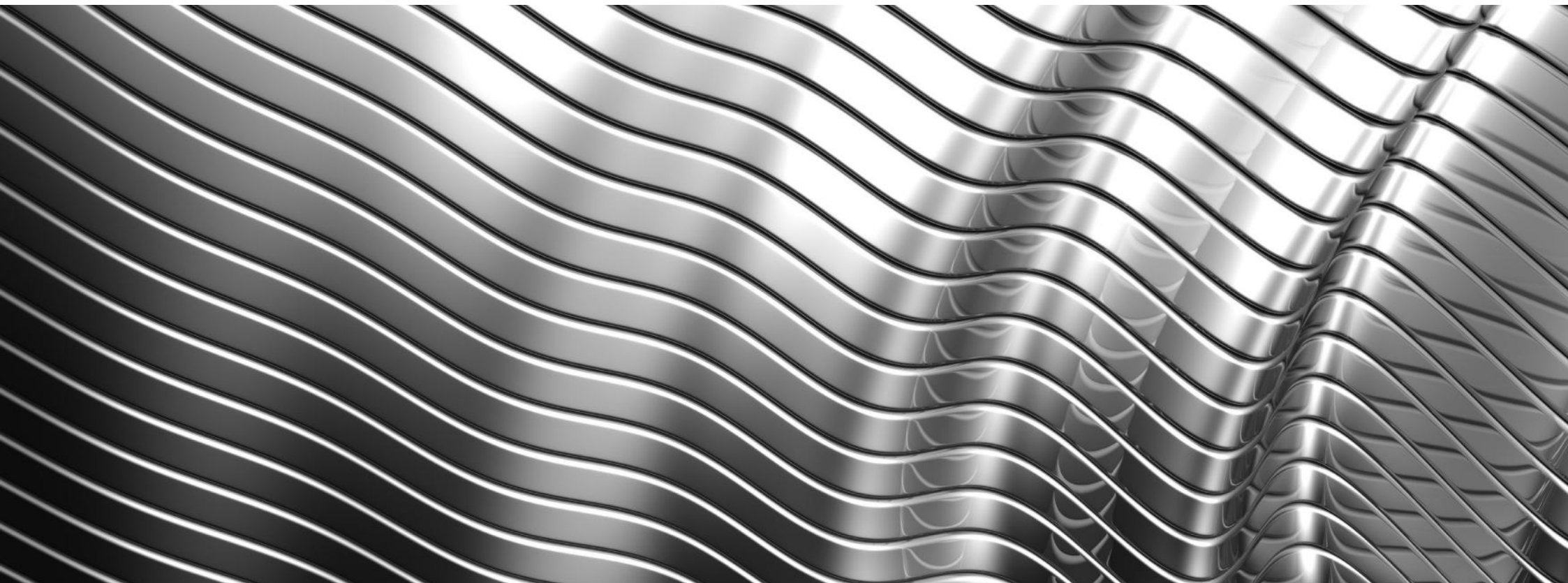


# Building a Cash Flow Focused Resource Company

Investor Presentation – October 2018



# Disclaimer



Statements & material contained in this presentation, particularly those regarding possible or assumed future performance, production levels or rates, metal prices, metal markets, resources or potential growth of Metallica Minerals Ltd, industry growth or other trend projections are, or may be, Forward Looking Statements. Such statements relate to future events & expectations as such, involve known & unknown risks & uncertainties.

The Urquhart Bauxite (Bx) and Urquhart Point Heavy Mineral Sands (HMS) Projects, Esmeralda Graphite and the Cape Flattery Silica Sands Projects 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.

Actual results & developments of projects and market development may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors.

Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.

This material is used for a company summary presentation only, for more detailed information the reviewer should seek company information as provided in Metallica's ASX releases, Annual & Quarterly Reports.

**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.

Forward-looking statements are based on current views, expectations and beliefs as at the date they are expressed and which are subject to various risks and uncertainties. Actual results, performance or achievements of Metallica could be materially different from those expressed in, or implied by, these forward-looking statements. The forward-looking statements contained in this presentation are not guarantees or assurances of future performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Metallica, which may cause the actual results, performance or achievements of Metallica to differ materially from those expressed or implied by the forward-looking statements. For example, the factors that are likely to affect the results of Metallica include general economic conditions in Australia and globally; ability for Metallica to fund its activities; exchange rates; production levels or rates; demand for Metallica's products, competition in the markets in which Metallica does and will operate; and the inherent regulatory risks in the businesses of Metallica. Given these uncertainties, readers are cautioned to not place undue reliance on such forward looking statements.

## Competent Person Statement

### 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.

### Cape Flattery Silica Sands

The information in this report that relates to the Exploration Results and Targets was undertaken by Mr Neil Mackenzie-Forbes, who is a Member of the Australian Institute of Geoscientist and is a Consulting Geologist employed by Sebrof Projects Pty Ltd. Mr Neil Mackenzie-Forbes has in excess of 20 years mining and exploration experience in Australia with major mining and junior exploration companies. Mr Mackenzie-Forbes has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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. Mr Neil Mackenzie-Forbes consents to the inclusion of this information in the form and context in which it appears in this release/report.

### Wagina

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Dr Andrew White (a geologist of over 50 years experience), and a Competent Person who is a Fellow of the Australian Institute of Geoscientists, a Consulting Geologist employed by Andrew White and Associates Pty Ltd (AWA) and is a contract consultant to South West Pacific Bauxite Ltd. Dr Andrew White 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. Dr Andrew White 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 Geoff Reed, (a geologist of over 20 years experience), who is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy and is a Consulting Geologist employed by Breakaway Mining Services Pty Limited. Mr Geoff Reed 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 Geoff Reed consents to the inclusion of this information in the form and context in which it appears in this release/report.

# Investment Highlights



Cash Balance  
\$6M as at  
30 June 2018<sup>1</sup>



Proposed merger to  
create value  
and cash flow focussed  
resources company<sup>2</sup>



Mining Lease issued  
for Urquhart Bauxite  
project <sup>3</sup>



Identified growth  
opportunity in the  
Wagina bauxite project<sup>4</sup>



High purity silica sands  
at Cape Flattery<sup>5</sup>



Global bauxite  
supply and demand  
fundamentals  
supporting  
development



Completed sale of  
SCONI for \$11M cash  
and shares<sup>6</sup>



Two cashflow  
producing assets on  
stream by mid-2019



# Corporate Snapshot

Metallica listed on the ASX in 2004 with 61.9M shares on issue

322M

Shares on Issue

A\$0.035

Share Price  
as at 15 October 2018

A\$10.9M

Market  
Capitalisation

A\$6M

Cash 30 June 18

16.8M

AUZ shares due  
received July 2018

A\$5M

Enterprise Value

*(Market Cap less Cash and  
Marketable Securities)*

# Corporate Snapshot

## Experienced and Rejuvenated Board



**Peter Turnbull**  
**Non-Executive Chairman**  
*Appointed 12 Dec 2016*

Peter has significant experience as an independent non-executive director and chair across a range of sectors including over a decade in the resources, energy and technology commercialisation sectors. Peter is a non-executive director, Life Member and former President of the Governance Institute of Australia and is an active contributor, writer and speaker on governance related issues within Australian and international governance circles. Peter is currently a non-executive director of Karoon Gas Australia Limited and Chairman of Calix Limited.



**Simon Slesarewich**  
**Managing Director**  
*Appointed 17 April 2018*

Simon Slesarewich was appointed to the position of Managing Director on 17 April 2018. Simon joined the company in July 2015 as Chief Executive Officer. Simon 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 is a Director of the Queensland Resources Council (QRC) and Chairman of the QRC Management Committee. He is the former CEO of Northern Discovery and Boardwalk Resources.



**Steve Boulton**  
**Non-Executive Director**  
*Appointed 25 Jan 2017*

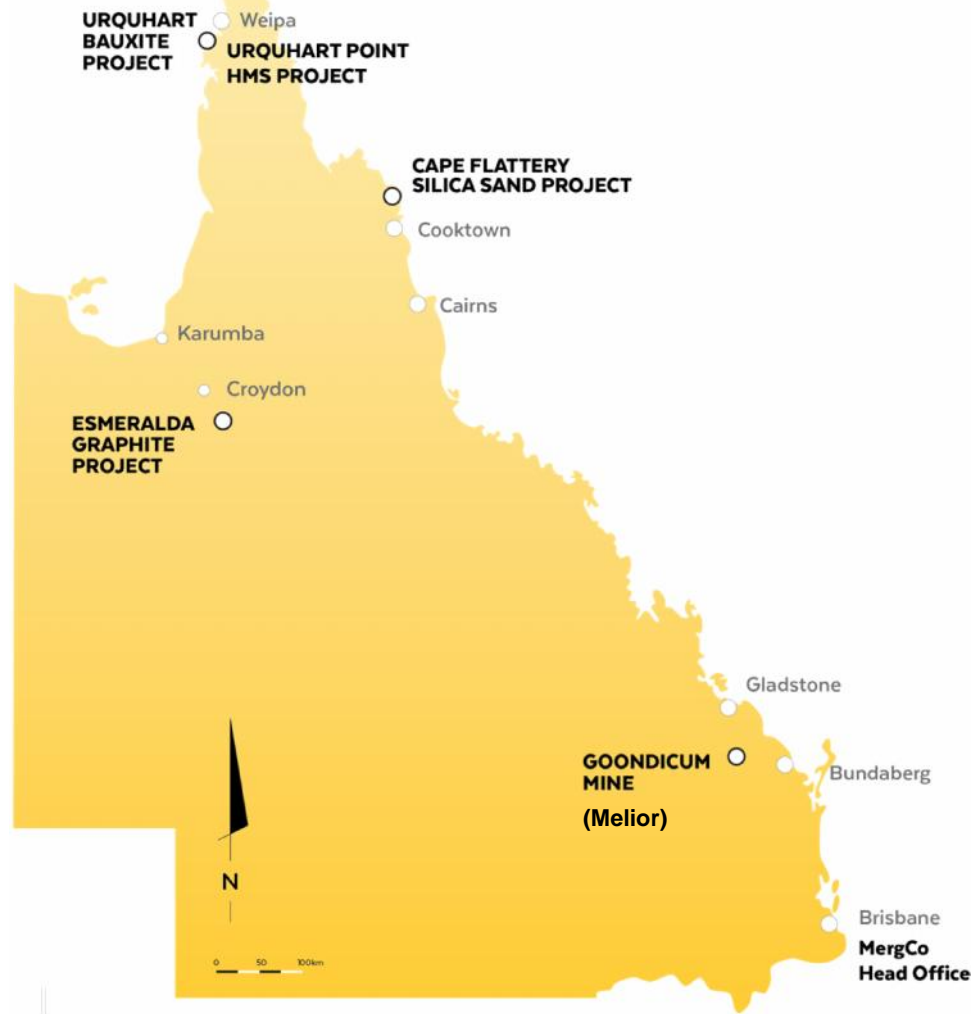
Steve Boulton is an experienced funds management and infrastructure specialist with over 40 years experience that has covered complex fund, asset and investment management and utility and infrastructure enterprises, including experience in the mining/minerals sector in Australia and New Zealand. This 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. Steve is currently a Director of Nova Group and Chairman of Newcastle Agri Terminal.



**Ian Jacobson**  
**Non-Executive Director**  
*Appointed 1 Jul 2018*

Ian Jacobson has more than 40 years' experience in the aluminium industry and has held senior executive roles in operations and project development with Rio Tinto/Comalco, Alcoa of Australia and BHP Billiton Aluminium. Ian is also co-founder and the current Executive Chairman of SCCR Group, which provides a range of consulting services to the primary aluminium industry including; project development, plant management, technical and operational support and governance in bauxite mining, alumina refining and aluminium smelting.

# MergCo Project Locations



01

## Urquhart Bauxite – 50%

Direct Shipping Bauxite project

02

## Urquhart HMS – 50%

Heavy Mineral Sands project

03

## Goondicum – 100% Melior

Ilmenite and Apatite Mine  
Production scheduled to  
commence in Q4 CY 2018

04

## Esmeralda – 100%

Graphite

05

## Cape Flattery – 100%

Silica Sands

*Metallica is building a strong ASX-listed  
cash flow focussed resource company.*

# Compelling Merger Rationale



01

**Enhanced Capital Market Profile:** An increased market capitalisation facilitates increased share trading liquidity, analyst coverage and a potential re-rating.

02

**Stronger, More Diversified Shareholder Register:** The merged entity will have a strong and supportive shareholder base with a balance of institutional, strategic and retail investors.

03

**Highly Experienced Board:** Consisting of three directors from each Company committed to driving long term sustainable value for shareholders . George Lloyd to assume the Chair.

04

**Increased Management Capability:** The combined management team has complementary skills, are culturally aligned and will enhance overall corporate capability. Simon Slesarewich to continue as Managing Director.

05

**Complementary Combination of Assets:** The combined portfolio will see bauxite, mineral sands and silica sand assets all Qld based with similar project technical features and favourable commodity price outlooks.

06

**Access to Goondicum Near Term Production and Cash Flow:** Goondicum is on schedule to commence production in Q4 2018, be cash flow positive by Q2 CY2019 and forecast to deliver pre-tax cash flow of over US\$90M over the nine year mine life.

07

**Urquhart Bauxite Development Scheduled Soon After:** Urquhart Bauxite is a simple development proposition with a granted mining lease. Management are optimising the logistics solution to maximise project returns.

08

**Additional Prospective Development & Exploration Assets:** Urquhart Pt Mineral Sands, Cape Flattery Silica Sands and the Esmeralda Graphite project provide additional opportunities to unlock value from the portfolio.





# Benefits of the Transaction



## CASHFLOW

Metallica shareholders will benefit from the near term cashflow generation of the long life Goondicum project



## \$120M

Will gain exposure to over \$120 million of investment in Goondicum by previous owners



## EXPLORATION

Significant exploration opportunities in the surrounding tenure of Goondicum which has the potential to nearly double the existing mine life of nine years



## FURTHER POTENTIAL

The cash flow generated by Goondicum has the potential to realise further value from Urquhart and the Joint Venture more broadly



## BALANCED REGISTER

More balanced share register with the introduction of Institutional and strategic investors, including Pala as a 30% shareholder



## EXPERIENCED PEOPLE

Highly experienced board and increased management capability





# Transaction Details

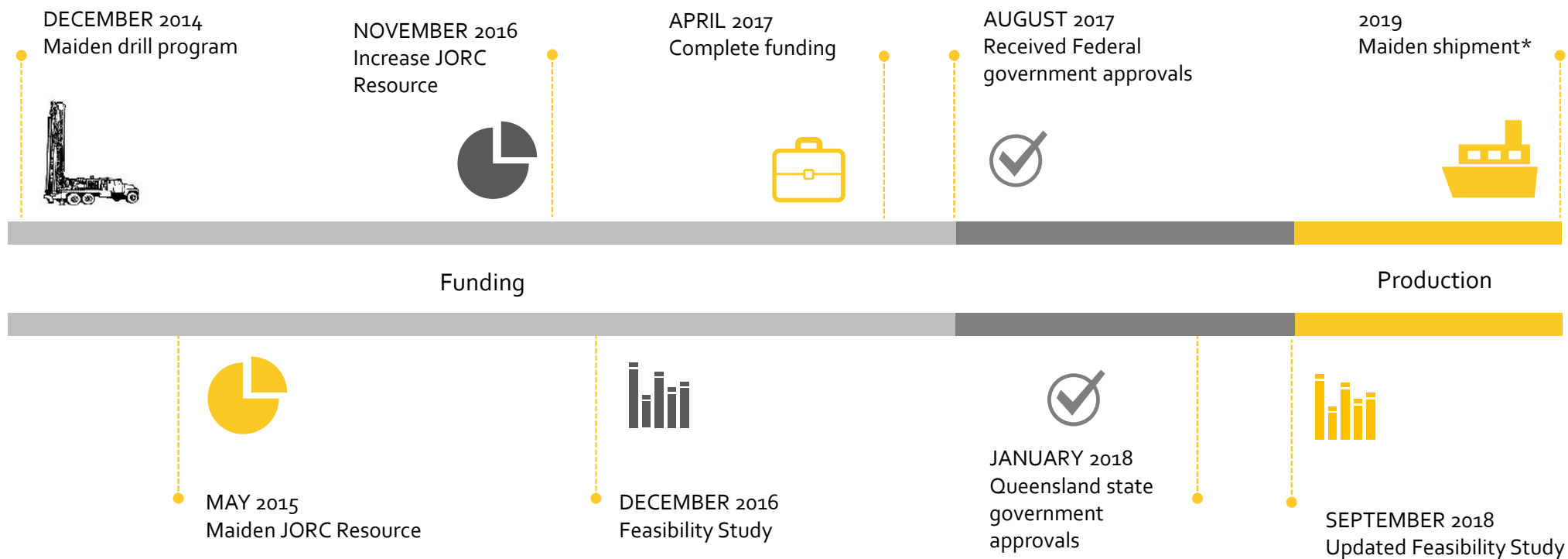
Structure	<ul style="list-style-type: none"><li>• Merger to be via a court approved Plan of Arrangement in British Columbia, Canada.</li><li>• Metallica to be the surviving entity and to maintain its ASX listing</li><li>• Melior shareholders to receive 20 Metallica shares for every 1 Melior share held</li></ul>	
Relative Ownership	<ul style="list-style-type: none"><li>• Metallica shareholders will hold 36% of MergeCo</li><li>• Melior shareholders will hold 64% of MergeCo</li></ul>	
Board	MergeCo Board will comprise of three representatives each from Metallica and Melior	
	<b>Metallica</b> Simon Slesarewich (Managing Director) Peter Turnbull Ian Jacobson	<b>Melior</b> George Lloyd (Chairman) Mark McCauley (Executive Director) Martyn Buttenshaw
Recommendation and Support	<ul style="list-style-type: none"><li>• Metallica and Melior boards unanimously recommend the transaction.</li><li>• Metallica and Melior boards intend to vote in favour of all resolutions put to respective shareholders</li><li>• Melior has entered into binding agreements representing almost 80% of Melior shares to vote in favour of the transaction</li></ul>	
Shareholder Approvals	<b>Metallica will seek shareholder approval to:</b> <ul style="list-style-type: none"><li>• Issue the Consideration Shares</li><li>• Approve Pala holding over 20% of MergeCo following implementation of the transaction</li><li>• Any other ASX or ASIC requirements</li><li>• Implement a corporate name change</li></ul>	<b>Melior will seek court and shareholder approval to:</b> <ul style="list-style-type: none"><li>• Implement the Plan of Arrangement in accordance with British Columbia laws</li></ul>
Conditions	<ul style="list-style-type: none"><li>• Receipt of all regulatory, shareholder and other approvals including ASX, ASIC, TSXV approvals;</li><li>• Approval of the Plan of Arrangement by Melior shareholders and the Court;</li><li>• Independent Expert concluding that the transaction is in the best interests of Metallica shareholders;</li><li>• Other conditions customary to this type of transaction, including the absence of a material adverse change, no prescribed transactions occurring, accuracy of representations and warranties, obtaining waivers and consents from third parties as necessary, a break fee payable under prescribed circumstances</li></ul>	

# Urquhart Bauxite – Operations Video



# Urquhart Bauxite

Expedited to be development ready



# Urquhart Bauxite – PFS7\*



Item	Unit	Base Case (100% Basis)	Base Case (MLM share – 50% basis)
Total Saleable Product	dry kt	6,532	3,266
Total Al <sub>2</sub> O <sub>3</sub>	%	52.7	52.7
Total SiO <sub>2</sub>	%	13.3	13.3
Total Revenue	A\$m	389	195
EBITDA	A\$m	68.8	34.4
NPV <sub>10</sub> Pre Tax	A\$m	47.3	23.7
NPV <sub>10</sub> Post Tax	A\$m	33.7	20.5
IRR Post Tax		364%	469%
LOM Capital	A\$m	2.2	1.1
Avg CFR Costs*	A\$ tonne	49.08	49.08
Avg CFR Received	A\$ tonne	59.62	59.62
Payback	years	< 2 yrs	< 2 yrs

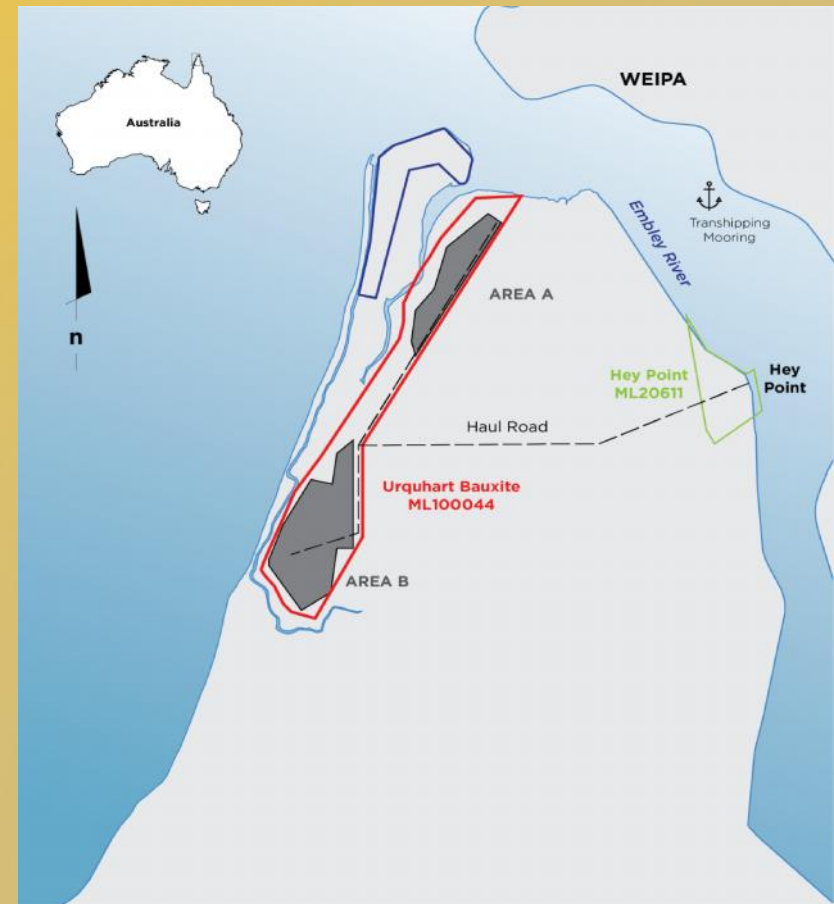
\* Includes all operating costs, royalties and other payments

\* Pre-Feasibility Study, September 2018

# Urquhart Bauxite – Permitting



- Mining Lease issued by Qld state government
- Completing haul road approval to link the mine to the existing Hey Point barge loading facility
  - Utilises previously completed environmental work
  - Previously executed Traditional Land Owner agreements<sup>8</sup> covers the haul road area
  - An agreement with the underlying tenure holder is yet to be completed
    - Significant progress made over the past 2 months

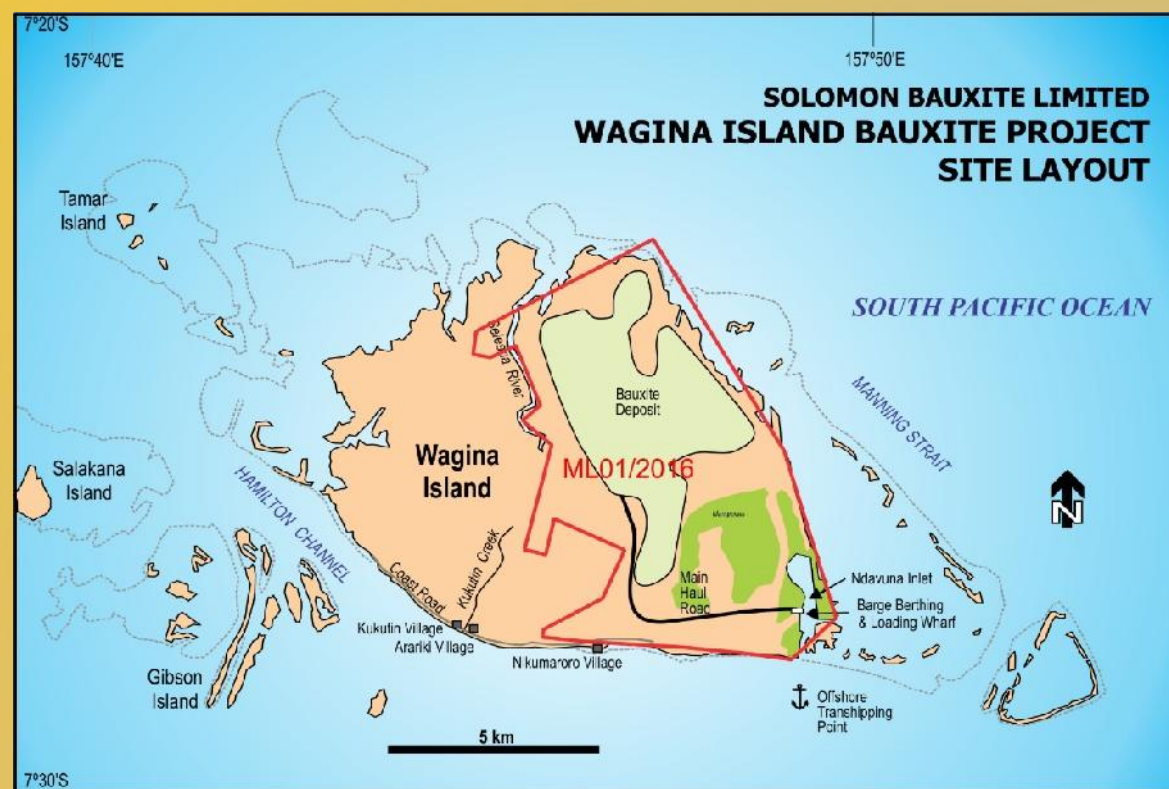


# Growth – Wagina bauxite project



- Strategic Loan to South West Pacific Bauxite – Majority owner of the attractive Wagina bauxite project
- Currently undertaking due diligence on Wagina ahead of a potential transaction

Classification	Tonnes	Total Al <sub>2</sub> O <sub>3</sub>	Total SiO <sub>2</sub>
Measured	26.1Mt	46.8%	3.0%
Indicated	3.6Mt	47.5%	2.5%
Inferred	0.5 Mt	46.7%	3.6%
Total	30.1 Mt	46.9%	3.0%





# Growth – Wagina Bauxite project

## Why we like it:

- Advanced project on a granted mining lease
- Has the potential to be brought into production via a low capex model
- Capex to be facilitated via Marketing Agreement with Noble
- Ability to deliver meaningful free cash flow when in operations
- Large JORC Resource – 30.1mt
- Envisage a 2 to 3 mtpa operation
- Deep sheltered water just 2km from shore
- Nearby Rennel Island commenced production in 2014, with 2017 exports being 1.53 million tonnes, receiving up to US\$54.69 per dry tonne delivered (CIF)
- Attractively located just 10 days shipping to the Chinese market (Guinea in West Africa approximately 33 days)

*"Delivering on the Company's vision to build a ASX-listed cash focussed resource company"*



# Moving Forward – ***Deliver the clear and stated strategy***



- Complete merger with Melior Resources
- Secure haul road approval
- Finalise logistics contract with Green Coast Resources
- Finalise Offtake for Urquhart Bauxite
- Production and cash flow from Urquhart bauxite
- Complete due diligence on Wagina, Solomon Islands
- Continue to evaluate new opportunities

# Key Take Away



## Funded

Cash + AUZ shares  
(at market value)  
~ **\$6M**



## Cash flow

Two producing assets  
Urquhart Bauxite and  
Goondicum



## Growth

Building an ASX-listed  
cash flow focussed  
resource company

*Significantly Undervalued*

\* Subject to final approvals and agreements

# 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 Bauxite – JORC Resource<sup>9</sup>



## JORC Resource Estimate (48% Al<sub>2</sub>O<sub>3</sub> cut-off)

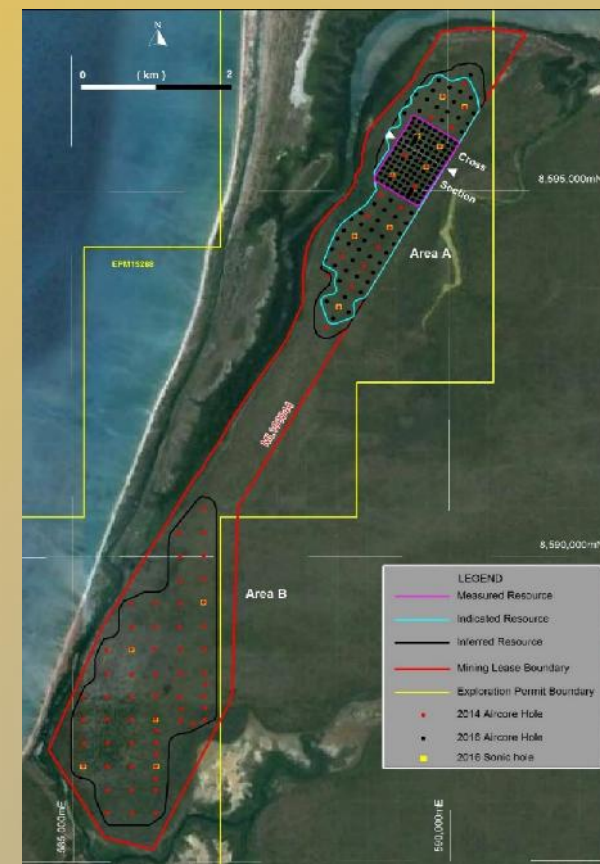
Classification	Area	Mt	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	AAI%*	RSi %**
Measured	A	3.0	54.4	11.8	43.2	5.0
Indicated	A	3.9	53.3	13.1	40.8	5.2
Inferred	A	0.3	54.2	11.3	42.0	4.7
	B	2.3	49.9	17.4	37.2	6.0
	Subtotal	2.6	50.3	16.8	37.6	5.9
<b>Total</b>		<b>9.5</b>	<b>52.8</b>	<b>13.7</b>	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

## Upside (not included in JORC Resource)

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

- 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

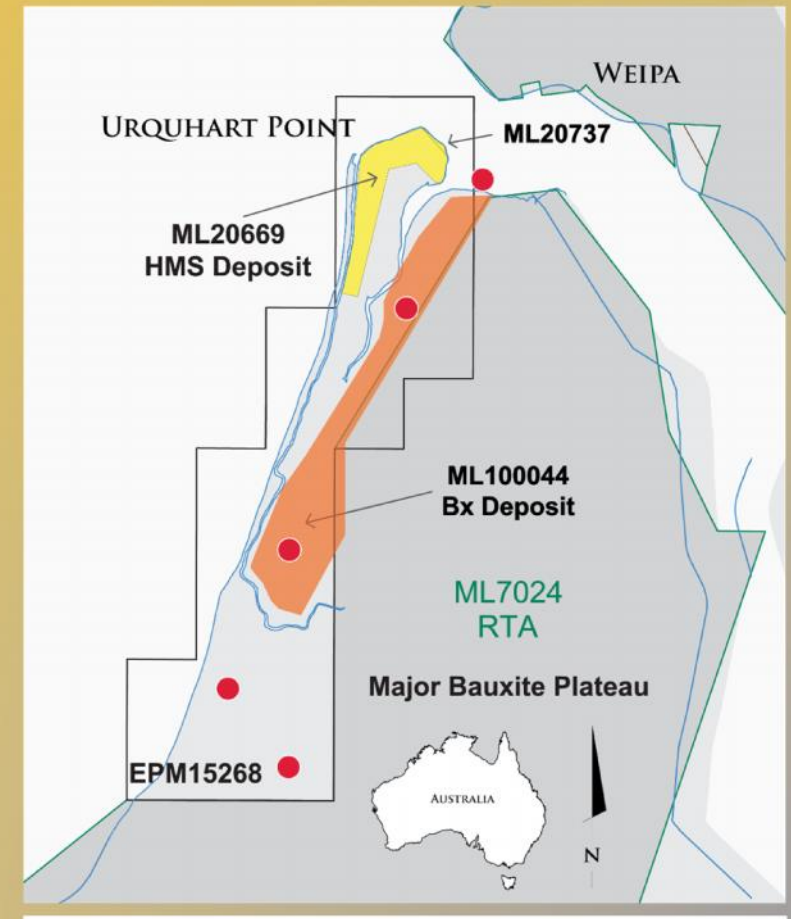
\* AAI – Available Alumina @150 C    \*\* RSi – Reactive Silica @ 150 C



# 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 continued to recover
- Simple dry mining and processing plant

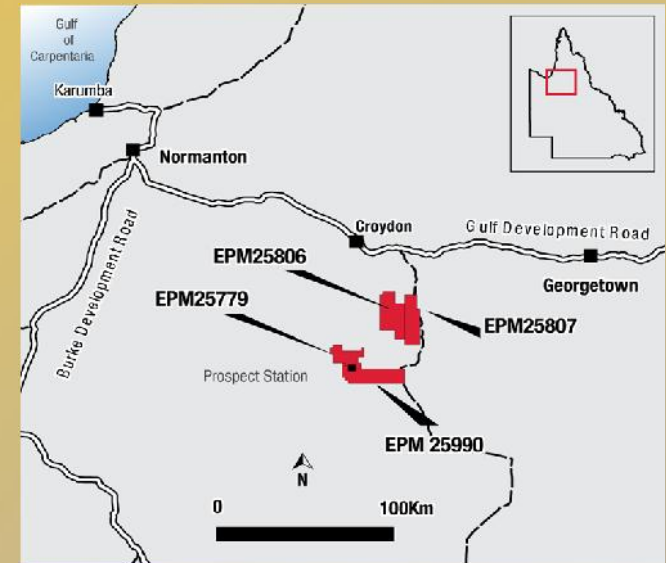




# Esmeralda Graphite Project (Qld) – 100%



- Spectacular<sup>9</sup> high grade graphite intersections at the 100% owned Esmeralda Project
  - WD001 – 95 m @ 6.5% Cg<sup>10</sup> from 71m
  - WD002 – 29.1 m @ 7.8% Cg<sup>10</sup> from 71.9m, including 7.1 m @ 12.9% Cg
- 91.5% graphite concentrate produced with a 91% recovery via conventional flotation tests<sup>11</sup>
- Upgrade of concentrate to 97.8% via single stage caustic bake<sup>10</sup>
- 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 mineralisation





# Cape Flattery Silica Sands Project (Qld) – 100%



- Maiden sampling program at Cape Flattery Project completed in March
- Sampling identifies high purity silica sands with samples of greater than 99% silica sand ( $\text{SiO}_2$ )
- Exploration target of 20-100 million tonnes across three identified areas
- Located adjacent to Mitsubishi's Cape Flattery mine, the world's single largest source of silica sand
- Large silica sands dune field that has been producing since 1967
- Jetty and ship loading facility in place
- Large exploration tenement – 54 km<sup>2</sup>
- *Assessing options to unlock value value from the project*





# Footnotes

1. See ASX Release 26 July 2018 "Quarterly Activities Report and Appendix 5B"
2. See ASX Release 13 September 2018 "Transformational Merger with Melior Resources"
3. See ASX Release 3 January 2018 "Mining Lease Granted for Urquhart Bauxite Project"
4. See ASX Release 30 April 2018 "Strategic Loan to Bauxite Developer"
5. See ASX Release 18 April 2018 "High Purity Silica Sands at Cape Flattery"
6. See ASX Release 5 September 2017 "SCONI Sale and Purchase Agreement"
7. See ASX Release 12 September "Updated PFS – Urquhart Bauxite"
8. See ASX Release 21 June 2017 "Traditional Land Owner Compensation Agreement"
9. See ASX Release 14 November 2016 "Significant Increase to Mineral Resource at Urquhart Bauxite"
10. See ASX Release 10 December 2015 "Assays strongly support potential for large graphite deposit"
11. See ASX Release 24 May 2016 "High Purity and Recovery from Esmerelda Graphite testwork"
12. See ASX Release 18 April 2018 "High Purity Silica Sands at Cape Flattery"