



NORTHERN
MINERALS

Investor Presentation

MAY | 2015 | ASX:NTU

OUR VISION
To become the first
significant dysprosium
producer outside of China

Important notice

This presentation has been prepared by Northern Minerals Limited (“Northern Minerals” or the “Company”). It should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this presentation.

This presentation contains forecasts and forward looking information. Such forecasts and information are not a guarantee of future performance, involve unknown risks and uncertainties. Actual results and developments will almost certainly differ materially from those expressed or implied. Northern Minerals has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this presentation. Accordingly, to the maximum extent permitted by applicable laws, Northern Minerals makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and take no responsibility and assume no liability for, the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission, from any information, statement or opinion contained in this presentation.

You should not act or refrain from acting in reliance on this presentation material. This overview of Northern Minerals does not purport to be all inclusive or to contain all information which its recipients may require in order to make an informed assessment of the Company’s prospects. You should conduct your own investigation and perform your own analysis in order to satisfy yourself as to the accuracy and completeness of the information, statements and opinions contained in this presentation and making any investment decision.

The information in the announcement that relates to Mineral Resources is extracted from the report entitled “Increased Mineral Resource Delivers More Good News” created on 23 February 2015 and is available to view on the Company’s website (northernminerals.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

The information in the announcement that relates to Ore Reserves is extracted from the report entitled “Increased Ore Reserve for Browns Range Project” created on 2 March 2015 and is available to view on the Company’s website (northernminerals.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

The information in this report that relates to Exploration Results or Exploration Targets is based on information compiled by Mr Robin Wilson, a full-time employee of Northern Minerals, a Competent Person, who is a member of the Australasian Institute of Mining and Metallurgy. Robin Wilson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Wilson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in the announcement that relates to production targets is extracted from the report entitled “DFS positions Browns Range Project as next dysprosium supplier” dated 2 March 2015 and is available to view on the Company’s website (northernminerals.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the production targets in the relevant market announcement continue to apply and have not materially changed.

TREO = Total Rare Earth Oxides – La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃
HREO = Heavy Rare Earth Oxides – Total of Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃

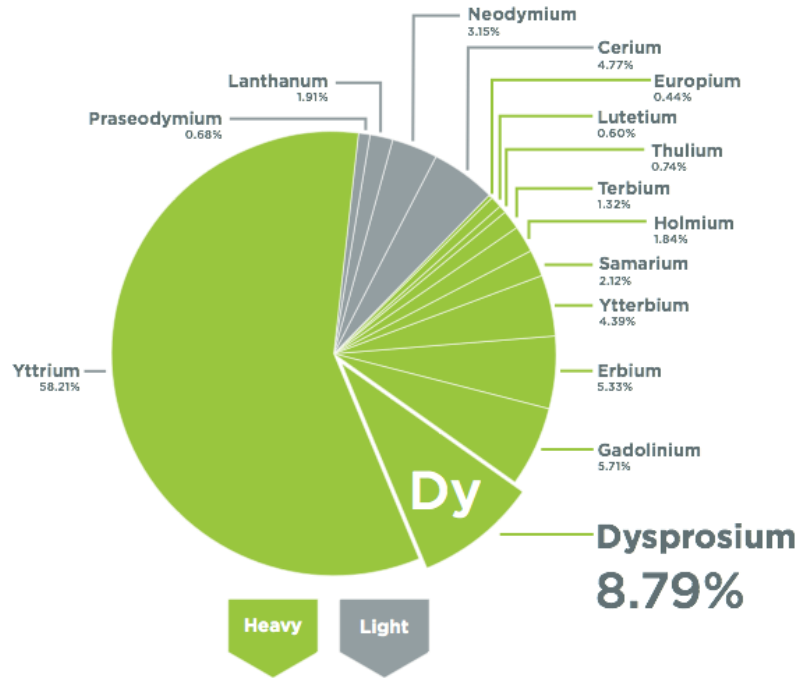
As best in class the Browns Range Project is positioned to be the first significant world producer of dysprosium outside of China.

The Project will deliver dysprosium and other heavy rare earths that are vital in powering clean energy technology now and in the future.



Northern Minerals Browns Range

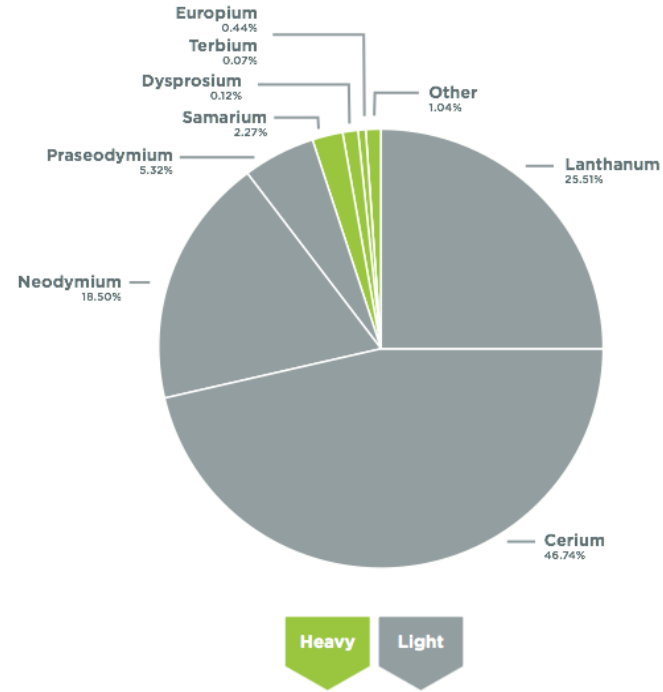
Rare earth distribution ¹



¹ Based on Wolverine Mineral Resource

Lynas Mt Weld

Rare earth oxide composition ²



² Source: Lynas Corporation website

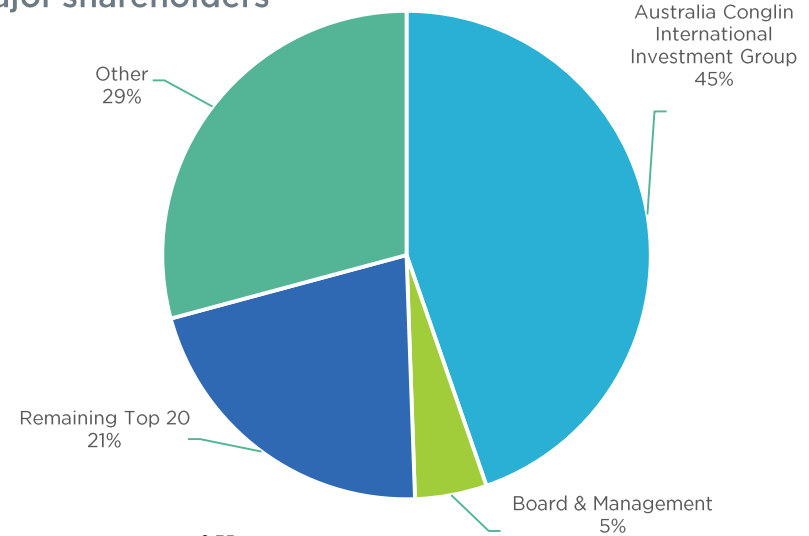
3rd largest RE company outside China

Market capitalisation A\$89M

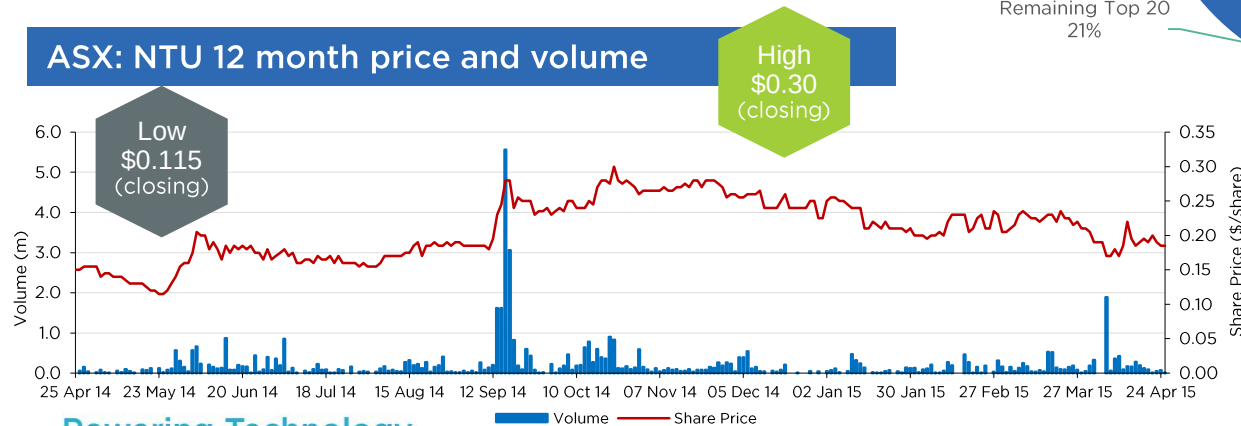
(at 22 April 2015 @ \$0.20)

Ordinary Shares	444M
Unlisted Options and Performance Rights	26.8M
Convertible Notes	\$5M
Cash (31 March 2015)	\$2.8M

Major shareholders



ASX: NTU 12 month price and volume



Powering Technology.

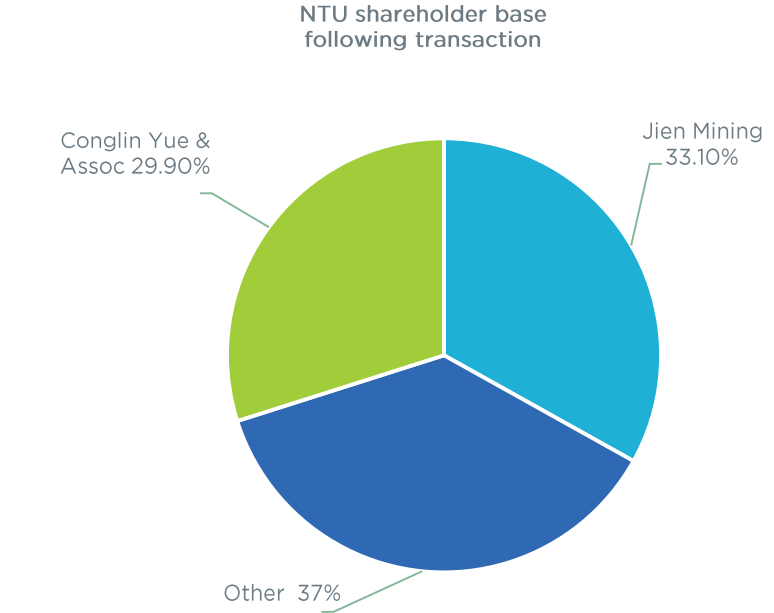
* All amounts in A\$

\$49.5M funding partnership Jien Mining*

- ◆ \$5M received from convertible note.
- ◆ Placement of 110M shares at \$0.20 (less conversion of convertible note) and 110M options at exercise price of \$0.25 expiring one year after date of issue of options.
- ◆ Share placement subject to due diligence process and shareholder approval on 27 May 2015, and offtake MoU.

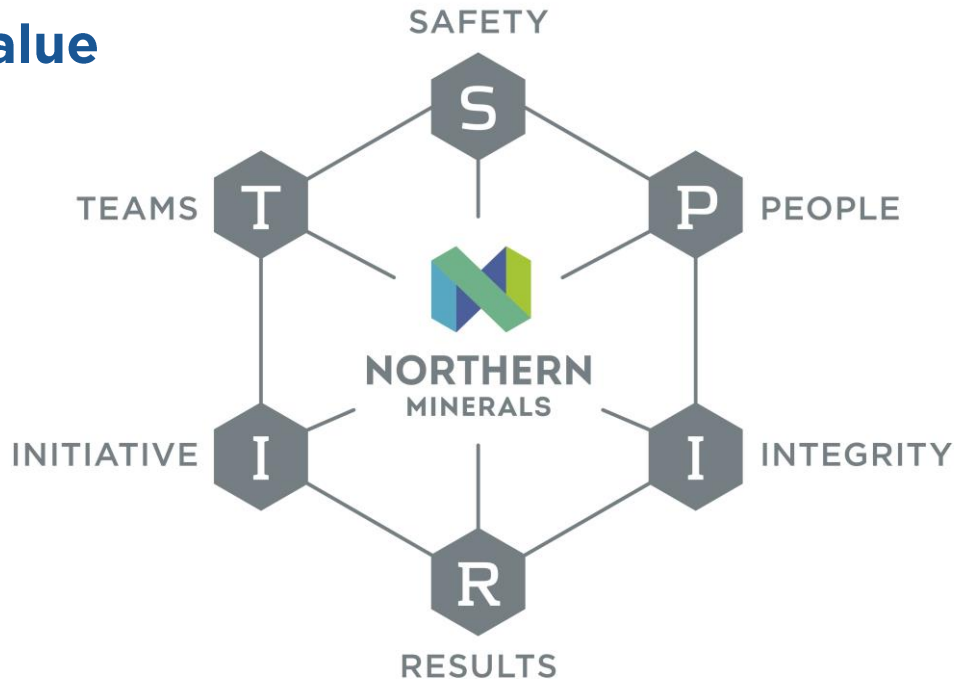
About Jien Mining Pty Ltd

- ◆ Australian based subsidiary of Jilin Jien Nickel Industry Co Ltd (Jilin Jien) one of the largest producers of nickel sulfate in the world.
- ◆ Jilin Jien, listed Shanghai Stock Exchange, market cap RMB 26 billion (A\$4.6 billion) as at 19/3/15.
- ◆ Jilin Jien, focussed nonferrous metal production and processing, new energy material development and financial capital business operations.



Our values 'SPIRIT'

Our **people** are an
integral part of our **value
proposition**



A winning **team**
underpinned by our
core values

Retention of
intelligence from
IPO to DFS

Respect and
engage with all
our **stakeholders**

The right leadership

A wealth of experience and knowledge to take Northern Minerals from explorer to the next dysprosium producer

BOARD OF DIRECTORS

Conglin Yue – Executive Chairman

- Long standing relationship with a number of major steel producing companies in China.

George Bauk - Managing Director / CEO

- 25 years' global resource industry experience in senior operational and corporate roles, with particular focus on rare earths and nickel.

Kevin Schultz - Deputy Chairman

- Mining Engineer/Geologist with 40 years' experience in mineral discovery and appraisal, through to mine development.

Adrian Griffin - Non Executive Director

- Significant expertise in mine management and production with corporate experience as MD and Chairman of listed resource companies.

Colin McCavana - Non Executive Director

- More than 35 years' global management experience in the construction and operation of resources projects.

Yanchun Wang - Non Executive Director

- Strategic investor for a number of Chinese companies.

EXECUTIVE MANAGEMENT TEAM

Robin Wilson – Exploration Manager

- Geologist, with 20 years' experience in Australia and Africa including the discovery of the Browns Range Project.

Robin Jones – Project Manager

- More than 20 years' experience, in Australia, Africa and Asia with success in taking projects from scoping study through to production.

Mark Tory – CFO / Company Secretary

- More than 20 years' experience in the management (operational and finance) of mining companies both national and international.

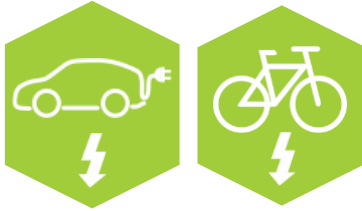
Bin Cai – Alternate Director

- Experience with the China Investment Bank, along with global resource investment.



By 2020

17%
growth in electric vehicles



Transportation

14%
of demand for permanent magnets

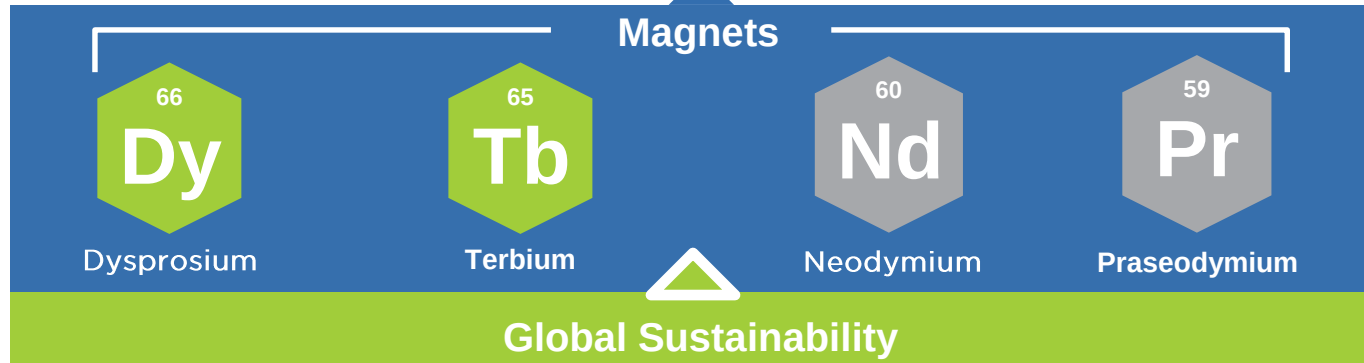


Renewable Energy

7.8%
of growth in Dy demand for energy storage systems



Technology



5 million
China's target of hybrid &
electric vehicles received by
2020

Kyoto Protocol
United Nations Framework
Convention on Climate
Change

39
countries have put
a price on carbon

Powering Technology.



The rare earth marketing landscape



Project's production to contribute 268,000kg of Dy to 777,000kg global supply shortage in 2018



Permanent magnet sector fastest growing accounting for an estimated 30% of end use market



Chinese Government recommences stockpiling of critical REs



China removes export quotas, replaces with export licences and RE resource tax 27% on HREs



+21% increase in the price of Dy in 2015



Chinese Government clamp down on illegal mining, which currently accounts for $\pm 30\%$ of global production

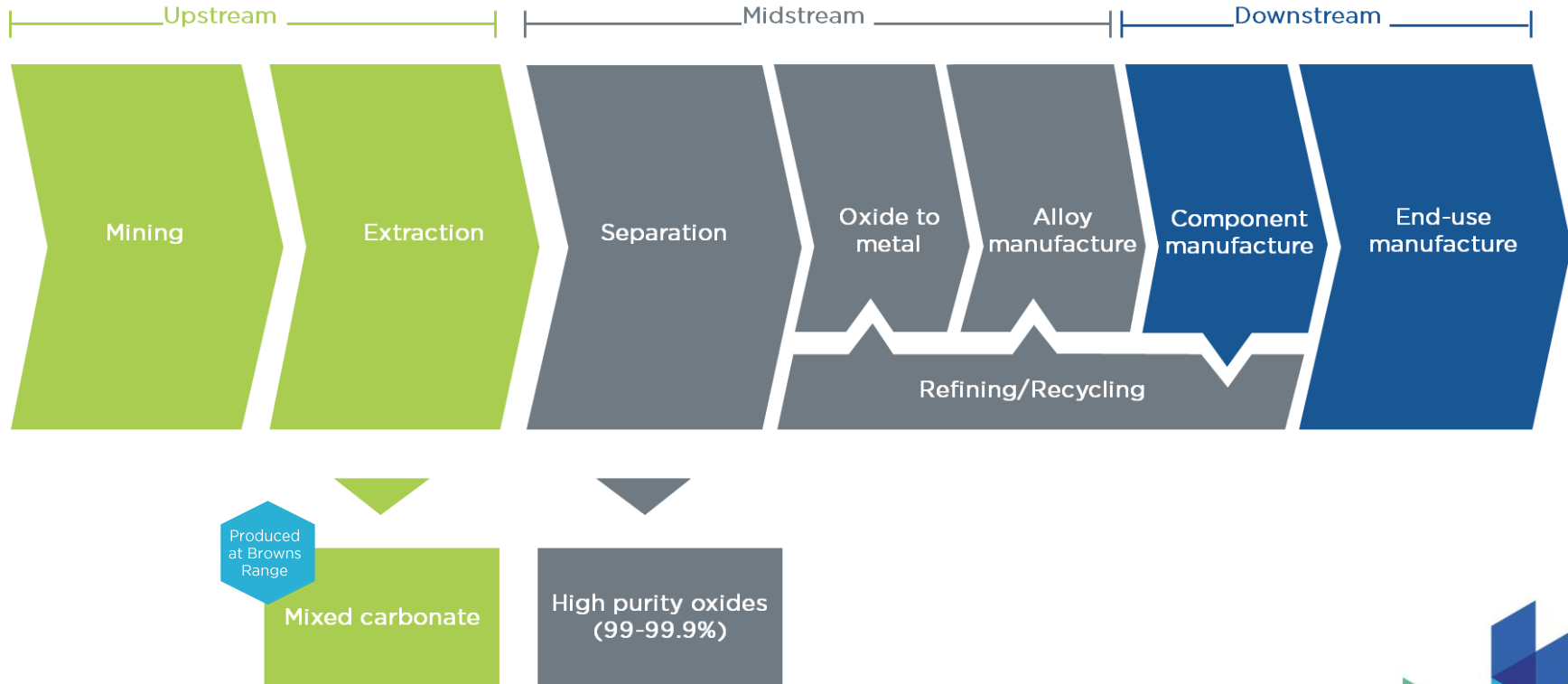


Substantial increase in rare earth exports from China to over 29 countries and regions in 2014



Reputable global end-users requiring environmentally responsible production of rare earths

Mine to magnet supply chain



Positioned for success

Browns Range Project competitive advantage



Exploration potential



Large landholding
1,500km²
12% explored



Current mineral resource
4,759,000kg dysprosium within
56,663,000kg TREO



Mineralogy & production



High grade
Xenotime mineralisation



Ease of processing
30 x upgrade



Competitive CAPEX
Dysprosium rich,
mixed RE carbonate



Licence to operate



Secure tenure
100% ownership

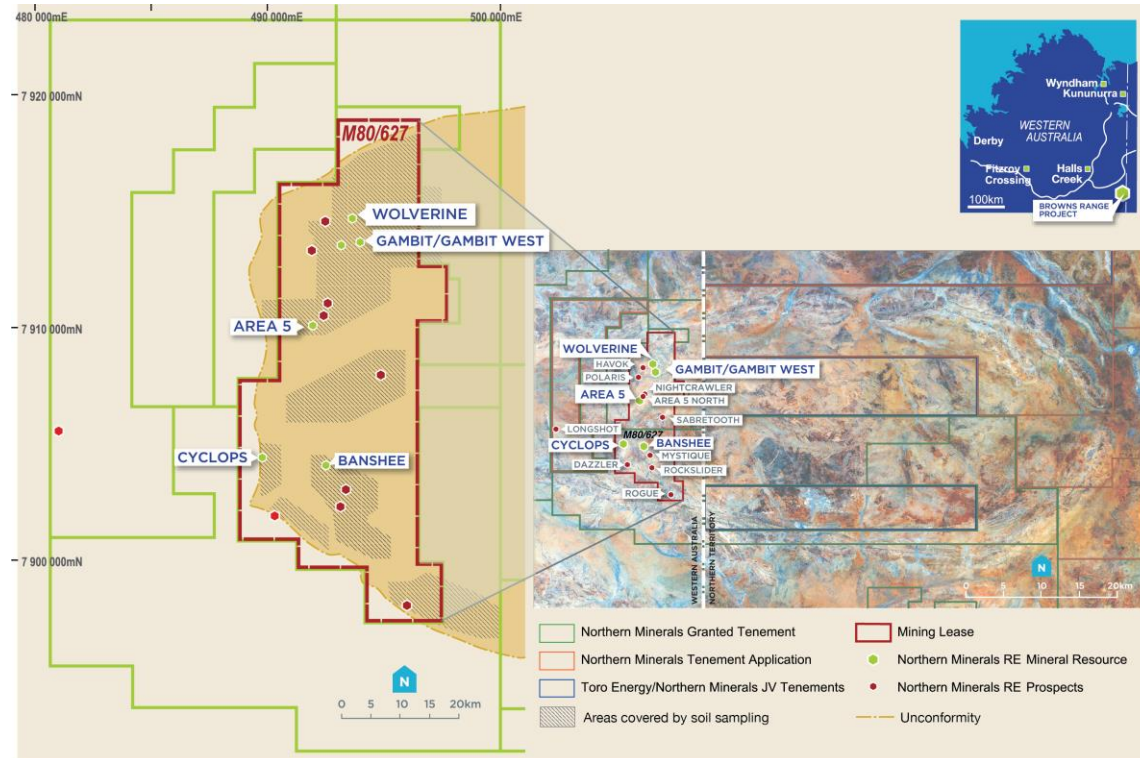


Licencing/approval
Primary approval received



Native title
Co-existence agreement
signed

Browns Range Dome

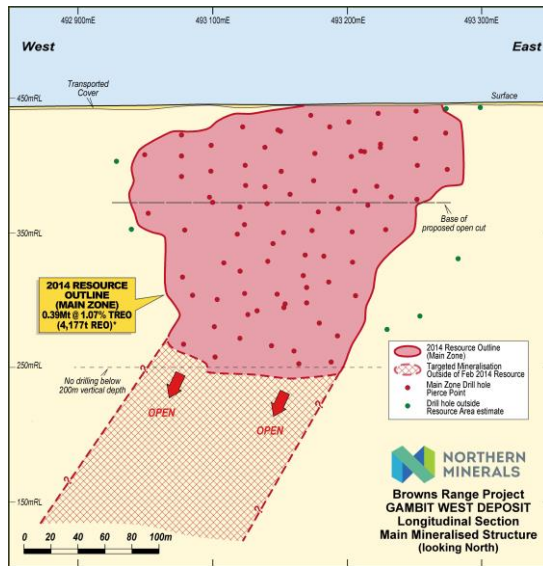


The dome is a massive geological feature covering 1,500km² and stretching **60km x 30km** most of which hasn't been effectively explored

Extend mine life by increasing resources

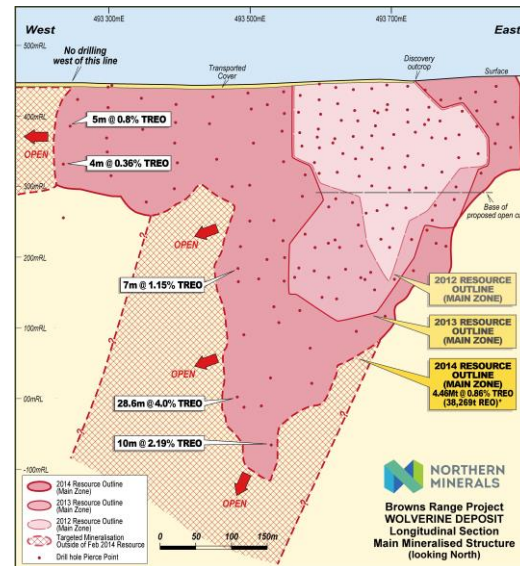
OPEN....

Gambit, Gambit West and Area 5 open near surface and open at depth, no drilling below 200m



OPEN...

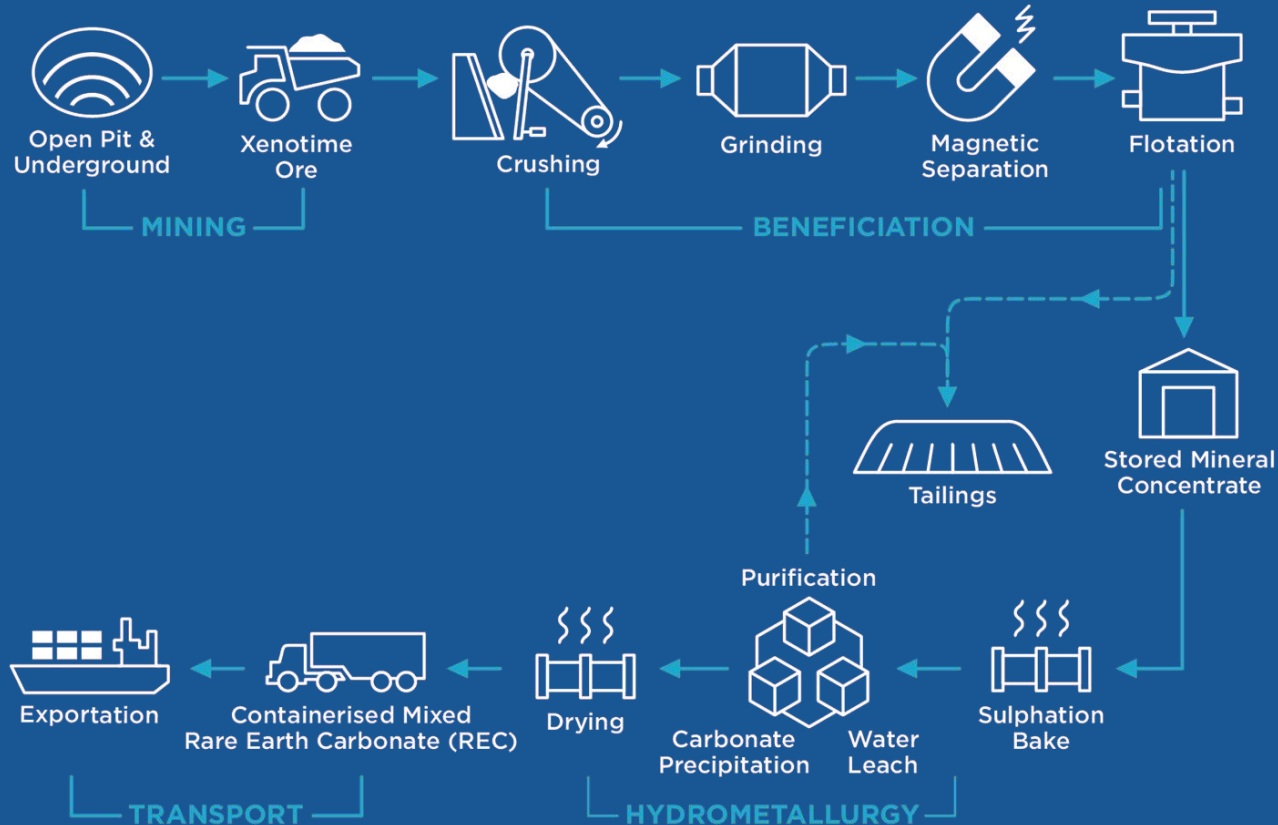
Wolverine deposit open at depth and along strike, no drilling below 550m



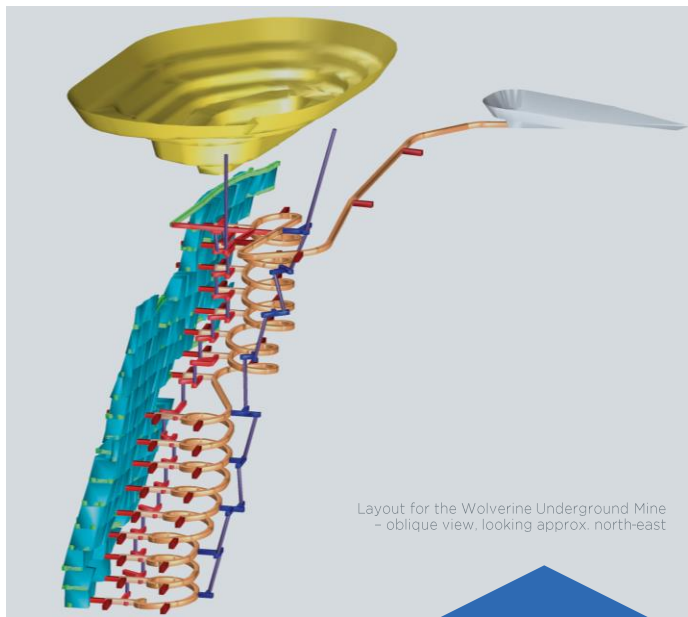
DFS highlights



Mining and production process



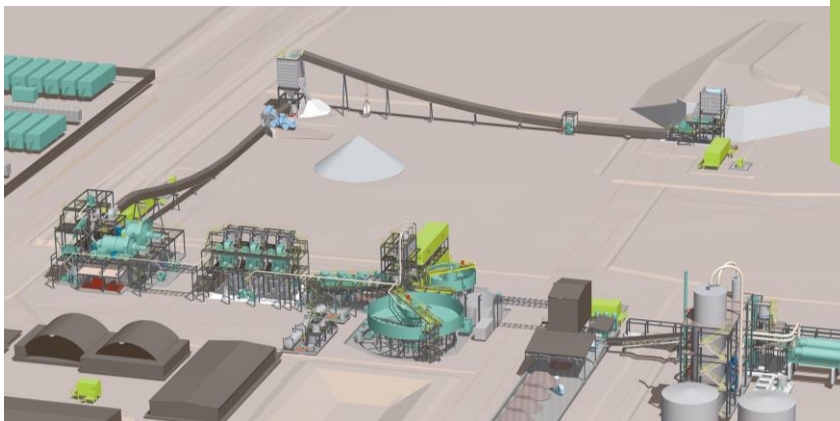
Mining



585,000tpa
@ 0.66% TREO,
open pit and
underground
mining

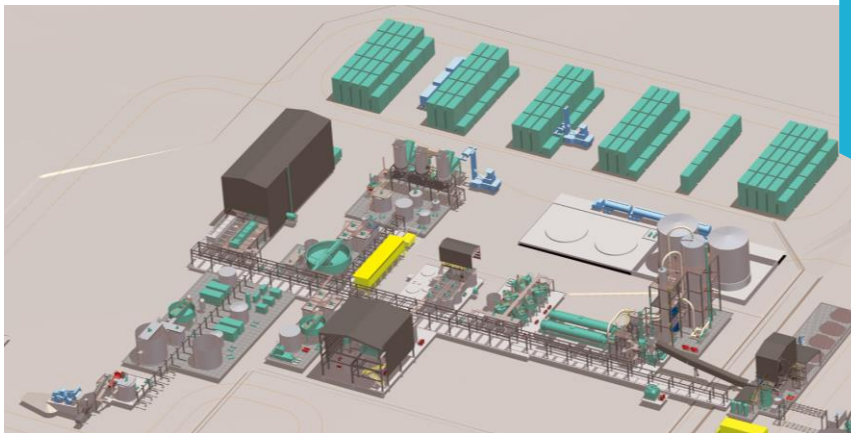
Powering Technology.

Beneficiation plant



16,700tpa
mineral
concentrate
@ 20%
TREO

Hydrometallurgical plant



279,000kg
Dy within
3,098,000kg
TREO, in a mixed
RE carbonate

Ancillary infrastructure

- ◆ Accommodation village 276 people
- ◆ 2.0km airstrip
- ◆ Diesel generators and distribution
- ◆ Groundwater supply and distribution
- ◆ Consumable and reagent storage facilities
- ◆ Road transport via Halls Creek to/from Wyndham Port

Plant infrastructure

- ◆ Above ground tailings storage facility
- ◆ Water ponds
- ◆ Waste water treatment plant and evaporation pond

Powering Technology.



Environment

- Government assessment & approval
- Extensive studies & surveys to inform project design
- Ongoing rehabilitation & compliance reporting



Community and government

- Social & economic development
- Good neighbours
- Liaison and communication



Indigenous employment

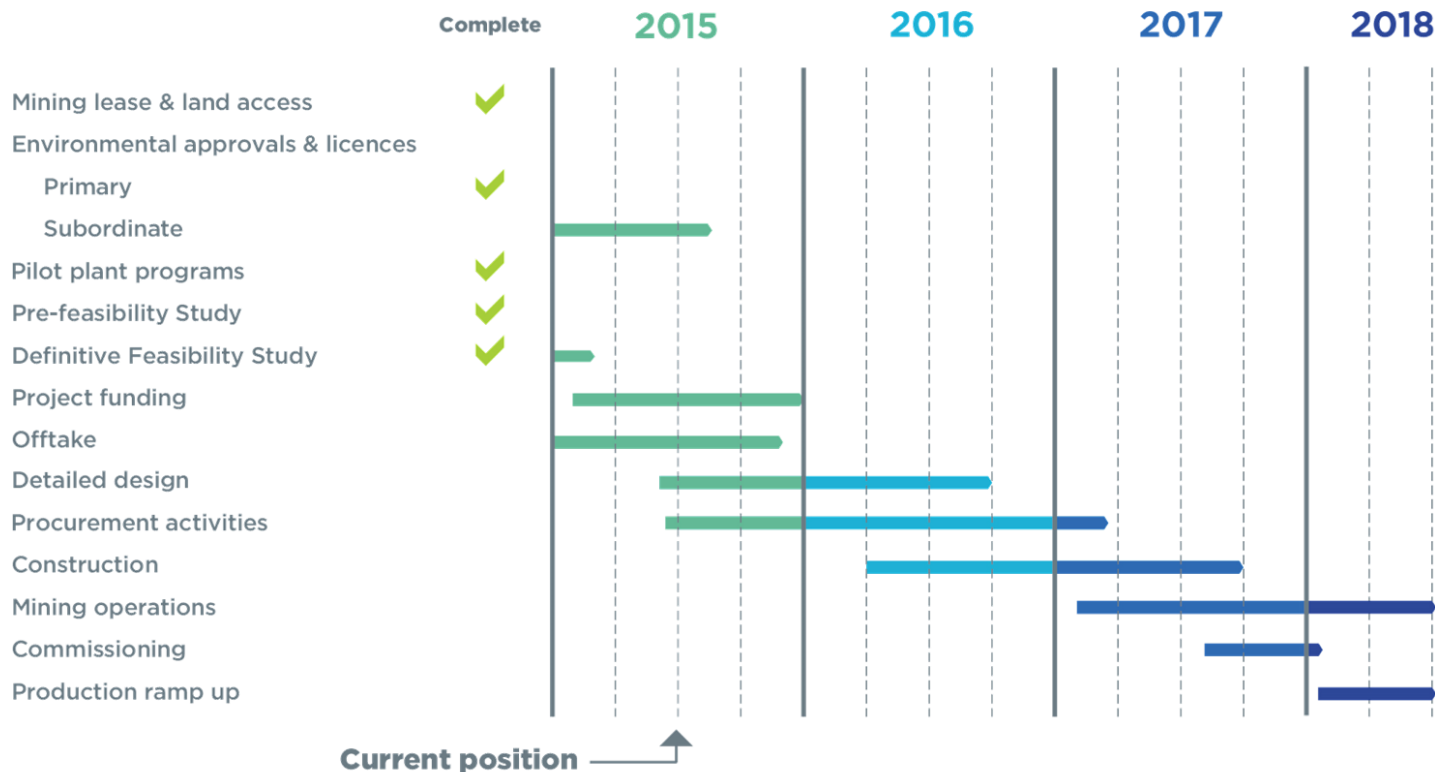
- Developing local employment & training strategy
- Cultural awareness
- Ongoing employee support



Native title

- Co-existence Agreement
- Economic & social benefits
- Looking after country

Pathway to production



Browns Range: the next Dy mine

Rare Earths **Essential** for
Hybrid & Electric Vehicles
Toyota Prius
~11kg of rare earths



Magnets



Detailed design and procurement

to commence

Financing

General Meeting
27 May

Marketing

offtake discussions
advancing

Exploration

only limited by funding

APPENDICES

Delivering on promises

2010

- Identified HRE mineralisation and completed first metallurgical test at Browns Range
- Acquisitions included John Galt and Browns Range NT

2011

- Drilling confirms HRE at Wolverine, Gambit and Area 5
- Flowsheet developed, low capital costs
- Project development timeline developed 'Pathway to Production'

2012

- Initial JORC resource at Wolverine
- HRE Oxide >92% purity produced, expanding project scope
- MoU signed for offtake with Sumitomo

2013

- Raised \$26.6M of the proposed \$58M funding package
- JORC resource upgrade of 165%, over 60,000m drilled
- Commenced Pre-feasibility study

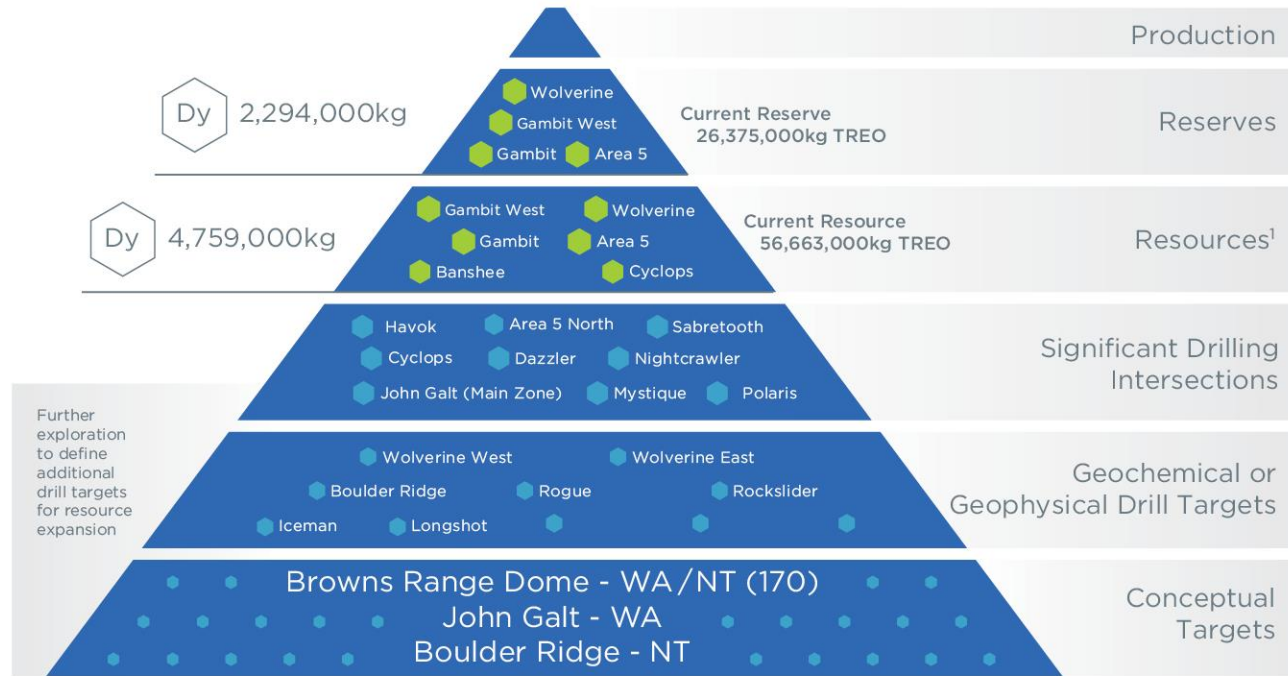
2014

- JORC resource increase 52,372,000kg and maiden Ore Reserve 23,595,000kg
- Co-existence Agreement signed; mining lease and primary environmental approval granted
- Completion of Pre-Feasibility Study, commenced Definitive Feasibility study

2015

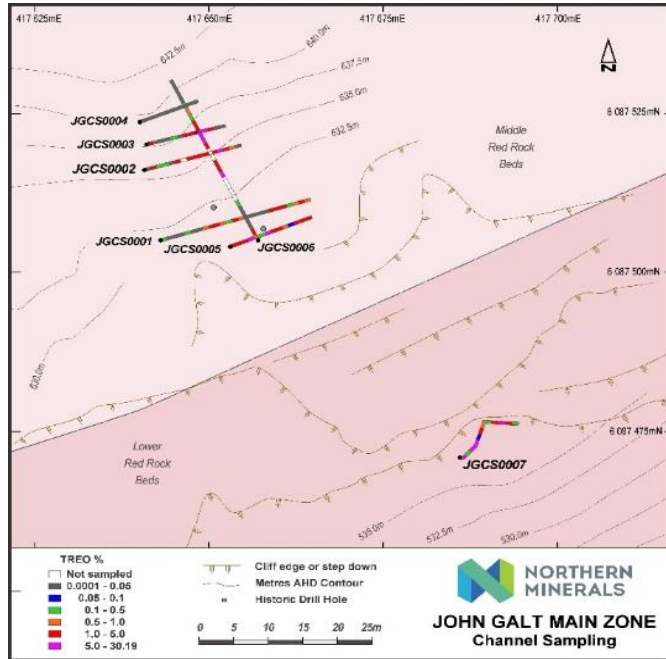
- JORC resource increased by 4,291,000kg to 56,663,000kg
- \$49.5M funding proposal announced, subject to due diligence and shareholder approval
- \$4M funding facility from Macquarie Bank
- Definitive Feasibility Study complete

10 years is only the beginning



Resource size only limited by funding

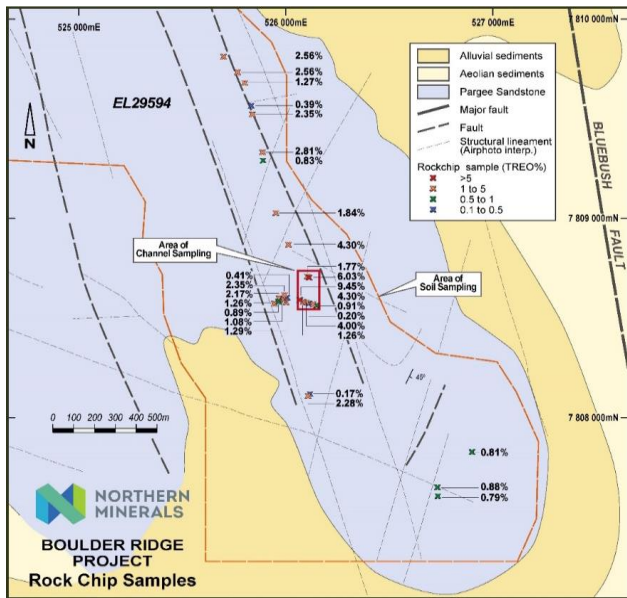
John Galt Project (Western Australia)



Channel sampling location plan - TREO% results

- Rock chip samples up to 42% TREO with approximately 95% HREO
- Preliminary metallurgical tests indicate excellent recovery rates (>90%) with potential for concentrate grades >40%
- High grade mineralisation in talus (scree) material – hard-rock source of scree is the primary target
- Channel sampling confirms high grade nature of mineralisation, with average (uncut) grade of 1.47% TREO from 99 samples at top of ridge and 5.53% TREO from 12 samples at bottom of ridge

Boulder Ridge Project (Northern Territory)

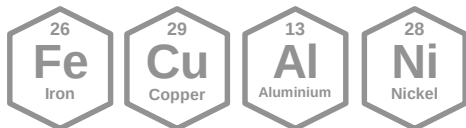


Geology and surface sampling location plan

- Rock chip samples confirm high-grade HREs
- Best results exceed 12% TREO, including up to 1.15% dysprosium, with a dominance of HRE – up to 99%
- Further exploration planned to refine drill targets
- Reinforces significant growth potential in Browns Range and Tanami regions



INDUSTRIALISATION



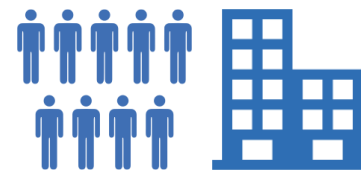
Environmental
protection and
improvement
of energy
efficiency

GDP growth
of 6-8%, more
sustainable
than +10%
in 2000

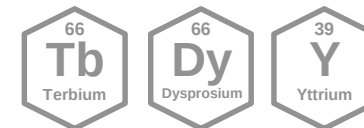
CHINA'S 12TH 5 YEAR PLAN 2011-2015

Improve
standard of living
for Chinese
citizens - higher
demand for
consumer goods

7 priority
industries to
increase 2015
GDP contributions
to 8%, related to
'new markets'
e.g. rare earths



URBANISATION

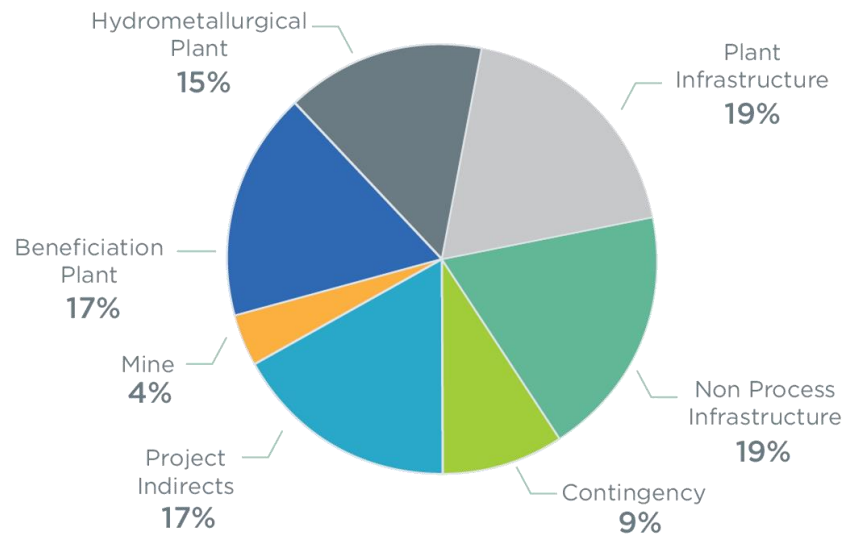


DFS comparison

	DFS OUTCOMES	VARIANCE FROM PFS		
Net present value	\$552M	\$106M		24%
Operating cost (/kg TREO)	\$37.6	\$2.2		6%
Life of mine (LOM)	11.25yrs	1.5yrs		16%
Total Dy produced LOM (Mkg)	3.13	0.44		16%
Total recovery	80.4%	2.1%		3.3%
Pre-production capital	\$329M	\$15.7M		5%

Pre-production capital cost estimate

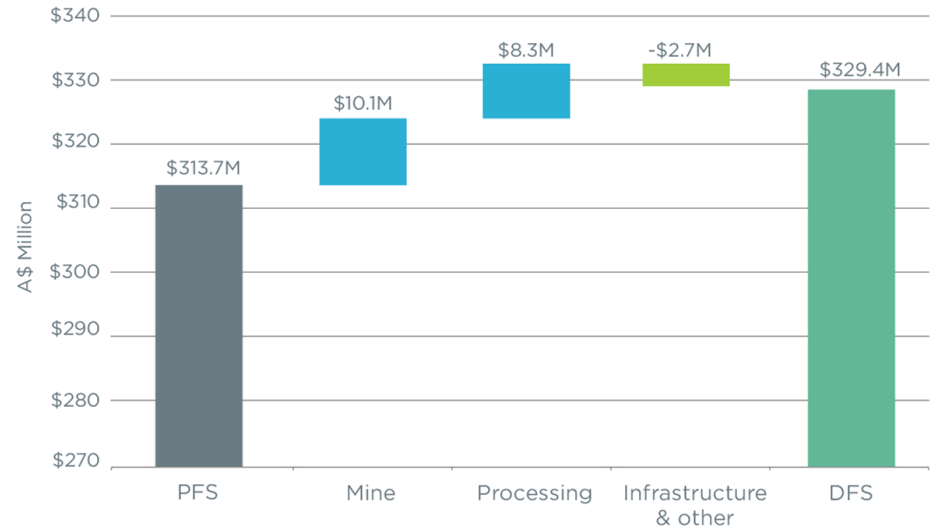
Cost Area	A\$M
Mine	\$13.3
Beneficiation Plant	\$56.3
Hydrometallurgical Plant	\$48.7
Plant Infrastructure	\$55
Non-process Infrastructure	\$62
Direct Costs Sub-Total	\$242.7
Indirect Costs	\$57.8
Contingency	\$28.9
Total Project Pre-Production Capital	\$329.4



Previous capital comparison

Increased by \$15.7M or 5%:

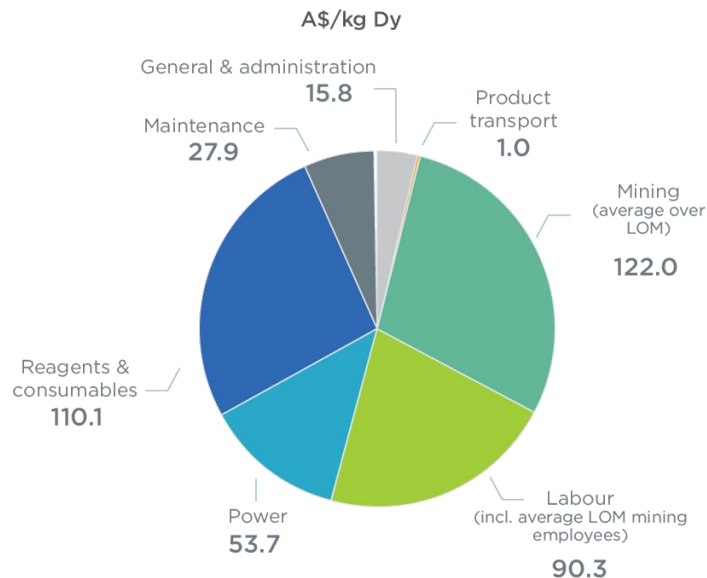
- Earlier targeted production: commencement of the Wolverine decline
- Additional \$20M NPV from improved hydromet recoveries 88% to 93%: increased hydrometallurgical plant equipment scope



Operating costs by expense area

(585,000tpa plant throughput)

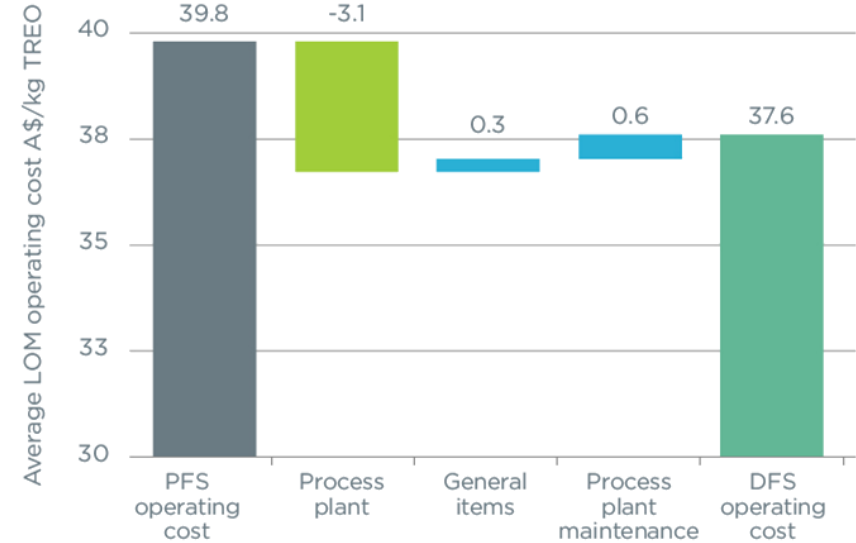
Average operating cost by expense area over LOM	A\$/M/a	A\$/kg Dy ₂ O ₃	A\$/kg TREO	%
Mining (average over LOM)	33.7	122.0	10.9	29.0%
Labour (incl. average LOM mining employees)	24.9	90.3	8.1	21.4%
Power	14.8	53.7	4.8	12.8%
Reagents & consumables	30.4	110.1	9.8	26.2%
Maintenance	7.7	27.9	2.5	6.6%
General & administration	4.3	15.8	1.4	3.7%
Product transport	0.3	1.0	0.1	0.3%
Total annual operating costs	116.3	420.8	37.6	100%
By-product revenue	113.1	406.0	36.5	
Operating cost excluding royalties (net of by-product revenue)	3.2	14.8	1.1	



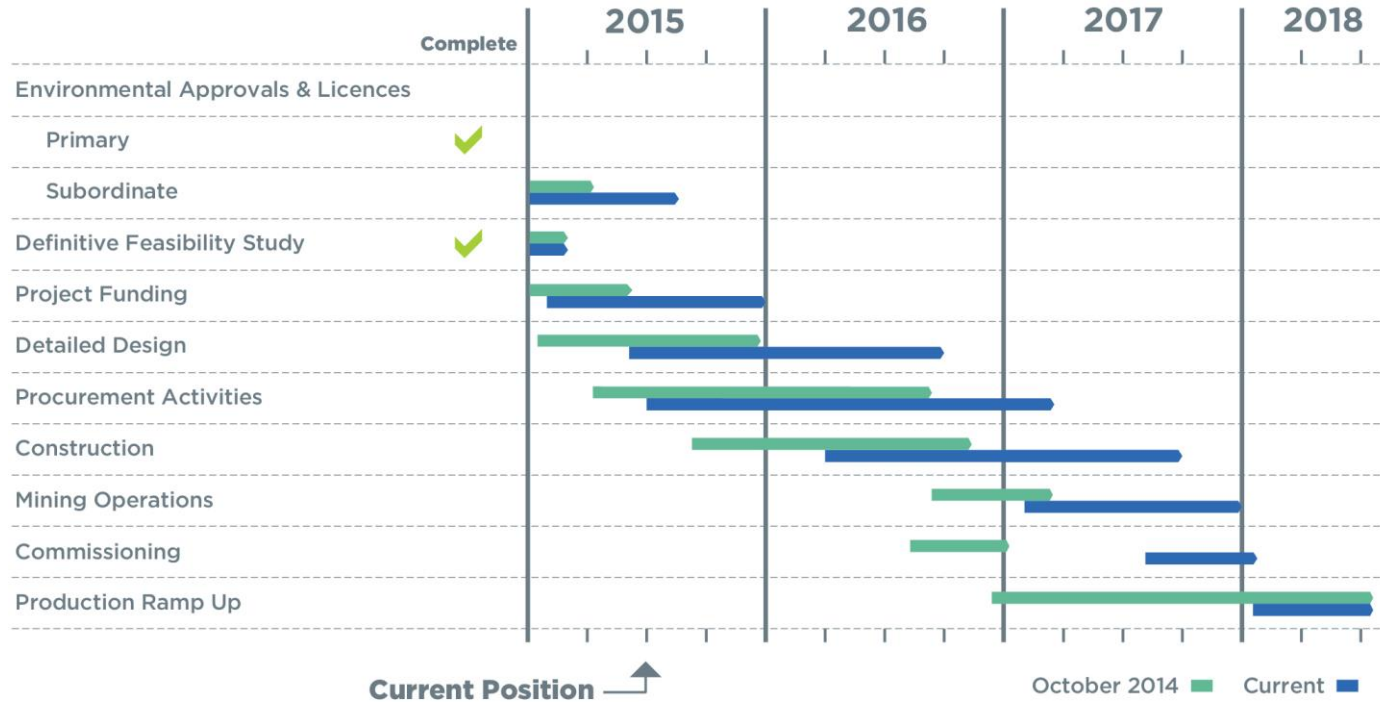
Previous OPEX comparison

Reduced by average of \$6.2M pa or \$2.20/kg TREO

- Improved accuracy: general and administration costs
- Reduction reagent consumption and reagent costs: based on pilot plant results and formal supplier quotes
- Reduced diesel price: reducing site power costs
- Increase maintenance costs: additional equipment hydrometallurgical plant to improve plant recoveries



Previous timeline comparison



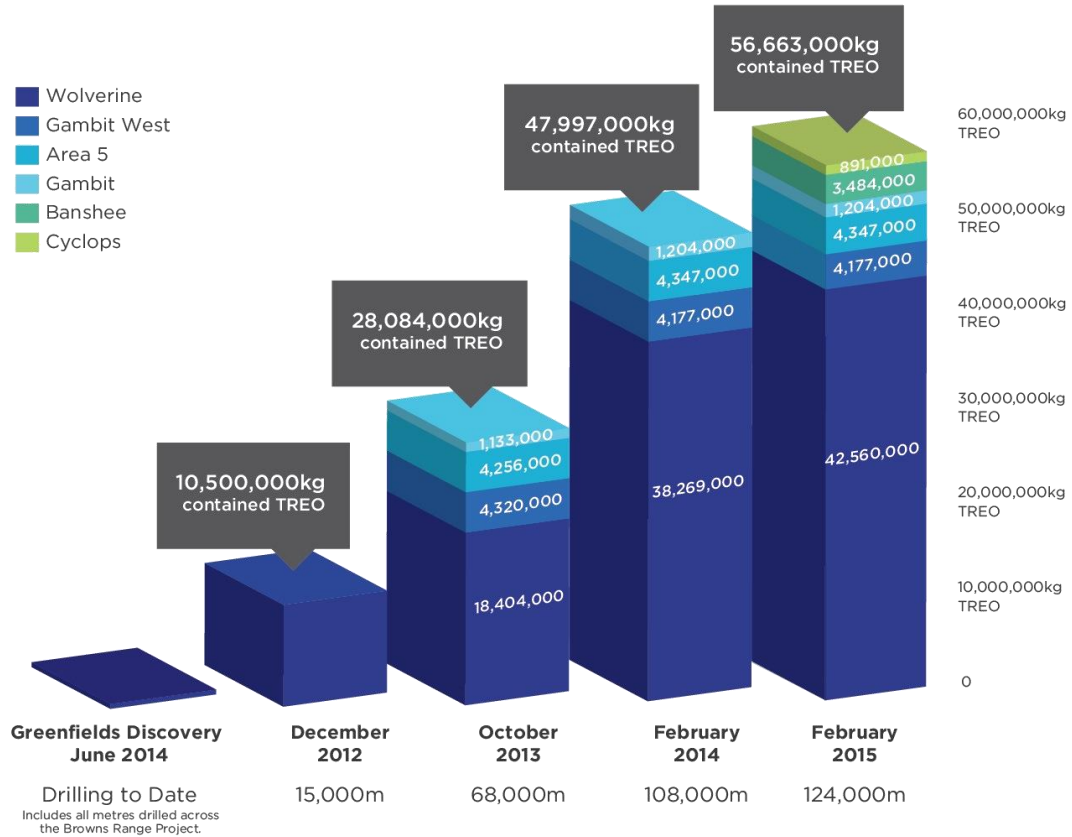
Sustaining capital

Sustaining capital item	Sustaining capital per operating year (A\$M)														Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	(A\$M)
Mine development	43.5	13.0	17.1	19.1	20.5	8.1	5.6	4.1	-	-	-	-	-	-	131.0
Process plant & infrastructure	3.1	-	0.6	-	1.1	-	0.6	-	0.6	-	-	-	-	-	6.0
TSF & evaporation ponds - additional cells and lifts	5.3	3.4	3.7	4.0	3.5	4.0	5.6	4.7	5.7	-	-	-	-	-	39.9
Closure - mining, plant, TSF and infrastructure	0.4	1.2	0.4	-	0.7	0.3	0.3	1.1	0.7	0.7	11.3	4.7	0.4	0.4	22.8
Total	52.2	17.6	21.8	23.1	25.9	12.5	12.2	9.9	7.0	0.7	11.3	4.7	0.4	0.4	199.7

Figures may not add up due to rounding.



Growth in Mineral Resource



Mineral Reserve and Resource

Probable Ore Reserve (March 2015)

			TREO		Dy ₂ O ₃		Y ₂ O ₃		Tb ₄ O ₇	
Deposit	Classification	Ore Tonnes	kg/t	kg contained	kg/t	kg contained	kg/t	kg contained	kg/t	kg contained
TOTAL¹	Probable	3,750,000	7.03	26,375,000	0.61	2,294,000	4.07	15,266,000	0.09	335,000



Global JORC compliant Mineral Resource Estimate (February 2015)

Deposit	Category	Mt	TREO %	Dy ₂ O ₃ kg/t	Y ₂ O ₃ kg/t	Tb ₄ O ₇ kg/t	HREO %	TREO kg
Total¹	Indicated	4.69	0.70	0.59	3.95	0.09	87	32,862,000
	Inferred	4.28	0.56	0.46	3.15	0.07	87	23,802,000
	Total¹	8.98	0.63	0.53	3.56	0.08	87	56,663,000



The Mineral Resource is inclusive of the Ore Reserves

Note: The Mineral Resource is a complete summation of individual resources reported at Wolverine, Gambit, Gambit West, Area 5, Cyclops and Banshee
The Ore Reserve is a complete summation of the individual Ore Reserves reported at Wolverine, Gambit, Gambit West, Area 5

¹ - Rounding may cause some computational discrepancies (TREO (metal) tonnes estimated from Mt x TREO%)

TREO = Total Rare Earth Oxides – La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃;

HREO = Heavy Rare Earth Oxides – Total of Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃

Production forecast

Rare Earth Oxide	Unit	2017	2018	2019	2020	2021	2022	2023 - 28	Total
Dysprosium	kg	43,000	268,000	282,000	287,000	292,000	305,000	1,661,000	3,134,000
Erbium	kg	32,000	184,000	183,000	175,000	174,000	184,000	1,004,000	1,934,000
Holmium	kg	11,000	64,000	64,000	63,000	63,000	66,000	358,000	687,000
Lutetium	kg	4,000	21,000	21,000	20,000	19,000	21,000	111,000	213,000
Terbium	kg	6,000	37,000	39,000	41,000	42,000	43,000	230,000	435,000
Thulium	kg	5,000	26,000	26,000	25,000	24,000	26,000	140,000	269,000
Ytterbium	kg	27,000	154,000	151,000	142,000	137,000	148,000	814,000	1,571,000
Yttrium	kg	291,000	1,816,000	1,893,000	1,943,000	1,988,000	2,097,000	11,474,000	21,498,000
Europium	kg	2,000	13,000	14,000	14,000	15,000	15,000	78,000	148,000
Gadolinium	kg	28,000	172,000	181,000	184,000	193,000	195,000	1,048,000	1,998,000
Samarium	kg	11,000	64,000	64,000	65,000	69,000	69,000	369,000	709,000
Cerium	kg	22,000	106,000	81,000	86,000	94,000	90,000	476,000	952,000
Lanthanum	kg	9,000	42,000	31,000	33,000	36,000	34,000	182,000	364,000
Neodymium	kg	17,000	89,000	70,000	72,000	79,000	77,000	404,000	804,000
Praseodymium	kg	4,000	16,000	12,000	13,000	14,000	14,000	71,000	142,000
Total TREO Produced	kg	504,000	3,066,000	3,105,000	3,156,000	3,231,000	3,378,000	18,413,000	34,851,000
TREO Basket Price	A\$/kg TREO	92	101	111	123	122	122	121	119
By-Product Basket Price	A\$/kg TREO	24	28	32	39	39	38	38	36

Figures may not add due to rounding

Based on LOM of 11.3 years.

TREO = Total Rare Earth Oxides- Total of Dy₂O₃, La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃

By-product Oxides- Total of La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃

Supply, demand and revenue

Forecast global supply for selected rare earths to 2020 incl. project production

	Dysprosium kg				Terbium kg				Yttrium kg			
	Global supply deficit	Project supply	Deficit after project supply	NTU market share	Global supply deficit	Project supply	Deficit after project supply	NTU market share	Global supply deficit	Project supply	Deficit after project supply	NTU market share
2015	313,000	-	-	-	-	-	-	-	922,000	-	-	-
2016	484,000	-	-	-	75,000	-	-	-	545,000	-	-	-
2017	636,000	43,000	593,000	3%	91,000	6,000	85,000	2%	1,283,000	291,000	992,000	2%
2018	777,000	268,000	509,000	17%	120,000	37,000	83,000	10%	2,328,000	1,816,000	512,000	15%
2019	927,000	282,000	645,000	18%	130,000	39,000	91,000	11%	2,959,000	1,893,000	4,852,000	16%
2020	1,085,000	287,000	798,000	15%	155,000	41,000	114,000	10%	3,930,000	1,943,000	1,987,000	13%

Source: Adamas Intelligence, Critical Metals and Minerals Research, 2014

Project's production critical to global dysprosium supply from 2017 and beyond

**US\$684/kg
Dy LOM**

average realised price