

Australia's Next Bauxite Producer

Investor Presentation – July 2017



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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 was formally a 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/report.



Investment Highlights



Fully funded
through to
production



Global bauxite
supply and demand
fundamentals supporting
development



On track to commence
bauxite production
in Q3 2017 with
minimal capex



100% of Scandium
Cobalt Nickel project



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



322M

Shares on Issue

39M

Options on Issue

A\$0.057

Share Price
as at 14 July 2017

A\$18.4M

Market
Capitalisation

A\$4.4M

Cash

A\$2M

Negotiating standby
credit facility

36.5%

Top 20
Shareholders

12.5%

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.



Shu Zhang alternate for Wang Ruobing
Non-Executive Director
Wang Ruobing appointed 6 March 2017

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.



Simon Slesarewich
Chief Executive Officer
Appointed 13 July 2015

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.



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



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

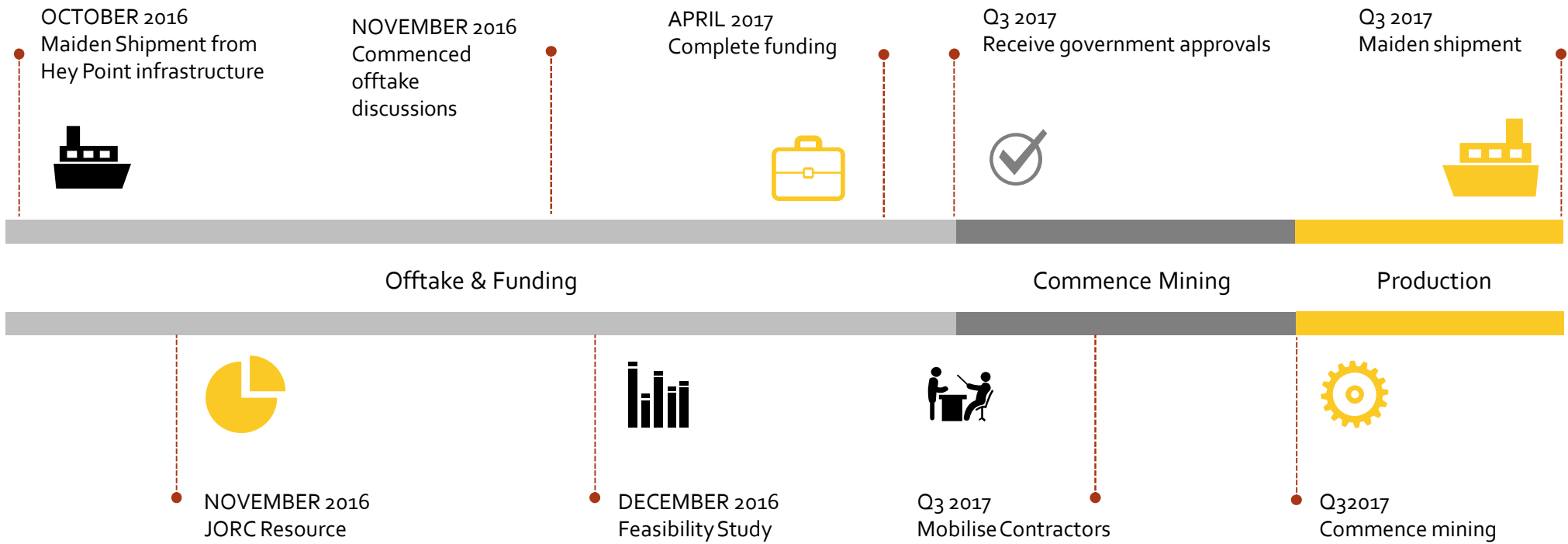
Metallica is focused on building a sustainable bauxite business with the Urquhart Bauxite project forming the foundation.

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
NPV₁₀ 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

Notes:

- Unless otherwise indicated all figures are on a 100% project basis
- Metallica confirms all material assumptions underpinning production targets and corresponding financial information continue to apply and have not materially changed as per Listing Rule 5.19.2

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

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

- Start-up capital limited to working capital ~A\$1.1M (no contingency)
- Metallica accumulated tax losses ~A\$17.6M (30 June 2016)
- LCR Group appointed as mining and haulage contractor. Contract prices in line with PFS⁴
- LCR Group have confirmed that they will partially defer Haul Road and Mobilisation capex⁴
- Average price received estimated by London based independent metal analyst CRU International utilising mine plan volumes and grades

³ See ASX Release 16 January 2016 "Quarterly Activities Report"
⁴ See ASX Release 22 May 2017 "Mining and Haulage Contractor Appointed"

Notes:

- Metallica confirms all material assumptions underpinning production targets and corresponding financial information continue to apply and have not materially changed as per Listing Rule 5.19.2

Urquhart Bauxite – JORC Resource⁵

JORC Resource Estimate (48% Al₂O₃ cut-off)

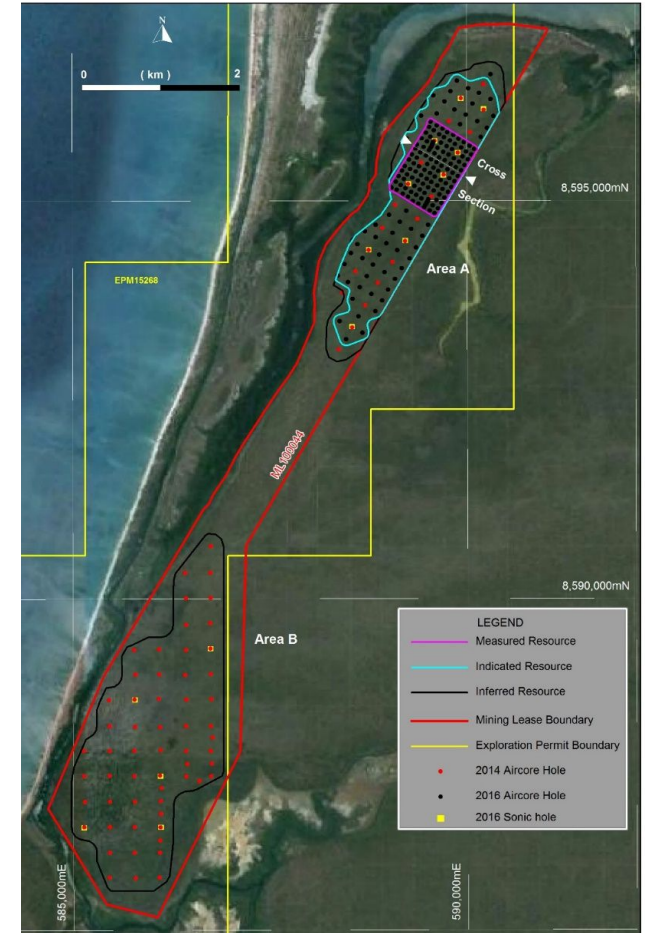
Classification	Area	Mt	Al ₂ O ₃ %	SiO ₂ %	AAI%*	RSi %**
Measured	A	3.0	54.4	11.8	43.2	5.0
Indicated	A	3.9	53.3	13.1	40.8	5.2
Inferred	A	0.3	54.2	11.3	42.0	4.7
	B	2.3	49.9	17.4	37.2	6.0
	Subtotal	2.6	50.3	16.8	37.6	5.9
Total		9.5	52.8	13.7	40.7	5.3

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



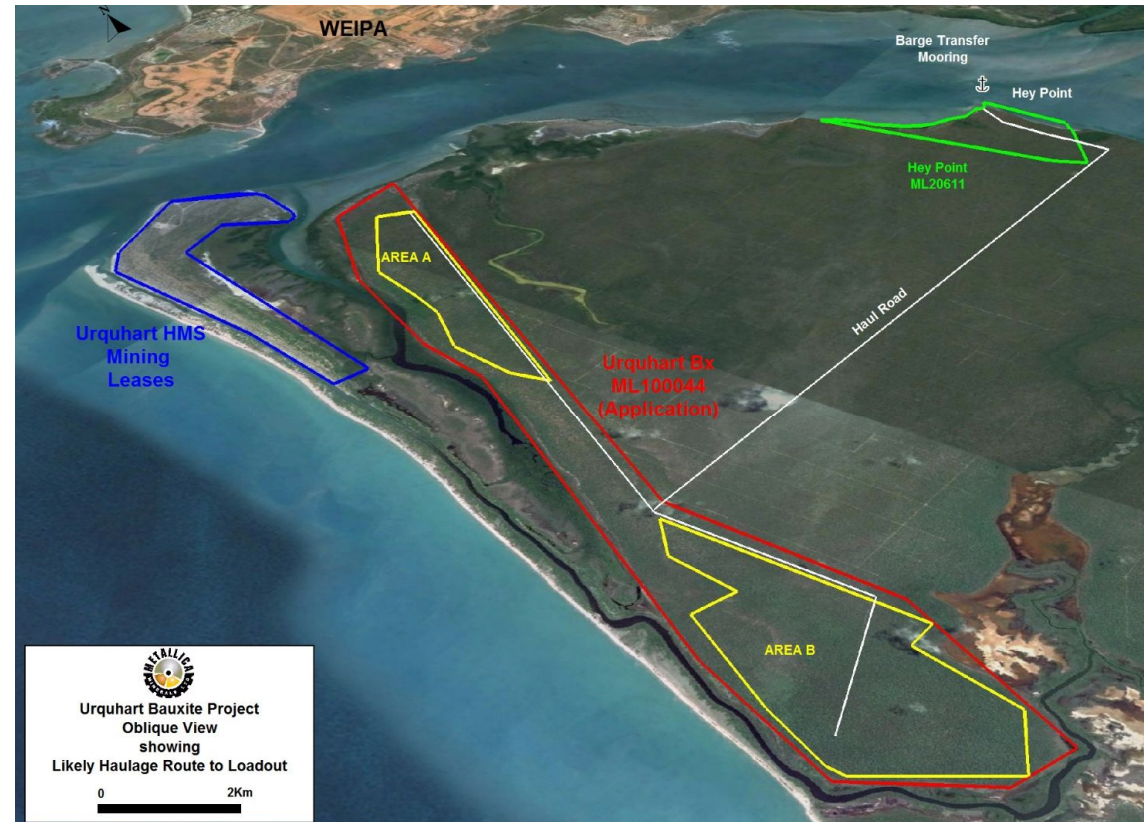
⁵ See ASX Release 14 November 2016 "Significant Increase to Mineral Resource at Urquhart Bauxite"

* AAI – Available Alumina @150°C ** RSi – Reactive Silica @ 150°C

Urquhart Bauxite – Infrastructure and Logistics



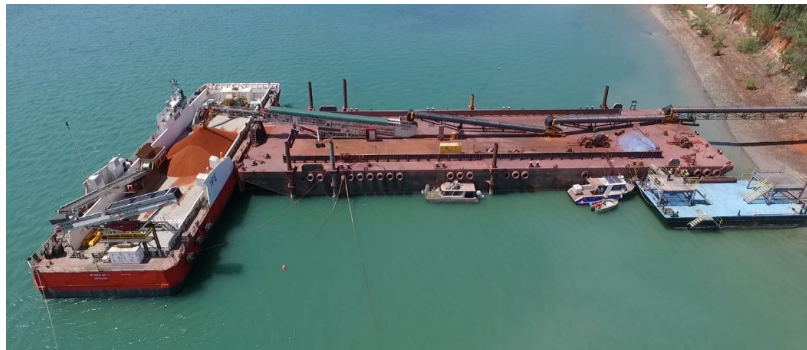
- Contractor model for mining, haulage and logistics delivers very low start-up capital model (~\$1.1m)
- LCR Group has agreed to partly capitalise their mobilisation and haul road design and construct costs
- No on site processing
- On-site infrastructure limited to small office and workshop facility
- Established and operational Hey Point barge loading and transhipping facility
 - Operational with 3 ships loaded pre 2016/17 wet season
 - Loan to Green Coast Resources (owner of Hey Point) secures access and a discounted transhipping rate⁶
 - Queensland State Government has confirmed that use of Hey Point requires no further approvals



⁶ See ASX Release 4 October 2016 "Company update and loan to Green Coast Resources"

Ideal Logistics

Hey Point – Maiden Shipment October 2016



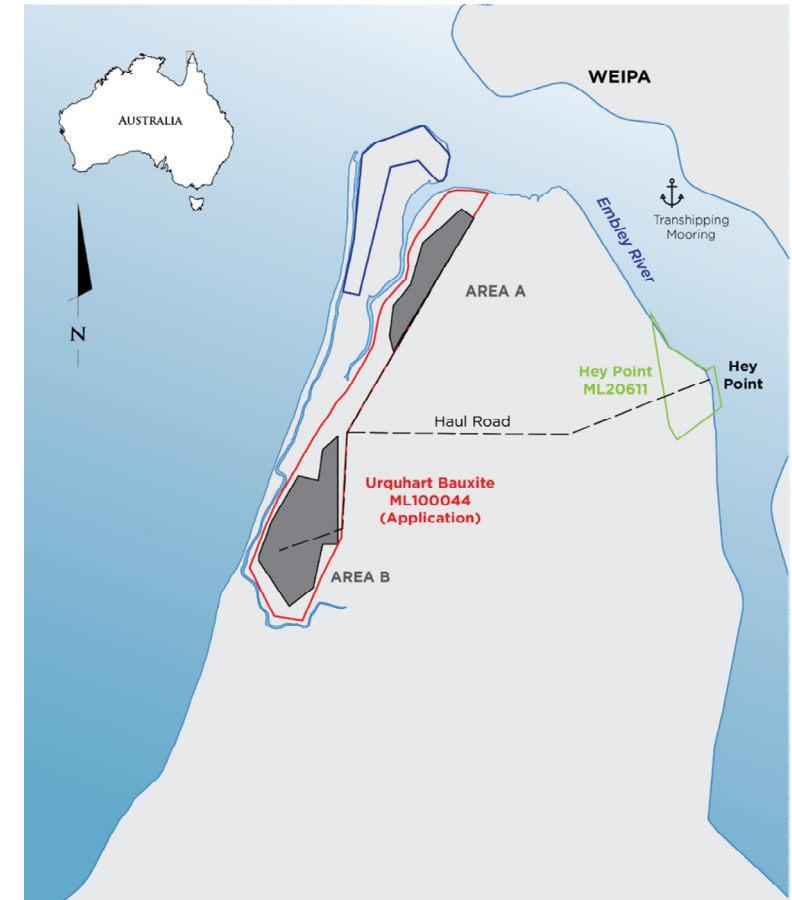
Urquhart Bauxite – Permitting

- Commonwealth Government has confirmed that an EIS **won't** be required⁷
- Queensland State Government has confirmed that an EIS **won't** be required⁸
- Executed all Traditional Land Owner agreements⁹
- Commonwealth Government public notification period completed with no submissions received
- Finalising Queensland State Government approvals. Commencing notification process
- Haul road approval to be via a Development Application with the local Cook Shire Council
 - Utilise all previous work completed to date
 - To be run concurrently with final Queensland State approvals
- Expect approvals in Q3 2017

⁷ See ASX Release 24 June 2016 "Commonwealth Government confirms no EIS"

⁸ See ASX Release 25 October 2016 "DEHP advises no EIS required for Urquhart Bauxite"

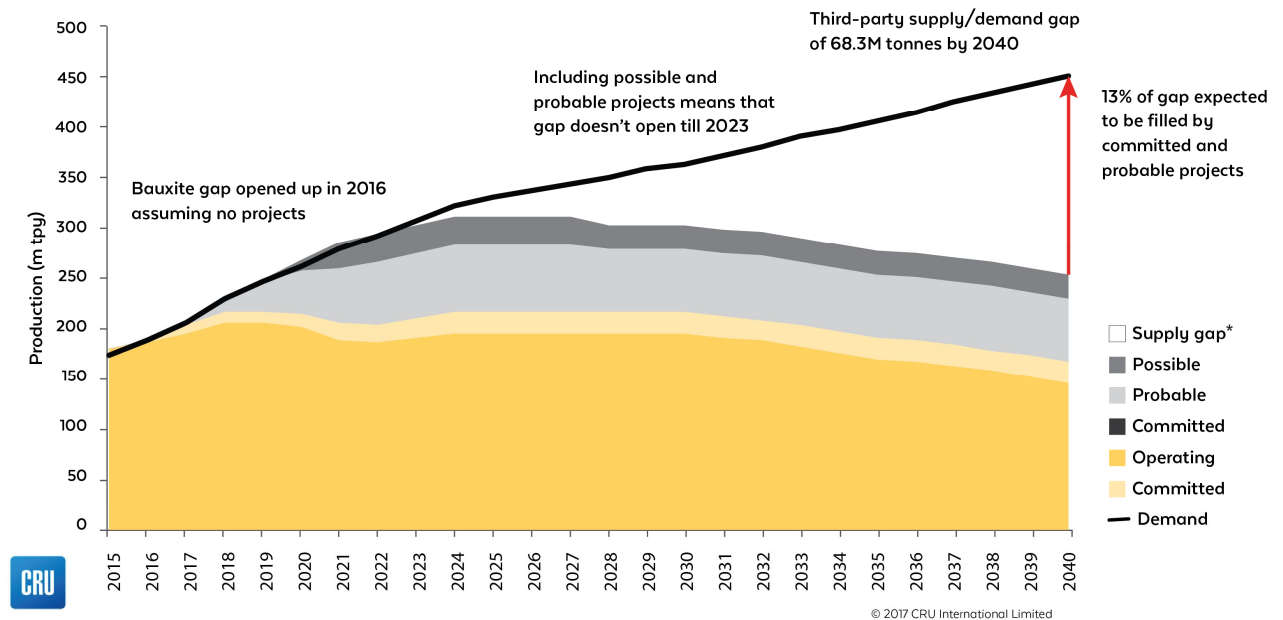
⁹ See ASX Release 21 June 2017 "Traditional Land Owner Compensation Agreement"



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 to the end of 2017
 - Some calls within India to reserve bauxite for domestic consumption
- Forecast 80.2 Mtpa shortfall in supply of low temperature bauxite by 2040¹⁰
- Chinese bauxite imports set to grow from 55.9Mt in 2015 to 84.5Mt in 2025¹⁰
- Bauxite has decoupled from the alumina and aluminium pricing as new refining and smelting capacity is not integrated with dedicated mining operations
- Chinese domestic bauxite quality has deteriorated significantly

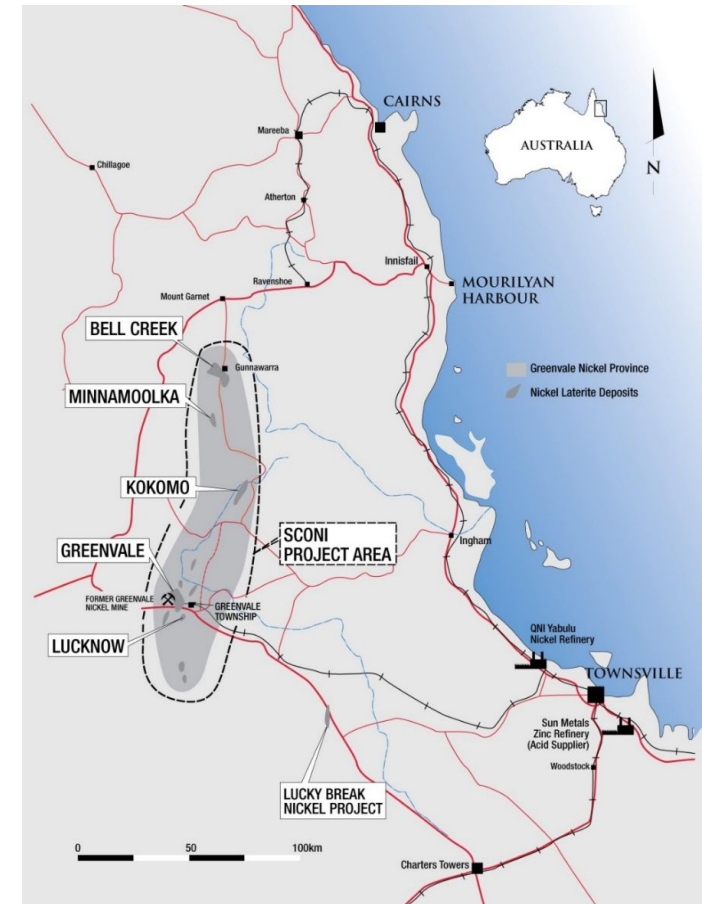


¹⁰ CRU International Limited

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



- Completed Joint Venture with Australian Mines¹¹ to:
 - Preserve value
 - Maintain upside exposure to cobalt, scandium and nickel markets
 - Reduces 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 ~\$30M
 - Environmental licence granted by the Queensland Government¹²
 - Definitive feasibility underway¹²
 - Finalised design of demonstration-size processing plant with construction scheduled commenced in May 2017¹³



¹¹ See ASX Release 10 October 2016 "Metallica-Australia Mines SCONI Joint Venture"

¹² See AUZ ASX Release 2 March 2017 "Environmental licences granted for mining operation at SCONI"

¹³ See AUZ ASX Release 15 May 2017 "Construction Commences on Processing Plant"



Scorecard

- ✓ Secured preferred logistics solution at the operational Hey Point facility⁵
 - ✓ Received \$1.9 from sale of non-core limestone assets^{14 15 16}
 - ✓ Metallurgical test results from Esmeralda¹⁸
 - ✓ Queensland and Commonwealth Government confirms no need for an EIS^{7 8}
 - ✓ Significant increase in volume and category to mineral Resource⁴
 - ✓ SCONI JV delivers cash, reduces cost and preserves previous investment⁹
 - ✓ Deliver Pre-Feasibility Study²
 - ✓ Funding secured via underwritten Renounceable Rights Issue and Options¹⁷
 - ✓ LCR Group appointed as mining and haulage contractor. Costs and deferred capex in line with PFS
 - ✓ Executed Traditional Land Owner Agreements⁹
- Secure Offtake for Urquhart Bauxite
 - Grant of Urquhart bauxite mining lease
 - Production from Urquhart bauxite
 - Unlock value from non-core assets
 - Pipeline of new opportunities

¹⁴ See ASX Release 16 November 2016 "Option to sell Boyne Limestone for \$1,000,000"

¹⁵ See ASX Release 9 July 2015 "\$550k sale of Ootann Limestone Project"

¹⁶ See ASX Release 28 July 2016 "\$370,000 Sale of Star Limestone Project"

¹⁷ See ASX Release 10 March 2017 "Renounceable Issue"

Key Take Away



Funded

Cash + 30 June 2017
options now exercised

Production

On target for Q3 CY2017
production

Value

Cash flow + Unrealised
value in other non-core
projects

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

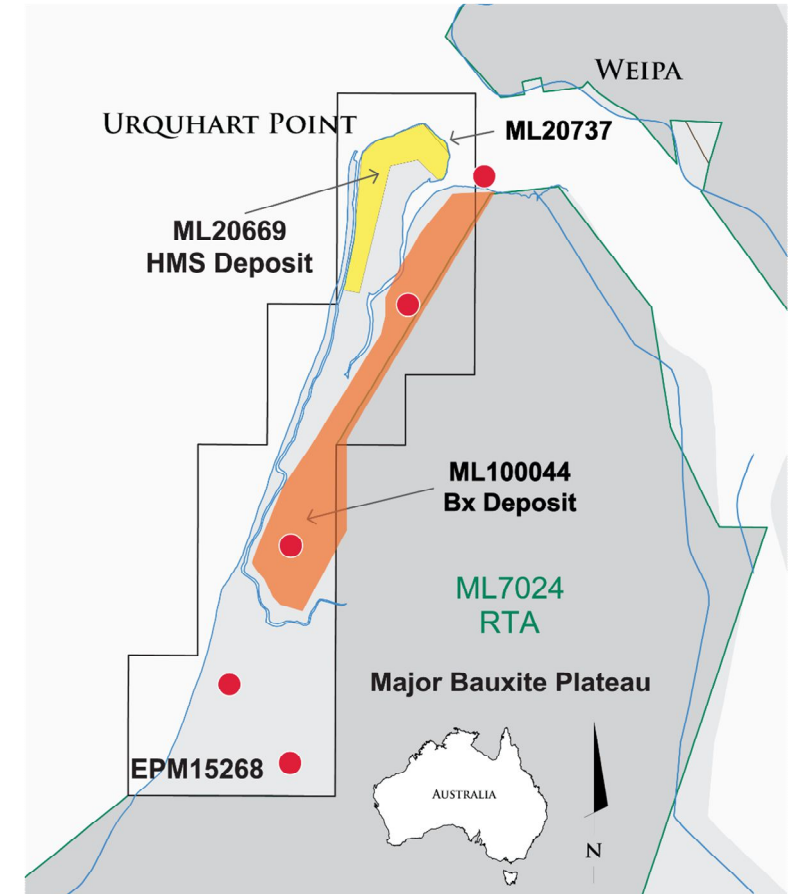
Appendix



Urquhart Point HMS Project (Qld) – 50%



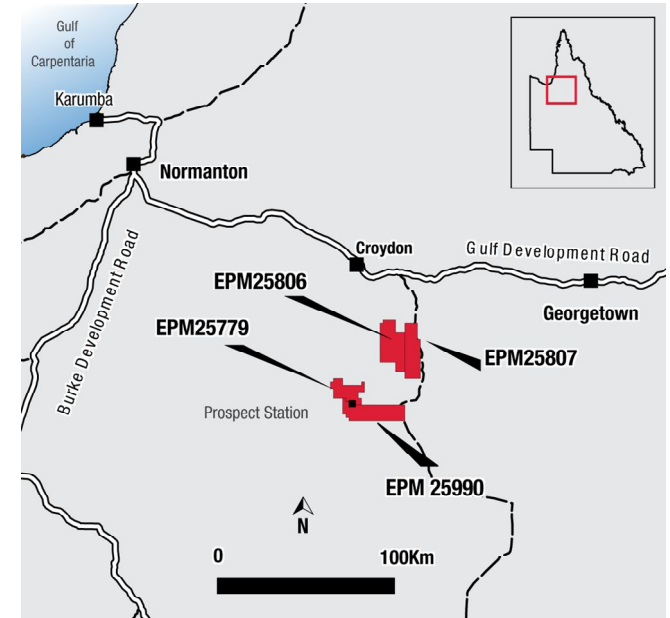
- Project currently on hold
- Fully permitted
- HMS processing plant constructed and in storage near Brisbane
- Over \$4.5m spent on design and manufacture of the processing plant alone
- Able to bring into production in 3-4 months from an internal decision to proceed with development
- Highly leveraged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



Esmeralda Graphite Project (Qld) – 100%



- Spectacular¹⁸ high grade graphite intersections at the 100% owned Esmeralda Project
 - WD001 – 95 m @ 6.5% Cg¹⁹ from 71m
 - WD002 – 29.1 m @ 7.8% Cg¹⁹ from 71.9m, including 7.1 m @ 12.9% Cg
- 91.5% graphite concentrate produced with a 91% recovery via conventional flotation tests²⁰
- Upgrade of concentrate to 97.8% via single stage caustic bake¹⁸
- 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 mineralisation²¹



¹⁸ See ASX Release 10 December 2015 "Assays strongly support potential for large graphite deposit"

¹⁹ Using a cut-off grade of 3% Cg

²⁰ See ASX Release 24 May 2016 "High Purity and Recovery from Esmeralda Graphite testwork"

²¹ 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*

