



METALLICA MINERALS LIMITED

INVESTOR UPDATE

July 2016

On track to commence bauxite production in H1 2017



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The **Cape York Bauxite (Bx) and 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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- The **Urquhart Bauxite Project** is at an advanced feasibility and development stage and reasonable care has been taken to ensure that the facts stated in this announcement are accurate and or that the opinions expressed are fair and reasonable. However, actual results may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors.

Technical information contained in this report has been compiled by Metallica Minerals Non-Executive Director Mr Andrew Gillies B.Sc. & M. AUSIMM, who is a **competent person** & a member of the Australasian Institute of Mining & Metallurgy & have relevant experience to the mineralisation being reported on to qualify as Competent Persons as defined by the Australasian Code for Reporting of Minerals Resources & Reserves. Mr Gillies consents to the inclusion in this presentation of the matters based on the information in the form & context in which it appears.

***Exploration Target** - The potential quantity and grade of the bauxite deposits are conceptual in nature. There is insufficient information at this time to define a mineral resource and there is no certainty that further exploration will result in the determination of a mineral resource in these areas.

For further detailed information on the content of this presentation please also refer to the following ASX Releases dated: 12th Jul7 2016, 27th June 2016, 24 June 2016, 24th May 2016, 7th April 2016, 10th December 2015, 25th June 2015, 11th May 2015, 2015 Cru International Limited.



Highlights

- Well funded through to grant of Urquhart Bauxite mining lease
- Strong global bauxite supply and demand fundamentals supporting development
- On track to commence bauxite production in H1 2017 with minimal capex
- Commonwealth Government confirms no requirement for EIS¹
- Heads of Agreement for access and logistics through Hey Point significantly de-risks delivery²
- Ramp up to 1.5 – 2mtpa to deliver sustainable free cash flow
- 91.5% graphite concentrate produced via conventional flotation tests that was upgraded to 97.8% following a single stage caustic bake purification³
- Tight capital structure with no debt
- Realised value from sale of non-core assets ~\$1.9 million⁴



Corporate Snapshot

Capital Structure

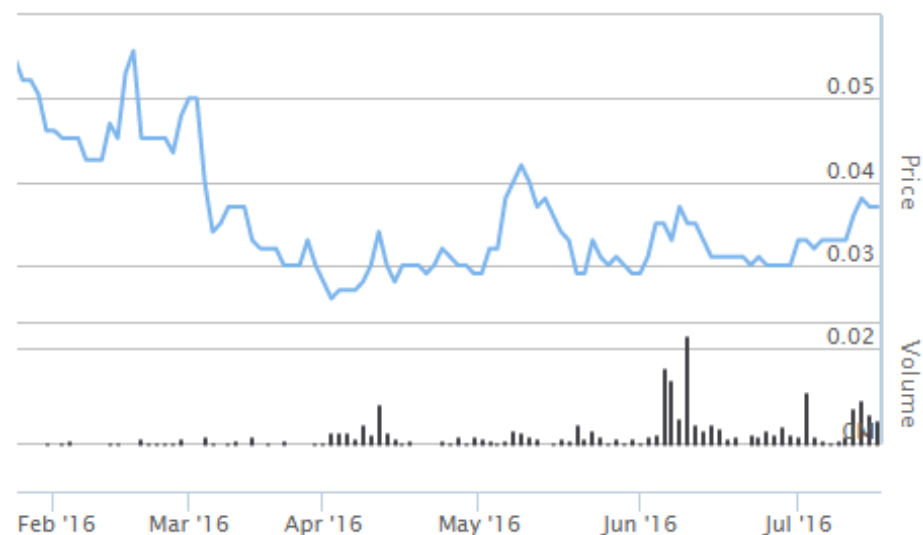
Shares on issue	227.3m
Options on issue	38m
Share price (18 July 2016)	A\$0.037
Market capitalisation	A\$8.4m
Cash at 30 June 2016	A\$2.3m

No debt

Top 20 shareholders	41.2%
Directors and management	5.1%
Jien Mining	17.6%

Board and Management

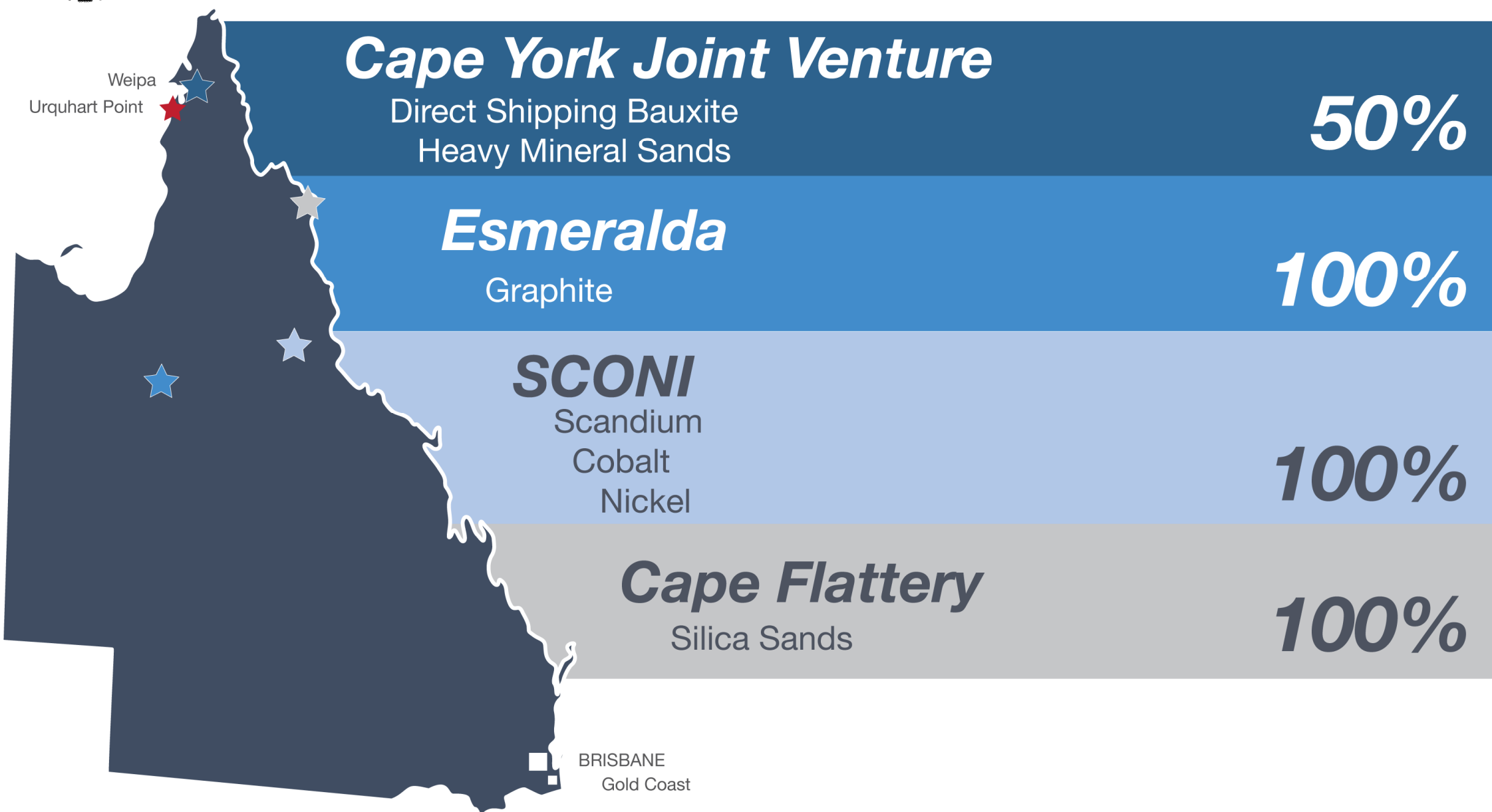
Barry Casson	Non-Executive Chairman
Simon Slesarewich	Chief Executive Officer
Andrew Gillies	Non-Executive Director
Shu Wu	Non-Executive Director
Shu Zhang	Alternate Non-Executive Director
John Haley	CFO I Company Secretary



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



Project Overview





Urquhart Bauxite Project

- ## HMS & Regional Projects

- HMS Project on hold
- Reviewing options to deliver value on HMS project and plant
- Over 1,257 km² coastal tenements held which cover many HM sand and laterite bauxite targets
- Contains a large (42 Mt – 128 Mt) bauxite Exploration Target

Logistics solution secured and close to Asian bauxite markets





Low Temperature Bauxite Is In Demand

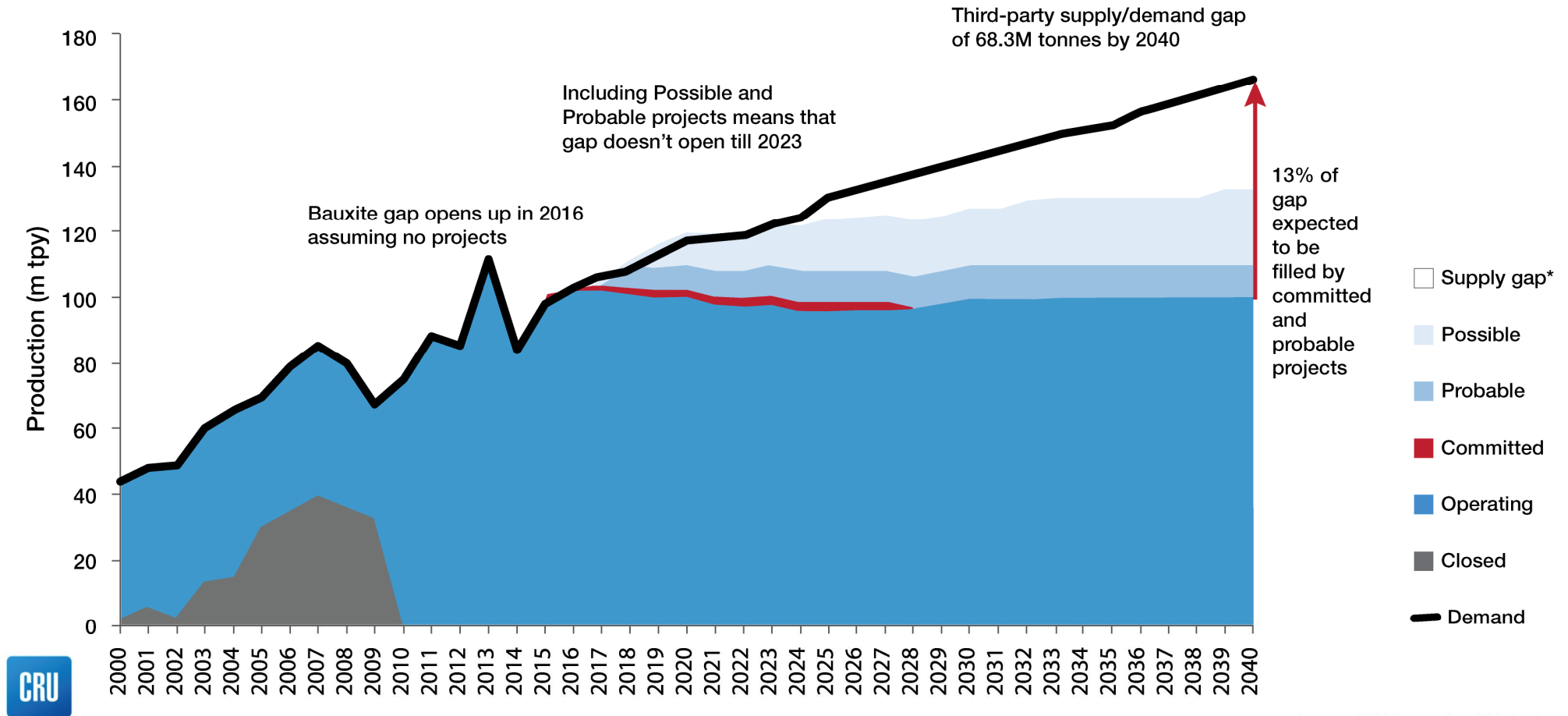
- Testing has confirmed low temperature bauxite production
- Production and export constraints:
 - Indonesian ban of raw exports removed ~40 Mtpa from the global bauxite market
 - Malaysia has extended a 3 month ban on exports to mid July, with calls for a further extension
 - Some calls within India to reserve bauxite for domestic consumption
- Forecast 68 Mtpa shortfall in supply of low temperature bauxite by 2040¹
- 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 industry.



Imports into China

Strong growth in Chinese third party bauxite demand to result in a supply-demand gap opening after 2016

World third party bauxite balance, 2000-2040



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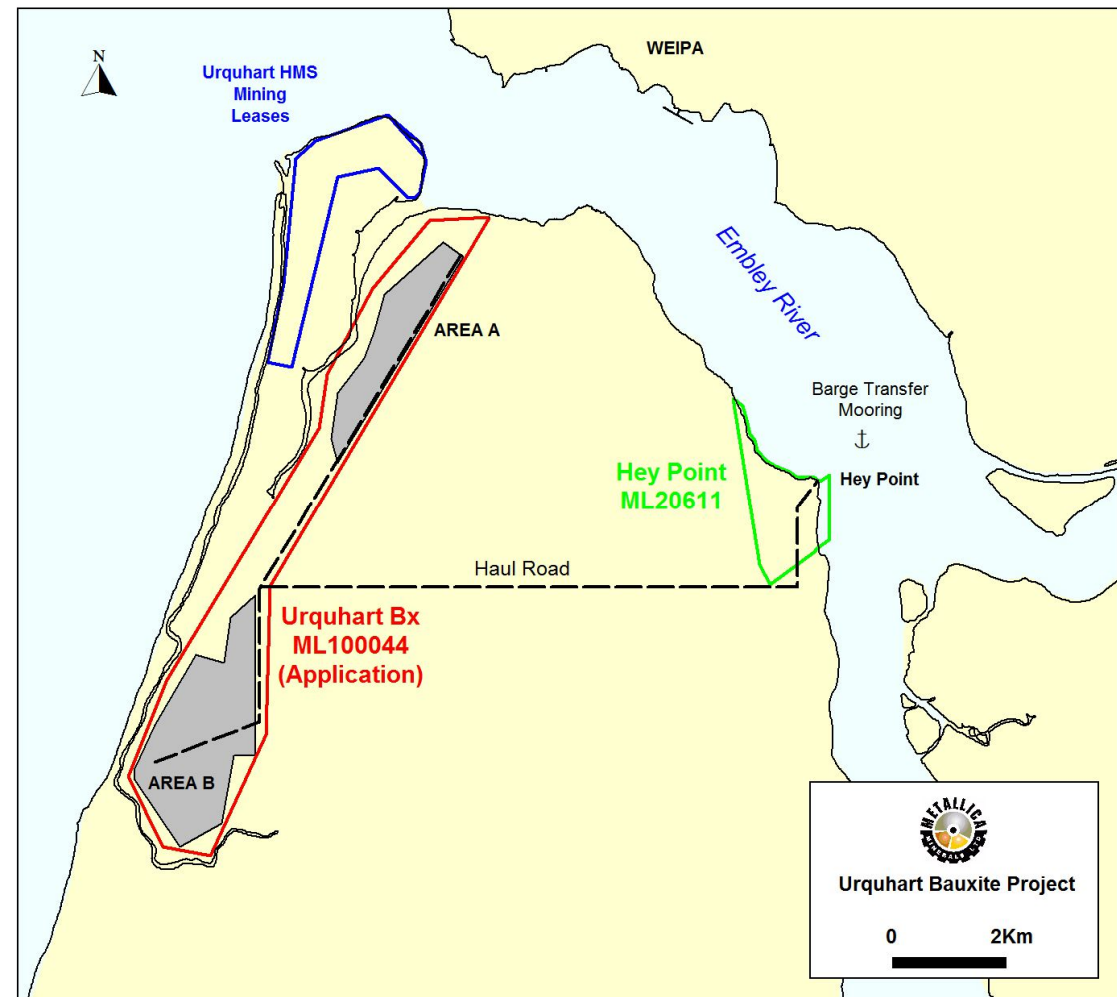
Many new sources of supply are needed!



Urquhart Bauxite Project

Why do we like Urquhart Bauxite?

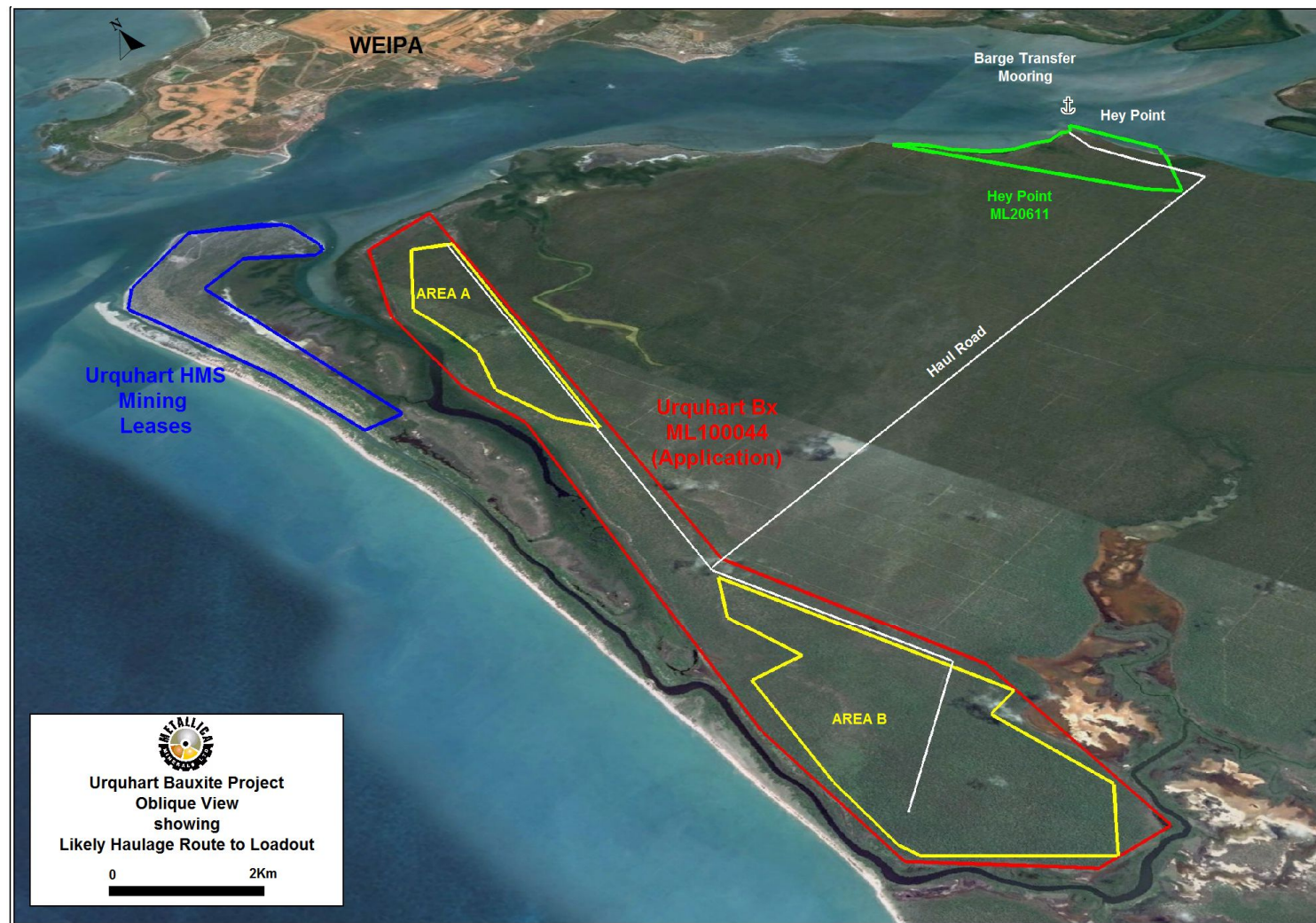
- Defined path to production in H1 2017
- Simple 1.5 – 2 Mtpa development
- Positive in-house scoping study
- Modest capex and simple development scenario
- Ideally located near deep water
- Executed Heads of agreement for logistics and access to Hey Point
- Well-known and accepted low temperature bauxite product
- Strong supply and demand fundamentals
 - Indonesia ban
 - Malaysian ban
 - Calls for Indian production to be reserved for domestic use
- Proven ability to secure approvals via Urquhart Point HMS mining lease





Ideal Logistics

- Bulk commodities is all about logistics
- Successfully completed an in house options study on logistics and load out options
- Derisked logistics via execution of a Heads of Agreement to utilise infrastructure and access at Hey Point
 - Low capex
 - Compressed start-up





Ideal Logistics – *Hey Point June 2016*





Logistics Advantage

Guinea to remain the marginal supplier as it is located some distance from China, the largest buyer of third party bauxite

China's favoured regions for third party bauxite supply



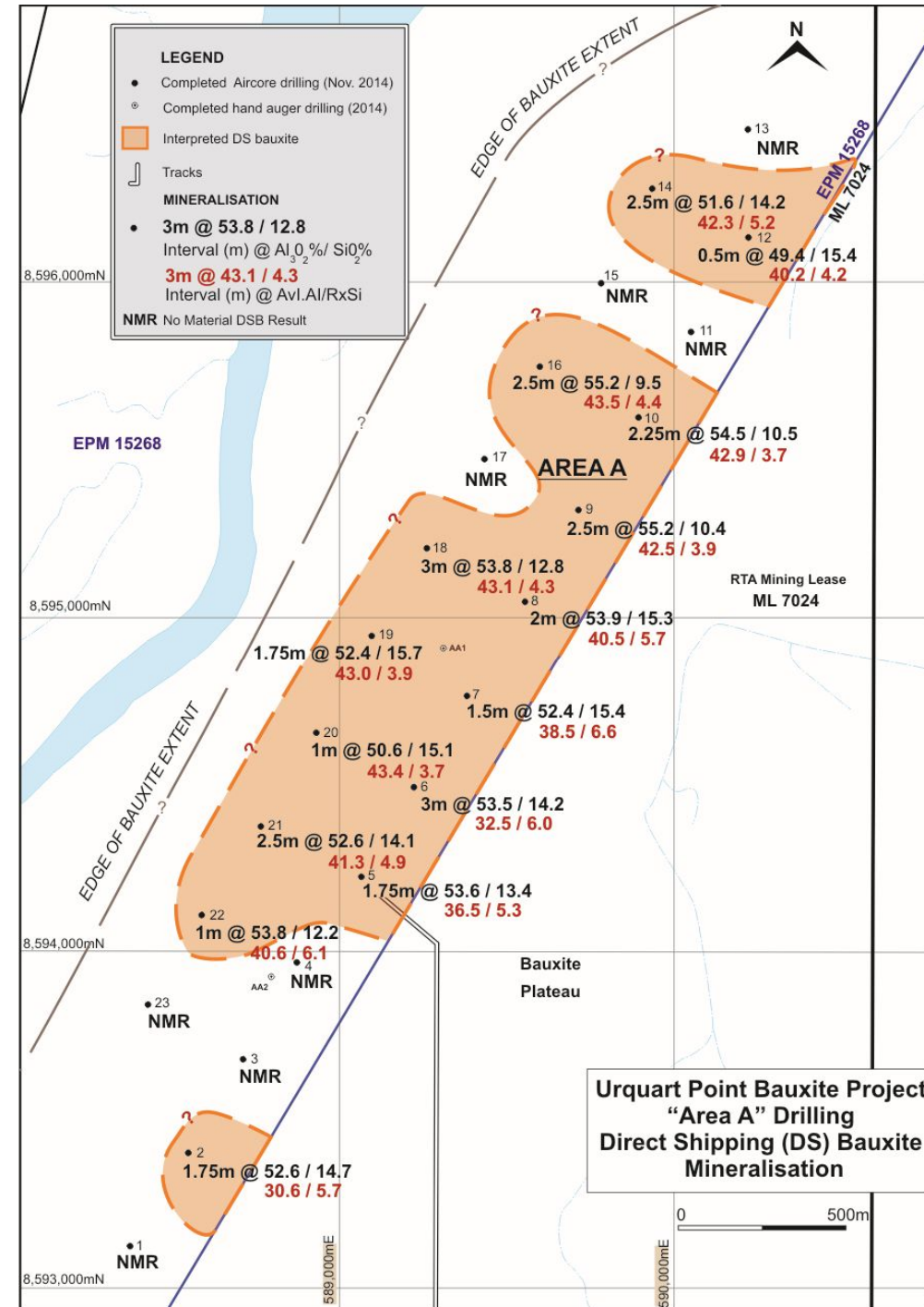
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Urquhart bauxite is located close to the coast and international shipping, lowering operating and transport costs, with ready access to ship-borne trade to China or the Middle East



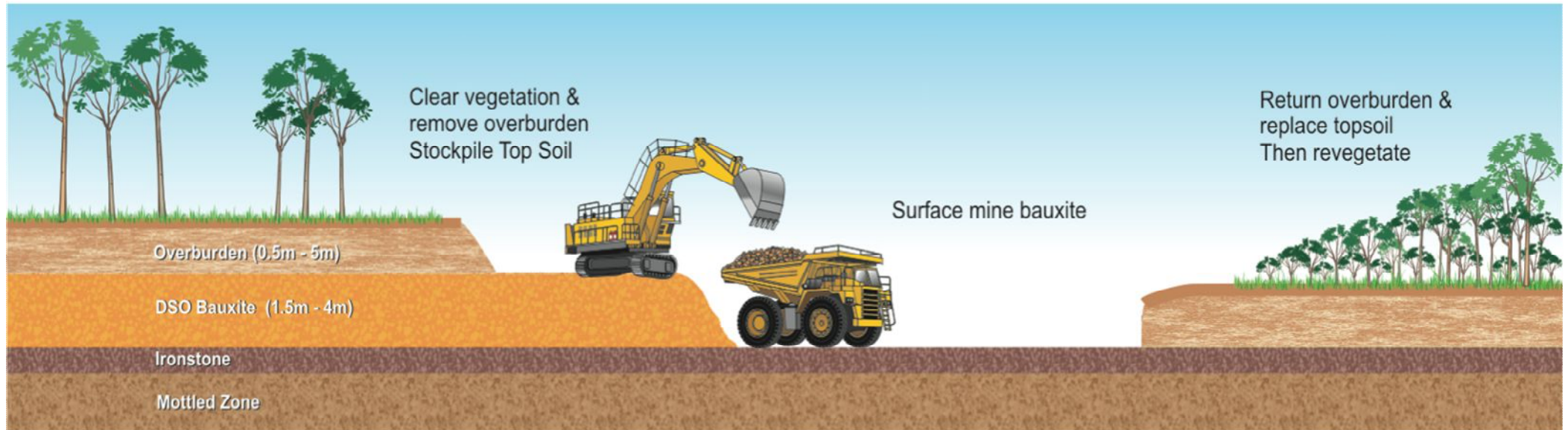
Urquhart Bauxite

- Good quality and readily saleable into the seaborne market
 - 40.6% AAI and 4.9% RSi¹
- Maiden JORC-compliant Inferred Resource released¹
 - 7.5 Mt @ 51% Al₂O₃, 16.3% SiO₂
- Direct Shipping Bauxite (DSB) with average thickness of ~2 m
- Low temperature DSB confirmed¹
- Mining Lease Application lodged²
- Commonwealth Government has confirmed no requirement for EIS³
- Pathway to H1 2017 production⁴





Simple Development



- Simple 1.5–2.0 Mtpa mine-truck-barge-ship operation
- Proximity to the established mining town of Weipa
- Expected low operating costs coupled with low capital requirements
- Ability to lock in costs near the bottom of the cycle
- Utilise contractors to reduce capital requirements





Example of barge transshipment



Urquhart Bauxite Development Timeline

	2015			2016				2017			
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Submit Mining Lease Application	Completed	Completed									
Landowner exploration agreement		Completed									
Preliminary exploration Drilling (Inferred)	Completed	Completed									
Resource Drilling						To be Completed					
Market testing and Studies						To be Completed					
Updated JORC Report						To be Completed	To be Completed				
Wet/Dry Ecological reports			Completed	Completed							
Hydrology Reporting				Completed	Completed	To be Completed					
EA approval pathway (site specific application)				Completed	Completed	To be Completed					
Submit EA						To be Completed					
Issue draft EA to Mining Register and DNRM						To be Completed					
Develop TLO compensation agreements				Completed	Completed	To be Completed					
Combined Department Decision							To be Completed				
Mining Lease Granted							To be Completed				
Procurement and Contracting				Completed	Completed	To be Completed	To be Completed	To be Completed			
Pre civil works and site clearance								To be Completed			
Mining and shipping commence								To be Completed	★		

 Completed
 To be Completed



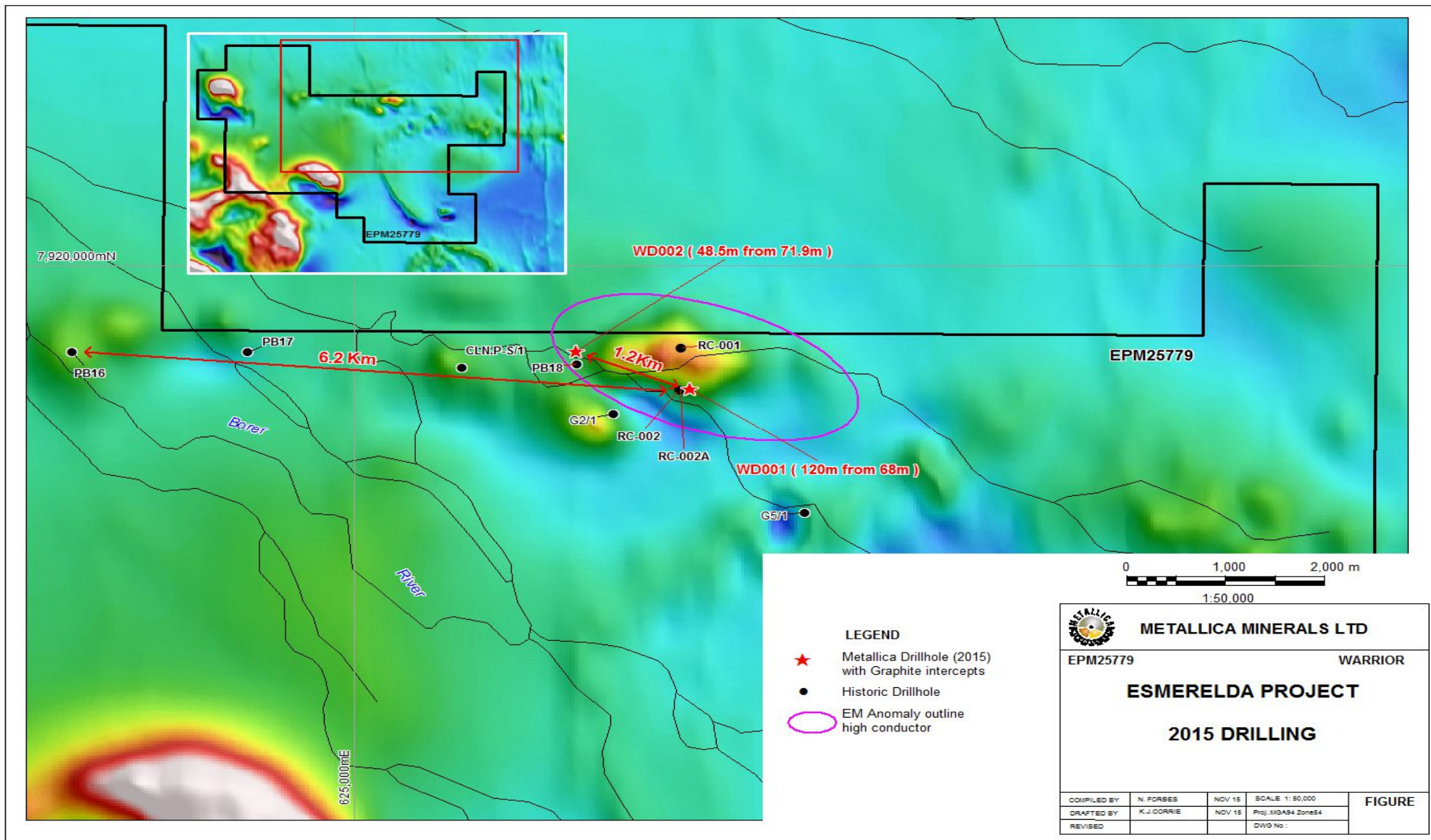
Esmeralda Graphite (Qld)

- Spectacular¹ high grade graphite intersections at the 100% owned Esmeralda Project
 - WD001 – 95 m @ 6.5% Cg² from 71m
 - WD002 – 29.1 m @ 7.8%¹Cg² from 71.9m, including 7.1 m @ 12.9% Cg
- 91.5% graphite concentrate produced with a 91% recovery via conventional flotation tests³
- Upgrade of concentrate to 97.8% via single stage caustic bake³
- Petrology confirms the same mineralisation style hosted within hydrothermally altered granite is present in both holes which are 1.2km apart





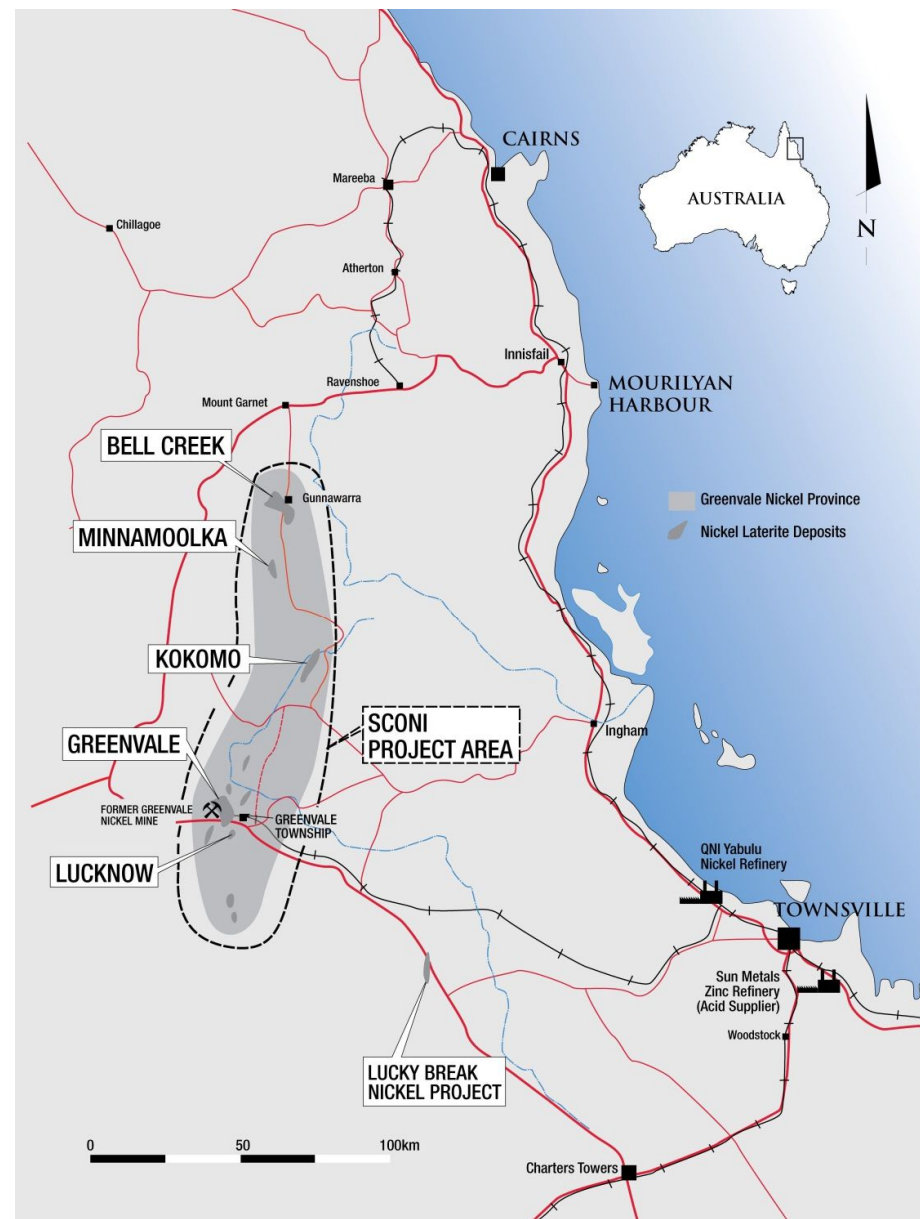
Esmeralda Graphite





SCONI Nickel-Cobalt-Scandium Project (Qld)

- Over \$10 million already spent
- Ideal location – historical Greenvale nickel mine
- Established JORC Resources
- Close proximity to industrial services Townsville and Mourilyan Ports
- Good metallurgical ore types
- Metallica-owned Scandium IP recovery and purification technology
- Low environmental impact and strong community support
- Currently in negotiations for a JV or sale





Catalysts

- ✓ Execute Heads of Agreement for preferred logistics solution at Hey Point
- ✓ Received \$900,000 from completed sale of Boyne limestone
Metallurgical test results from Esmeralda
- ✓ Commonwealth Government confirms no need for an EIS
- Upgrade Resource category and studies for Urquhart bauxite
- Grant of Urquhart bauxite mining lease
- Production from Urquhart bauxite
- Continued disposal or jv of non-core assets
- Strong pipeline of new opportunities



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

THANK YOU