



**NORTHERN
MINERALS**

Powering Technology.



Dysprosium > Permanent Magnets > Electric Motors > Electric Cars

ASX:NTU

AUGUST 6 - 9 2018

DIGGERS & DEALERS 2018

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Compliance Statement

The information in this presentation that relates to the Mineral Resource Estimates of the Wolverine deposit is extracted from the report entitled "Increased Mineral Resource delivers more good news" dated 23 February 2015 and is available to view on the Company's website (www.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 the Mineral Resource Estimates of the Cyclops and Banshee deposits is extracted from the report entitled "Further Increase in Brown Range Mineral Resource" dated 15 October 2014 and is available to view on the Company's website (www.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 the Mineral Resource Estimates of the Gambit, Gambit West and Area 5 deposits is extracted from the report entitled "Wolverine Total Resource Doubled in a Major Upgrade of Browns Range HRE Mineral Resource Estimate" dated 26 February 2014 and is available to view on the Company's website (www.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 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 this presentation that relates to Exploration Results at the Iceman and Dazzler prospects is extracted from the report entitled "Preliminary drilling results at Dazzler and Iceman highlight extensive new exploration target" dated 2 August 2018 and is available to view on the Company's website (www.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 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 potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration completed in the areas of the Exploration Target and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

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 – La_2O_3 , CeO_2 , Pr_6O_{11} , Nd_2O_3 , Sm_2O_3 , Eu_2O_3 , Gd_2O_3 , Tb_4O_7 , Dy_2O_3 , Ho_2O_3 , Er_2O_3 , Tm_2O_3 , Yb_2O_3 , Lu_2O_3 , Y_2O_3

HREO = Heavy Rare Earth Oxides – Total of Sm_2O_3 , Eu_2O_3 , Gd_2O_3 , Tb_4O_7 , Dy_2O_3 , Ho_2O_3 , Er_2O_3 , Tm_2O_3 , Yb_2O_3 , Lu_2O_3 , Y_2O_3

Heavy
Rare
Earths
ASX:NTU



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WA Premier, the Hon Mark McGowan MLA and Josie Farrer MLA
Sod turning event
27 July 2017



Minister for Regional Development, the Hon Alannah MacTiernan MLC and Josie Farrer MLA official project opening
27 July 2018

In just 12 months:

- Mining campaign for 3 year pilot plant project completed;
- Pilot plant fabricated in China and modules transported to Australia;
- Modules assembled on site and installed;
- Commissioning of crushing, beneficiation and hydromet circuits commenced;
- Exploration program recommenced with exciting initial results

Rare Earths 2.0 – Strategically and Politically Critical

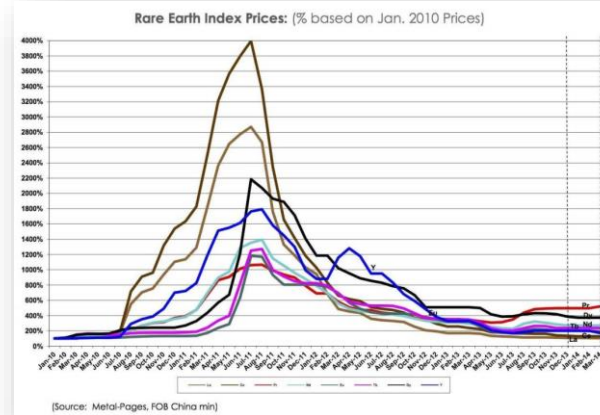
1992



*“Saudi Arabia has oil, but
China has rare earths”*

Chinese Premier, Deng Xiaoping

2011



*China cuts rare earths exports
on South China Sea issues,
prices skyrocket*

2018



*“This executive order will prioritize
reducing the nation’s vulnerability to
disruptions in our supply of critical
minerals safely and responsibly for the
benefit of the American people,”*

US President Donald Trump

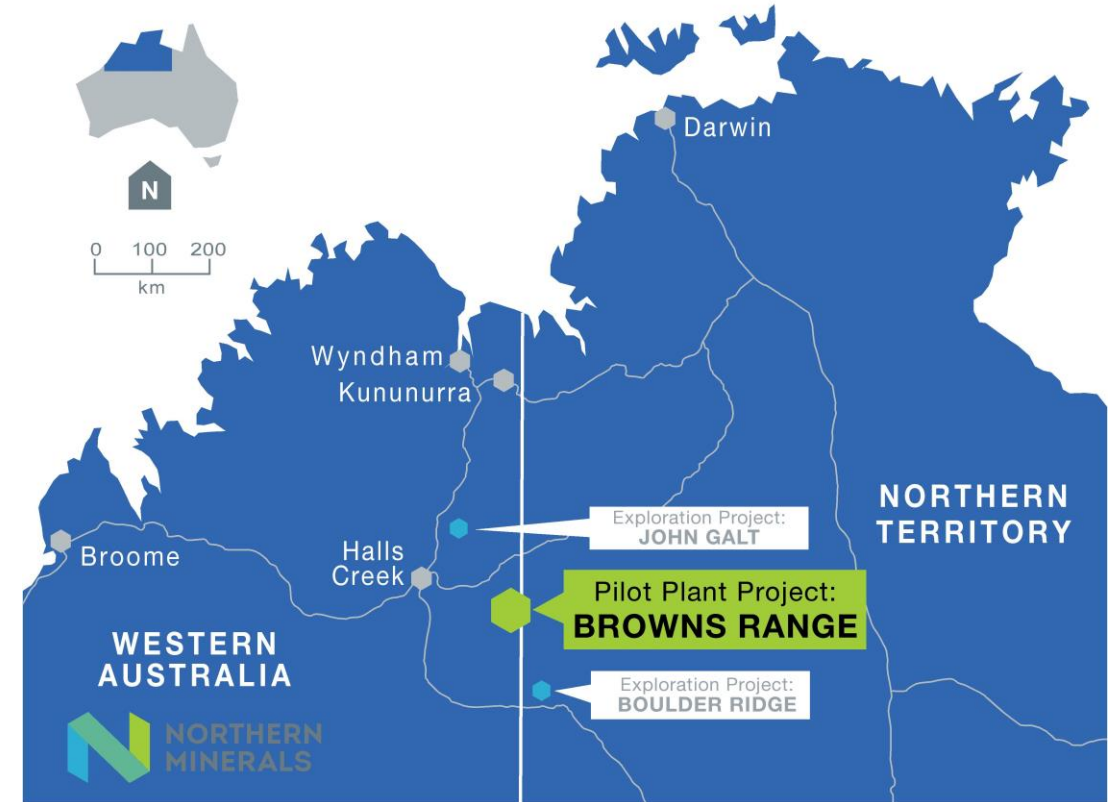
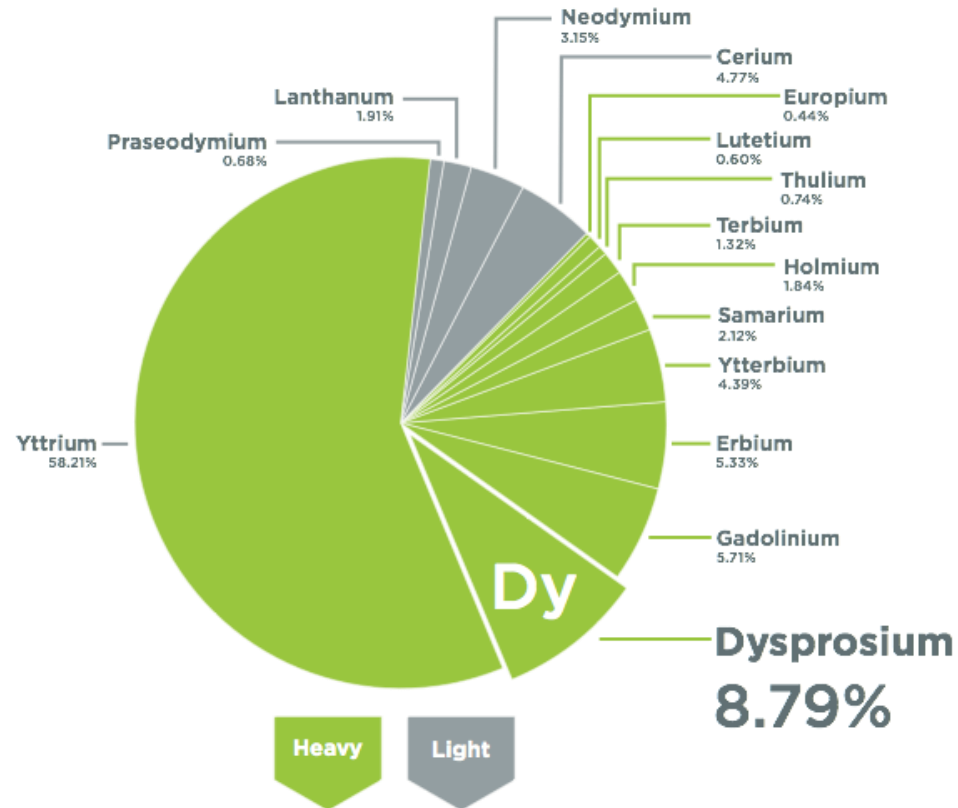
Demand from EVs is the difference

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Northern Minerals Browns Range

Rare earth distribution ¹



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¹ Based on Wolverine Mineral Resource

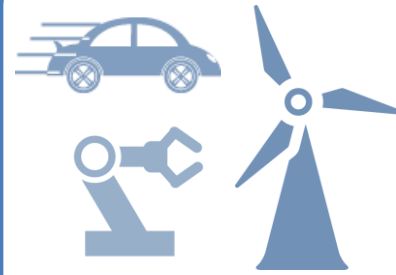


Dysprosium

66
Dy
162.5

98%

Production from
China



**Lighter &
More Efficient**

35m

Forecast EV
sales by 2030

102g

Dysprosium per
electric vehicle

3,500tpa

EV demand for
Dy by 2030



**Government
mandated change**

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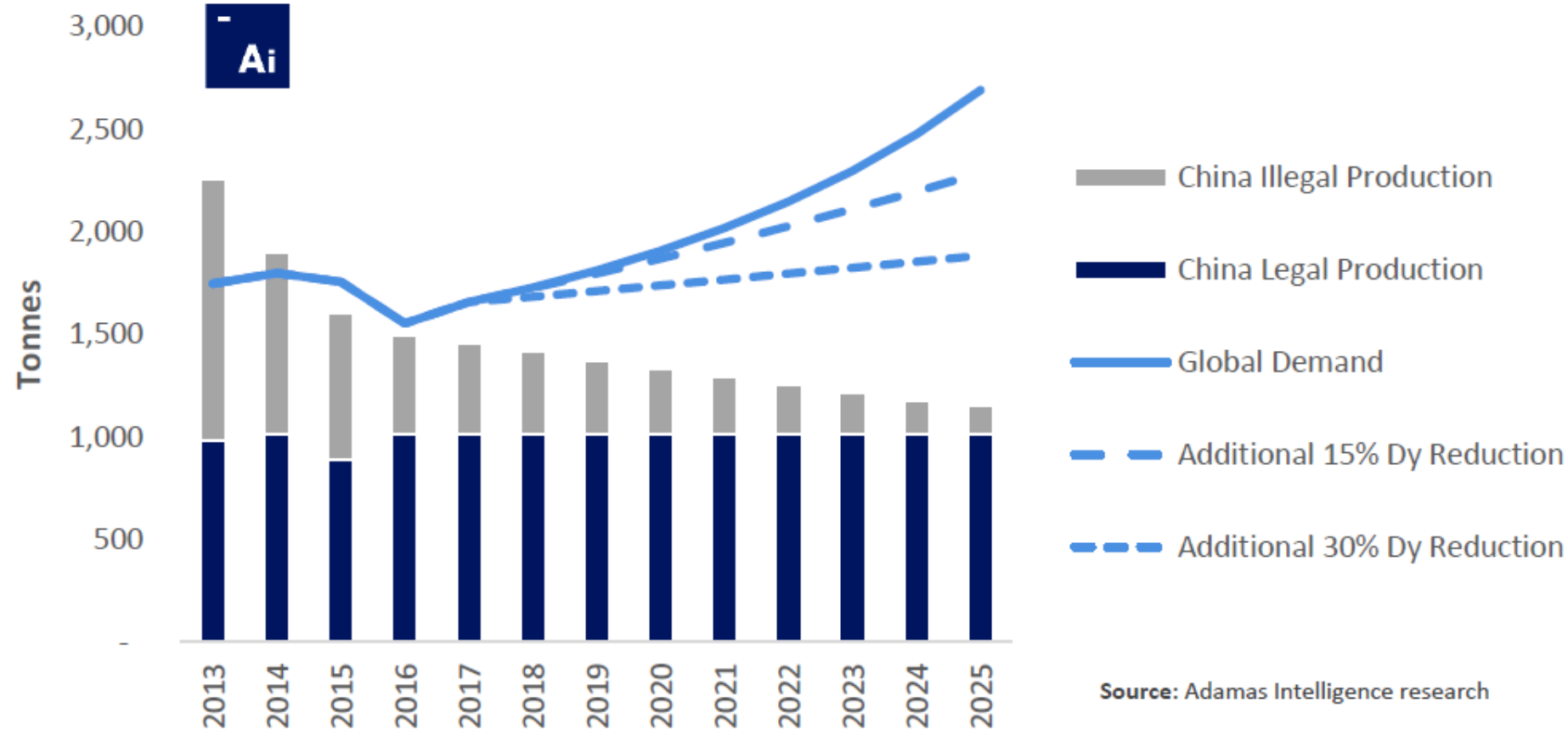
66
Dy
Dysprosium



65
Tb
Terbium



Browns Range - Filling the Dysprosium supply gap



Even with motor efficiencies, the supply gap is growing and will require more Browns Range scale projects

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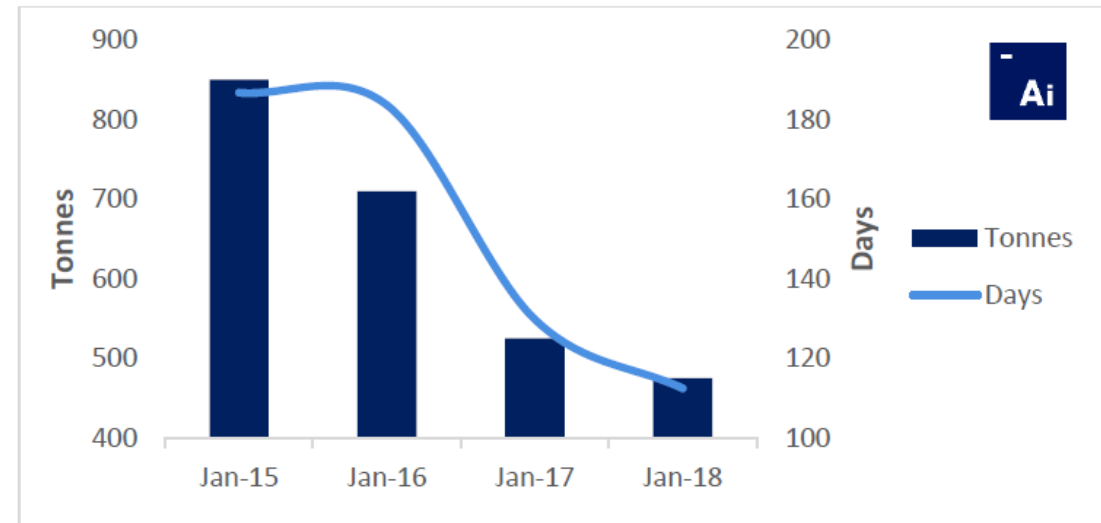
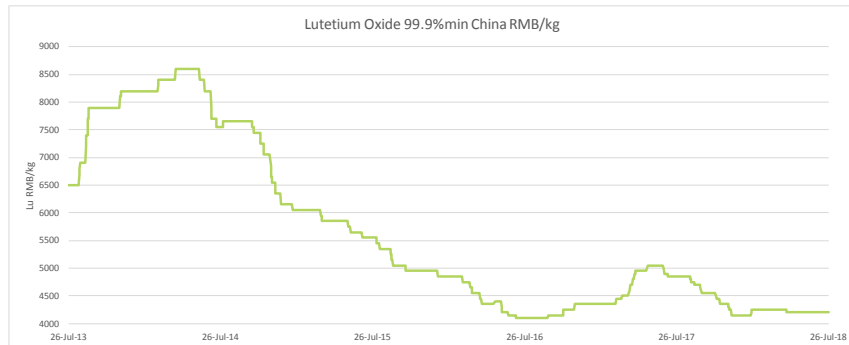
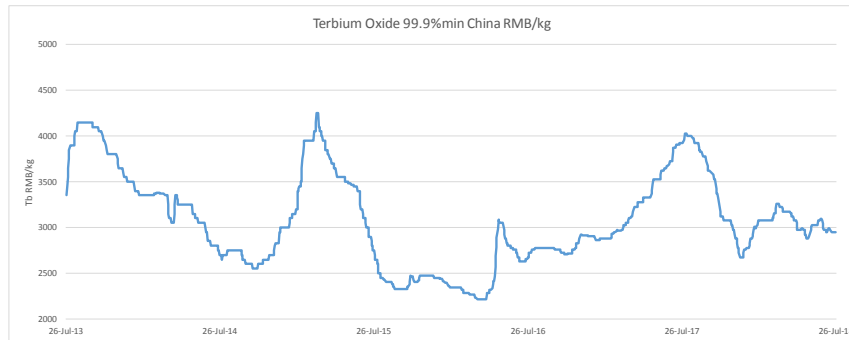
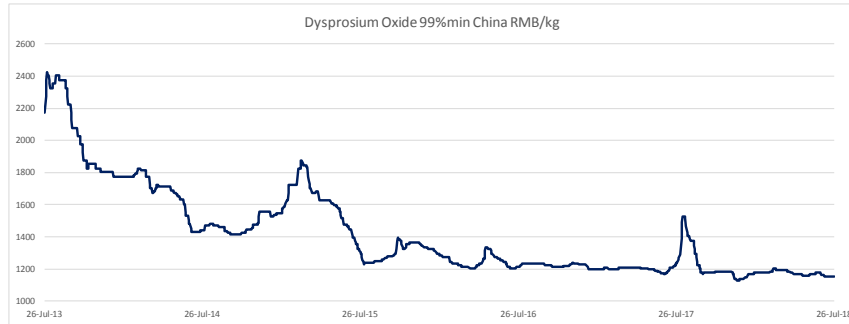
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Source: Adamus Intelligence, Northern Minerals



HRE – sustainable pricing

Increased demand from new EV sales coupled with lower stockpiles and crackdown on illegal mining in China will positively impact prices



Source: Adamas Intelligence research, Asian Metal

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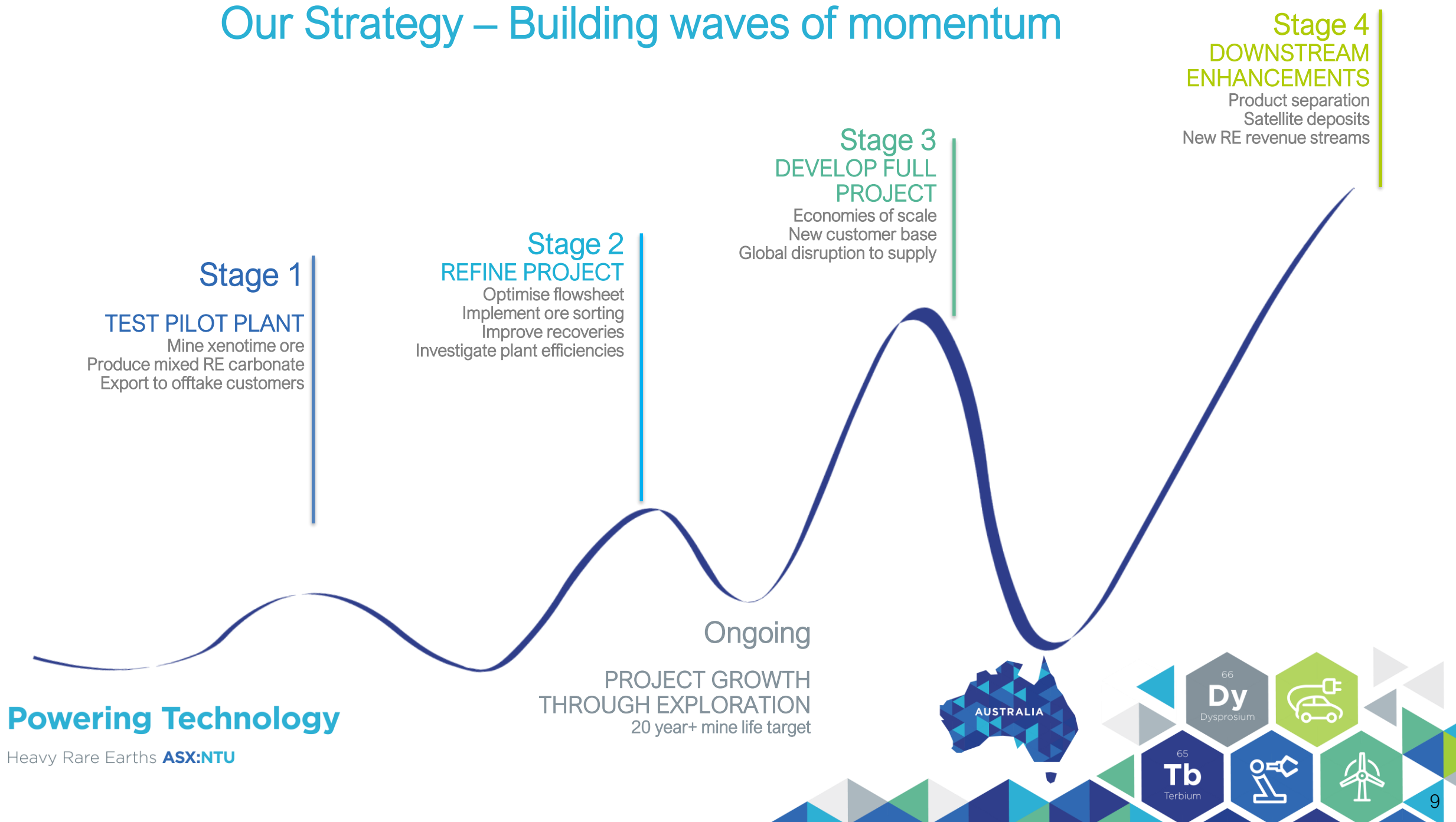
66
Dy
Dysprosium



65
Tb
Terbium



Our Strategy – Building waves of momentum



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Three year pilot plant project

- 10% of full scale capacity
- Production – from August 2018
- Develop, mining, processing & offtake experience
- 573tpa contained TREO
- 72ktpa capacity beneficiation plant
- 3,840tpa capacity hydrometallurgical plant



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66
Dy
Dysprosium



65
Tb
Terbium



In July 2018, Northern Minerals commenced commissioning of beneficiation and hydromet circuit



In September 2018, we will commence a new supply of heavy rare earths to the global market



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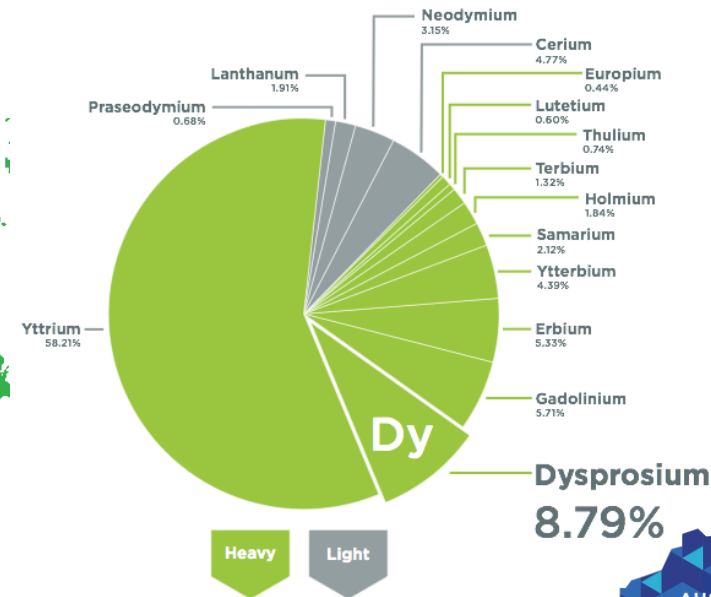
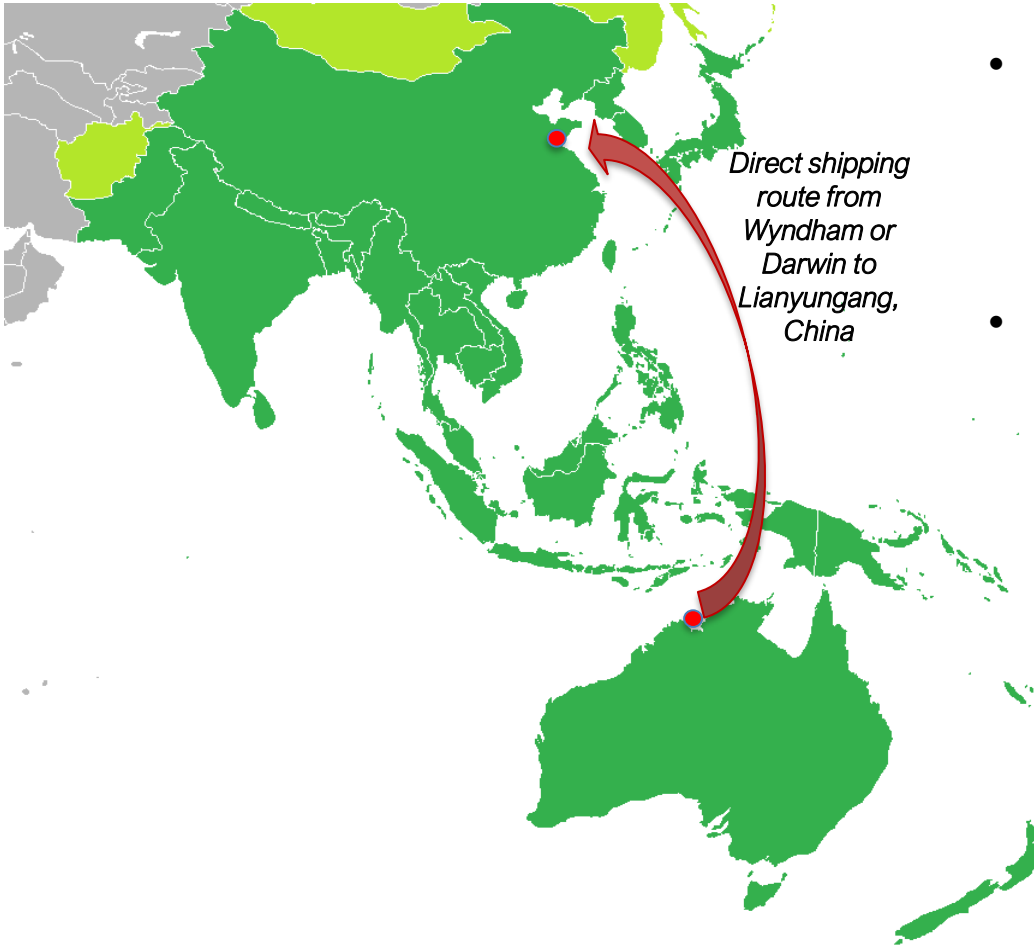
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* The flowsheet is NTU IP and design based on testwork undertaken in Australia



Pilot Plant offtake committed

- 100% of Browns Range Pilot Plant production to be purchased by Lianyungang Zeyu New Materials Sales Co Ltd (JFMAG), a 51% owned subsidiary of Guangdong Rare Earths Group.
- Terms based off CIF Incoterms 2010 with pricing referenced from a 2-month average of quoted prices on Asian Metals and Beijing Ruidow Information Technology.



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Mining

- Investigating steeper pit walls, resulting in more ore and less waste;

Processing

- Opportunity to increase grade through ore sorting technology. Engineering study & testwork underway;

Downstream

- Investigating licensing structure for heavy rare earth separation;

Exploration

- New exploration targets and models aimed at increasing mine life to 20+ years.

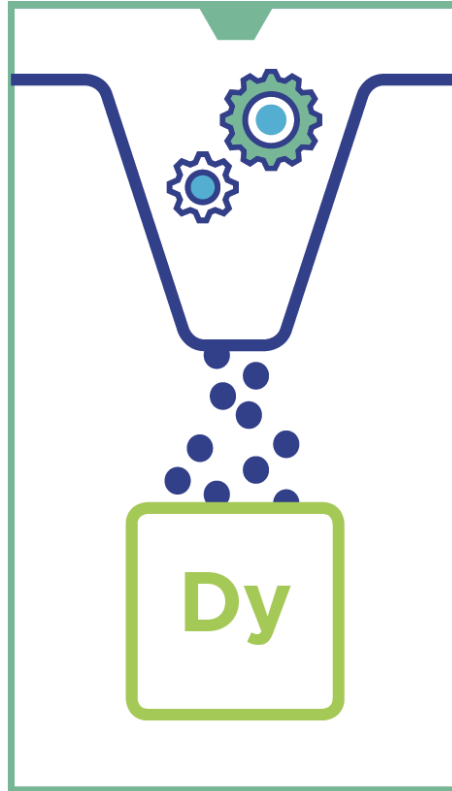


66
Dy
Dysprosium



65
Tb
Terbium



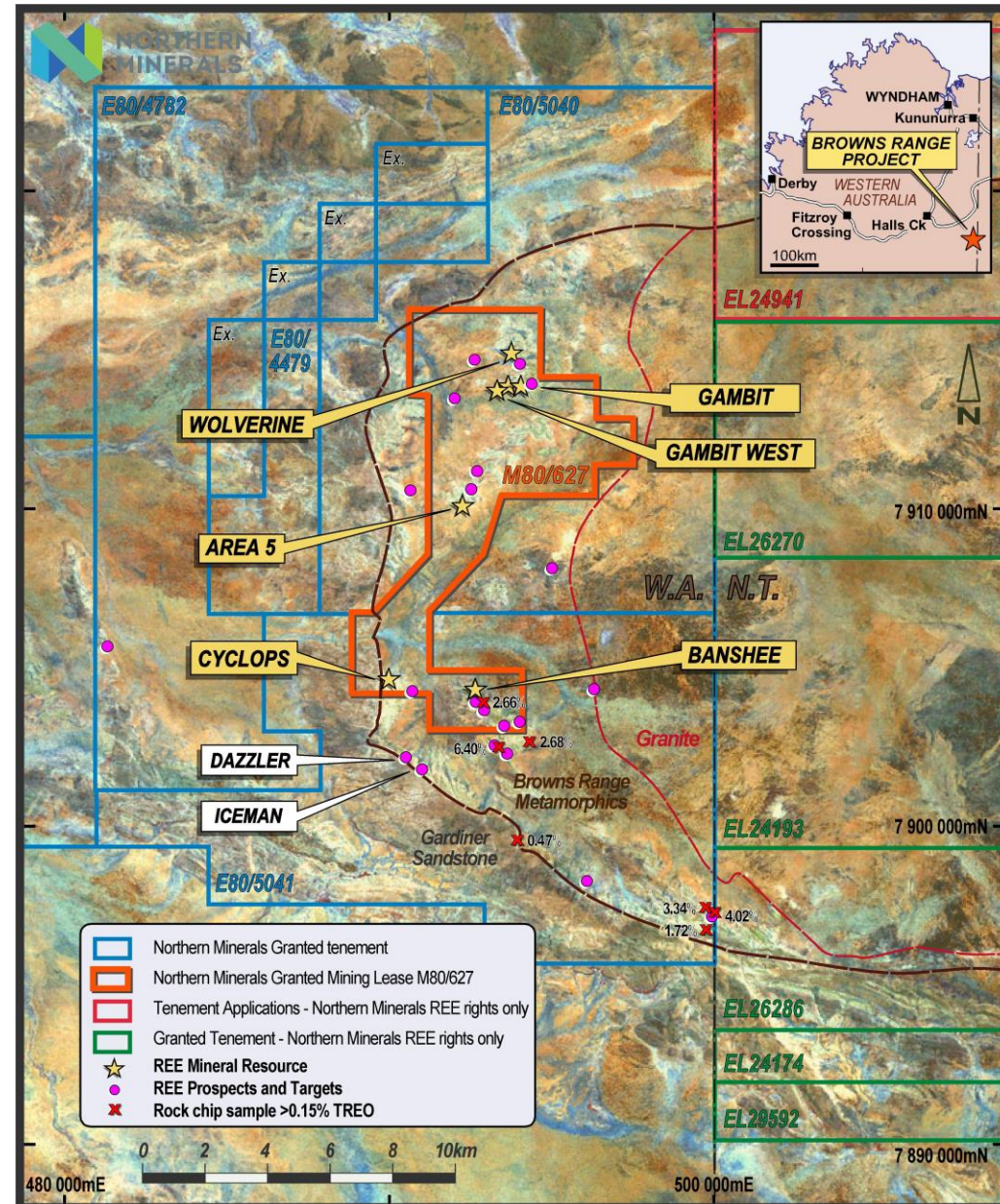


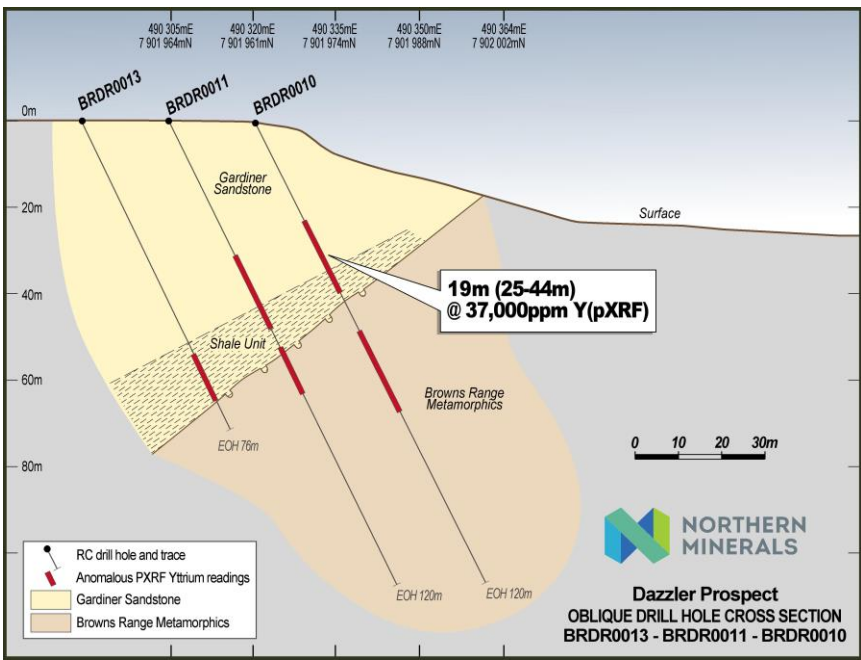
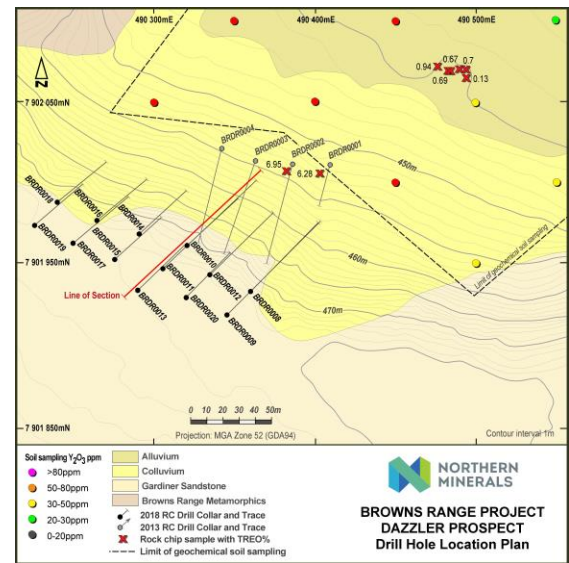
- 300,000kg Dysprosium production per annum
- 3,000,000kg TREO per annum
- Significant dysprosium supplier
- Initial 11 year life with significant upside through exploration



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

- ◆ JORC Resource supporting an 11 year full scale operation
- ◆ Exploration target to add additional 9 years of JORC Resources (under review)
- ◆ Numerous targets defined across the Dome yet to be drilled
- ◆ High priority targets at Iceman and Dazzler returned exciting initial results
- ◆ John Galt and Boulder Ridge – Additional HRE projects with upside potential
- ◆ Funding in place - exploration commenced in July





Hole ID	Width (m)*	From (m)	To (m)	Average pXRF Yttrium (ppm)	Estimated TREO by Correlation
BRDR0008	4	33	37	1,000	0.5%
BRDR0010	19	25	44	37000	8%
BRDR0011	9	41	50	3000	0.8%
BRDR0012	6	35	41	1000	0.4%
BRDR0014	21	24	45	7000	2%
BRDR0014	6	60	66	2000	0.6%
BRDR0015	12	43	55	2000	0.6%
BRDR0016	10	34	44	3000	0.7%
BRDR0017	2	66	68	1500	0.3%
BRDR0018	2	44	46	1600	0.3%

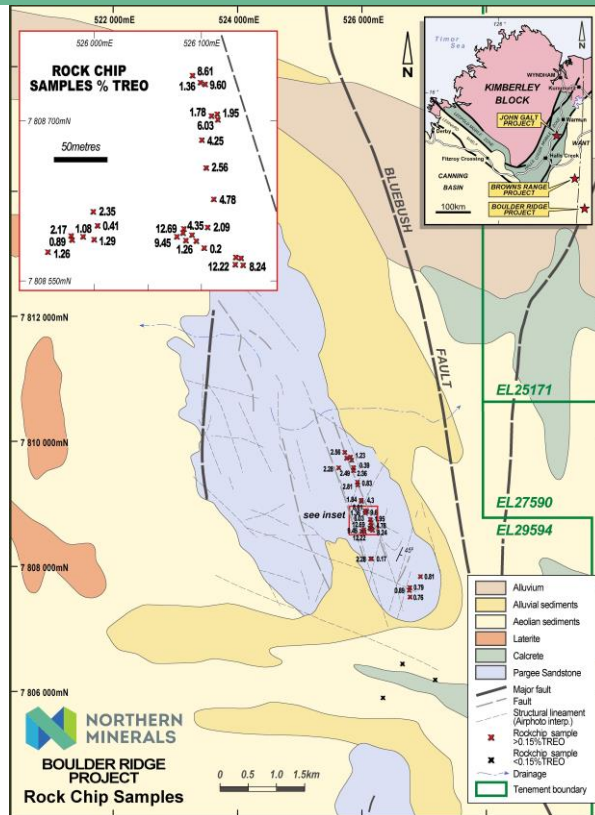
High grade pXRF readings in overlying Gardiner Sandstone open up significant new target opportunities

(TREO – Total Rare Earth Oxides)

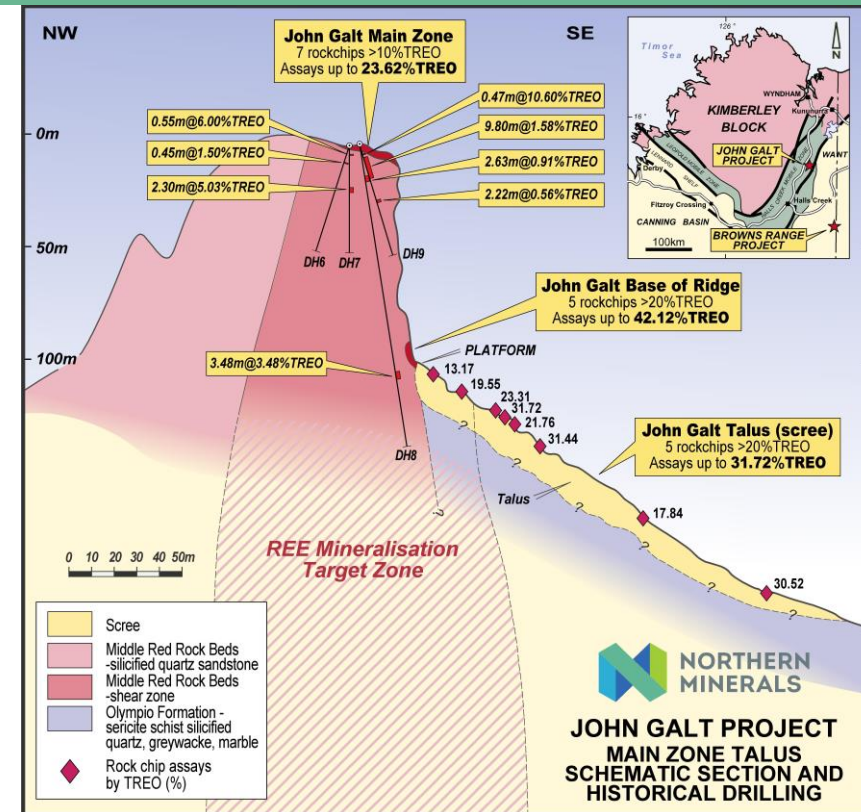
*Downhole widths only, true width is currently unknown

The measurement of yttrium using a pXRF is a method that has been used extensively at Browns Range. Historical data demonstrates final assayed Yttrium and TREO has a strong correlation with pXRF (Yttrium) field analysis of RC drill samples at Browns Range. However, the pXRF results that are the subject of this report are preliminary only and the “pXRF Yttrium” and “Estimated TREO by Correlation” is only an indication of the expected order of magnitude for TREO and Yttrium final analysis. The analyses that are the subject of this report will be submitted for laboratory assay, and some variation from the results presented herein should be expected.



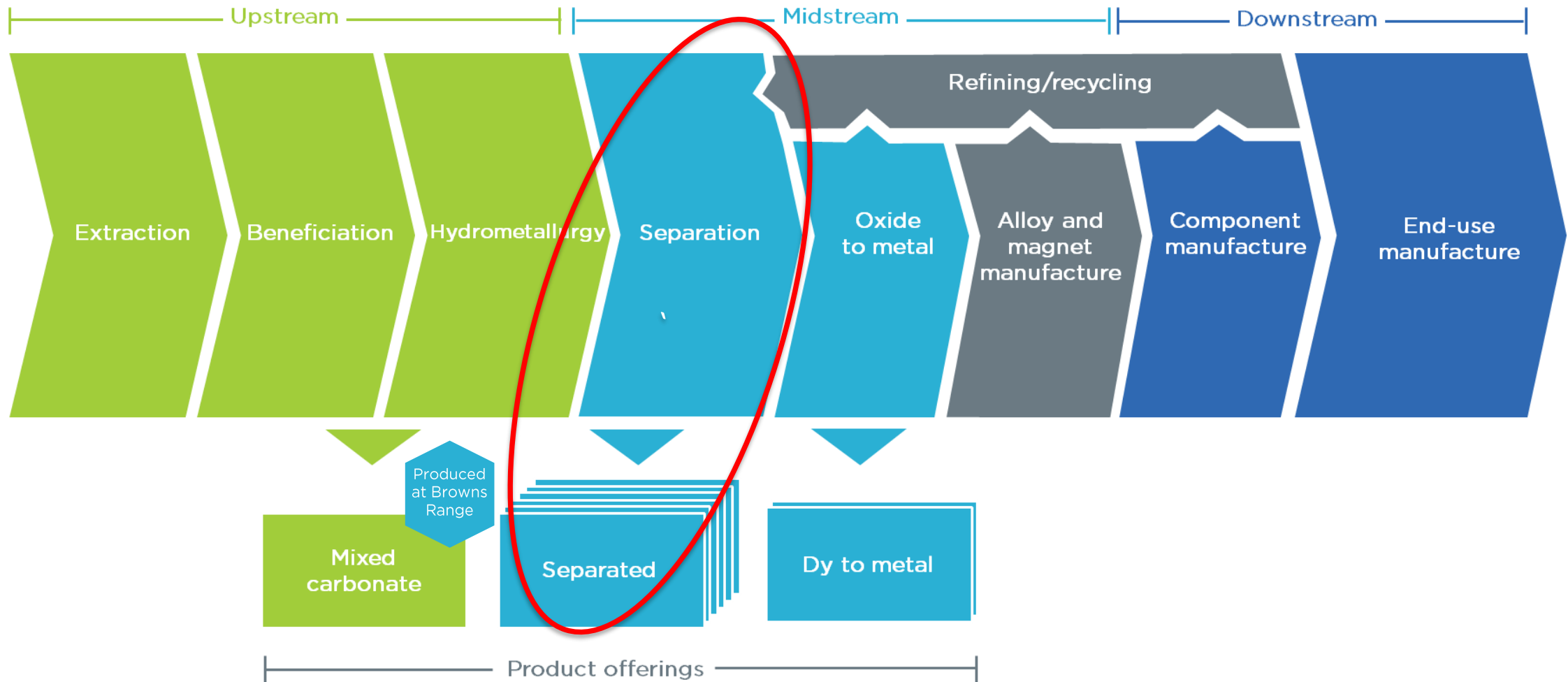


- Rock chip samples from the Boulder Ridge project confirm high-grade Heavy Rare Earths (HRE)
- Best results exceed 12% TREO, including up to 1.15% Dysprosium, with a dominance of HRE – up to 99%.
- Reinforces significant growth potential in Browns Range and Tanami regions.



- Rock chip samples up to 42% TREO with approximately 95% Heavy REO
- Preliminary metallurgical tests indicate excellent recovery rates (>90%)
- Potential for concentrate grades >40%
- High grade mineralisation in talus (scree) material
- Hard-rock source of scree is the primary target

Investigating separation technologies



Strong support received from the WA Government for downstream processing within the state



Key Site Personnel:
Eben Van Rooyen – Resident Manager
Tony Hadley – General Manager
Louis de Klerk – R&D Manager



BREVET CAPITAL MANAGEMENT



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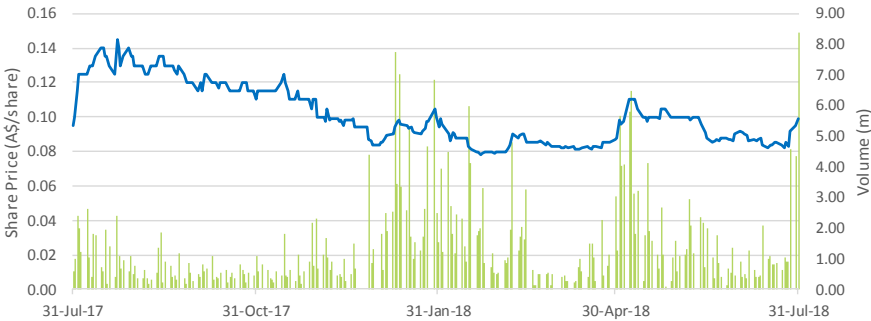
Major shareholders	31 July 2018
ACIG	17.1%
Huatai Mining	14.7%
Citicorp Nominees	3.9%
Board & Management	2.3%
Remaining Top 20	19.5%
Other	42.5%

Market capitalisation \$110M

(at 1 August 2018 @ \$0.095)

Ordinary Shares	1,161M
Options and Performance Rights	101.5M
Cash (30 June 2018)	\$10.4M
12 month low - high	\$0.078 - \$0.145
Average daily volume (12 month avg)	1,376,000
Average daily volume (3 month avg)	1,735,000

Northern Minerals Share Price Performance



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2018 PLANS




TRAIN & LEARN
Implementation of
Training-to-Work Program




PRACTICAL COMPLETION
Commence research &
Development studies

EXPLORE
Continue
exploration on
multiple HRE
opportunities



**FIRST PRODUCT
DELIVERY**
Mixed rare earth carbonates



**RESEARCH &
DEVELOPMENT**
Assess the technical and
economic feasibility of the
larger scale operation



BONUS OPTION ISSUE
Planned listed 12c options for all
shareholders as at Record Date
following General Meeting

1-for-5



CASHFLOW
Commence product sales from
Browns Range

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- Pilot plant production to commence in August 2018
- Three year project to demonstrate and assess economic and technical feasibility of full scale operation
- Process commenced on separation
- Browns Range on track to be a globally significant supplier of dysprosium
- Quality management and operations team focussed on delivery
- An essential part of the EV evolution

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66
Dy
Dysprosium



65
Tb
Terbium





NORTHERN MINERALS

Delivering critical technology metals to the EV evolution



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APPENDICES

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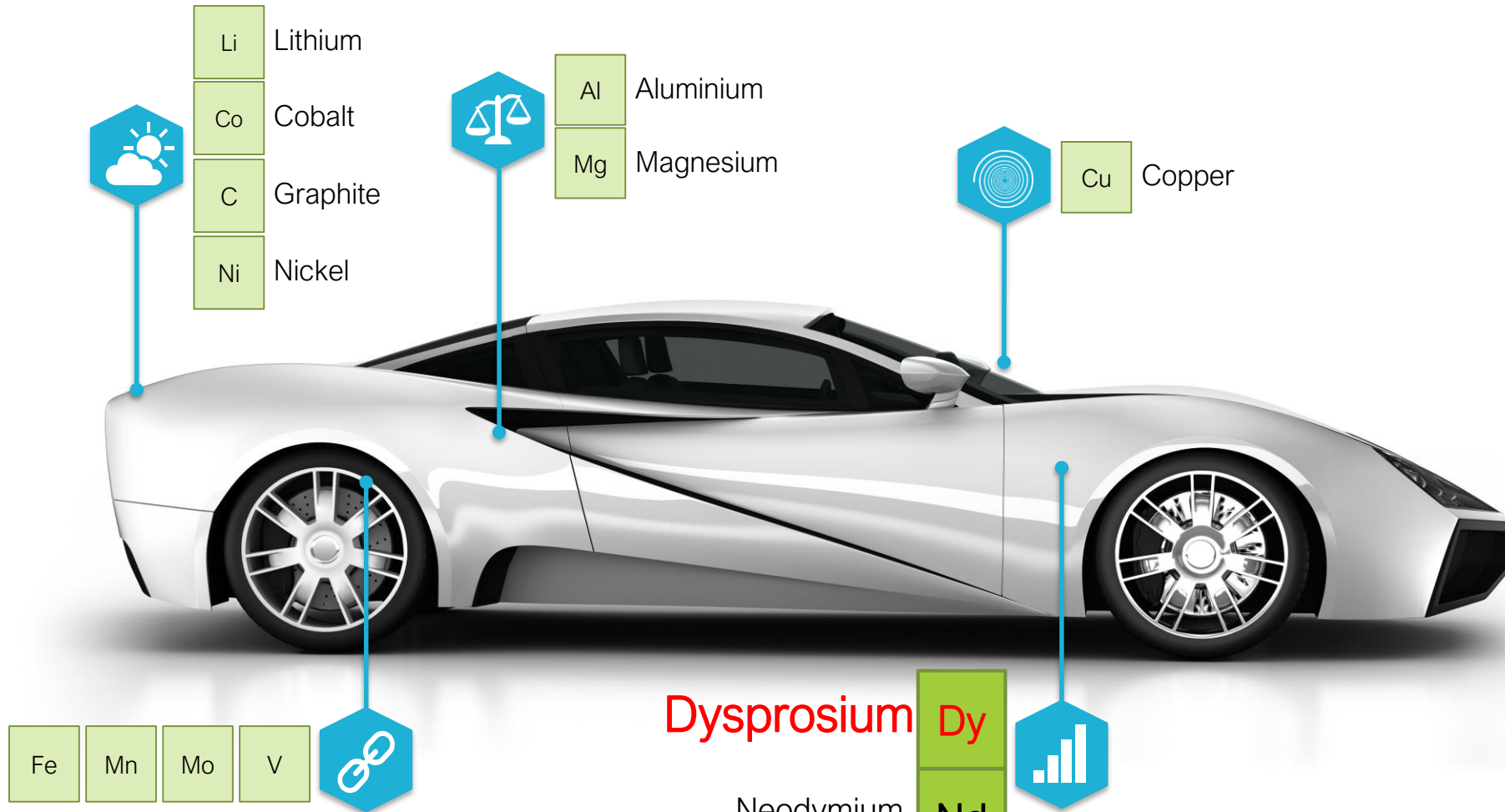


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Rare Earths 2.0 - EVs not just a lithium story!



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Rare
Earths
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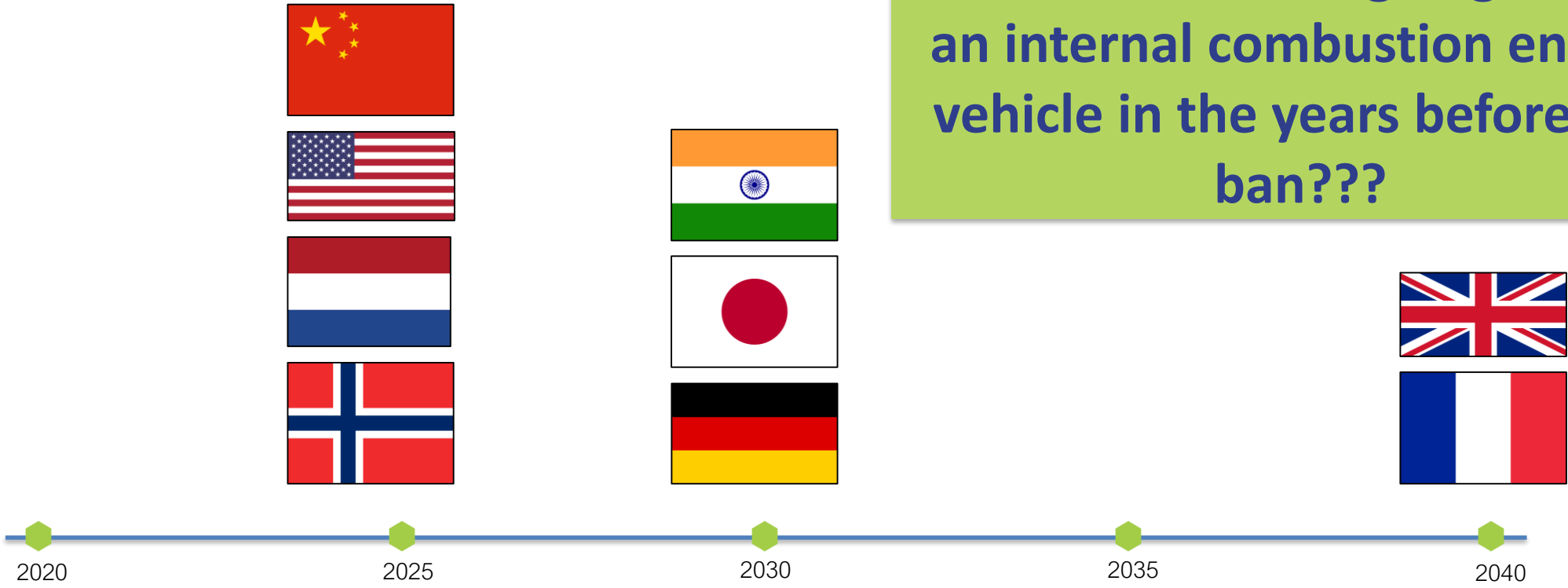


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Government legislated phase out of internal combustion engine vehicles

Question: Who is going to buy an internal combustion engine vehicle in the years before the ban???



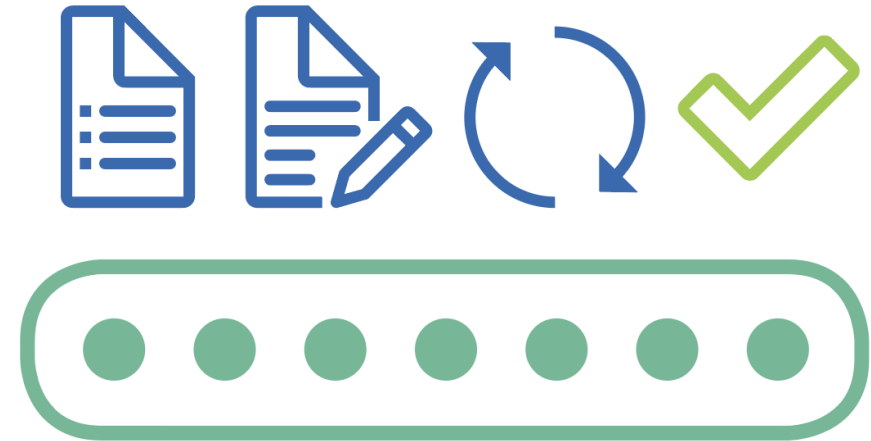
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- Operational readiness plan in place
- Recruitment completed
- Training ongoing
- Reagent supply contracts in place
- First fills on site



- Reduce mining cost - modify mining method
- Boost production – increase head grade
- Develop premium product – yttrium rejection
- Funding plan for progressing initiatives



Downstream Opportunities



- Downstream separation of heavy rare earth elements
- Production of dysprosium oxide and terbium oxide
- Wider potential customer base
- Additional value capture
- Funded plan to investigate downstream opportunities



Mineral Resources

Deposit	Category	Mt	TREO	Dy ₂ O ₃	Y ₂ O ₃	Tb ₄ O ₇	HREO	TREO
			%	Kg/t	Kg/t	Kg/t	%	Kg
Wolverine	Indicated	2.99	0.83	0.73	4.86	0.11	89	24,952,000
	Inferred	1.97	0.89	0.76	5.13	0.11	88	17,609,000
	Total¹	4.97	0.86	0.74	4.97	0.11	89	42,560,000
Gambit West	Indicated	0.27	1.26	1.07	7.06	0.14	90	3,424,000
	Inferred	0.12	0.64	0.54	3.67	0.07	85	753,000
	Total¹	0.39	1.07	0.91	6.04	0.12	89	4,177,000
Gambit	Indicated	0.05	1.06	0.92	6.62	0.12	97	533,000
	Inferred	0.06	1.2	1.01	6.8	0.15	95	671,000
	Total¹	0.11	1.13	0.97	6.72	0.13	96	1,204,000
Area 5	Indicated	1.38	0.29	0.18	1.27	0.03	69	3,953,000
	Inferred	0.14	0.27	0.17	1.17	0.03	70	394,000
	Total¹	1.52	0.29	0.18	1.26	0.03	69	4,347,000
Cyclops	Indicated	-	-	-	-	-	-	-
	Inferred	0.33	0.27	0.18	1.24	0.03	70	891,000
	Total¹	0.33	0.27	0.18	1.24	0.03	70	891,000
Banshee	Indicated	-	-	-	-	-	-	-
	Inferred	1.66	0.21	0.16	1.17	0.02	87	3,484,000
	Total¹	1.66	0.21	0.16	1.17	0.02	87	3,484,000
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

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¹ – Rounding may cause some computational discrepancies (TREO (metal) tonnes estimated from Mt x TREO%)
Mineral resources as per NTU announcement 2 March 2015 in relation to increased reserves.



Ore Reserves

Deposit	Classification	Ore Tonnes	TREO		Dy ₂ O ₃		Tb ₄ O ₇		Y ₂ O ₃	
			kg/t	kg Contained	kg/t	kg Contained	kg/t	kg Contained	kg/t	kg Contained
OPEN PIT										
Wolverine	Probable	833,000	6.15	5,124,000	0.55	460,000	0.08	66,000	3.59	2,989,000
Gambit West	Probable	219,000	10.10	2,212,000	0.83	182,000	0.11	25,000	5.52	1,209,000
Gambit	Probable	37,000	8.05	298,000	0.68	25,000	0.09	3,000	4.74	176,000
Area 5	Probable	467,000	2.24	1,048,000	0.14	65,000	0.02	10,000	0.99	463,000
UNDERGROUND										
Wolverine	Probable	2,104,000	8.00	16,833,000	0.70	1,483,000	0.10	221,000	4.71	9,908,000
Gambit West	Probable	90,000	9.54	860,000	0.88	79,000	0.11	10,000	5.78	521,000
RESERVE										
Total	Probable ¹	3,750,000	7.03	26,375,000	0.61	2,294,000	0.09	335,000	4.07	15,266,000

¹ Rounding may cause some computational discrepancies

Ore reserves as per NTU announcement 2 March 2015 in relation to increased reserves.

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Project Development Schedule



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Three year pilot plant project



Pilot
Plant
Site

May 2017

- Mixed RE carbonate (REC) produced
- Product specification available for REC
- REC samples validated by several downstream separators
- REC suitable for solvent extraction separation
- Low thorium and uranium levels
- First shipment planned for September quarter

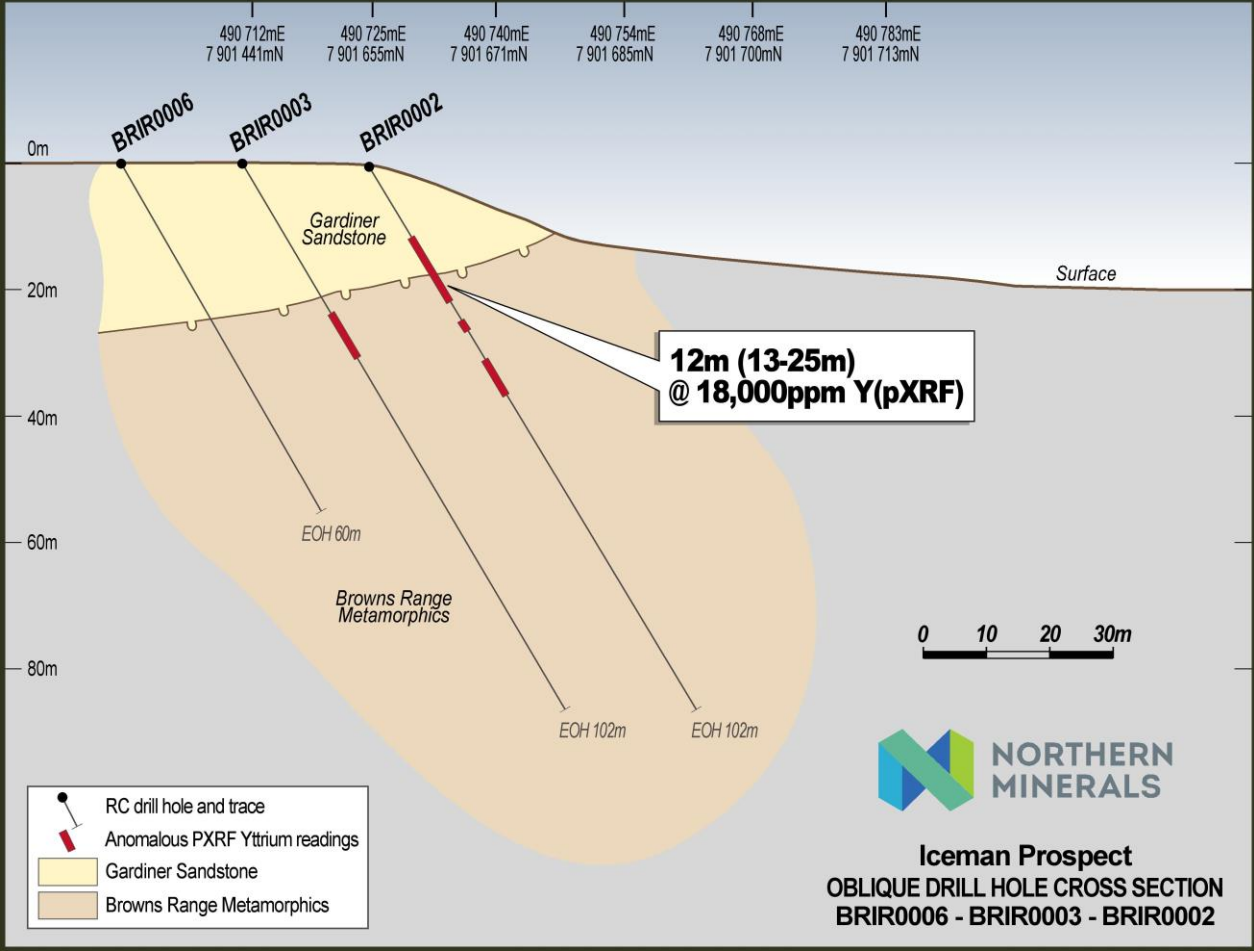
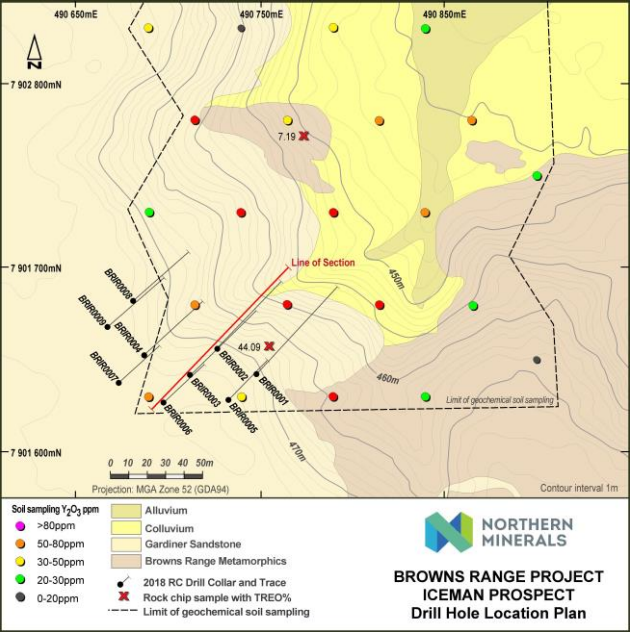
REO contained in mixed RE carbonate	Annual production (000s kg)
Lanthanum	5.8
Cerium	15.2
Praseodymium	2.8
Neodymium	10.6
Samarium	11.4
Europium	2.4
Gadolinium	34.8
Terbium	6.7
Dysprosium	49.4
Holmium	13.5
Erbium	39.3
Thulium	5.6
Ytterbium	33.1
Lutetium	4.5
Yttrium	337.6
Total TREO produced	573
Total carbonate produced	1,100

Figures may not add due to rounding
TREO = Total Rare Earth Oxides- Total of La_2O_3 , Ce_2O_3 , Pr_2O_3 , Nd_2O_3 , Sm_2O_3 , Eu_2O_3 , Gd_2O_3 , Tb_2O_3 , Ho_2O_3 , Er_2O_3 , Tm_2O_3 , Yb_2O_3 , Lu_2O_3 , Y_2O_3

Production table from NTU announcements dated 4 February 2016 in relation to new business plan for Browns Range and presentation of the business plan



Hole ID	Width (m)*	From (m)	To (m)	Average pXRF Yttrium ppm	Estimated TREO by Correlation
BRIR0002	12	13	25	18,000	4%
BRIR0003	8	27	35	2,000	0.6%
BRIR0004	7	26	33	12,000	3%
BRIR0007	4	42	46	5,000	1%



(TREO – Total Rare Earth Oxides)

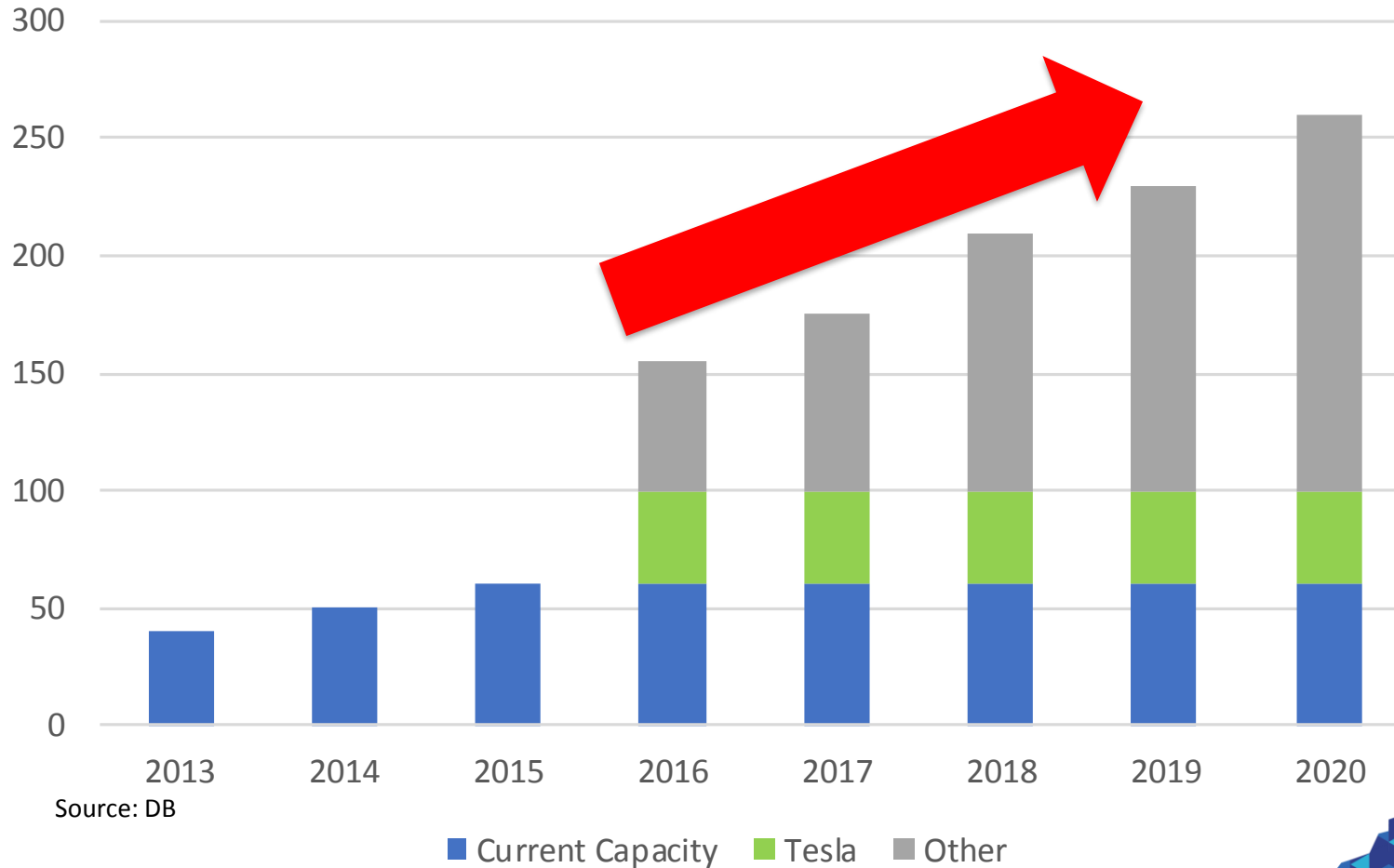
*Downhole widths only, true width is currently unknown

The measurement of yttrium using a pXRF is a method that has been used extensively at Browns Range. Historical data demonstrates final assayed Yttrium and TREO has a strong correlation with pXRF (Yttrium) field analysis of RC drill samples at Browns Range. However, the pXRF results that are the subject of this report are preliminary only and the “pXRF Yttrium” and “Estimated TREO by Correlation” is only an indication of the expected order of magnitude for TREO and Yttrium final analysis. The analyses that are the subject of this report will be submitted for laboratory assay, and some variation from the results presented herein should be expected.



EV growth driven by consumer demand and Government restrictions

Megafactories Capacity (GWh)



Source: DB

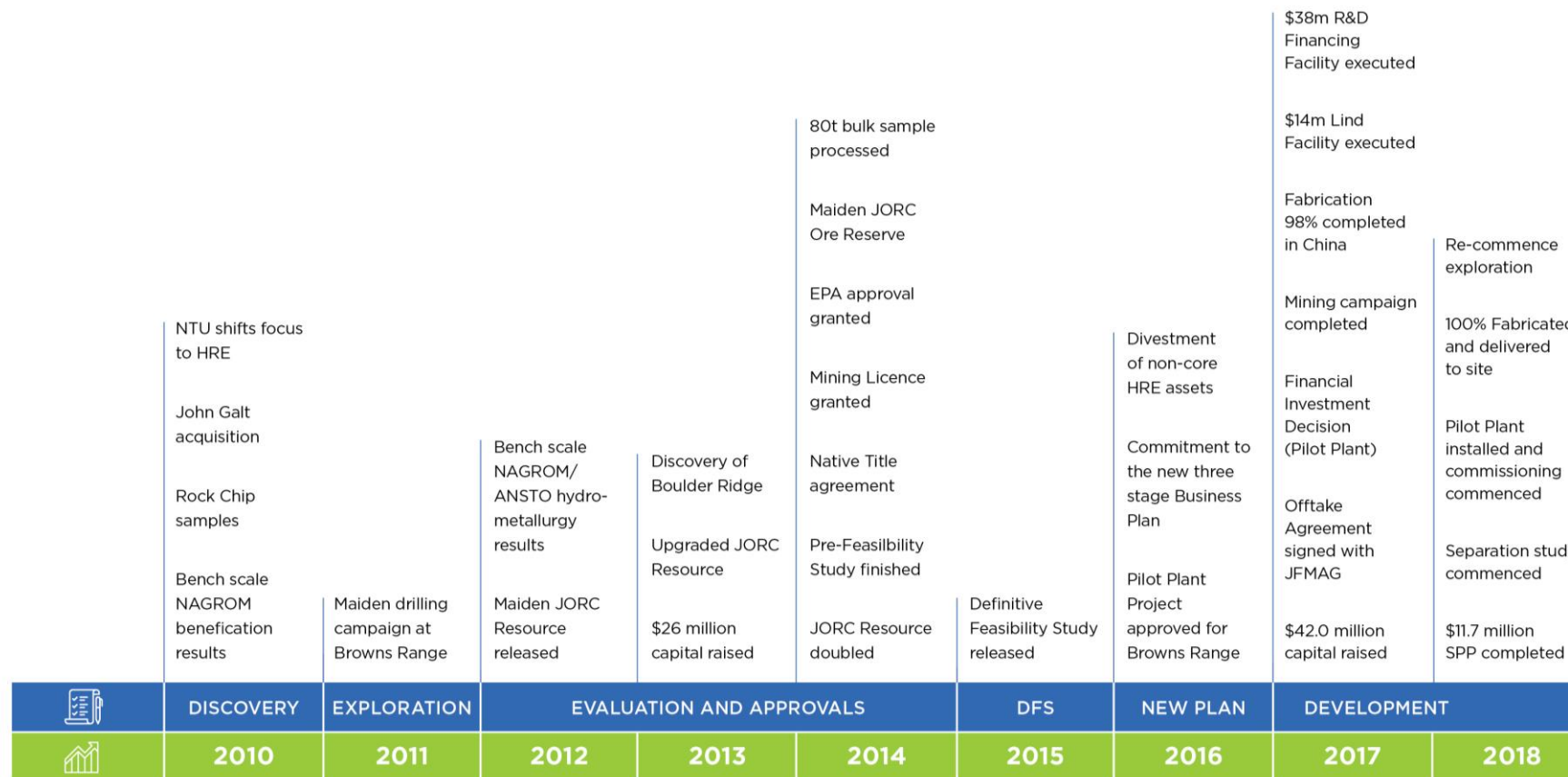
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Battery growth
is a good proxy
for EV growth



Browns Range – An Eight Year \$180m



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NTU Board



Nan
Yang

Colin
McCavana

Adrian
Griffin

George
Bauk

Bin
Cai

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Heavy Rare Earths **ASX:NTU**

Colin McCavana - Non-executive Chairman (appointed 2006)

Mr McCavana has more than 35 years of management experience worldwide in the earthworks, construction and mining industries.

George Bauk - Managing Director / CEO (appointed 2010)

George is an experienced executive, with over 25 years' experience in the resources industry. Prior to Northern Minerals, George held global operational and corporate roles with WMC Resources, Arafura Resources and Indago Resources. Mr Bauk is Vice President of the Chamber of Minerals and Energy, WA and Chairman of Lithium Australia.

Adrian Griffin - Non-executive Director (appointed 2006)

An Australian trained mining professional with exposure to metal mining and processing throughout the world, Mr Griffin has been involved in the development of extraction technology for platinum group metals and agricultural commodities.

Nan Yang - Non-executive Director (appointed 2017)

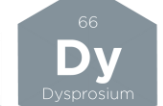
Mr Yang is an Australian mining engineer with more than 10 years' experience in mine planning, design, and mergers and acquisitions.

Yanchung Wang - Non-executive Director (not in photo) (appointed 2013)

Ms Wang acts as a strategic investor for a number of Chinese based companies. Ms Wang is Vice Chairman of Conglin Baoyuan International Investment Group and also a Director of Huachen.

Bin Cai - Non-executive Director (alternate) (appointed 2013)

Bin is the MD of Conglin International Investment Group Pty Ltd based in Brisbane. He has a record of successful strategic investments in emerging Australian resources companies.



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