



METALLICA MINERALS



SCONI Scandium Project

Emerging Scandium producer to the World

David Glover – Project Manager

ASX:MLM



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The SCONI Scandium-Cobalt-Nickel Project, the Weipa Heavy Mineral Sands projects are at the 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 scandium market development may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors.

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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 the 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.

- The SCONI Project is at a medium to advanced evaluation and feasibility 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.
- A key conclusion of the Pre feasibility Study (PFS) which is based on forward looking statements is that the SCONI Project is considered to have positive economic potential. Further detailed studies are required to increase the confidence in the project parameters, economics and scandium market

Technical information contained in this report has been compiled by Metallica Minerals Managing 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.



MLM Financial Overview

Financial Information

Share price (28 May 2013)	13c
Shares on Issue	145.8M
Market Cap (15 May 2013)	\$19M
Cash Position (15 May 2013)	\$2M
ASX Investments (28 May 2013)	\$8.5M
Cash & Listed Investments	\$6.6M

Major Shareholders

Jien Mining Pty Ltd**	19.1%
Victorian Ferries Pty Ltd	11.9%
Golden Breed Pty Ltd	6.7%
Bondline Ltd	3.4%
Top 20 shareholders	57%

** Subsidiary of Jilin Nickel Co. Limited

MLM: 12 Month Trading History





Board of Directors (5) & CEO

Name	Position	Background	Experience
David Barwick	Non-Executive Chairman	Financial / Corporate	40+ years
Andrew Gillies	Managing Director	Geology / Mining / Corp Dev	25+ years
John Haley	CFO / Director / Company Secretary	Financial	25+ years
Barry Casson	Non-Executive Director	Financial / Corporate	40+ years
Wu Shu (Tao Li – Alternate)	Non-Executive Director	Engineering	30+ years
Gavin Becker	CEO	Metallurgy / Engineering	35+ years



(L-R): Tao Li, Wu Shu, Barry Casson, David Barwick
Gavin Becker, Andrew Gillies & John Haley

Experienced, talented & dedicated Board & Management team
Focussed on delivering value to shareholders



Metallica Minerals (ASX : MLM) 3 Asset Groups

1. SCONI Scandium Project 100%

Scandium-Cobalt-Nickel – Greenvale, QLD

- ✓ Positive PFS at DFS Stage (seeking funding DFS)
- ✓ Emerging Major Scandium producer
- ✓ Emerging Lime producer (Ootann limeworks)



2. Weipa Zircon –Rutile Mineral Sands Project 100%

- ✓ Advanced permitting toward of grant of mining lease
- ✓ Targeting cashflow in mid 2014



3. Cash & Listed Investments (15/05/2013)

\$2M Cash & \$6.5M Listed Investments (CBX & MTE)

*Rights Issue funding to be completed mid June -
underwritten \$2.1M (15c + option (25c – September 2014))*



Excellent Project Location



- ✓ Greenvale – Ideal location
- ✓ Historical Greenvale nickel operation - Mined 1974 – 92
produced 40Mt @ 1.56% Ni, 0.12% Co (containing 624,000t Ni & 48,000t Co)
- ✓ Low sovereign risk country
- ✓ Close proximity to industrial services & port in Townsville
- ✓ Low environmental impact & strong community support

Introducing Scandium...

Element 21 – “The Enhancer”

- **Scandium:** is a strategic-critical-technological metal - it has enhancing applications in aluminium alloys & fuel cells
- **Scandium:** is typically used as **Scandium Oxide (Sc_2O_3)**
- **Sc_2O_3 Price:** MLM used \$2,000/kg long term price for Feasibility
- Current global annual supply of **Sc_2O_3** is only ~10 tonnes.....

but why??



Current Scandium 'Market'



Limited Global
Supply ~10tpa

Unfulfilled
Demand
>>>100tpa??

Constrained
Usage
~10tpa

A constrained market with no reliable supply...
Enormous opportunity for Metallica

Two Major Markets for Scandium



Aluminium Alloys

Aerospace application for next generation lighter-stronger aircraft & other transport frames such as cars

Solid Oxide Fuel Cells (SOFCs)

Delivering efficient, cost effective & reliable green energy



....and many more applications being researched

Metallica's Sc Partners

- Industry leading partners in both sectors

Aluminium Alloys

SOFCs



See ASX Release 3 Oct 2012

Bloomenergy

See ASX Release 2 Oct 2012
First base load customer

Aluminium Alloys

- **Scandium** is the single most potent element that can be added to aluminium (Al) to enhance its properties
"Spice Metal"
- Just by adding **0.2 – 0.8% Sc** to aluminium will dramatically improve:
 - Strength – significant improvement in strength
 - Weldability – weld becomes as strong as the Al alloy due to potent grain refining of scandium & also inhibits "heat cracking" during welding
 - Corrosion Resistance – one of the biggest problems in aerospace
 - Ease of manufacturing – considerable cost savings

Aluminium Alloys

Aluminium

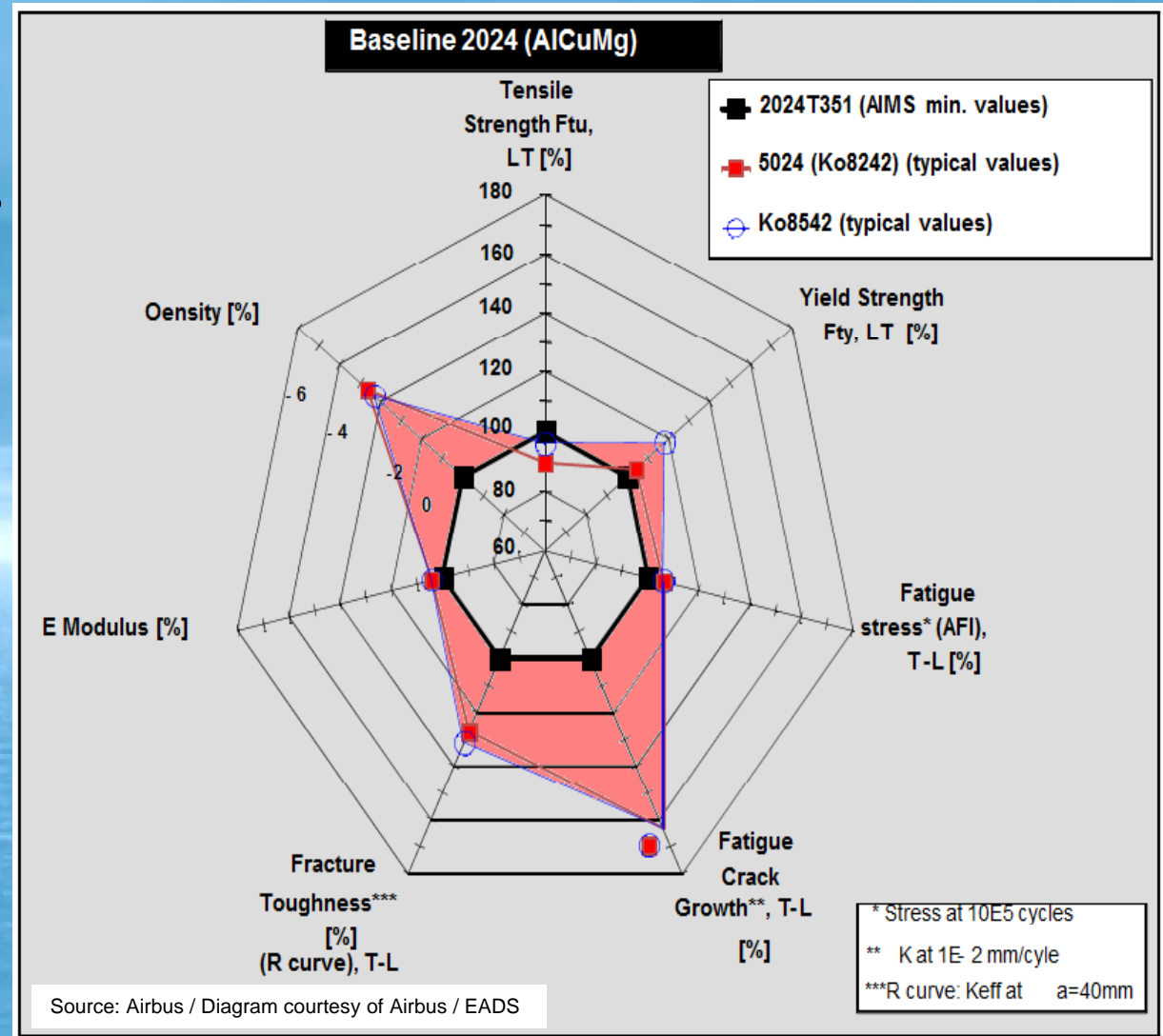
Al-Sc Alloy
(Grain refining)



Aluminium Alloys containing Scandium are superior to conventional Alloys



- ✓ Increased Alloy performance
- ✓ High strength to weight ratio
- ✓ Lower density – weight savings (2.65/2.78)
- ✓ Good weldability – with high strength
- ✓ High damage tolerance
- ✓ High resistance to corrosion
- ✓ Reduced manufacturing steps – cost savings
- ✓ Combined benefits makes - very cost effective



Solid Oxide Fuel Cells (SOFCs)

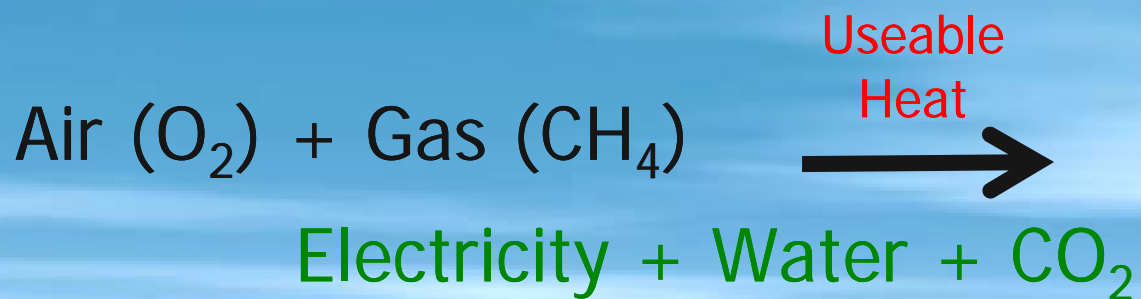
- Delivers reliable, efficient & cleaner energy by **converting gas into electricity & useable heat** (up to 85% efficiency)



- Safe, on-site location, NO COMBUSTION

Solid Oxide Fuel Cells

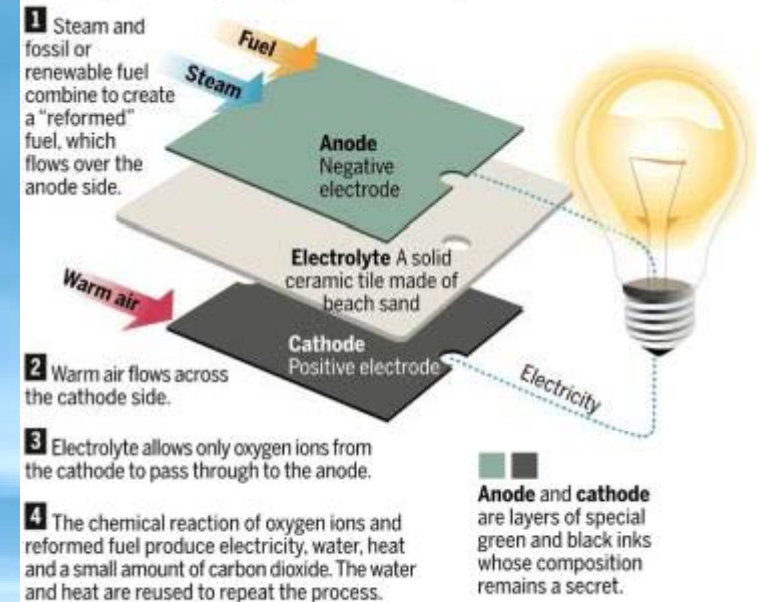
- Electrochemical reaction



- Electrolytes containing scandium offer the best performance for SOFC's
- Huge potential on the back of world wide growth in gas distribution

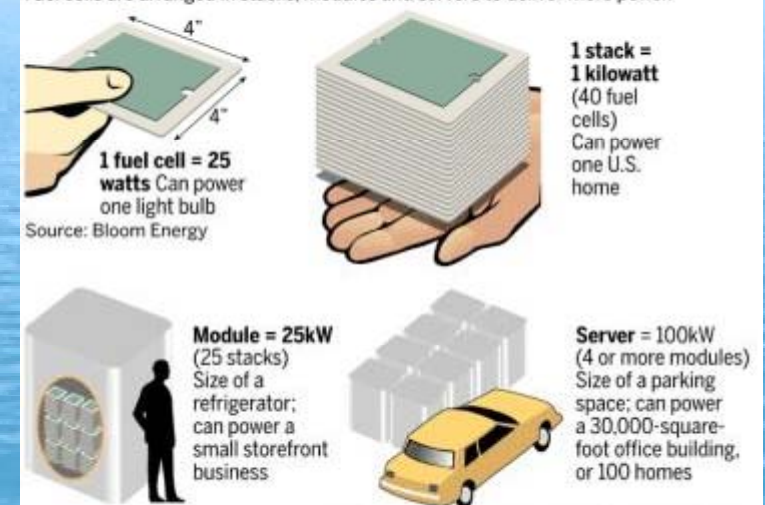
A new way to generate clean electricity

Bloom Energy's three-layer solid oxide fuel cell produces clean and potentially affordable power by an electrochemical process. How it works:



How much power?

Fuel cells are arranged in stacks, modules and servers to deliver more power.



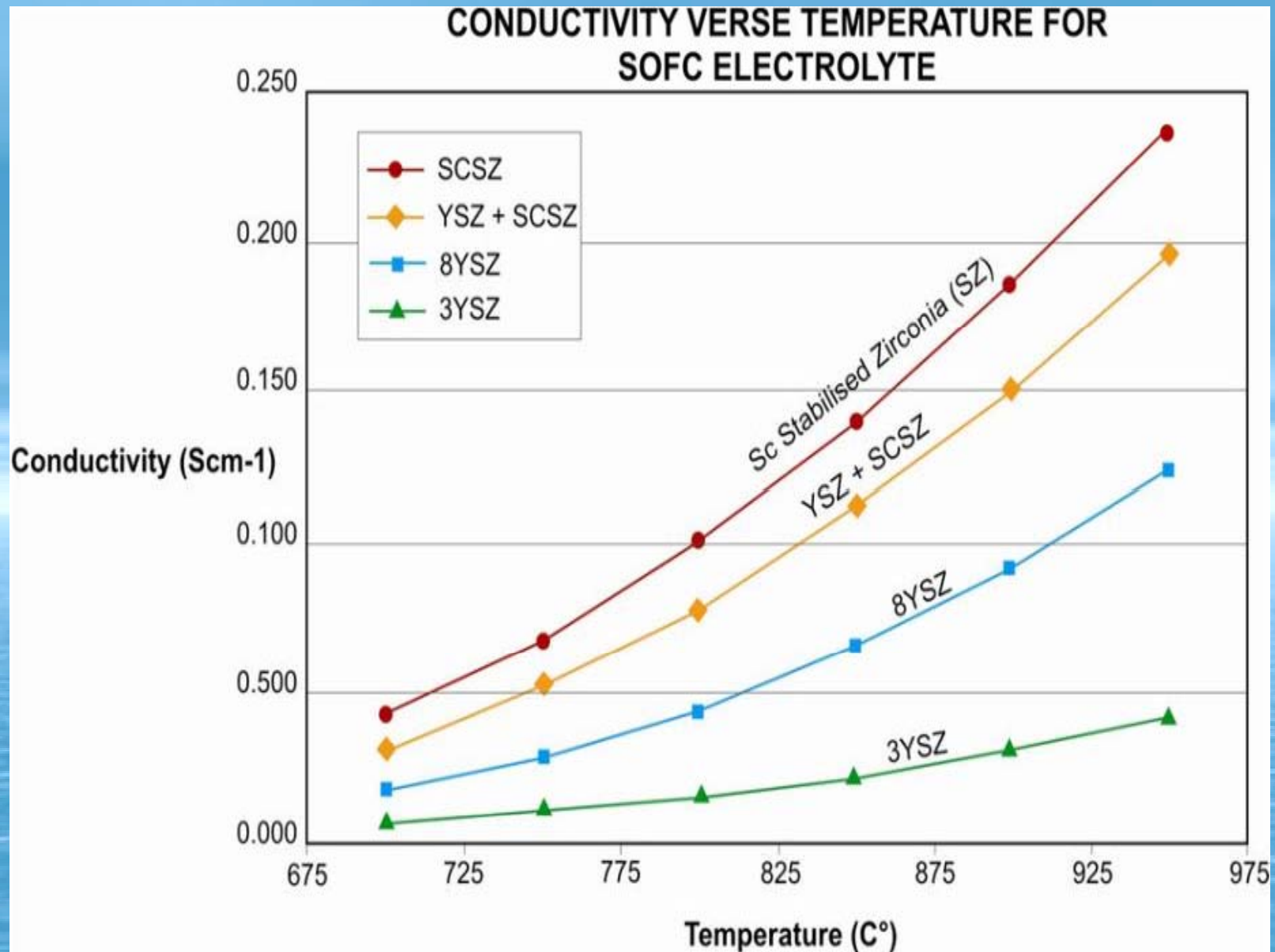
ANDRÉA MASCHIETTO AND KARL KÄHLER — MERCURY NEWS

Scandium Zirconia – Highest Output Potential of all Electrolyte-supported Fuel Cells



- Sc Stabilised zirconia – Highest electrolyte Conductivity

- Sc also enhances zirconia electrolyte stability, durability & lifespan



Why SOFCs?

Current System



"The Future"



Independent mini power station
Cleaner, greener, reliable & cheaper
"It's already happening"

Who is using Bloom's SOFCs?



And many more...!

Breaking the nexus

Solving the Chicken & Egg

A market waiting to happen...

"The Opportunity"

Major reliable Sc
supplier



Greater market
confidence, demand
& end users

Application growth
– Al alloys, SOFCs
& more

Metallica can create the Sc market & grow with it

The Missing Pieces of the Puzzle..



Production of high grade scandium or
Sc-Co-Ni generating high margin



>99.9% purity from
Pilot Plant



100% owned
Australian project
(low sovereign risk)



Rising demand
SOFC & Alloys



Established Sc-Co-Ni Resource Base



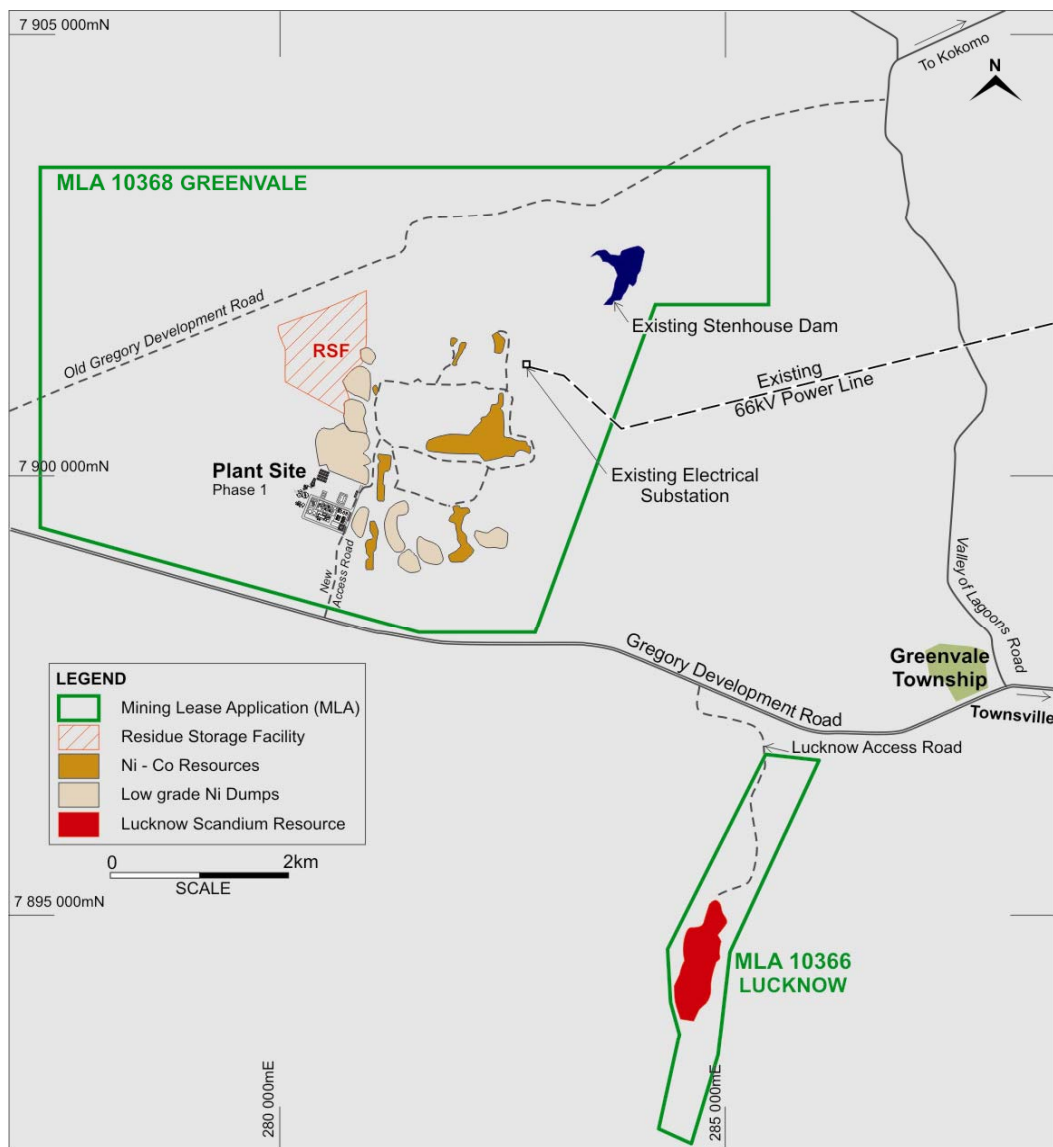
Proven process

Excellent Project Location



- ✓ Greenvale – Ideal location
- ✓ Historical Greenvale nickel operation - Mined 1974 – 92
produced 40Mt @ 1.56% Ni, 0.12% Co (containing 624,000t Ni & 48,000t Co)
- ✓ Low sovereign risk country
- ✓ Close proximity to industrial services & port in Townsville
- ✓ Low environmental impact & strong community support

Site Layout – Infrastructure Available



- ✓ Existing water available adjacent to plant site
- ✓ Power access within 3km
- ✓ Sealed roads to Townsville
- ✓ 12km from high grade Lucknow scandium deposit to plant site
- ✓ Established township at Greenvale



Greenvale Nickel Mine Mid 1980's



Ticking the Boxes for our Sc Partners

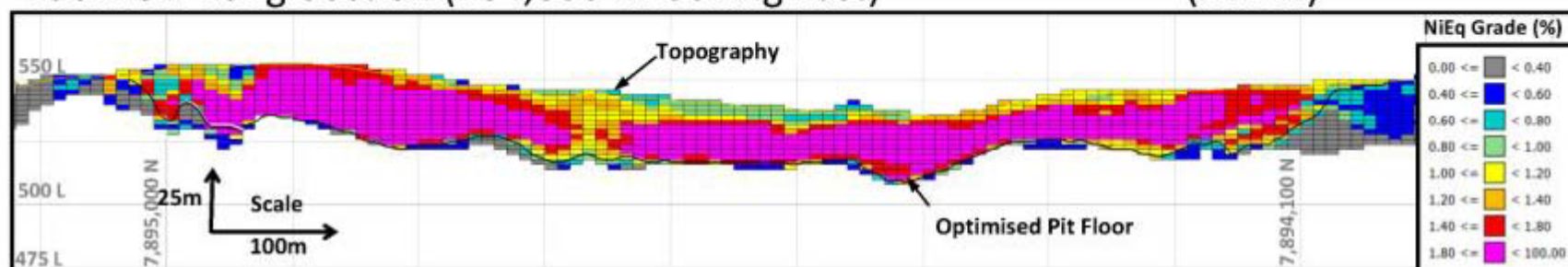


- ✓ 100% owned SCONI project, PFS completed – ready to start DFS
- ✓ Excellent project location & low sovereign risk
- ✓ Established Scandium-Cobalt-Nickel JORC resource (>5,000t contained Sc_2O_3 & 467kt Ni & 50kt Co) – See Appendix Tables (SCONI South & North)
- ✓ Advanced permitting & no major technical hurdles
- ✓ Developed proprietary scandium recovery & purification technology
- ✓ Excellent metallurgical testwork results with proven flowsheet – achieved >99.9% Sc_2O_3 from pilot plant
- ✓ KBM Affilips produced aluminium Master Alloy with SCONI Scandium Oxide

Metallica's goal is to become a major, long-term, reliable supplier of scandium

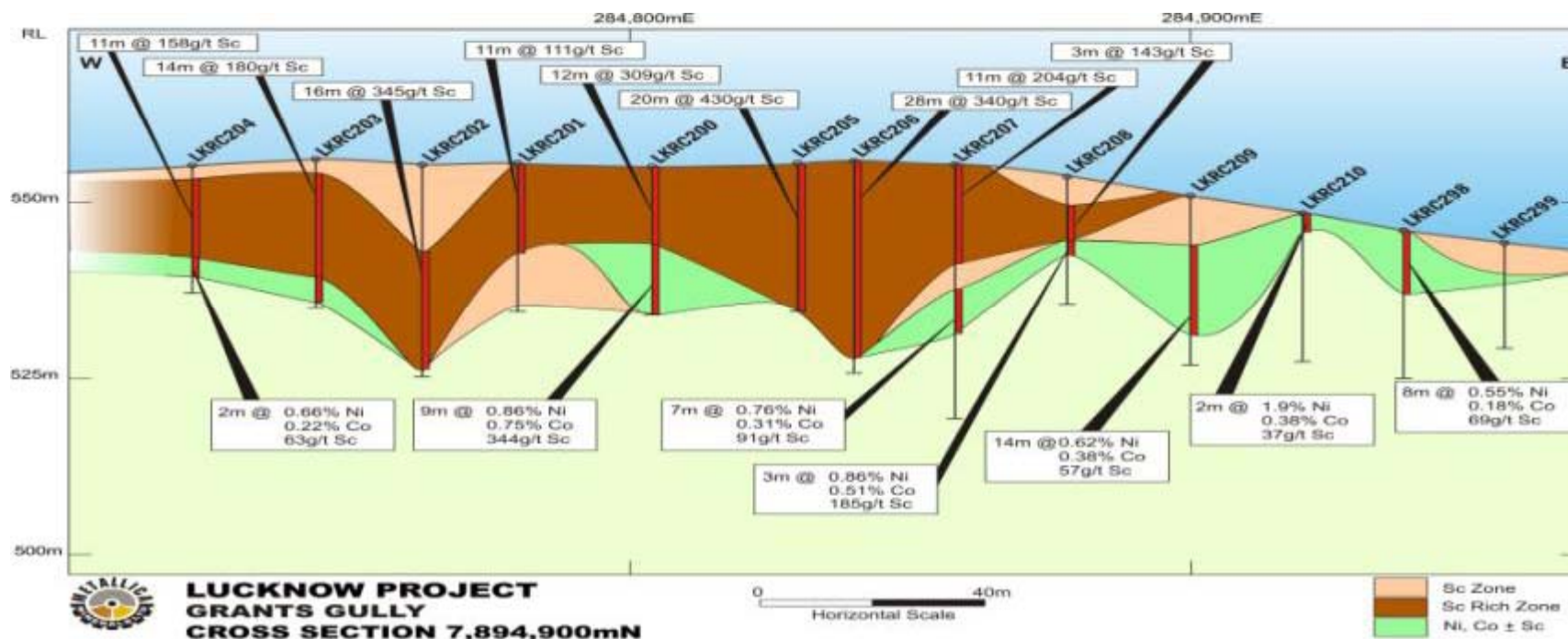
Lucknow Long-Section (284,800 E Looking East)

(2V:1H)



Nickel Equivalent (NiEq) = Nickel % + 1.5 x Cobalt % + 0.01 x Scandium ppm

Scandium-Ni-Co Drill X/S



LUCKNOW PROJECT
GRANTS GULLY
CROSS SECTION 7,894,900mN

0 40m
Horizontal Scale

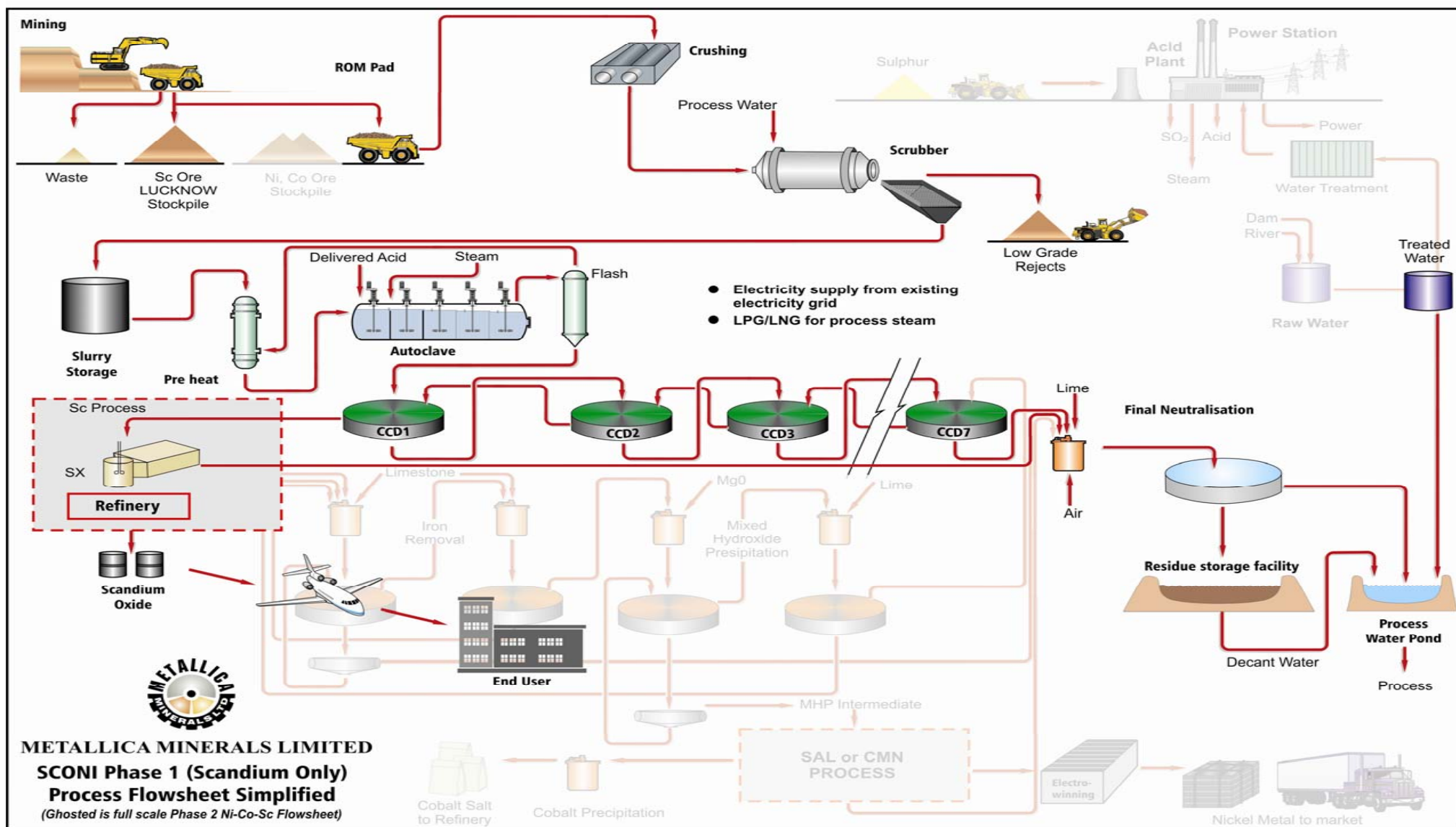
Sc Zone
Sc Rich Zone
Ni, Co ± Sc



SCONI Phase 1 Simplified Process Sheet

(Producing Scandium Oxide only)

SCONI
Scandium • Cobalt • Nickel





SCONI Phase 1 PFS Results



Description	Revised Phased Development
Scandia Price & Long term forex rate	US\$2,000/kg & A\$1:US\$0.85
Processing Plant Throughput	200,000tpa
Capital Cost (Forex rate A\$1 : US\$0.90)	A\$247M (including 20% contingency)
Annual Production	50,000 - 65,000kg Scandium Oxide
Annual average EBITDA	A\$59M
NPV (8% discount rate, 100% equity, real terms)	A\$273M (pre-tax), A\$155M (post tax)
IRR	20.6% (pre-tax), 15.9% (post tax)

- ✓ PFS showed a technically & economically viable project
- ✓ Capex includes high level of actual quotes >60% of mechanical equipment list
- ✓ Simplified Processing, initially no acid plant or power plant - Scandium only
- ✓ Long life +20 years
- ✓ Phase 1 precursor to potential tri-metal Phase 2 Project (Sc – Ni – Co) 750Ktpa

For details see ASX announcement dated 28 March 2013



SCONI possible Phase 2 Development (full scale)



Description

Processing Plant Throughput	750,000tpa Ni-Co-Sc Resources
Capital Cost	~A\$800M (possible brownfields expansion)
Average Annual Sc Production	75,000kg Scandium Oxide (Additional to Phase 1)
Average Annual Ni & Co Production	5,000tpa Ni, 700tpa Co

- ✓ Full scale 750,000tpa processing plant would include nickel & cobalt co-products
- ✓ Acid plant & power plant located on site
- ✓ Decision to proceed on Phase 2 could be made after commissioning of Phase 1 subject to market conditions at the time (full scale PFS not yet optimised)
- ✓ Brownfields expansion – phased approach means lower risk
- ✓ Would increase total Sc production capacity to meet the market
- ✓ Existing Greenvale, Lucknow, Kokomo Ni-Co-Sc 28.3Mt @ 0.6% Ni, 0.09% Co and 91g/t Sc (1.0% Nieq COG) JORC resource supports long life (>20 years) – See Appendix 1



Scandium Opportunity – Why Now?



- ✓ New advanced materials & technology, more efficient products & applications – next generation technologies - increased energy efficiency, (Gas-SOFC) – improved aerospace & vehicle alloys, 3D printing (next industrial revolution)
- ✓ Increasing demand from greener technologies SOFC (efficient energy conversion) & Sc-Al Alloys (high performance, strength–weight ratio & energy savings)
- ✓ SCONI can produce long-term reliable supply of Scandia (20 + years)
- ✓ Metallica early mover in exciting niche market



Investment Rationale – Why Metallica?



- ✓ **Opportunity for major growth from scandium**
 - Highly strategic – usage in next generation technological applications
 - Scandium supply trails growing market demand
 - Metallica is an early mover, ready & focussed
- ✓ **Strong downstream partnerships already established**
 - KBM Affilips & Bloom Energy have chosen Metallica for a reason
- ✓ **Significant de-risking already achieved**
 - Established Measured & Indicated Sc & Sc-Co-Ni resource
 - Proven Metallurgy & Process
 - Developed proprietary technology to produce high purity Sc_2O_3
 - Scandium Offtake Agreement Bloom Energy (USA:SOFC energy company)
 - Very experienced technical team (Brisbane & Townsville HVBS)
 - Permitting advanced & nearly all field/ground work completed
 - Low sovereign risk country – critical for reliable & secure supply



Zircon-Rutile: Weipa HMS Project Overview

- Weipa Heavy Mineral Sands (HMS) – Zircon & Rutile Project (100% owned) in Cape York, Queensland
- Urquhart Point Mining Lease applied for over shallow (<3m) high grade (~7% THM) Zircon-Rutile deposit
- Zircon + Rutile >40% HMC
- Over 2,000sq km of EPM's/EPMA's
- Feasibility & EIS process advanced
- Zircon-Rutile production targeted 2014 subject to feasibility, permitting and financing



Opportunity for cashflow generation in 2014



METALLICA MINERALS

THANK YOU

METALLICA SUBSIDIARIES

NORNICO PTY LTD | 100% MLM
GREENVALE OPERATIONS PTY LTD | MLM 100%
LUCKY BREAK OPERATIONS PTY LTD | MLM 100%
SCANDIUM PTY LTD | MLM 100%
PHOENIX LIME PTY LTD | MLM 100%
ORESOME AUSTRALIA PTY LTD | MLM 100%

ASX:MLM



Appendix 1

Lucknow Scandium Resource for Phase 1



Lucknow Scandium Resource using a 120g/t COG (excluding Ni-Co Resource)						
Description	Tonnes (Mt)	Sc (g/t)	Ni (%)	Co (%)	Fe (%)	Mg (%)
Measured	0.6	231	0.30	0.08	31.6	1.6
Indicated	5.1	191	0.23	0.06	34.9	1.1
Inferred	0.04	130	0.10	0.01	29.5	0.5
Totals	5.7	195	0.23	0.06	34.5	1.1

Competent Person's Statement

The SCONI Scandium-Cobalt-Nickel project Mineral Resource estimate(s) is based upon & accurately reflects data compiled, validated or supervised by Mr John Horton, Principal Geologist FAusIMM (CP) who is a full time employee of Golder Associates Pty Ltd. Mr Horton has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources & Ore Reserves'. Mr. Horton consents to the inclusion of this information in the form and context in which it appears in this document.



Southern Deposits Sc & Ni-Co Resource Statement



Southern Deposits – COG NiEq (Ni + 1.5Co + 0.01Sc) = 0.7%

Description	Tonnes (Mt)	Ni (%)	Co (%)	Sc (g/t)	Ni Metal (kt)	Co Metal (kt)	Sc Metal (t)	Equivalent Sc Oxide (t)
Kokomo								
Measured	2.2	0.57	0.11	80	12.2	2.5	173	260
Indicated	17.2	0.56	0.09	49	95.8	15.5	843	1,264
Inferred	10.2	0.36	0.04	59	36.7	4.5	603	905
Totals	29.5	0.49	0.08	55	144.7	22.5	1,619	2,429
Greenvale								
Measured	4.8	0.78	0.06	38	37.8	3.0	186	279
Indicated	9.5	0.71	0.05	38	67.0	4.9	360	541
Inferred	1.9	0.71	0.05	34	13.3	0.9	65	97
Totals	16.2	0.73	0.05	38	118.1	8.8	611	917
Lucknow								
Measured	1.7	0.45	0.10	103	7.9	1.8	180	271
Indicated	10.6	0.27	0.07	128	28.5	7.2	1,357	2,035
Inferred	1.5	0.40	0.07	41	5.8	1.0	60	90
Totals	13.8	0.31	0.07	116	42.2	10.0	1,597	2,396
Combined Southern Deposits (COG 0.7%)								
Measured	8.7	0.66	0.08	62	57.9	7.2	539	809
Indicated	37.3	0.51	0.07	69	191.3	27.6	2,560	3,840
Inferred	13.5	0.41	0.05	54	55.9	6.4	728	1,092
Totals	59.5	0.51	0.07	64	305.1	41.1	3,827	5,741

Southern Deposits – COG NiEq = 1.0%

Description	Tonnes (Mt)	Ni (%)	Co (%)	Sc (g/t)	Ni Metal (kt)	Co Metal (kt)	Sc Metal (t)	Equivalent Sc Oxide (t)
Combined Southern Deposits (COG 1.0%)								
Measured	5.9	0.78	0.10	75	45.8	5.9	440	659
Indicated	22.4	0.55	0.09	95	123.4	19.1	2,126	3,189
Inferred	5.1	0.51	0.06	72	26.0	3.1	365	548
Totals	33.4	0.59	0.08	88	195.2	28.2	2,931	4,396



Northern Deposits Ni-Co Resource Statement



Northern Deposits – COG NiEq (Ni + 1.5Co) = 0.7%					
Description	Tonnes (Mt)	Ni (%)	Co (%)	Ni Metal (kt)	Co Metal (kt)
Bell Creek South					
Measured	7.8	0.96	0.07	75.5	5.1
Indicated	0.1	0.81	0.05	1.2	0.1
Totals	8.0	0.96	0.07	76.7	5.2
Bell Creek North					
Indicated	2.0	0.86	0.03	16.8	0.5
Totals	2.0	0.86	0.03	16.8	0.5
Bell Creek Northwest					
Indicated	2.5	0.81	0.05	20.1	1.2
Totals	2.5	0.81	0.05	20.1	1.2
The Neck					
Indicated	0.4	0.84	0.03	3.5	0.1
Totals	0.4	0.84	0.03	3.5	0.1
Minnamoolka					
Indicated	4.7	0.82	0.05	38.3	2.1
Inferred	0.9	0.78	0.04	6.7	0.3
Totals	5.5	0.82	0.04	45.0	2.4
Combined Northern Deposits					
Measured	7.8	0.96	0.07	75.5	5.1
Indicated	9.7	0.83	0.04	79.9	4.0
Inferred	0.9	0.78	0.04	6.7	0.3
Totals	18.4	0.88	0.05	162.1	9.4

Notes to Resource Statements

1. Scandium is typically sold as an oxide product. Hence the equivalent scandium oxide has been calculated at 1.5 times contained scandium.
2. The resources for the Southern Deposits of Lucknow, Greenvale and Kokomo are reported at a cut-off grade (COG) of NiEq 0.7% (Ni + 1.5Co + 0.01Sc). This NiEq COG formula has been calculated using commodity prices of US\$10/lb nickel, US\$15/lb cobalt and US\$1,500/kg scandium oxide, and recoveries of 90% for all three metals. Metallica indicates that the metallurgical testwork to date provides reasonable potential for the nickel, cobalt and scandium to be recovered at similar recoveries to those achieved in the testwork.
3. The Mineral Resources for the Northern Deposits of Bell Creek South, Bell Creek North, Bell Creek Northwest, Minnamoolka and The Neck are reported at a COG of NiEq 0.7% (Ni + 1.5Co). This NiEq COG formula has been calculated using commodity prices of US\$10/lb nickel and US\$15/lb cobalt, and recoveries of 90% for both nickel and cobalt.
4. No scandium content was estimated in the Northern deposits as Sc assays are generally not available. From limited data there is good indication the Northern deposits are relatively low in Sc (generally <20ppm Sc).
5. Variations in total may be present due to rounding factors.
6. For further details on the SCONI scandium and nickel cobalt scandium resource see Metallica ASX release SCONI Scandium Project – 28 March 2013

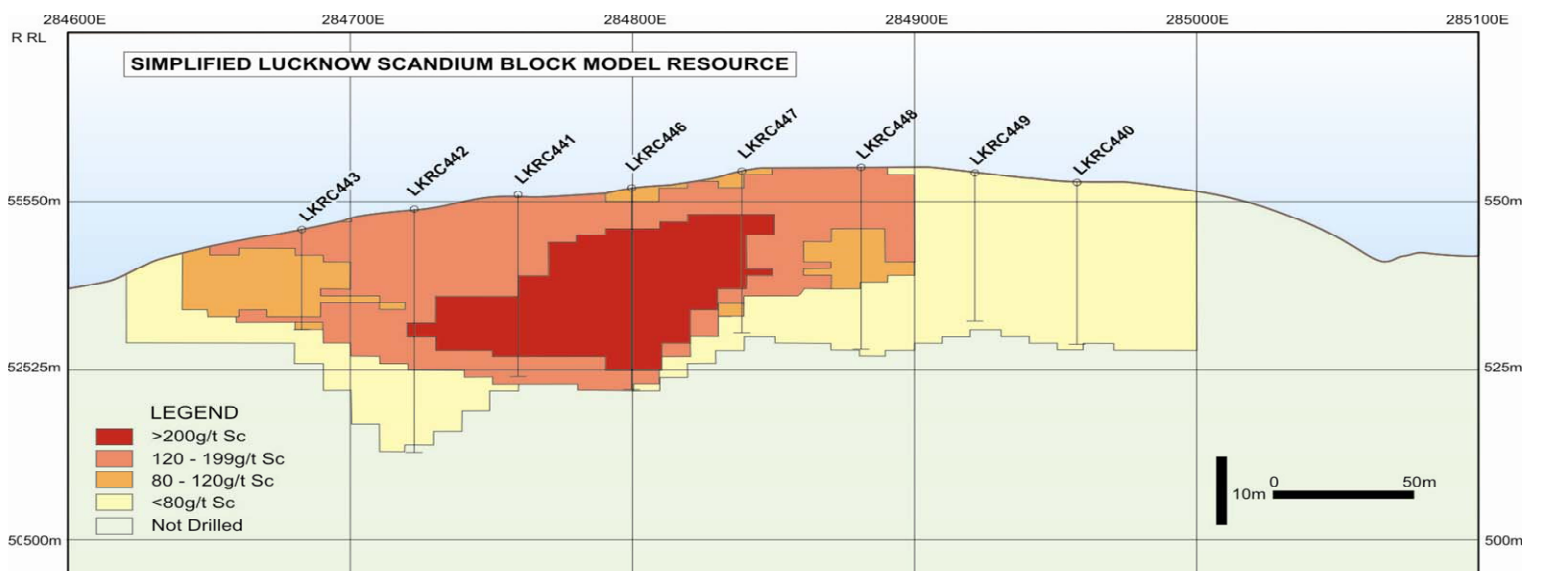
Technical information and exploration results contained in this report have been compiled by Metallica Minerals Ltd full time employee Andrew Gillies B.Sc MAusIMM in the position of Managing Director. Mr Gillies has sufficient experience that is relevant to the style of mineralisation being reported on to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Minerals Resources & Ore Reserves. Mr Gillies consents to the inclusion in this report of the matters based on the information in the form and context in which it appears

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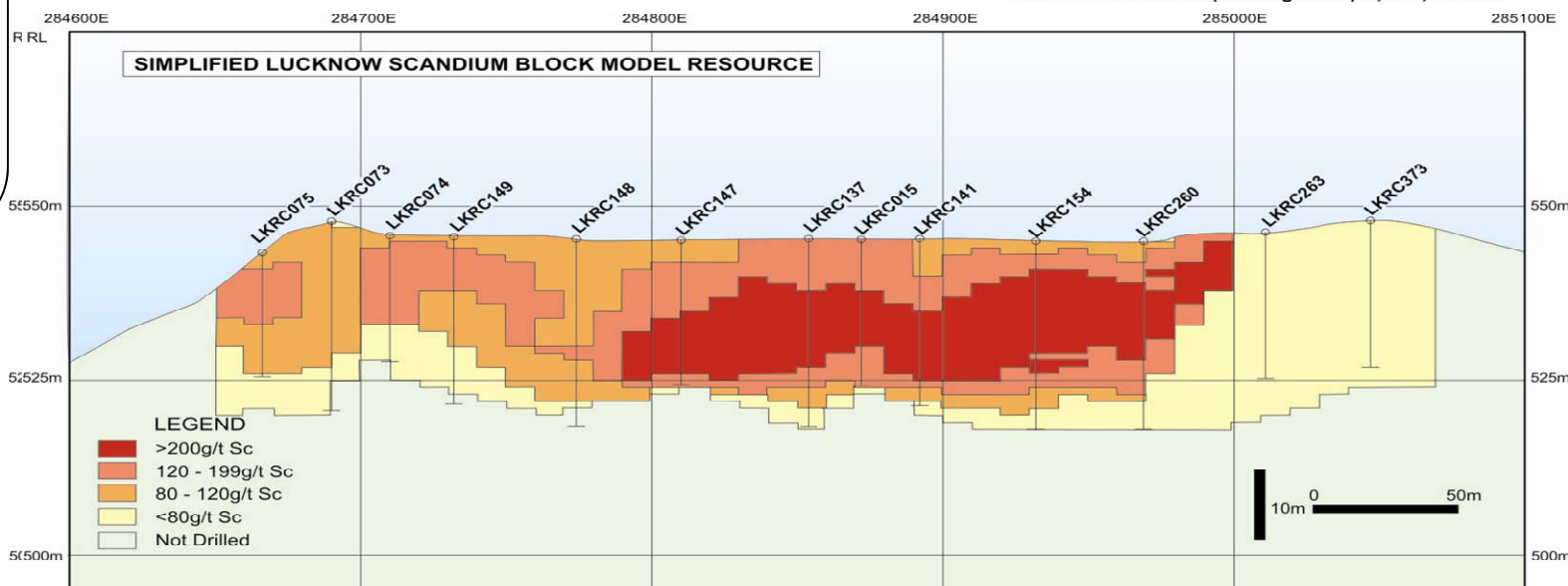


Lucknow Block Model Cross Sections*

Easy access,
bulk mineable
high grade
Sc measured
& indicated
resource

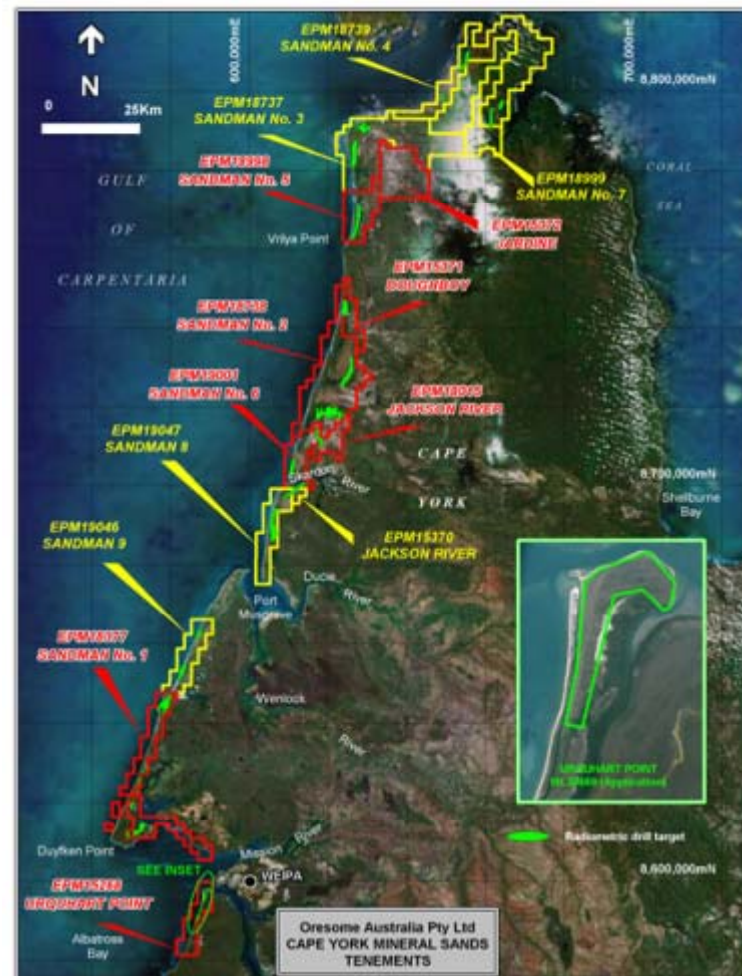
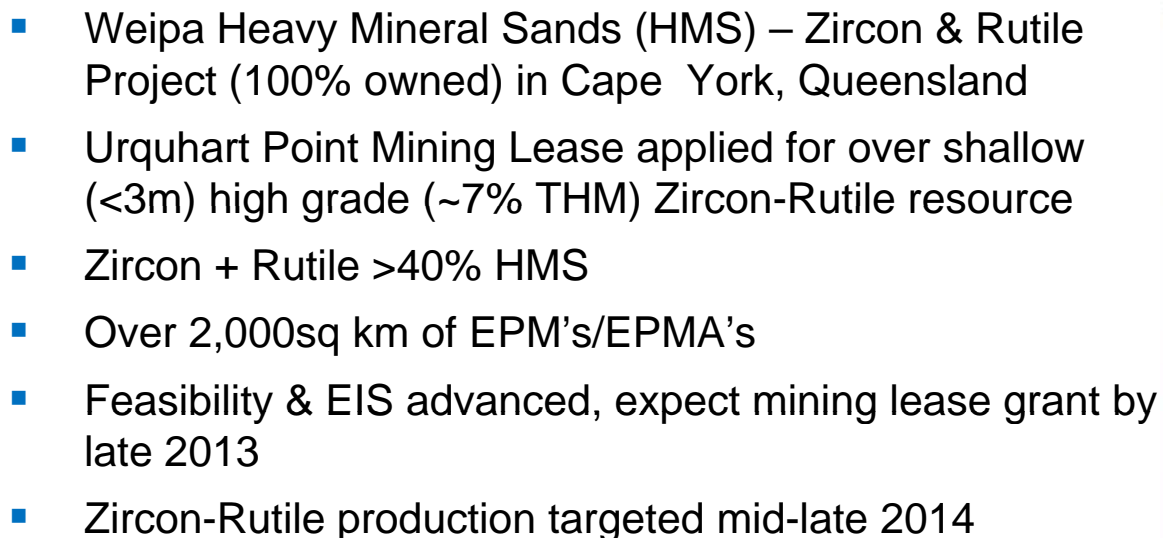


CROSS SECTION (Looking North) 7,894,820mN



CROSS SECTION (Looking North) 7,894,200mN

* Colour code simplified, based on detailed block model resource compiled by Golder Associates (Feb 2012)



Opportunity for near-term cashflow generation



NOTES



NOTES
