

“Australia’s Next Bauxite Producer”

Investor Presentation - February 2017



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The Urquhart Bauxite (Bx) and Urquhart Point Heavy Mineral Sands (HMS) Projects, Esmeralda Graphite and the SCONI Scandium-Cobalt-Nickel Project, are at the exploration, advanced evaluation & feasibility stage & although reasonable care has been taken to ensure that the facts stated in this presentation are accurate & or that the opinions expressed are fair & reasonable, no reliance can be placed for any purpose whatsoever on the information contained in this document or on its completeness.

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Forward-looking statements are based on assumptions regarding Metallica Minerals Limited ("Metallica"), business strategies, plans and objectives of the Company for future operations and development and the environment in which Metallica may operate.

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Competent Person Statements

Urquhart Bauxite

The Mineral Reserve estimate and Production Target estimates were undertaken by Mr Stewart Lewis, Mining Engineer, who is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy and the CEO of IMC Mining Pty Ltd. Mr Lewis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Lewis consents to the inclusion of this information in the form and context in which it appears in this release/report.

The Mineral Resource estimate was undertaken by Mr John Horton, Principal Geologist, who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and an associate at IMC Mining Pty Ltd. Mr Horton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Horton consents to the inclusion of this information in the form and context in which it appears in this release/report.

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by John Cameron (a geologist of over 25 years experience), and a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and is a contract consultant to Metallica Minerals Ltd. Mr Cameron has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cameron consents to the inclusion of this information in the form and context in which it appears in this release/report.

Other

The technical information contained in this report was compiled or supervised by Mr Andrew Gillies, BSc(Geol), a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and a non-Executive Director of Metallica Minerals Ltd. Mr Gillies has relevant experience in the mineralisation, exploration results and resources being reported to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Mr Gillies consents to the inclusion of this information in the form and context in which it appears in this release

Investment Highlights



Urquhart Bauxite
PFS delivers strong
margins with
minimal capital



Strong global bauxite
supply and demand
fundamentals supporting
development



On track to commence
bauxite production
in Q2 2017 with
minimal capex



Commonwealth and
Queensland
Governments confirm
no requirement for EIS



Secured logistics
through Hey
Point de-risks delivery



Ramp up to
1.5Mtpa to deliver
average annual EBITDA
of
A\$18.8M



Base Case
Pre-Tax NPV₁₀

A\$78.4M



Development Capital

A\$1.1M

"Metallica has a vision is to be producing 5-7Mtpa of bauxite over the coming 3 to 5 years"

Corporate Snapshot



Metallica listed on the ASX in 2004 with 61.9M shares on issue and still holds a tight capital structure

227.3M

Shares on Issue

33M

Options on Issue

A\$0.063

Share Price
as at 30 January 2017

A\$14.3M

Market
Capitalisation

A\$1.2M

Cash at
31 December 2016
No debt

41.2%

Top 20
Shareholders

5.1%

Directors and
Management

17.6%

Jien Mining
Largest Shareholder

Corporate Snapshot

Experienced and Rejuvenated Board and Management



Peter Turnbull
Non-Executive Chairman
Appointed 12 Dec 2016

Peter Turnbull is an experienced chairman and professional non-executive director of publically listed, unlisted public and private companies. With degrees in law and commerce and over 30 years experience in senior executive and corporate roles that includes; Newcrest Mining, BTR Nylex and Energex. Peter is currently a Non-Executive Director at Karoon Gas Australia and the Governance Institute of Australia and is also the Chairman of Calix and Auxita.



Steve Boulton
Non-Executive Director
Appointed 25 Jan 2017

Steve Boulton is an experienced funds management and infrastructure specialist with over 40 years experience that has covered complex fund, asset and investment management and utility and infrastructure enterprises, including experience in the mining/minerals sector in Australia and New Zealand. This has included executive and board positions with CP2 Funds Management, Port of Brisbane, Dalrymple Bay Coal Terminal, PD Ports, Nova Group and Infrastructure Partnerships Australia. He was also the CEO of Hastings Funds Management and Power Co.



Simon Slesarewich
Chief Executive Officer
Appointed 13 July 2016

Simon Slesarewich is a mining engineer with over 20 years of experience in operational and executive roles. He was instrumental in all facets of the development of the large Middlemount Coal mine and has been a senior manager in 4 other mine developments. Simon has experience across various jurisdictions and commodities and was previously the CEO of Boardwalk Resources and a director of Larkham Resources which was backed by a large international private equity group.



Shu Zhang alternate for Shu Wu
Non-Executive Director

Dr Shu Zhang represents Jien Mining (40m shares) and has over 40 years experience in mining operations and executive management in Australia, China and Canada. He was a key part of the success Sino Gold Mining Ltd and is a director of Jilin Jien Nickel's Canadian subsidiaries; Canadian Royalties Inc and the TSX listed Northern Sun Mining Corporation.



Andrew Gillies
Non-Executive Director

Andrew Gillies is a geologist with over 30 years experience across a range of commodities. Andrew has significant experience in exploration, project identification, feasibility studies and project development. Andrew controls 11m shares in Metallica and was previously the Managing Director of Metallica.



John Haley
Chief Financial Officer / Company Secretary

John Haley has over 35 years experience in senior corporate roles in Australia and Canada. John has a diverse career across a range of industries and has been integral as an investor and executive in the launch of various resource companies. Previously John held roles with Coopers & Lybrand and Arthur Andersen & Co., and with listed and unlisted companies in general management, financial reporting and company secretarial positions.

Project Overview



Urquhart Bauxite

1

2

3

4

Brisbane

1. CAPE YORK JOINT VENTURE – 50%
Urquhart Direct Shipping Bauxite project
Urquhart Point HMS project

2. CAPE FLATTERY – 100%
Silica Sands

3. ESMERALDA – 100%
Graphite

4. SCONI – 100%¹
Nickel Cobalt
& Scandium

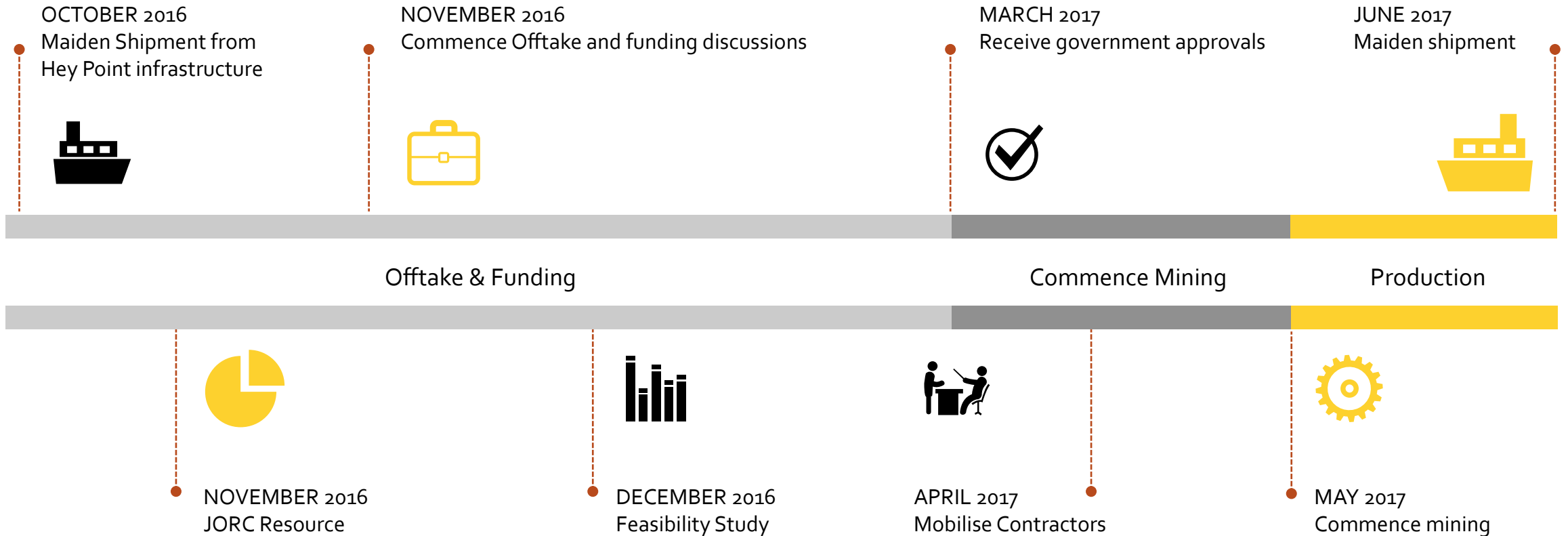
Metallica is focused on building a sustainable bauxite business with the Urquhart Bauxite project forming the foundation.

The Company remains committed to continuing to unlock value in its non-core assets.

¹ See ASX Release 10 October 2016 "Metallica-Australian Mines SCONI Joint Venture"

Urquhart Bauxite

Development Timeline



Urquhart Bauxite – Key PFS Findings²



Item	Unit	Scenario 1 (Base Case)	Scenario 2	Scenario 3
		Mining Proved & Probable Reserves in Area A	Additional mining of Inferred resource in both Area A and Area B	At end of mine life, screening transitional stockpiled material
Total Saleable Product	dry kt	6,532	8,672	10,296
Total Al ₂ O ₃	%	52.7	51.6	51.2
Total SiO ₂	%	13.3	14.7	15.4
AAI*	%	40.6	39.1	38.1
RSi**	%	5.7	6.1	6.1
Total Revenue	A\$m	295.5	364.5	416.9
EBITDA	A\$m	81.8	82.6	90.8
NPV ₁₀ Pre Tax	A\$m	78.4	78.9	86.9
NPV ₁₀ Post Tax	A\$m	53.9	54.2	59.9
LOM Capital	A\$m	2.7	3.0	3.1
Avg FOB Cost***	A\$ tonne	32.72	32.51	31.67
Avg FOB Received	A\$ tonne	45.24	42.03	40.49
Payback	months	5	5	5

Does not take into account MLM's accumulated tax losses

² See ASX Release 21 December 2016 "Strong PFS for Urquhart Bauxite project"

* AAI – Available Alumina @ 150°C ** RSi – Reactive Silica @ 150°C *** Includes all operating costs, royalties and other payments

Urquhart Bauxite – Key PFS Findings

Average Operating Costs³

Item	Unit	Scenario 1 (Base Case)
Total Saleable Product	dry kt	6,532
Average Price Received (FOB)	A\$/dry t	45.24
AUD:USD		0.71
Mining Costs	A\$/dry t	5.63
Haulage Costs	A\$/dry t	3.06
Transshipping Costs	A\$/dry t	14.13
Contractor Overheads	A\$/dry t	1.49
Other Costs	A\$/dry t	1.92
GnA	A\$/dry t	0.83
Royalties	A\$/dry t	5.66
EBITDA	A\$/dry t	12.52

- Start-up capital limited to working capital ~A\$1.1M (no contingency)
- Metallica accumulated tax losses ~A\$17.6M (30 June 2016)
- Opex built up via contractor quotes
- Contractors have confirmed that they will defer Haul Road and Mobilisation capex
- Average price received estimated by London based independent metal analyst CRU International utilising mine plan volumes and grades

Average EBITDA of \$18.8m per annum at 1.5mtpa

³ See ASX Release 16 January 2016 "Quarterly Activities Report"

Urquhart Bauxite – JORC Resource⁴

JORC Resource Estimate (48% Al₂ O₃ cut-off)

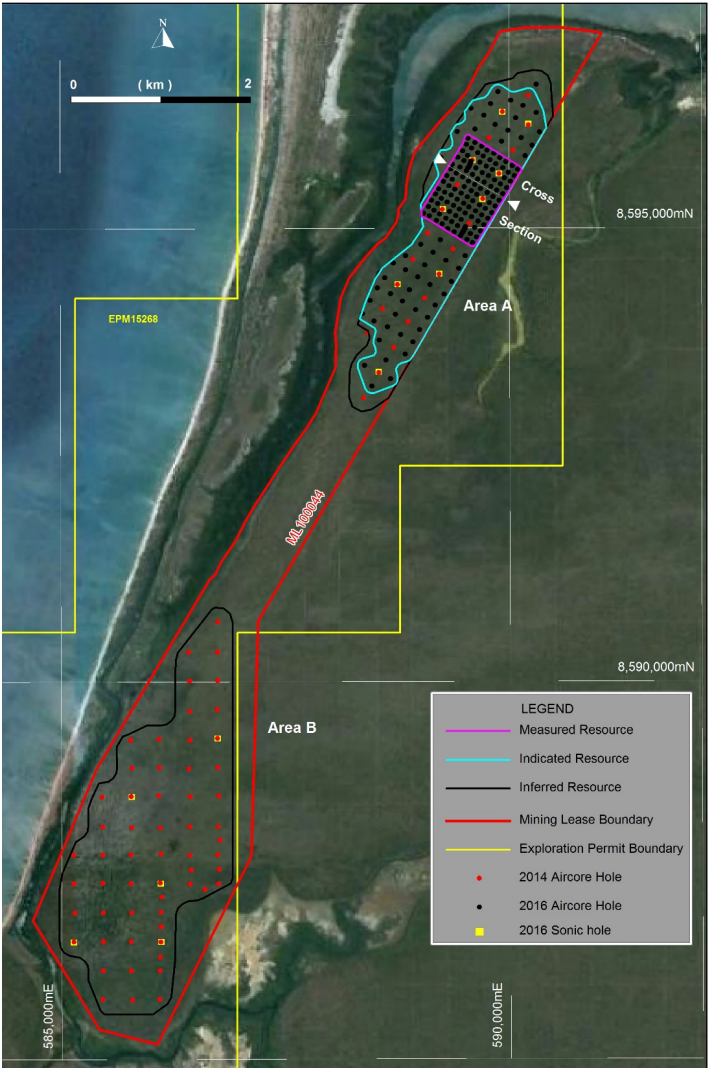
Classification	Area	Mt	Al ₂ O ₃ %	SiO ₂ %	AAI%*	RSi %**
Measured	A	3.0	54.4	11.8	43.2	5.0
Indicated	A	3.9	53.3	13.1	40.8	5.2
Inferred	A	0.3	54.2	11.3	42.0	4.7
	B	2.3	49.9	17.4	37.2	6.0
	Subtotal	2.6	50.3	16.8	37.6	5.9
Total		9.5	52.8	13.7	40.7	5.3

Upside (not included in JORC Resource)

Classification	Tonnes	Total Al ₂ O ₃	Total SiO ₂
Measured	0.8 Mt	44.1%	27.3%
Indicated	1.8 Mt	42.0%	30.0%
Inferred	5.9 Mt	35.7%	37.9%
Total	8.5 Mt	37.8%	35.2%

- Potential to upgrade low grade material via conventional dry screening
- Material not contained in JORC Resource Estimate
- Capital allowed for drilling and screen test work

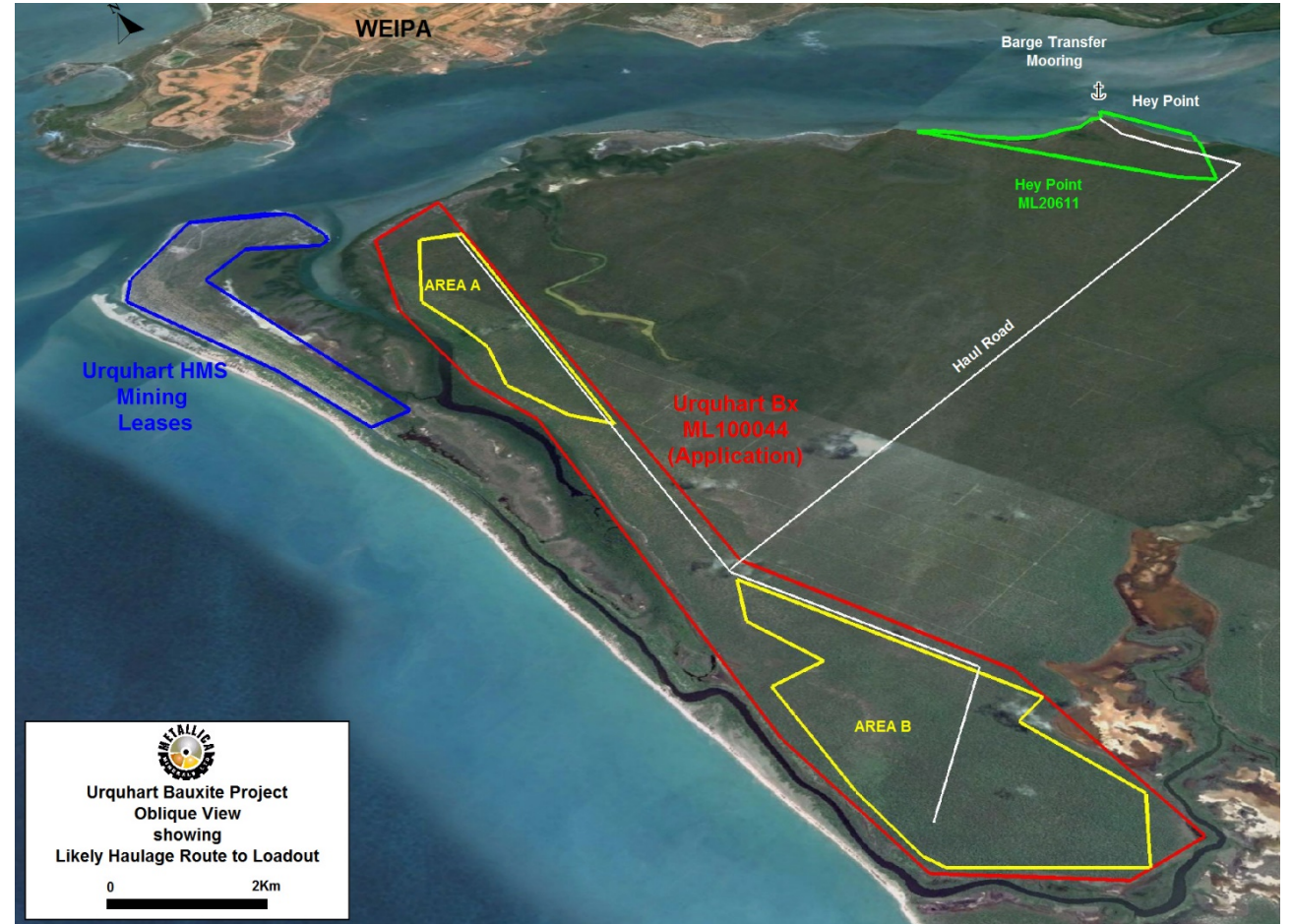
⁴ See ASX Release 14 November 2016 “Significant Increase to Mineral Resource at Urquhart Bauxite”
 * AAI – Available Alumina @150°C ** RSi – Reactive Silica @ 150°C



Urquhart Bauxite – Infrastructure and Logistics



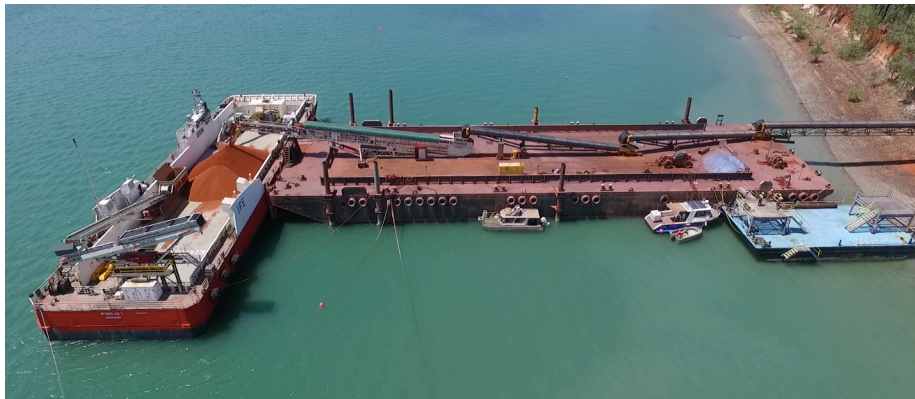
- Contractor model for mining, haulage and logistics delivers very low start-up capital model (~\$1.1m)
- Mining and haulage contractor has agreed to capitalise their mobilisation and haul road design and construct costs
- No on site processing
- On-site infrastructure limited to small office and workshop facility
- Established and operational Hey Point barge loading and transhipping facility
 - Operational with 3 ships loaded pre 2016/17 wet season
 - Heads of Agreement in place for access and transhipping services
 - Loan to Green Coast Resources (owner of Hey Point) secures access and a discounted transhipping rate⁵



⁵ See ASX Release 4 October 2016 "Company update and loan to Green Coast Resources"

Ideal Logistics

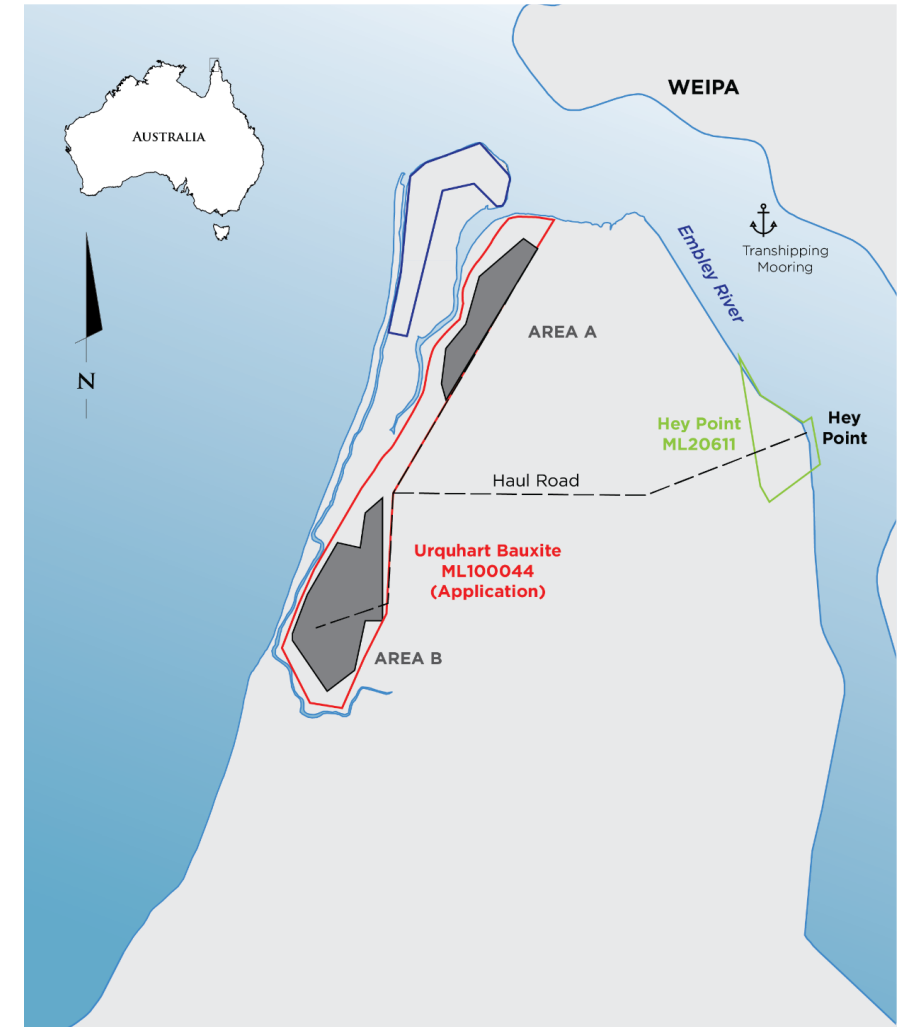
Hey Point – Maiden Shipment October 2016



Urquhart Bauxite – Permitting



- Commonwealth Government has confirmed that an EIS **won't** be required⁶
- Queensland State Government has confirmed that an EIS **won't** be required⁷
- Currently responding to Request For Information from Queensland State Government
- Haul Road Mining Lease (ML) linking Urquhart Bauxite to Hey Point
 - Haul Road ML and MLA 100044 to be granted concurrently
- Negotiating final agreements with Traditional Land Owners
- Expect approvals late in Q1 2017



⁶ See ASX Release 24 June 2016 "Commonwealth Government confirms no EIS"

⁷ See ASX Release 25 October 2016 "DEHP advises no EIS required for Urquhart Bauxite"

Low Temperature Bauxite is in Demand

- Production and export constraints:
 - Indonesian ban of raw exports removed ~40 Mtpa from the global bauxite market (2014). Potential for limited future exports with relaxation of ban
 - Malaysian ban has been extended again to March 2016
 - Some calls within India to reserve bauxite for domestic consumption
- Forecast 68 Mtpa shortfall in supply of low temperature bauxite by 2040⁸
- Low temperature bauxite market undersupplied in the short, medium and long term
- China's largest refineries are designed to accept low temperature bauxite but China predominantly produces high temperature bauxite
- Bauxite has decoupled from the alumina and aluminium pricing as new refining and smelting capacity is not integrated with dedicated mining operations
- In 2014–15, China imported only 39 Mt (nil from Indonesia), but needs more than 65 Mt of imported bauxite per year, rising even higher to more than 75 Mt in the next 5 years to feed its rapidly growing aluminium industry⁸

Imports into China

Many new sources of supply are needed

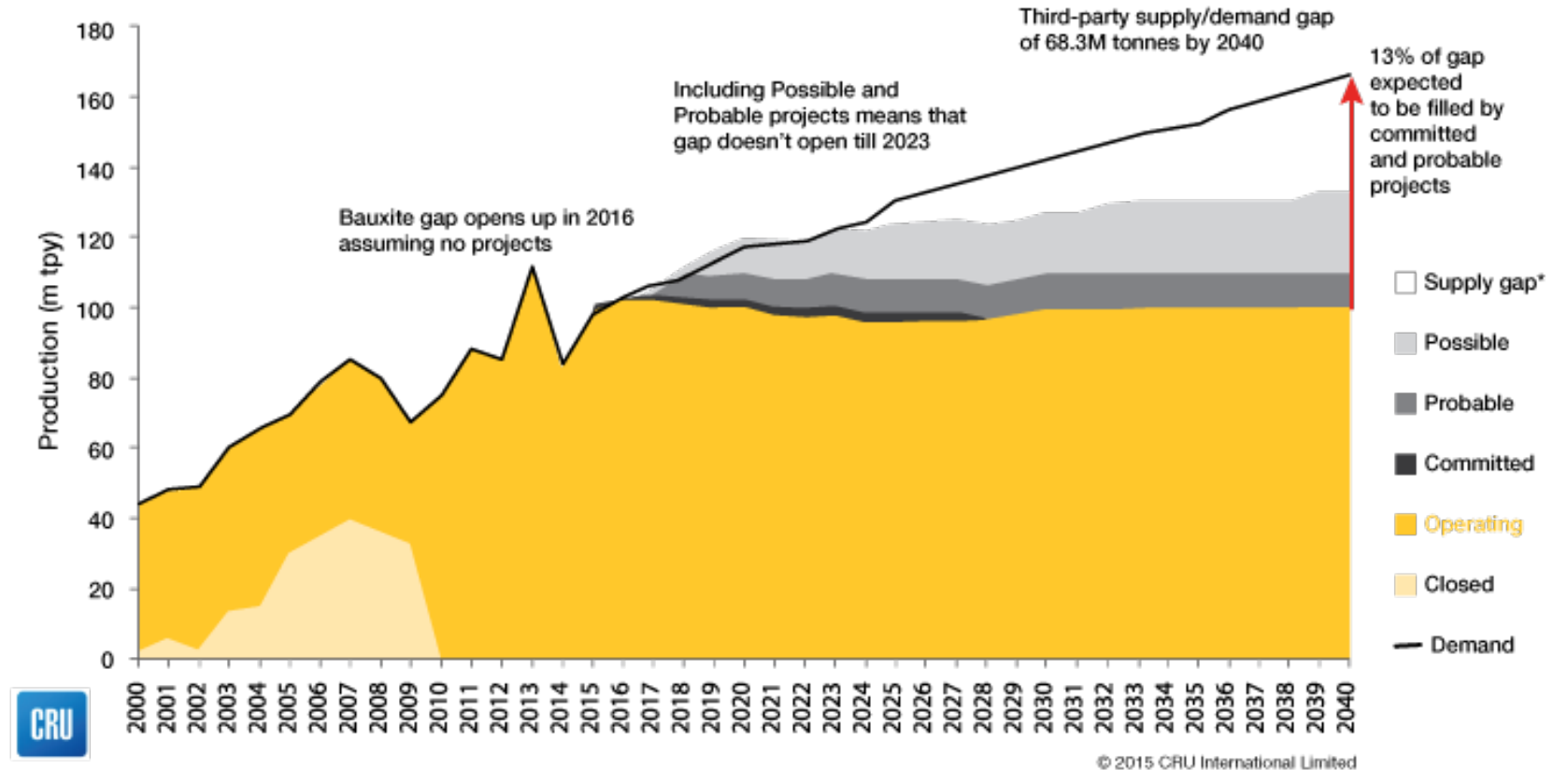


Low Temperature Bauxite

China's largest refineries are designed to accept low temperature bauxite but China predominantly produces high temperature bauxite

Seaborne Market

Pricing has decoupled from the alumina and aluminium pricing as new refining and smelting capacity is not integrated with dedicated mining operations



Scorecard



- ✓ Secured preferred logistics solution at the operational Hey Point facility⁵
- ✓ Received \$1.9 from sale of non-core limestone assets^{9 10 11}
- ✓ Metallurgical test results from Esmeralda¹⁵
- ✓ Queensland and Commonwealth Government confirms no need for an EIS^{6 7}
- ✓ Significant increase in volume and category to mineral Resource⁴
- ✓ SCONI JV delivers cash, reduces cost and preserves previous investment¹²
- ✓ Deliver Pre-Feasibility Study²

- Secure Offtake and Funding for Urquhart Bauxite
- Grant of Urquhart bauxite mining lease
- Production from Urquhart bauxite
- Unlock value from non-core assets
- Pipeline of new opportunities

⁹ See ASX Release 16 November 2016 "Option to sell Boyne Limestone for \$1,000,000"

¹⁰ See ASX Release 9 July 2015 "\$550k sale of Ootann Limestone Project"

¹¹ See ASX Release 28 July 2016 "\$370,000 Sale of Star Limestone Project"

¹² See ASX Release 10 October 2016 "Metallica-Australia Mines SCONI Joint Venture"

Thank You



SUBSIDIARY COMPANIES

NORNICO Pty Ltd ACN 065 384 045

Oresome Australia Pty Ltd ACN 071 762 484

Oresome Bauxite Pty Ltd ACN 606 362 252

Lucky Break Operations Pty Ltd ACN 126 272 580

Phoenix Lime Pty Ltd ACN 096 355 761

Greenvale Operations Pty Ltd ACN 139 136 708

Scandium Pty Ltd ACN 138 608 894

Touchstone Resources Pty Ltd ACN 126 306 018

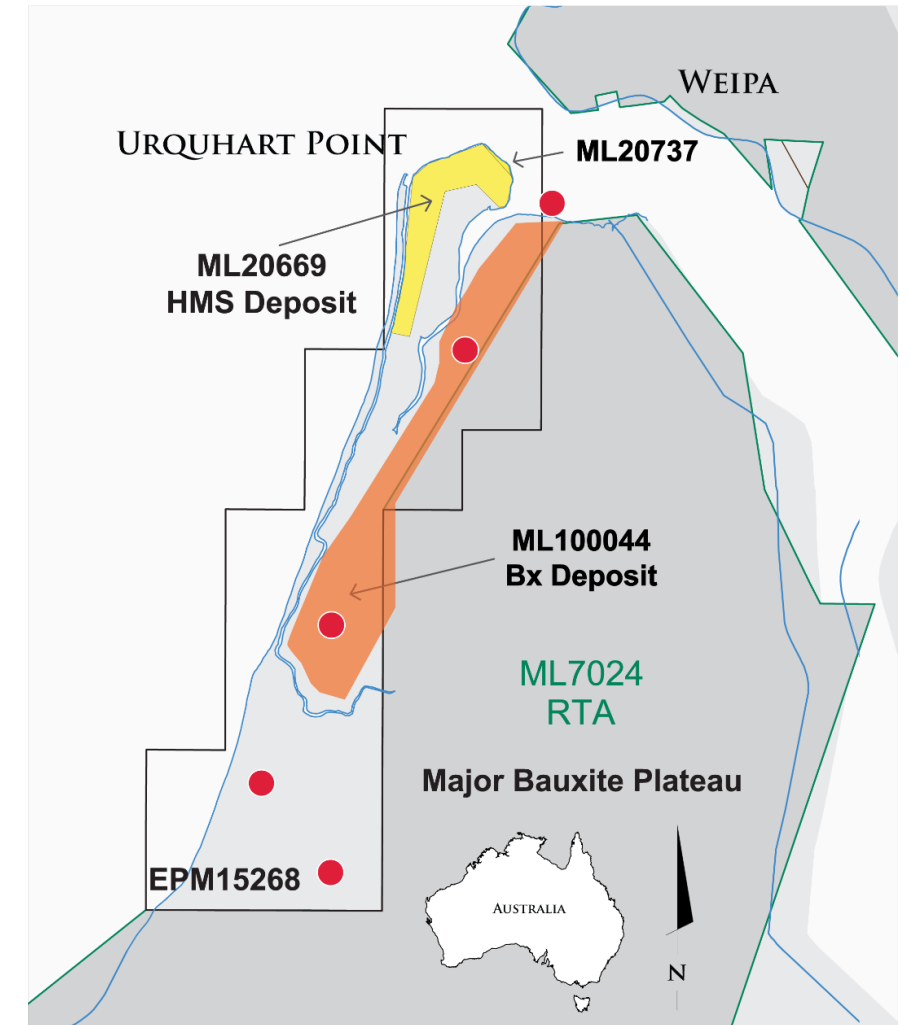
Appendix



Urquhart Point HMS Project (Qld) – 50%



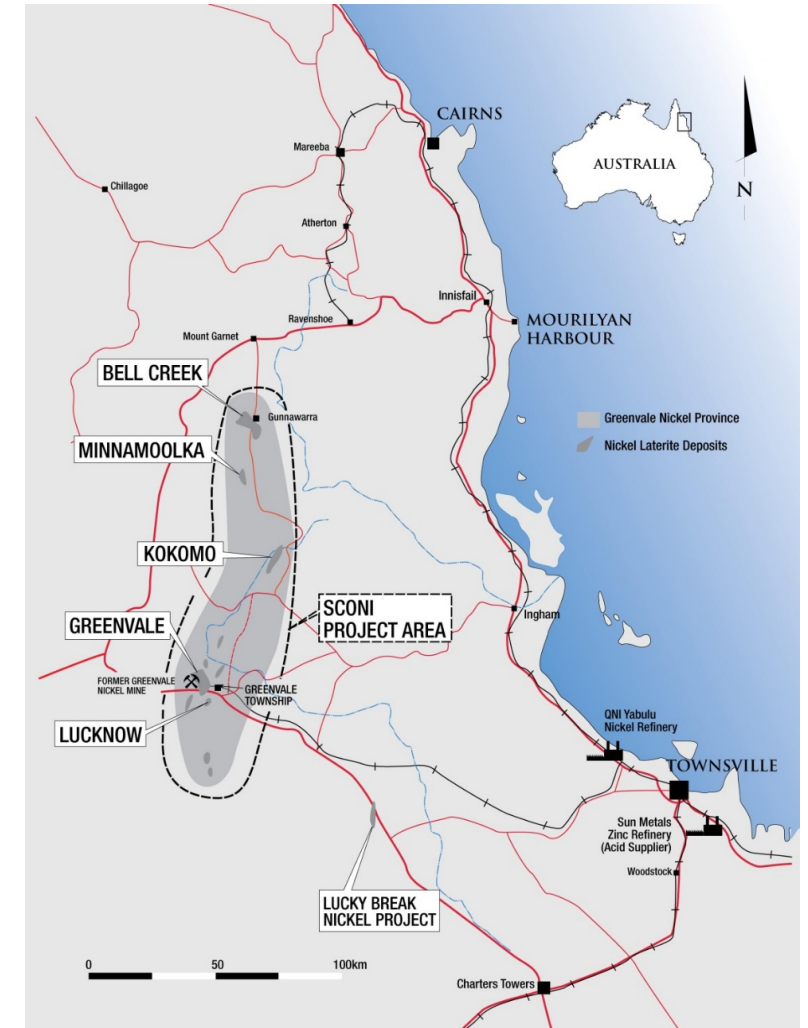
- Project currently on hold
- Fully permitted
- HMS processing plant constructed and in storage near Brisbane
- Over \$4.5m spent on design and manufacture of the processing plant alone
- Able to bring into production in 3-4 months from an internal decision to proceed with development
- Highly leveraged to a rebound in heavy mineral sand prices
- Heavy mineral sands prices have started to recover
- Simple dry mining and processing plan



SCONI Nickel-Cobalt-Scandium Project (Qld) – 100%



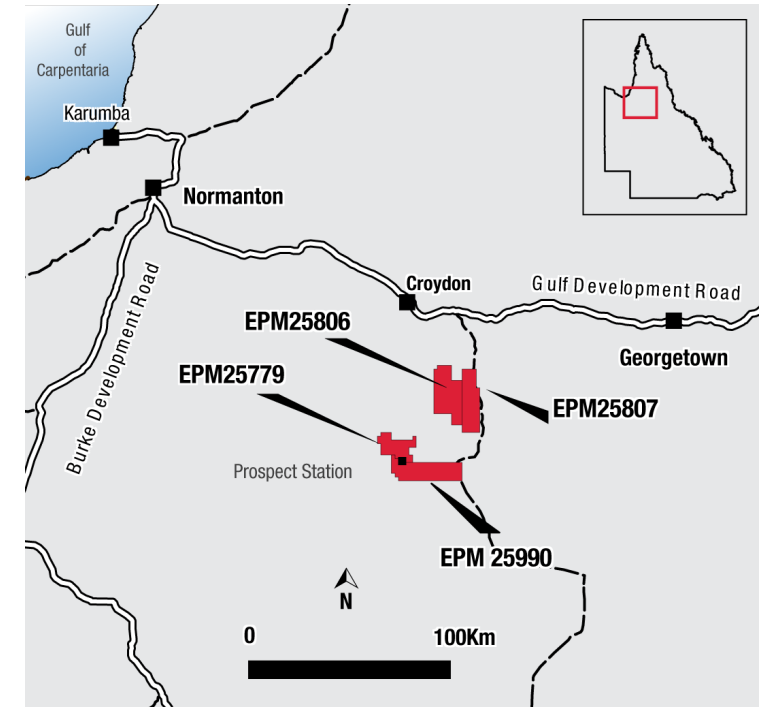
- Completed Joint Venture with Australian Mines¹² to:
 - Preserve value
 - Maintain upside exposure to cobalt, scandium and nickel markets
 - Reduce cash costs to focus on Urquhart Bauxite
- Key terms of the Joint Venture are:
 - Payment of \$250,000 (received)
 - \$10 million expenditure or BFS to earn 50% over 4 years
 - Secure suitable financing to earn a further 25% (total 75%) over a further 18 months
- Australian Mines focussed on scandium with a market capitalisation of ~\$8.9m



Esmeralda Graphite Project (Qld) – 100%



- Spectacular¹³ high grade graphite intersections at the 100% owned Esmeralda Project
 - WD001 – 95 m @ 6.5% Cg¹⁴ from 71m
 - WD002 – 29.1 m @ 7.8% Cg¹⁴ from 71.9m, including 7.1 m @ 12.9% Cg
- 91.5% graphite concentrate produced with a 91% recovery via conventional flotation tests¹⁵
- Upgrade of concentrate to 97.8% via single stage caustic bake¹⁵
- Petrology confirms the same mineralisation style hosted within hydrothermally altered granite is present in both holes which are 1.2km apart
- 2016 Electromagnetic survey over 3.5% of the project area failed to identify near surface mineralisation¹⁶



¹³ See ASX Release 10 December 2015 "Assays strongly support potential for large graphite deposit"

¹⁴ Using a cut-off grade of 3% Cg

¹⁵ See ASX Release 24 May 2016 "High Purity and Recovery from Esmeralda Graphite testwork"

¹⁶ See ASX Release 16 January 2016 "Quarterly Activities Report"

Cape Flattery Silica Sands Project (Qld) – 100%



- Located adjacent to Mitsubishi's large silica sands mine (Cape Flattery Silica Mines)
- Large silica sands dune field that has been producing since 1967
- Jetty and ship loading facility in place
- Large exploration tenement – 54 km²
- *Seeking JV partner or other transaction to unlock value from the project*

