effectively two markets; Class 1 and Class II nickel (Class I suitable for batteries)
- Ni market 'rebalancing' taking place with strong Class II supply from Indonesia and 'refining' to cathode specification in China

Waypoint

7

### 5 – YEAR NICKEL SPOT PRICE

Current Price<sup>1</sup> – US\$7.5/lb (US\$16.6k/t)



1 - 6 Dec 2023

# Nickel Market Timing & Sustainability

Nickel demand growth is driven mainly by batteries

## Essential for high-energy density batteries:

- Energy density mitigates 'range' anxiety – big issue in Nth America (Europe & Australia)
- c. 40 kg of 'Class I' nickel per EV (increasing Ni Intensity trend)

## Strong battery demand forecasts<sup>1</sup>:

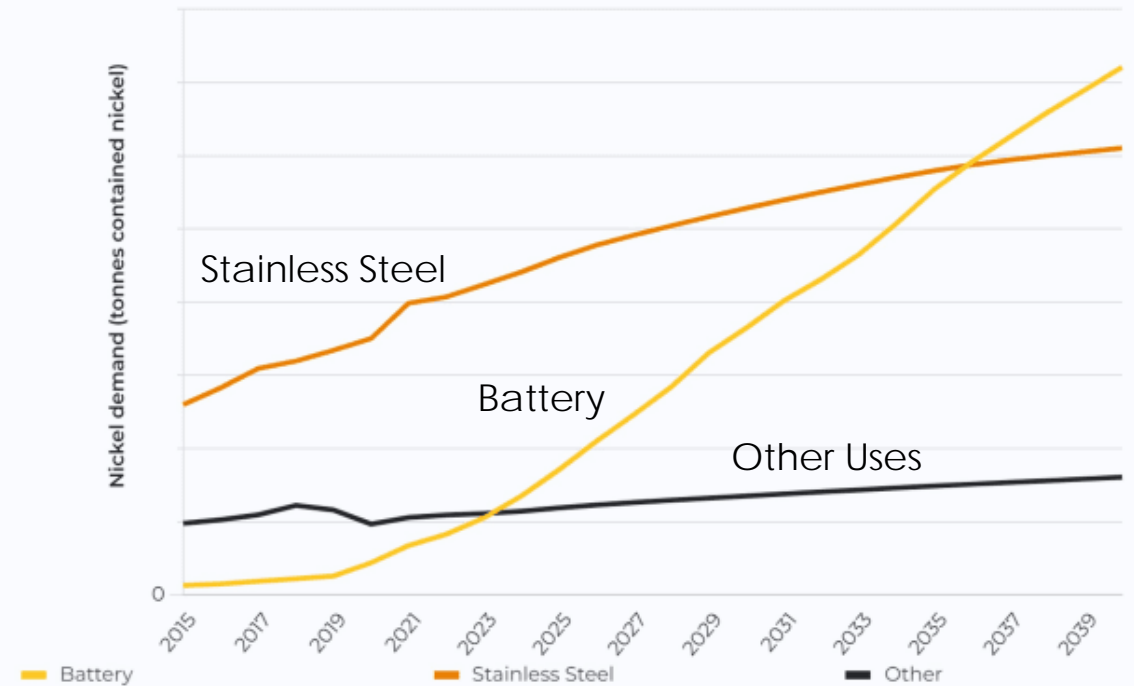
- 2015 – 2022: estimate 10x increase from ~70 to 700 GWhrs battery capacity
- 2023 – 2040: forecast 12x increase from ~700 to 8TWhrs battery capacity

Waypoint

7

## Batteries will be top nickel market from 2036

Nickel demand from batteries to grow 247% between 2023 and 2030 compared to 25% from stainless steel



SOURCE: BENCHMARK NICKEL FORECAST Q2 2023

BENCHMARK

"batteries driving growth in nickel demand; 247% to 2030"

# Nickel Market Timing & Sustainability

## Nickel market 'splitting' on global supply chain concentration (& ESG) concerns



### Inflation Reduction Act in the USA:

- Huge impact on nickel supply – no EV subsidy for US consumers if supply chain components have > 25% 'FEOC'<sup>1</sup> (Chinese) ownership



### Corporate focus on ESG credentials of supply chains:

- IFRS style audit rules on ESG reporting and claims

~2030 could be 'Perfect Timing' for new, Australian sourced, 'Ionick' nickel

### Prudent project development focus:



- IRA and EU compliance eg sources of capital
- Robust ESG framework and credentials

## Waypoint

### "FEOC definition leaves most Indonesian nickel outside IRA tax credits"

*"The US Department of Treasury has released its definition of a Foreign Entity of Concern (FEOC) for the purposes of the Inflation Reduction Act (IRA) – and there are big implications for nickel"*

Fast Markets 5 December 2023

### "Pro Take: Can Nickel, Cobalt and Other Battery Metals be Sourced Sustainably"

*"...worries over environmental destruction from Indonesian nickel are being used to build the case for extracting resources from the seabed."*

Wall Street Journal 11 May 2023

### "WA eyes CAM\* production; state broadens critical minerals strategy"

*\*nickel is a key cathode active material (CAM)*

Fast Markets 29 November 2023

### "US Moves to Choke China's role in Electric Vehicle Supply Chain"

Financial Times 2 December 2023

Recent Headlines: supportive for Ionick Metals' business case

# Experienced Team

*'a work-in-progress'*



tbc

Chair



tbc

Managing Director/CEO



tbc

Non-executive Director



tbc

Non-executive Director

Waypoint

8

## Objectives

01

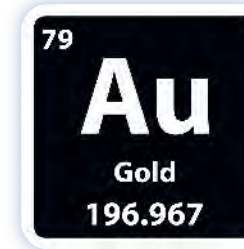
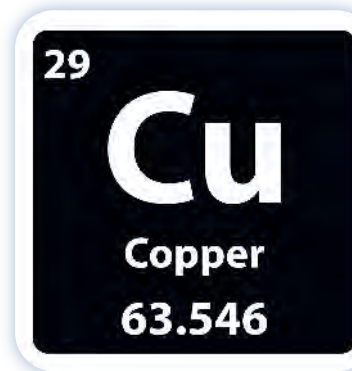
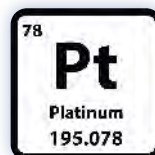
Appoint a standalone, board of directors with experience and skills around complex projects, capital markets, nickel-markets, financing, ASX and 'bespoke' commercial transactions

02

Retain a management team with appropriate technical and commercial skills to build a large-scale sustainable nickel business in NSW

# Two Companies; Distinct Assets & Risk Profiles

IPO Strategy



## Ni-Co Laterite Deposits

'Simple' to discover

'Challenging' to develop – high capital intensity

Specific investor profile

## Cu / Cu-Au / Au Deposits

Systematic detailed exploration required

'Simple' to develop and process

Broad investor profile

# IPO Outline

## IPO Strategy

### Expenditure Estimate includes



>500 drillholes for  
~18,000 metres



IPO promotional  
budget



Realistic corporate  
budget



Environmental and general  
permitting – preliminary assessments



Pre-feasibility level metallurgical  
testwork program

### Indicative Two-Year Use of Funds

		Year 1	Year 2	Total
<b>Cost of Offer</b>				
Corporate Services	\$M	0.2		0.2
IR & Promotion	\$M	0.1		0.1
Broker Fees (6%)	\$M	0.6		0.6
		<b>0.9</b>		<b>0.9</b>
<b>Exploration</b>				
Drilling	\$M	1.1	0.7	1.9
Assaying	\$M	0.6	0.4	1.1
Geologist & Other	\$M	0.2	1.3	1.4
Unallocated	\$M	0.2	0.2	0.4
		<b>2.1</b>	<b>2.7</b>	<b>4.8</b>
<b>Metallurgy</b>				
Characterisation	\$M	0.2	0.0	0.2
Process Tests	\$M	0.5	0.3	0.7
Pilot Testwork	\$M	-	-	-
		<b>0.6</b>	<b>0.3</b>	<b>1.0</b>
<b>Prelim Enviro/ESG</b>	\$M		0.3	<b>0.3</b>
<b>Study Management</b>	\$M	0.2	0.2	<b>0.4</b>
<b>Corporate Costs</b>	\$M	1.2	1.2	<b>2.4</b>
<b>Total Use of Funds</b>	<b>\$M</b>	<b>5.1</b>	<b>4.7</b>	<b>10.0</b>

*Note - figures rounded, minor errors may result*

# IPO Outline

## IPO Strategy

### Offer Concepts



Aim to secure cornerstone investor



Low EV: A\$3M, a 'modest' valuation of the assets with 'upside' through Performance Shares linked to major development milestones



In specie distribution to HLX shareholders after ASX Escrow period of both Vendor and any Performance shares



IPO amount planned of \$10M at 20 cents

	Ionick Metals Ltd		Helix (HLX)		Alchemy (ALY)		Jodama Pty Ltd	
Vendor Consideration	Shares (M)	\$M	Shares (M)	\$M	Shares (M)	\$M	Shares (M)	\$M
<b>Vendor Shares</b>								
IPO Vend	15.0	3.0	7.5	1.5	6.0	1.2	1.5	0.3
<b>Vendor Pre-IPO Holdings</b>	<b>15.0</b>	<b>3.0</b>	<b>7.5</b>	<b>1.5</b>	<b>6.0</b>	<b>1.2</b>	<b>1.5</b>	<b>0.3</b>
	<b>100%</b>		<b>50%</b>		<b>40%</b>		<b>10%</b>	
<b>Performance Shares</b>								
T1 -60Mt MRE Milestone	18.0	3.6	10.0	2.0	8.0	1.6		
T2 - Positive FID	27.0	5.4	15.0	3.0	12.0	2.4		
T3 - 20Mt MRE Milestone	1.5	0.3					1.5	0.3
T4 - Inclusion in FID	3.0	0.6					3.0	0.6

Potential IPO Metrics				
<b>Share Register (Post IPO)</b>	<b>Shares (M)</b>	<b>\$M</b>	<b>IPO Funds Raised</b>	<b>\$M</b>
Helix Vendor Shares	7.5	12%	<b>Implied Mkt Cap</b>	<b>\$M</b>
Alchemy Vendor Shares	6.0	9%	<b>Enterprise value (EV)</b>	<b>\$M</b>
Jodama Vendor Shares	1.5	2%		
IPO Investors	50.0	77%		
<b>Total Shares on listing</b>	<b>65.0</b>	<b>100%</b>		



ASX listing planned for mid-2024

ASX  
AUSTRALIAN STOCK EXCHANGE

# Investment Highlights

Value creation from advanced, large scale, sustainable nickel production opportunity following clear 'development waypoints'

IPO Strategy

## Large-scale high-grade Ni-Co resource potential

Homeville & West Lynn high-grade laterite Ni-Co Deposits (340kt Ni & 21kt Co contained metal)

~1,800km<sup>2</sup> of prospective ground with numerous prospects delivering shallow, thick nickel-cobalt intercepts

Focus on proven process routes to reduce technical and financing risks



Access to infrastructure and existing key stake holder relationships

Strong medium-long term outlook for nickel demand underpinned by battery demand, supply chain risks and ESG auditing

Clear funding strategy with well-defined milestone objectives

Highly experienced team to drive project towards development (work-in-progress)



## Contact Details

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## Subscribe for Details

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# Important Notices

This presentation has been authorised by the Board of Helix Resources Limited<sup>1</sup>

## Competent Persons Statement

The information in this report that relates to exploration results, and geological data for the Cobar projects is based on information generated and compiled by Mr Gordon Barnes and Mr Mike Rosenstreich who are both employees and shareholders of the Company. Mr Barnes is a Member of the Australian Institute of Geoscientists and Mr Rosenstreich is a Fellow of the Australasian Institute of Mining and Metallurgy.

Mr Barnes and Mr Rosenstreich have sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as Competent Person(s) as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Barnes and Mr Rosenstreich have consented to the inclusion of this information in the form and context in which it appears in this report.

Competent Persons for the West Lynn Nickel-Cobalt Mineral Resource can be found in Appendix A – Mineral Resources.

## Disclaimer

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This presentation may include forward-looking statements. These forward-looking statements are not historical facts but rather are based on current expectations, estimates and assumptions about the industry in which Helix and Ionick operate, and beliefs and assumptions regarding Helix's and Ionick's future performances. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Forward-looking statements are only predictions and are not guaranteed, and they are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of Helix and Ionick. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Actual values, results or events may be materially different to those expressed or implied in this presentation. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this presentation speak only at the date of issue of this presentation. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Neither Helix nor Ionick undertake any obligation to update or revise any information or any of the forward-looking statements in this presentation or any changes in events, conditions or circumstances on which any such forward looking statement is based.

# Appendix A

## Mineral Resource Estimates

### Homeville Nickel-Cobalt Mineral Resource Estimate

The Homeville Nickel-Cobalt Mineral Resource Estimate was completed in 2018 by Optiro Pty Ltd and classified and reported in accordance with the guidelines of the JORC Code (2012). This Mineral Resource is reported above a 0.7% nickel cut-off grade and is summarised in Tables A2 and A3 below. The 2018 Mineral Resource was publicly reported by Alpha HPA (formerly Collierina Cobalt Limited) on 28 September 2018 (Collierina Project Mineral Resources Estimate, ASX announcement).

Metallurgical testwork undertaken in 2015 to 2017 examined atmospheric counter-current acid leaching, achieving >90% nickel and cobalt recoveries to produce nickel cathode and a cobalt-carbonate.

Refer ASX Report 5 October 2017 and 29 November 2017 from Alpha HPA, formerly Collierina Cobalt Ltd and report from 14 July 2015 from Alpha HPA (formerly Auger Resources Ltd).

Helix Resources is not aware of any new information or data that materially effects the information in these announcements.

#### Homeville Ni-Co Mineral Resource by Rock Type

Classification (JORC 2012)	Rock	Tonnes (Mt)	Ni %	Co %	MgO %	FE %	Al <sub>2</sub> O <sub>3</sub> %	Ni %
Indicated Mineral Resource	Limonite	0.47	0.91	0.06	2.2	33	10.5	0.91
	Saprolite	0.93	1.10	0.03	19.8	16	4.1	1.10
	Serpentinite	0.78	0.86	0.04	21.9	15	3.7	0.86
Total Indicated Resource		2.18	0.98	0.04	16.8	19	5.3	0.98
Inferred Mineral Resource	Limonite	4.77	0.78	0.10	3.0	33	11.1	0.78
	Saprolite	9.15	0.95	0.04	15.2	19	5.5	0.95
	Serpentinite	1.76	0.82	0.03	19.3	16	4.2	0.82
Total Inferred Resource		15.68	0.88	0.06	11.9	23	7.0	0.88

#### Homeville Nickel-Cobalt (September 2018)

Category	Cut-off grade (Ni%)	Tonnes (Mt)	Ni %	Co %	Fe %	Al %
Indicated	0.7	2.2	0.98	0.04	19	2.8
Inferred	0.7	15.7	0.88	0.06	23	3.7
Total		17.9	0.89	0.06	22	3.6

Rounding discrepancies may occur in summary table

# Appendix A

## Mineral Resource Estimates

### West Lynn

Alchemy Resources Limited reported a maiden JORC Code 2012 Edition compliant Inferred mineral resource estimate on 19 February 2019 for the nickel-cobalt zone of the West Lynn Project, located 13km northwest of Nyngan, NSW.

The Mineral Resource estimate totalling 21.3Mt @ 0.84% Ni, 0.05% Co, 2.4% Al & 20.0% Fe was completed by Resource Evaluation Services (RES) and is reported at a 0.6% Ni lower cut-off as detailed in **Table A1**.

The resource estimate is subsequent to an intensive 3 phase drilling campaign completed by Alchemy during 2018 comprising 178 holes for 8,646m (including three diamond holes for 189m) and in line with Alchemy's Exploration Target1.

Initial metallurgical testwork completed by Direct Nickel (DNi) using a nitric acid leach via the patented DNi Process™ returned very encouraging recoveries for both nickel and cobalt from composite samples, with averages of 91.5% Ni (saprolite), 88.3% Co (saprolite), 86.4% Ni (lateritic clays), and 82.1% Co (lateritic clays).

Helix Resources is relying on the reported resource prepared by Alchemy under the Announcement and reaffirms that it has been prepared in accordance with the 2012 JORC code requirements. Helix has conducted a technical review of the data prior to execution of the Option Agreement.

Nothing has come to the attention of the Company that causes it to question the accuracy or reliability of Alchemy's Exploration Results, and the Company has not independently validated the previous Exploration Results and therefore is not to be regarded as reporting, adopting or endorsing those results.

### West Lynn Nickel-Cobalt (September 2019)

Table A1: Maiden Mineral Resource - West Lynn Project at 0.6% Ni CoG (19 Feb 2019)

Resource Category (JORC 2012)	Deposit	Rock	Tonnes Mt	Ni %	Co %	Mg %	Fe %	AL %
Inferred	West Lynn Deposit	Laterite	5.85	0.92	0.07	3.70	29.90	3.70
		Saprolite	7.19	0.82	0.04	19.40	14.30	1.50
		Transition	1.66	0.71	0.03	25.10	11.50	1.10
	Total West Lyn		14.70	0.85	0.05	13.80	20.20	2.40
Inferred	Summervale Deposit	Laterite	3.18	0.81	0.05	3.00	25.90	3.50
		Saprolite	2.77	0.85	0.04	17.70	14.10	1.50
		Transition	0.69	0.79	0.03	21.60	13.40	1.30
	Total Summervale		6.64	0.82	0.04	11.10	19.70	2.40
Inferred	Combined Deposits	Laterite	9.04	0.88	0.06	3.50	28.50	3.70
		Saprolite	9.95	0.83	0.04	18.90	14.20	1.50
		Transition	2.35	0.73	0.03	24.10	12.10	1.10
	Total Resource		21.34	0.84	0.05	12.90	20.00	2.40

Note: Small discrepancies may occur due to effects of rounding

# Appendix B

## Reference Sources for Comparative 'Pre-development' Australian Projects



### JERVOIS GLOBAL LTD

Refer [www.jervoisglobal.com/projects/nico-young/](http://www.jervoisglobal.com/projects/nico-young/) (6/12/23)



### ARDEA RESOURCES LTD

Refer ASX Report 5 July 2023 "KNP Goongarrie Hub Ore Reserve & Feasibility Study Defines +40 Year Operation with Strong Financial Metrics" (6/12/23)



### SUNRISE ENERGY METALS LTD

Refer ASX Report 28 September 2020 "Sunrise Battery Materials Project Reaches Key Development Milestone" (6/12/23)



### GOLDEN MILE RESOURCES LTD

Refer [www.goldenmileresources.com.au/projects/#QUICKSILVER](http://www.goldenmileresources.com.au/projects/#QUICKSILVER)



### ALLIANCE NICKEL LTD

Refer ASX Report 14 November 2023 "NiWest Nickel-Cobalt Project Mineral Resource Estimate Upgrade" (6/12/23)



### NQM PLC

Refer [www.99mines.com/projects/australia/tasmania/beaconsfield/development/barnes-hill-project-nickel-cobalt/](http://www.99mines.com/projects/australia/tasmania/beaconsfield/development/barnes-hill-project-nickel-cobalt/) (6/12/23)



### NICO RESOURCES LTD

Refer ASX Report 22 November 2023 "AGM Presentation" (6/12/23)



### AUSTRALIAN MINES LTD

Refer Australian Mines Ltd FY2023 Annual Report (6/12/23)