

RESOURCES LIMITED

121 Mining Investment London 2018

21 November 2018 **RICHARD BEVAN, MANAGING DIRECTOR**

In

www.cassiniresources.com.au

Minna m

Disclaimer and important notice



The information contained in this presentation is for informational purposes only and does not constitute an offer to issue, or arrange to issue, securities or other financial products. The information contained in this presentation is not investment or financial product advice and is not intended to be used as the basis for making an investment decision. The presentation has been prepared without taking into account the investment objectives, financial situation or particular needs of any particular person. Before making an investment decision, you should consider, with or without the assistance of a financial adviser, whether an investment is appropriate in light of your particular lowestment Needs, Objectives And Financial Circumstances.

No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. To the maximum extent permitted by law, none of Cassini Resources Ltd, their directors, employees or agents, nor any other person accepts any liability, including, without limitation, any liability arising out of fault of negligence, for any loss arising from the use of the information contained in this presentation. In particular, no representation or warranty, express or implied is given as to the accuracy, completeness or correctness, likelihood of achievement or reasonableness or any forecasts, prospects or returns contained in this presentation nor is any obligation assumed to update such information. Such forecasts, prospects or returns are by their nature subject to significant uncertainties and contingencies.

Competent Persons Statement

The information in this statement which relates to the Mineral Resource data, including tenement information, drilling, sampling, and analytical results, geology interpretation, and selection of cut-off grade has been overseen by Mr Greg Miles who is a full-time employee of Cassini Resources Ltd and a Member of the Australasian Institute of Geoscientists. Mr Miles has sufficient relevant experience to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the JORC Code, 2012 Edition.

The information in this report which relates to the Nebo-Babel Mineral Resource estimation and classification has been prepared by Mr Andrew Weeks who is a full-time employee of Golder Associates Pty Ltd and a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Weeks has sufficient relevant experience to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the JORC Code, 2012 Edition. Both Mr Miles and Mr Weeks consent to the inclusion in this report of the matters based on information in the form and context in which it appears.

Please refer to Cassini's ASX announcement of 7 December 2015 for the Competent Person Statement and JORC disclosure tables relating to the Succoth Mineral Resource Estimate.

Cassini is not aware of any new information or data, other than that disclosed in this report, that materially affects the information included in this report and that all material assumptions and parameters underpinning Exploration Results, Mineral Resource Estimates and Production Targets continue to apply and have not materially changed.

The nickel equivalent (NiEq) and copper equivalent (CuEq) calculations take into account resources, reserves, and grades as stated in latest ASX releases and assumes 100% payability for all metals recovered generating a commodity equivalent value for Ni, Cu, Co, Zn, Au, Ag, Pb and Mo. Only projects with JORC 2012 resources and reserves have been used. Nickel equivalent grade = Ni% + Cu% x 0.56. Copper equivalent grade = Cu% + Ni% x 1.97. Based on assumed recoveries of 73% for Cu and 59% for Ni and commodity prices shown below. It is the Cassini's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold. NiEq grades have been published to enable a comparison to similar sized nickel sulphide assets. CuEq grades have been published to enable a comparison to similar sized copper assets.

Forward Looking Statements

Some statements in this report regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are based on interpretations of current market conditions. Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future performance or results expressed or implied by such forward-looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain mine licenses, permits and other regulatory approvals required in connection with mining and processing operations, competition for among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel; incorrect assessments of the value of acquisitions; changes in commodity prices and exchange rates; currency and interest rate fluctuations; various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions; the demand for and availability of transportation services; the ability to secure assumptions and or manage the foregoing factors and risks. There can be no assurance that forward-looking statements will prove to be correct.

The production targets referred to in this announcement are based on 52% In-pit Indicated Resources and 48% Inferred Mineral Resources. The Inferred Resources do not determine the economic viability of the project, and approximately 80% of resources within the optimisation pit shells are in the Indicated Category during the pay-back period. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production targets themselves will be realised.

Statements regarding plans with respect to the Company's mineral properties may contain forward looking statements. Statements in relation to future matters can only be made where the Company has a reasonable basis for making those statements.

Cassini - Powering Ahead



- Rapidly progressing Pre-feasibility Study (PFS) on a world class nickel + copper sulphide project with ASX100 partner OZ Minerals (ASX:OZL)
- ✓ One of the few new sulphide **projects of scale** being developed globally
- Significant opportunity to add value to project through optimisation and exploration
- Base metal market dynamics continue to improve with new demand for high quality products





Corporate

A\$4.2 million placement to institutional, sophisticated and strategic investors (including \checkmark Chairman and major shareholder of Chinese end-user **Tinci Materials**)

West Musgrave Project

- OZ Minerals achieved Stage 1, 51% earn-in interest 8 months early \checkmark
- 2019 resource drilling program brought forward into Q4 2018 \checkmark
- PFS update shows significant improvements in met recovery and concentrate grades \checkmark







Board of Directors



Highly experienced senior leadership team, with proven capabilities in successful mineral exploration, financing and project development



Michael Young Non-Executive Chairman

- +30 years experience in mineral exploration and project development associated with base metals, iron ore, uranium, and gold
- Current Managing Director of Vimy Resources (ASX: VMY)
- Previous Managing Director of BC Iron (ASX: BCI), leading the company's transition from explorer to significant producer



Richard Bevan Managing Director

- Extensive senior management experience having been the Managing Director / CEO of a number of listed and unlisted companies, including Battery Minerals (ASX: BAT, formerly Metals of Africa)
- Has led the execution and integration of a number of M&A deals and other corporate transactions, across a range of industries
- Current Non-Executive Director of Empired (ASX: EPD)



Greg Miles Executive Director

Geologist with vast experience in mineral discovery and development, including being involved in the discovery of the 2.3Moz Centenary gold deposit and 40Mt Mount Caudan Iron ore deposit in WA

Dr John Hronsky Non-Executive Director

- +30 years experience in mineral exploration industry, specialising in project generation, technical innovation and exploration strategy
- Previously, Manager Strategy and Generative Services for BHP Billiton Mineral Exploration (ASX: BHP)
- Current Non-Executive Director of Encounter Resources (ASX: ENR)

Philip Warren Non-Executive Director

- Chartered accountant and Executive Director of corporate advisory firm Grange Consulting Group
- +15 years of corporate advisory experience specialising in financing, seed capital, debt restructuring and corporate governance
- Current Non-Executive Director of Rent.com.au (ASX: RNT) and Family Zone Cyber Safety (ASX: FZO)







Corporate Snapshot



CAPITAL STRUCTURE

Australian Stock Exchange (ASX) code	CZI
Frankfurt Stock Exchange code	ICR
ASX Share price (close 14-Nov-18)	A\$0.096
52 week low / high	A\$0.061 / A\$0.125
Shares outstanding	345.5M
Options on Issue	15.15M
Market capitalisation	A\$34.6 M
Cash (30-Sept-18)	A\$4.2M

MAJOR SHAREHOLDERS	
Atasa Holdings P/L	7.9%
Mr Xu, Jing Fu (Tinci Material Technology Co)	4.7%
Mr Bu, Xiao Yu	4.7%
GR Engineering (ASX:GNG)	4.4%
Directors and Management	4.1%

SHARE PRICE PERFORMANCE









Earnin/Joint Venture (OZL 51%, CZI 49%)

West Musgrave Project (Ni, Cu, Co, PGE)

STAGE: PRE-FEASIBILITY

NEBO-BABEL DEPOSITS

- 283Mt open pit sulphide resource
- · Low operating cost and long mine life

STAGE: ADVANCED EXPLORATION

SUCCOTH DEPOSIT

- 156Mt shallow Cu resource
- Provides significant optionality and leverage

STAGE: EXPLORATION

REGIONAL

- 40km mineralised corridor
- Multiple targets

Significant exploration upside remains



100% CZI Owned

Mount Squires Project (Au) STAGE: EXPLORATION

Shallow gold mineralisation

- 50km prospective trend
- Gold in previous drilling



CZI earning in to 80%

Yarawindah Brook Project (Ni, Cu, Co, PGE) STAGE: EXPLORATION

Massive sulphide mineralisation

- Under-explored project
- High grade Ni-Cu-Co massive sulphides



West Musgrave Project





West Musgrave Project (WMP): Overview



Globally significant Ni and Cu deposits with massive exploration upside

- Nebo-Babel discovered by Western Mining Corporation in May 2000
- Cassini acquired WMP from BHP Billiton in April 2014
- Commenced Earnin/ JV with OZ Minerals August 2016
- Scoping Study delivered Nov '17
- Rapidly progressing PFS, due Q2 2019



West Musgrave Project Joint Venture

OZ Minerals 51%, able to earn up to 70%

- OZL Stage 1 earn-in interest (51%) achieved Oct 2018 (8 months early).
- OZL to spend another A\$14 million to reach the Stage 2 interest of 70%.
- CZI has option to purchase OZL's 51% equity interest if OZL withdraws prior to Stage 2.
- If OZL completes the Stage 2, they will continue to sole fund JV expenditure until the completion of a BFS.
- Any amount funded by OZ Minerals in excess of \$36M, CZI will be loan-carried for 30%, with principal and capitalised interest to be repaid 5 years after the commencement of production.

Stage	Earn in requirement	OZL interest	Timeframe	Operator	Status
Minimum Commitment	A\$3m updated scoping study	0%	Up to 12 months	CZI	Completed Nov 2017
Stage 1	 A\$19m expenditure towards delivery of PFS and regional exploration 	51%	Up to 18 months	OZL CZI	Achieved Oct 2018 (8 months early)
Stage 2	 Additional A\$14m towards PFS/DFS and regional exploration 	70%	Up to 12 months	OZL CZI	By June 2020



Nebo-Babel – Scoping Study Outcomes (Nov '17)





Details of the Scoping Study Results can be found in Cassini's ASX Announcement of 14 November 2017 available on the Company website <u>www.cassiniresources.com.au</u> All material assumptions underpinning the forecast financial information derived from a production target in the initial public report of the Scoping Study continue to apply and have not materially changed.

West Musgrave Project camp



Current Status:

• 50+ people on site

Citra II

JAMESON

CAMP

- 2 Diamond rigs
- 3 RC rigs
- 1 Water bore rig
- Geophysics crew
- Environmental crew

Nebo-Babel Pre-Feasibility Study – work programs

- 40.000m Resource Infill increase • confidence leading to maiden Reserve
- **Resource Extension drilling** potential • higher grade extensions of the existing resource
- Metallurgy Advanced test work to • maximise metal recovery and reduce risk
- **Hydrogeology** Quantify groundwater • resource through exploration drilling and pump tests
- **Renewable energy study -** baseline data • collection from wind mast installation
- **Improved mine scheduling** and stockpile • management
- Environmental surveys for mine permitting •
- Consultation with key stakeholder groups •









- 27,000m resource drill out 100m x 50m centres
- Aiming to report maiden Reserve at end of PFS
- Resource extension drilling add highgrade mineralisation and options for development
- Early success at H-T lode
 - 25.6m @ 0.63% Ni, 1.04% Cu
- Mineralisation remains open along strike, follow-up drilling still to come

Nebo Resource





- 13,000m resource drill out on 100m x 50m centres
- Aiming to report maiden Reserve at end of PFS
- Resource extension drilling targeting high grade at Sugar Lode and Eastern Strike Extension (Angie Lode)

Metallurgy and Processing

- Significantly improved nickel and copper recoveries compared to 2017 Scoping Study, despite lower head grade samples.
- Small grade and recovery improvements in gold, platinum and palladium by-products.

2018 Master composite concentrate results compared to 2017 Scoping Study

Sample ID	Head	Grade	Final Copper Concentrate		Final Nickel Concentrate		
	%Ni	%Cu	% Cu Grade	% Cu Recovery	% Ni Grade	% Ni Recovery	
2018 MCX1	0.53	0.57	26.4	82.5	10.8	68.9	
2018 MCX2	0.37	0.43	26.4	87.4	11.0	66.9	
2018 MCX3	0.38	0.42	26.4	83.8	10.8	66.3	
Average			26.4	84.6	10.9	67.4	
2017 Scoping Study	1.00	0.70	22.7	72.6	10.8	59.0	
Variance			+3.7	+12.0	+0.1	+8.4	





Pre-Feasibility Study - Opportunities to Add Value





- Evaluation of renewable (wind) power to be combined with hybrid dieselsolar energy systems to further reduce power costs
- High-tech "Smart Mine" solutions to reduce capital and operating costs
- Improved mine scheduling and stockpile management
- Potential for Succoth and other high-value exploration discoveries to be included in development scenarios (Yappsu and One Tree Hill)

WMP Exploration – Significant discovery opportunity remains



- Exploration program targeting high value mineralisation to support Nebo Babel development
- Significant areas where there has been no or ineffective exploration
- Current success due to improved geological understanding and improved technology (geophysics)



Yappsu – Squid MLEM 2018 – clear anomaly

Yappsu – Sampson MLEM image 2009 – noisy data

Priority exploration targets

- Exploration strategy is to identify additional high grade sources of ore to complement the Nebo-Babel mining operation
- Ni + Cu mineralisation identified over 40km of strike
- Multi-commodity prospectivity Ni, Cu, Co, Au & PGE's
- Initial priority targets are Yappsu, One Tree Hill and Succoth
- Exploration program is managed by CZI and funded by OZL JV

Drilling is currently underway

MUSGRAVE

PERTH

PROJEC1

WESTERN AUSTRALIA

KALGOORLIE

JAMESON SUCCOTH DEPOSIT kilometres Yappsu Warburton **One Tree Hill**

West Musgrave Project

Exploration Prospects

Major Deposits

Wind Mast



Yappsu Prospect – Early success



- Intersected 6.5m zone of massive sulphide mineralisation
- Thick 78m zone of Ni, Cu, Co, PGE and gold mineralisation (CZD0076B)
- Highest PGE, Au and Co values at WMP to date
- Mineralisation open in all directions
- Drilling to continue after down-hole EM

Substantial discovery with positive implications for Project development



One Tree Hill Prospect



- Dec 2016, intersected two magmatic mineralised zones
- Widespread low level PGE and Cu anomalism - possible halo of a large system
- Potential for more high-value massive sulphide mineralisation
- Recent DH and ground EM identified 2 large conductors striking over 700m
- Initial program of 2 step out holes from CZD0017, results pending



Succoth Copper Deposit

- Excellent leverage to copper
- Not included in Scoping Study Nebo-Babel development plans
- Provides significant option to extend life of operations
- Current Inferred resource of
 - » 156mt @ 0.6% Cu
- Exploration programs targeting:
 - » higher grade, thick zones of mineralisation close to surface; and
 - chasing nickel mineralisation remains a focus
 - » Structural information to assist with geological model



ABOVE: **WMN4023 – 226.1m: 1.96% Ni, 0.13% Cu 1.2 g/t Pt+Pd.** Ni-rich massive sulphide from Babylon (hosted in late dolerite therefore remobilised, but proximal to source)





West Musgrave Project Schedule





Indicative Timeline



Other Exploration Projects



Yarawindah Brook (Ni+Cu+Co+PGE) – CZI option to earn 80%

WESTERN

AUSTRALIA

YARAWINDAH PROJECT



Increasing exposure to critical EV and battery metals

- Early stage massive Ni-Cu-Co-PGE sulphide project
- Significant intercepts not followed up
 - » 7m @1.29% Ni, 0.21% Cu, 0.06% Co
 - » 3m @ 2.70% Ni, 0.80% Cu, 0.19% Co
- New EM anomalies identified
- Anomalous surface rocks not tested no drilling
- Infrastructure advantages close to power, transport & water
- Applying learnings from WMP to a similar, but under-explored project



Mt Squires Project (Au) - 100% CZI

50km long structure with confirmed gold mineralisation

- Large-scale greenfields gold project
- Historical drilling identified significant
 mineralisation at the Handpump Prospect:
 - » 15m @ 2.3g/t Au from 31m, including 5m
 @ 4.7g/t from 34m
 - » 12m @ 1.3g/t Au from 25m, including 5m
 @ 2.0g/t from 25m
- Multiple new targets identified with no previous exploration





West Arunta Project (Zn) – 100% CZI



Multiple prospective zinc targets across a 35km prospective strike horizon

- Early-stage, sedimentary zinc exploration project - first mover advantage due to minimal historical exploration in region
- Maiden drill program identified broad zones of sub-surface enrichment in zinc and associated elements
- Airborne geophysics completed •
- RC drilling campaign recently completed, results pending



Regional projects (project

- Tanami (NYSE:NEM)
- MacKay SOP (ASX:AMN)
- Lake MacKay JV (ASX:ABU,
- Theseus (ASX:TOE)





Investment in Cassini



- Leveraged to positive Ni and Cu price outlook and emerging battery metals thematic
- Exposure to a large scale, long life, low cost Ni + Cu project in a safe, first world jurisdiction
- ✓ Advanced project de-risked by strong technical and financial partner OZL
- ✓ Significant upside exploration opportunity exists.
- Clear funding strategy for construction capital with multiple options





Cassini Resources Limited

10 Richardson Street, West Perth WA 6005

- T: +61 8 6164 8900
- E: admin@cassiniresources.com.au
- W: www.cassiniresources.com.au



2018 MEMBER

Appendix A: Mineral Resource Table



West Musgrave Project Indicated and Inferred Mineral Resources^{1,2,3}

Mineral Resource estimates provided by independent resource consultants CSA Global Pty Ltd

Prospect	Classification	Tonnes (Mt)	Ni (%)	Cu (%)	Co (ppm)	Au (ppm)	Pd (ppm)	Pt (ppm)
Nebo	Indicated	37.8	0.49	0.44	211	0.04	0.08	0.07
	Inferred	1.9	0.37	0.34	149	0.04	0.08	0.07
	Total	39.7	0.48	0.43	208	0.04	0.08	0.07
Babel	Indicated	73.9	0.36	0.41	132	0.06	0.10	0.09
	Inferred	169.4	0.33	0.37	123	0.06	0.10	0.09
	Total	243.3	0.34	0.38	126	0.06	0.10	0.09
Nebo + Babel	Total	283.0	0.36	0.39	137	0.06	0.10	0.09
Succoth	Inferred	156	0.06	0.60	-	0.02	0.11	0.04

NOTES:

1. Nebo-Babel Indicated and Inferred Mineral Resource (0.25% Ni cut-off), 8 November 2017

2. Succoth Deposit Inferred Mineral Resource estimate (0.3% Cu cut-off), 7 December 2015

3. The Mineral Resource estimates have been completed in accordance with the guidelines of the JORC Code (2012 edition) - Refer to the company website page: http://www.cassiniresources.com.au/jorc-compliance

Key Financial and Production Estimates



Key Financial and Production Metrics	
Processing capacity	10⁺ Mtpa
Initial Mine life	8 years
Average Nickel Metal production (Yrs1-8)	20-25ktpa
Average Copper Metal production (Yrs1-8)	25-30ktpa
Average Cobalt Metal production (Yrs1-8)	700–1,000tpa
Nickel equivalent grade*	0.5-0.6%
Copper equivalent grade*	1.0-1.2%
Nickel grade	0.30-0.40%
Copper grade	0.35-0.45%
C1 cost payable Ni main**	200-230US¢/lb
All-in sustaining cost Ni main	290-330US¢/lb
C1 cost payable Cu main**	20-40US¢/lb
All-in sustaining cost Cu main	60-90US¢/lb
Pre-production capital***	\$730-800m

Ranges are representative of sensitivities and improvement opportunities for metallurgical recoveries, power and pre-production capital. Excludes OZ Minerals earnin/study costs and discounting is applied from 1 January 2020.

- * Nickel equivalent grade = Ni% + Cu% x 0.56. Copper equivalent grade = Cu% + Ni% x 1.97. Based on assumed recoveries of 73% for Cu and 59% for Ni and commodity prices shown below. It is the Cassini's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.
- ** Financial valuation has used long term consensus forecasts of Ni: US\$7.13/lb, Cu: US\$2.95/lb, Co: US\$14.20/lb, Au: US\$1,292/oz, Pt: US\$1,128/oz, Pd: US\$769/oz and AUD:USD of \$0.74.
- *** Pre-production capital includes capitalised pre-strip of up to \$175m, although it is expected that approximately 50% of this cost will be incurred during the first year of production.
- **** The production targets referred to in this announcement are based on the first 7 years of production which includes 74% Indicated Mineral Resources and 26% Inferred Mineral Resources. The Inferred Resources do not determine the economic viability of the project as approximately 80% of resources within the optimisation pit shells are in the Indicated Category during the pay-back period. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production targets themselves will be realised.

The Scoping Study was prepared at a $\pm 35\%$ level of accuracy.

	Post-tax	Pre-tax
LOM average net cash flow	\$120-150m	\$150-200m
Internal Rate of Return****	20-25%	25-30%
Project Payback	3-4yrs	2-3yrs