

HASTINGS
Technology Metals Limited

Yangibana Neodymium Project Western Australia

Investors Presentation | November 2015

★ Yangibana



All currency amounts are in AUD\$ unless stated otherwise.

Disclaimer

This presentation has been prepared by Hastings Rare Metals Limited ("Company"). It does not purport to contain all the information that a prospective investor may require in connection with any potential investment in the Company. You should not treat the contents of this presentation, or any information provided in connection with it, as financial advice, financial product advice or advice relating to legal, taxation or investment matters.

This presentation is provided expressly on the basis that you will carry out your own independent inquiries into the matters contained in the presentation and make your own independent decisions about the affairs, financial position or prospects of the Company. The Company reserves the right to update, amend or supplement the information at any time in its absolute discretion (without incurring any obligation to do so).

Neither the Company, nor its related bodies corporate, officers, their advisers, agents and employees accept any responsibility or liability to any person or entity as to the accuracy, completeness or reasonableness of the information, statements, opinions or matters (express or implied) arising out of, contained in or derived from this presentation or provided in connection with it, or any omission from this presentation, nor as to the attainability of any estimates, forecasts or projections set out in this presentation. Pursuant to the general law (whether for negligence, under statute or otherwise), or any Australian legislation or any other jurisdiction. Any such responsibility or liability is, to the maximum extent permitted by law, expressly disclaimed and excluded. Nothing in this material should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities. It does not include all available information and should not be used in isolation as a basis to invest in the Company.

Future matters

This presentation contains reference to certain intentions, expectations, future plans, strategy and prospects of the Company. Those intentions, expectations, future plans, strategy and prospects may or may not be achieved. They are based on certain assumptions, which may not be met or on which views may differ and may be affected by known and unknown risks. The performance and operations of the Company may be influenced by a number of factors, many of which are outside the control of the Company. No representation or warranty, express or implied, is made by the Company, or any of its directors, officers, employees, advisers or agents that any intentions, expectations or plans will be achieved either totally or partially or that any particular rate of return will be achieved.

Given the risks and uncertainties that may cause the Company's actual future results, performance or achievements to be materially different from those expected, planned or intended, recipients should not place undue reliance on these intentions, expectations, future plans, strategy and prospects. The Company does not warrant or represent that the actual results, performance or achievements will be as expected, planned or intended.

Exploration Targets

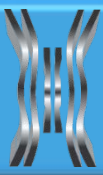
The terms "Target" or "Exploration Target" where used in this presentation should not be misunderstood or misconstrued as an estimate of a Mineral Resource as defined in this context. Exploration Targets are conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain further exploration will result in the determination of a Mineral Resource.

Competent Persons' Statement

- The information in this presentation that relates to Resources is based on information compiled by Simon Coxhell. Simon Coxhell is a consultant to the Company and a member of the Australasian Institute of Mining and Metallurgy. The information in this presentation that relates to Exploration Results is based on information compiled by Andy Border, an employee of the Company and a member of the Australasian Institute of Mining and Metallurgy.
- Each has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this report and to the activity which they are 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' ("JORC Code"). Each consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

US disclosure

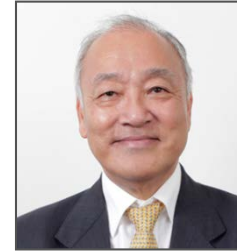
This document does not constitute any part of any offer to sell, or the solicitation of an offer to buy, any securities in the United States or to, or for the account or benefit of any "US person" as defined in Regulation S under the US Securities Act of 1993 ("Securities Act"). The Company's shares have not been, and will not be, registered under the Securities Act or the securities laws of any state or other jurisdiction of the United States, and may not be offered or sold in the United States or to any US person without being so registered or pursuant to an exemption from registration including an exemption for qualified institutional buyers.



Charles Lew

Executive Chairman

- Private investor and entrepreneur
- Independent Director of RHB Banking Group since 2004
- 30+ years experience in investment banking



Tony Ho

Non Executive Director & Chair of Audit Committee

- Director of Bioxyne, Greenland Minerals, and Apollo Minerals
- 35+ years in senior corporate management with Brazin, Yates and Dolomatrix



Guy Robertson

Chief Financial Officer & Company Secretary

- 25+ years CFO experience
- Former senior finance executive with Jardine Lloyd Thompson, Colliers, Franklins



Malcolm Mason

Non Executive Director

- 45+ years experience in Australian and international exploration and mining
- Experience covers rare earths, uranium, gold and base metals



Charles Tan

Commercial Manager

- 20+ years in Commercial & Procurement Management
- Mineral sands & aluminium mining

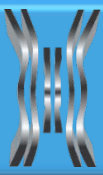


Andy Border

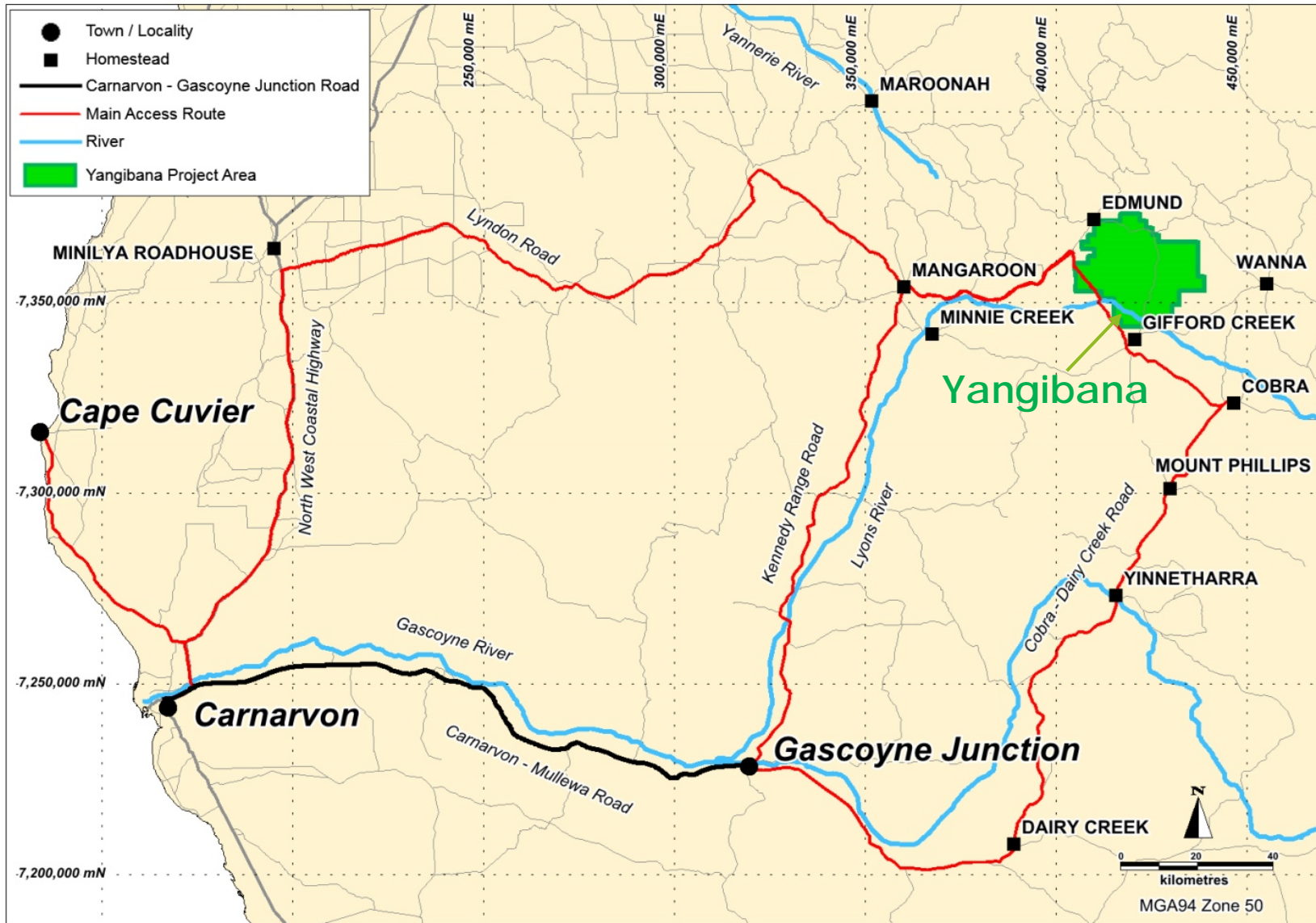
General Manager Exploration

- 35+ years experience as a geologist
- Rare earths, copper, gold and industrial minerals

ASX Listed Stock Code: HAS

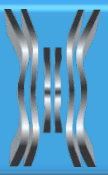


Yangibana Project - Location



Accessible from Carnarvon

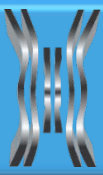
- In the Gascoyne Region of Western Australia
- 900km north of Perth
- 280km north-east of Carnarvon
- 170km north-north-east Gascoyne Junction
- Bitumen road from Carnarvon to Gascoyne Junction
- Shire maintained road to southern Project boundary



Yangibana Project - Geography

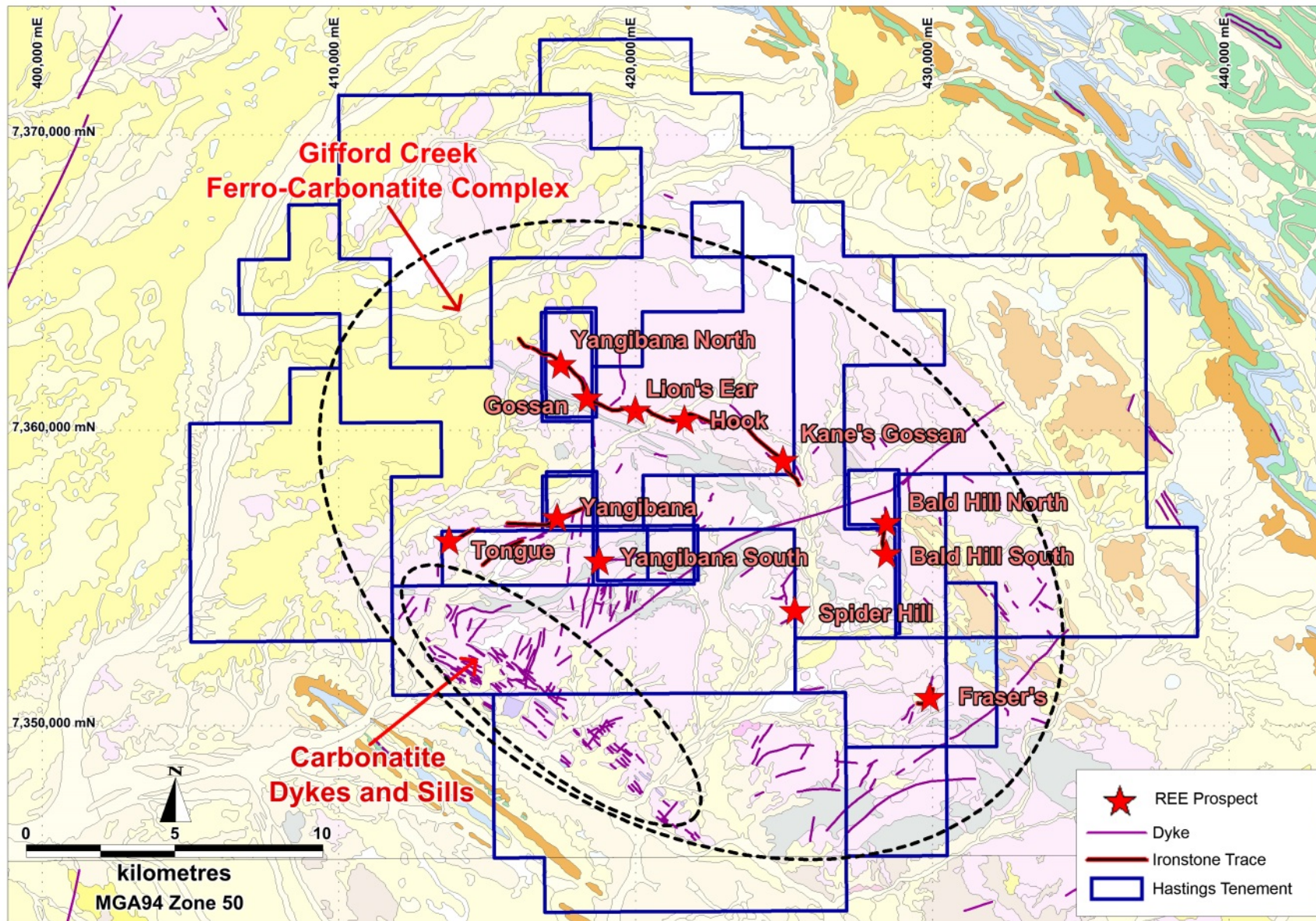
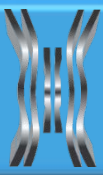


- Flat, open ground with excellent outcrop
- Located on the drainage divide between the Gascoyne River system and the Ashburton River system to the north
- Situated on Wanna Pastoral Station
- ***Uninhabited***

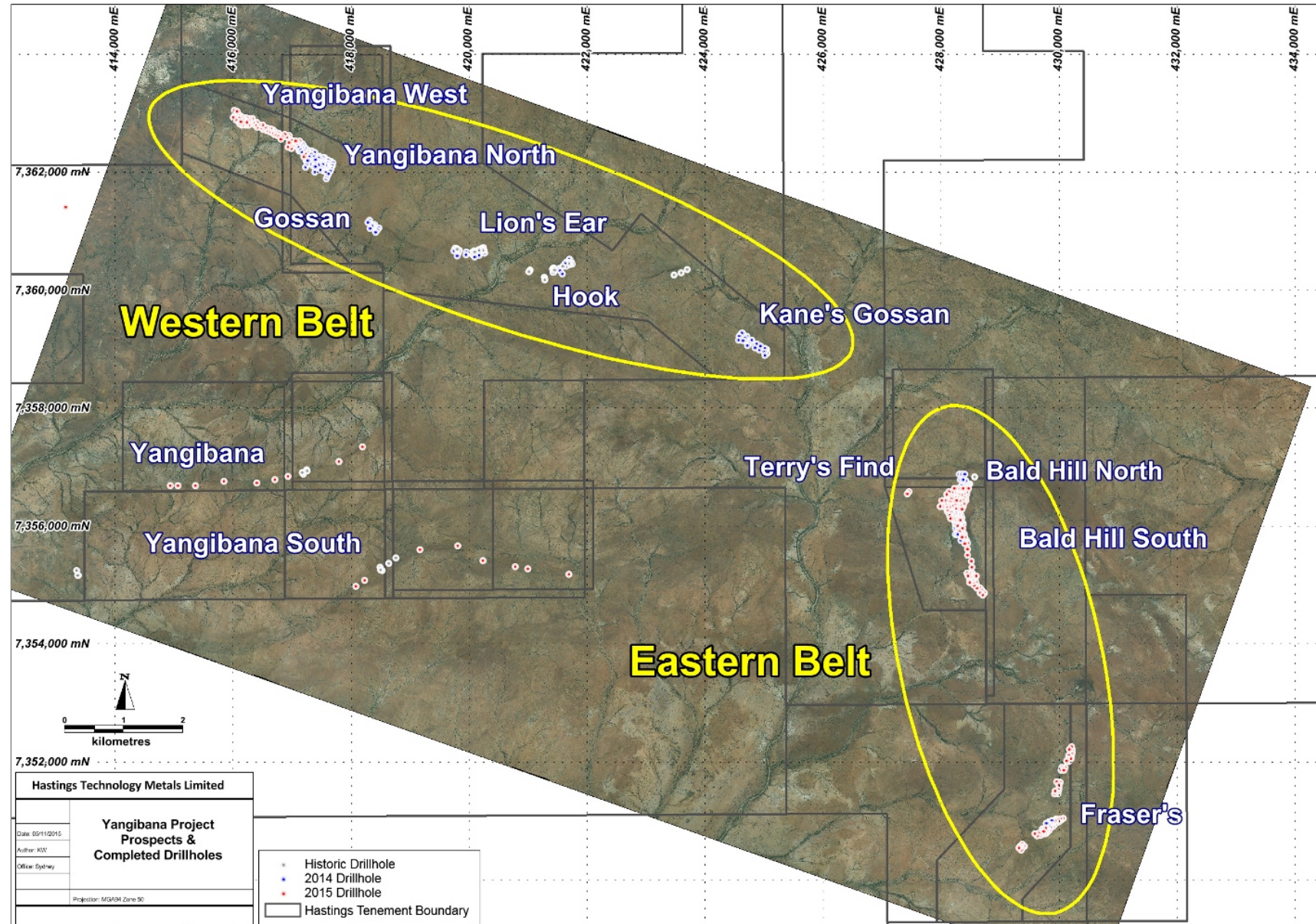
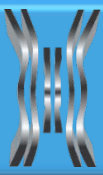


History:

- Significant rare earths mineralisation was intersected at Yangibana in the 1980s by Hurlston Pty Ltd.
- Rare earths rich monazite mineralisation located in widespread ironstone outcrops.
- Percussion drilling intersected significant mineralisation at 12 prospects beneath ironstone outcrops.

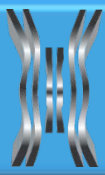


- Yangibana Project controls all areas considered to have potential for Yangibana-style Neodymium rich Rare Earths mineralisation
- Tenements cover 650km²
- Potential for large scale carbonatite-hosted Rare Earths mineralisation at depth



Products and Markets

- Neodymium, Praseodymium, Dysprosium and Europium are Yangibana's main economic Rare Earths and Hasting's efforts are directed to recovery of these 4 key rare earths.
- Neodymium and Praseodymium account for **86%** of total in-ground value.
- Our market is the ***rare earths magnets sector***; the most important of the rare earths market and with the greatest potential for growth



Neodymium-rich Rare Earths in the Eastern Belt

- **Western Belt mineralisation:** Nd_2O_3 comprises about **18%** of TREO
- **Eastern Belt mineralisation:**
 - Nd_2O_3 comprises about **33%** of TREO at Bald Hill South and
 - more than **40%** at Fraser's Deposit
- Hydrometallurgical and refining costs are a major part of mining and processing operating costs and directly proportional to the TREO treated
- Double the neodymium content of the TREO (ie in the Monazite) doubles the cash flow
- That is a higher content of Neodymium in the Monazite means a much more profitable operation

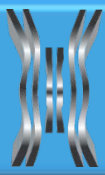
Eastern Belt mineralisation recognised as the main economic driver of the Yangibana Project

PFS Resource Drilling Objective: Delineate pit optimised JORC Indicated Resources sufficient for a proposed 1mtpa mining operation for 6-7 years additionally supported by JORC Inferred Resources sufficient for a 15-year mining operation

2015 Exploration drilling for the PFS concentrated on the economically important neodymium rich Eastern Belt and on 100% owned ground to the west of Yangibana North

Results of Resource Drilling

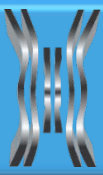
- **JORC Indicated Resources** have been established at **Bald Hill South, Fraser's, Yangibana West and Yangibana North**
- Hastings has tested **eleven** targets to date, of which **eight** have sufficient drilling to enable JORC resources to be estimated



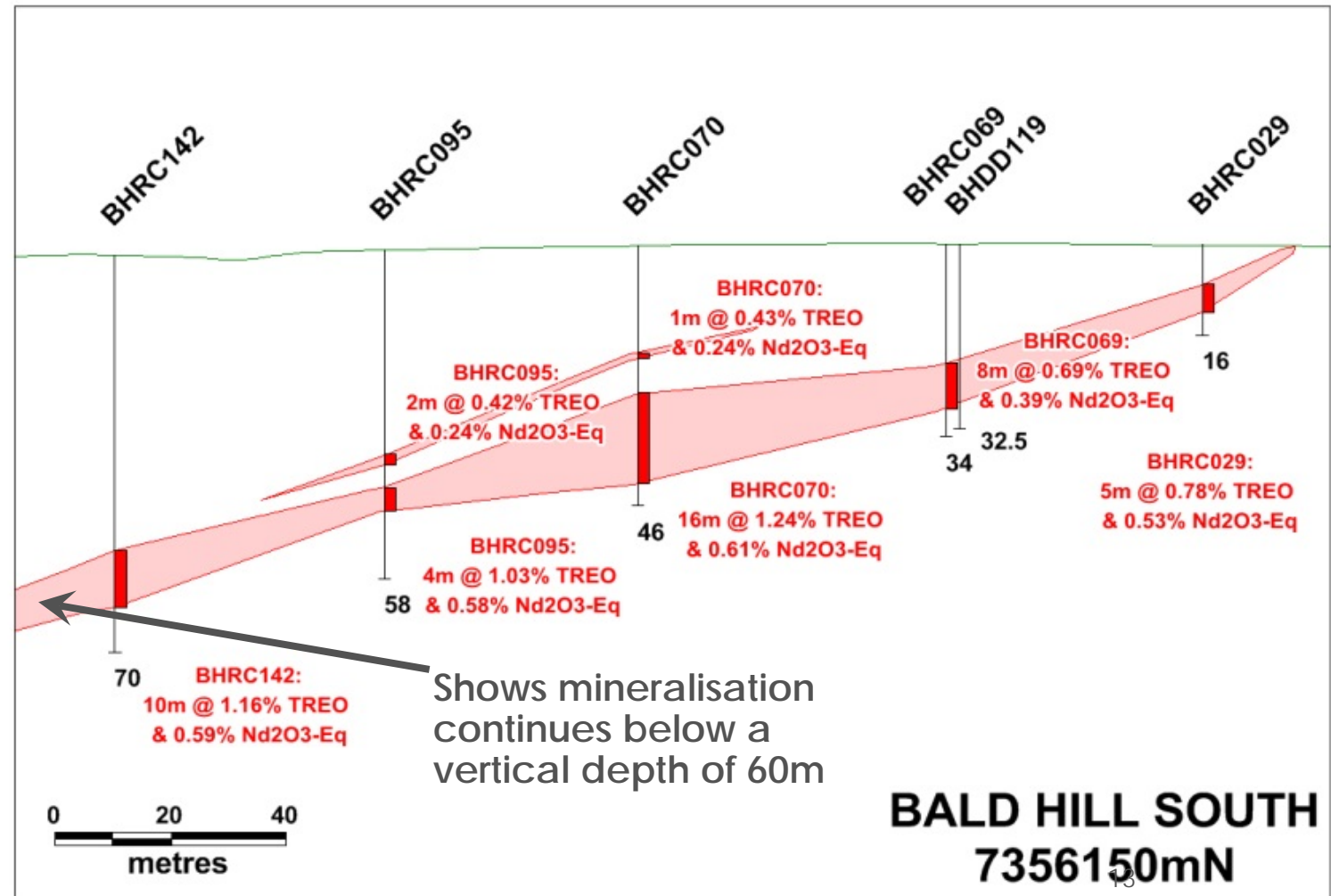
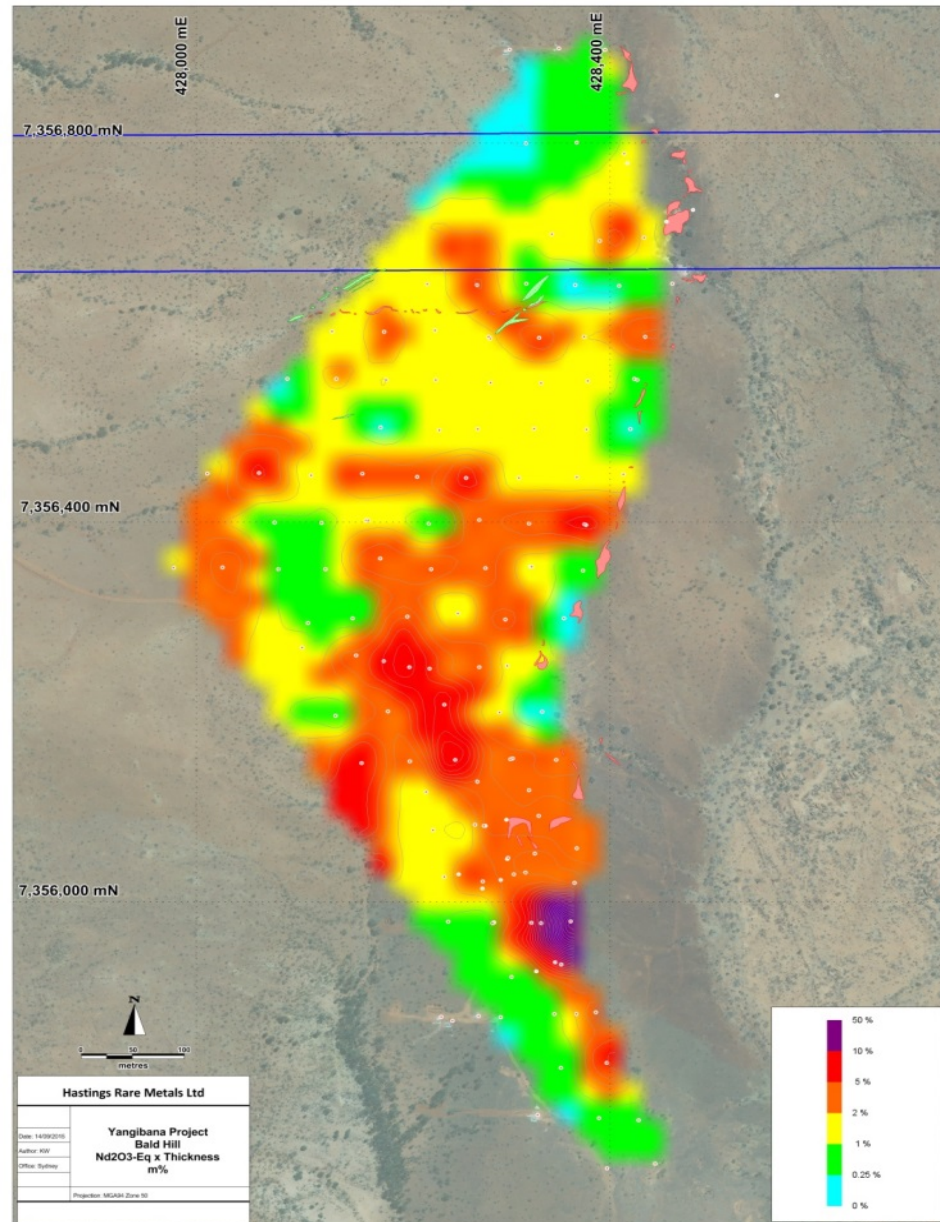
Resource Category	Tonnes	%TREO	%Nd ₂ O ₃ -Eq
Indicated	8,126,000	1.07	0.46
Inferred	4,236,000	1.07	0.41
TOTAL	12,362,000	1.07	0.44

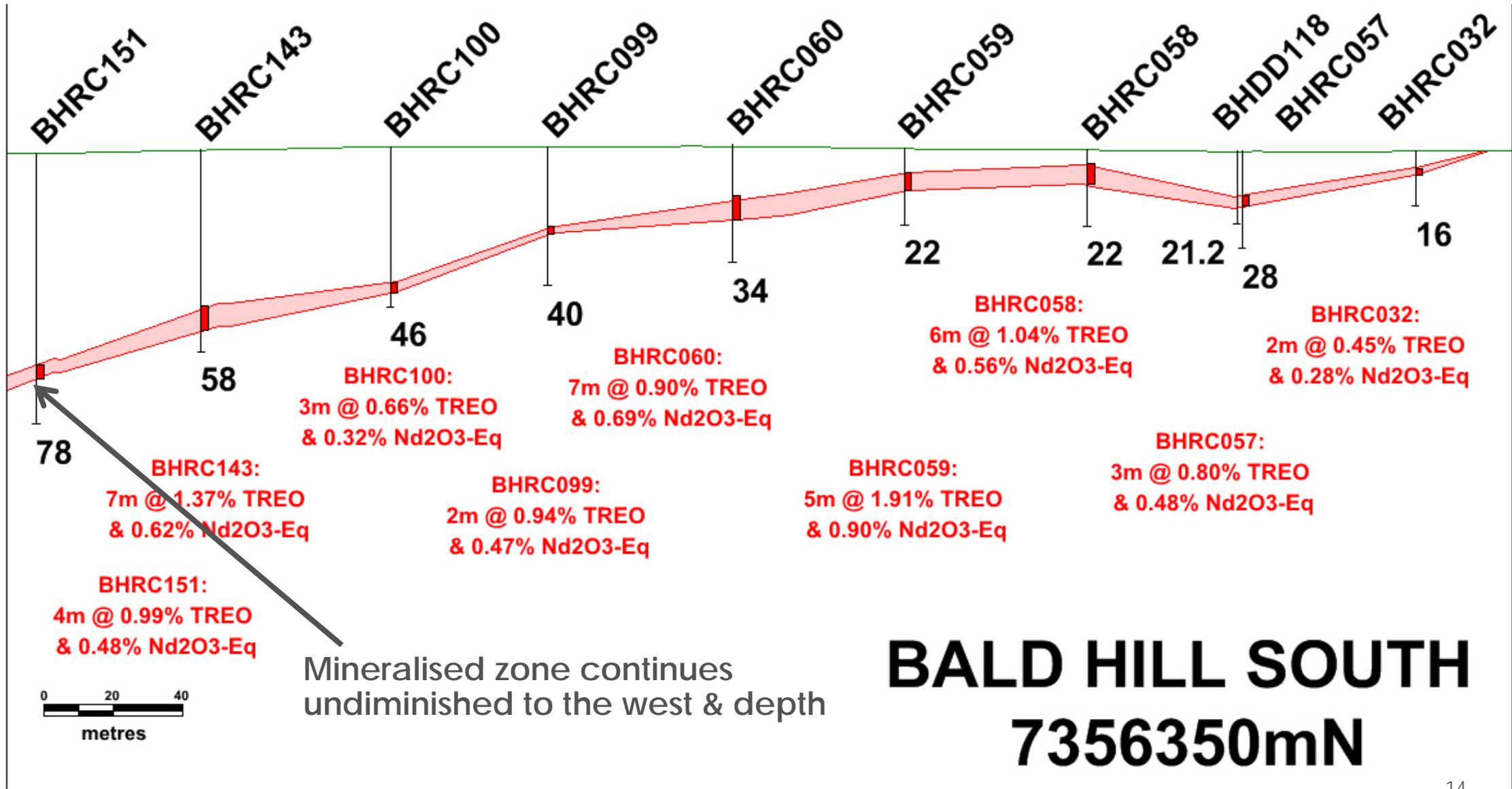
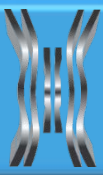
These resources contain 132,500 tonnes of TREO, including
33,900 tonnes of Nd₂O₃
8,950 tonnes of Pr₂O₃
590 tonnes of Dy₂O₃, and
920 tonnes of Eu₂O₃

(Global, Cut-off 0,25% Nd₂O₃-Eq, diluted & within wireframes)



Plan showing Thickness x $\text{Nd}_2\text{O}_3\text{-Eq}\%$ contours
Mineralisation intersected over more than 1,200m strike length



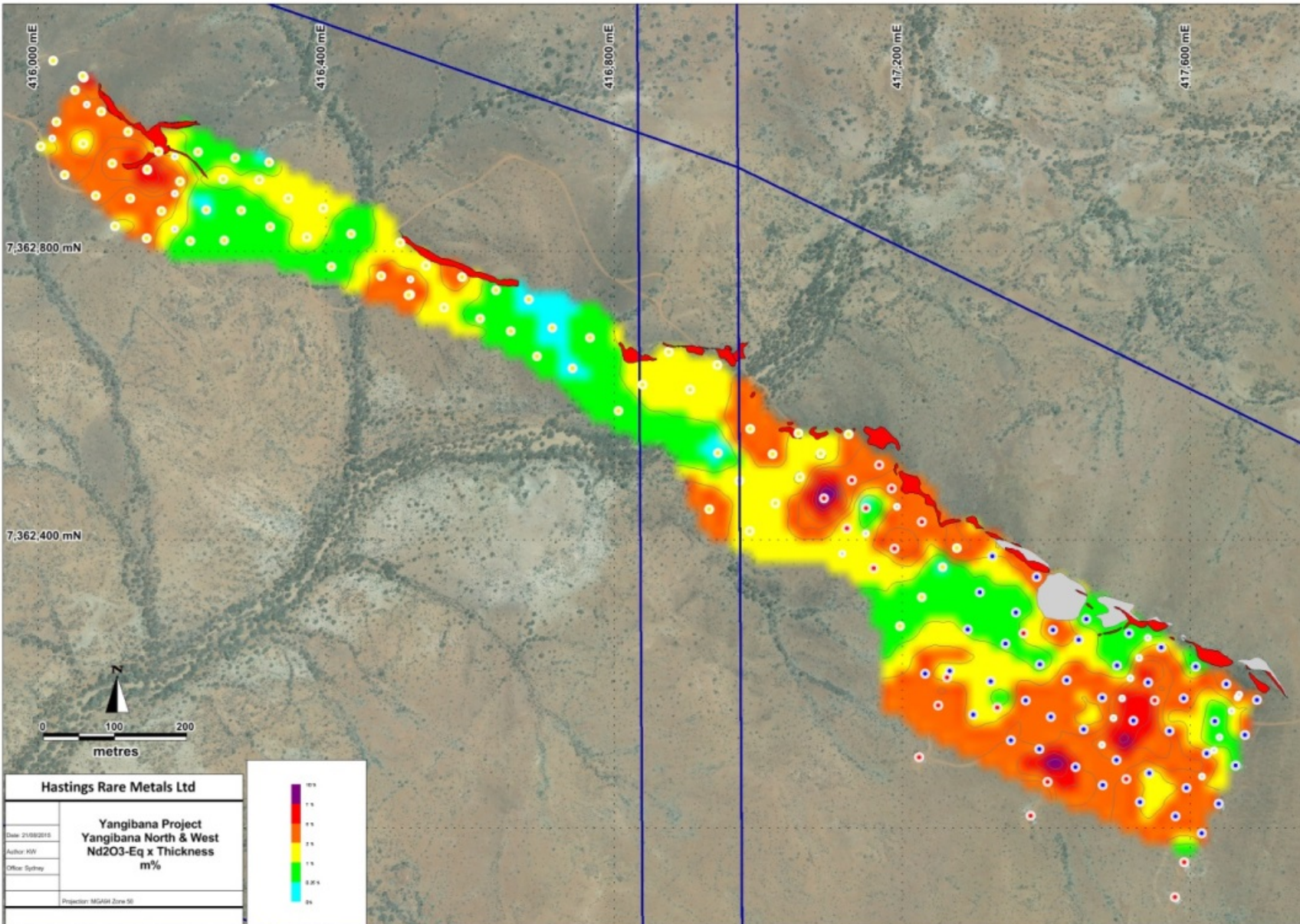


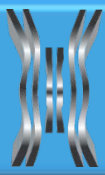
Yangibana West & North

Thickness x $\text{Nd}_2\text{O}_3\text{-Eq}\%$ contours

showing well defined **high grade shoots** within a continuous and extensive Ironstone vein defined by drilling over more than **1,600m** strike length

The mineralised limits of the vein are open in both directions along strike and also in depth





Summary

All Yangibana Deposits drilled to date have significant:

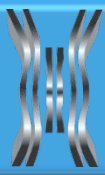
- high grade neodymium, praseodymium, dysprosium and europium Resources
- mineralisation that is open-ended along strike and at depth
- RE Resources are amenable to low cost open pit mining operations

Conclusion

Further similar mineralisation may be expected:

- as extensions to the eight drilled deposits
- known undrilled prospects and
- beneath the extensive outcropping zones between the defined prospects.

Further significant open-pittable resources are anticipated from future drilling programmes

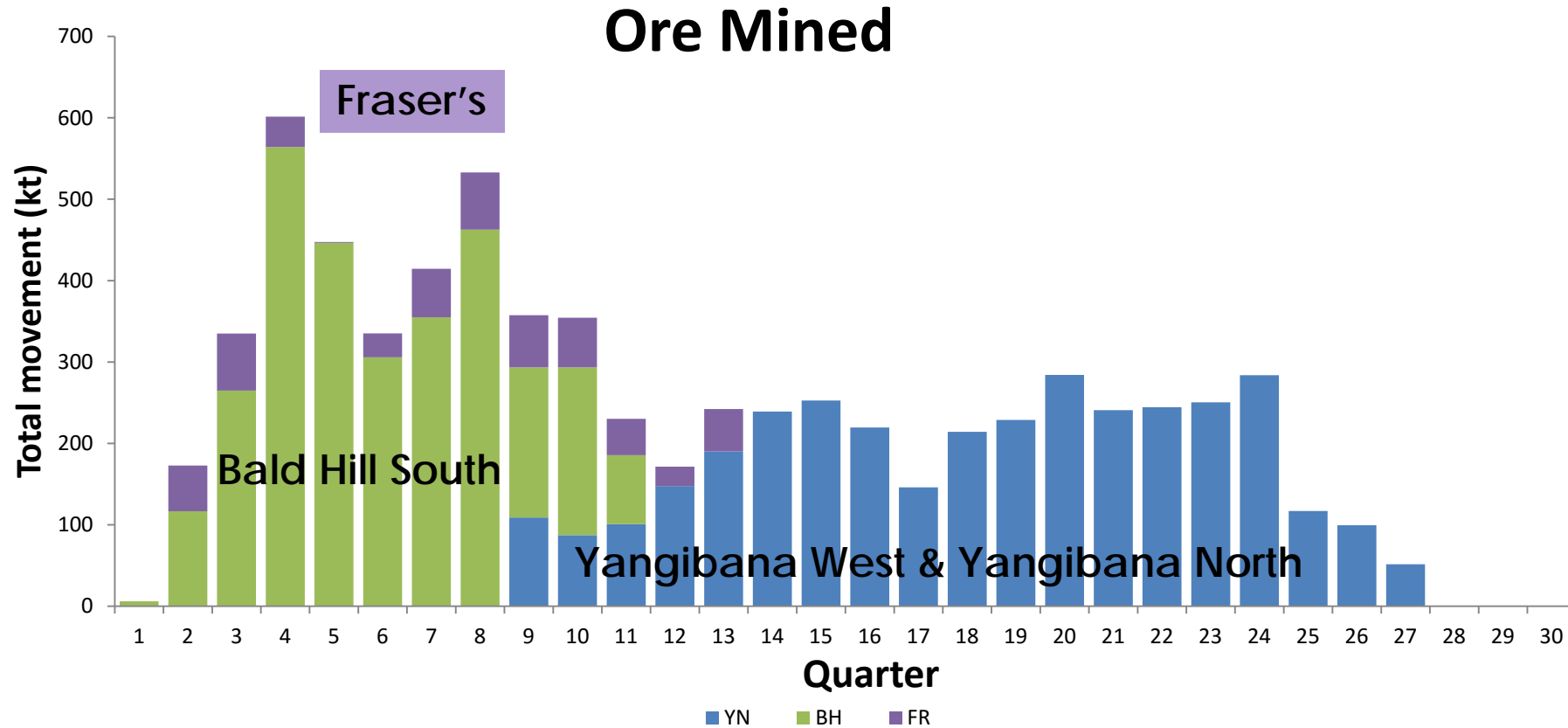
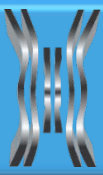


Pit Optimisations: Based on the JORC Indicated Resources, expected metallurgical recoveries and predicted commodity prices, Snowden completed pit optimisation at Bald Hill South, Fraser's, Yangibana West (100% Hastings) and Yangibana North (70% Hastings) deposits

Summary of Optimised Pits

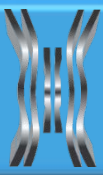
	Bald Hill South	Fraser's	YW-YN	Total
Ore	3.00mt	0.57mt	3.51mt	7.07mt
Waste	18.91mt	11.53mt	35.85mt	66.29mt
Stripping ratio	6.3	20.3	10.2	9.4

- *Almost all Indicated Resources are extracted, indicating that deposits remain economically viable well beyond current planned final pit depths*
- Hence there is scope by additional drilling along strike and at depth to increase Resources amenable to open pitting

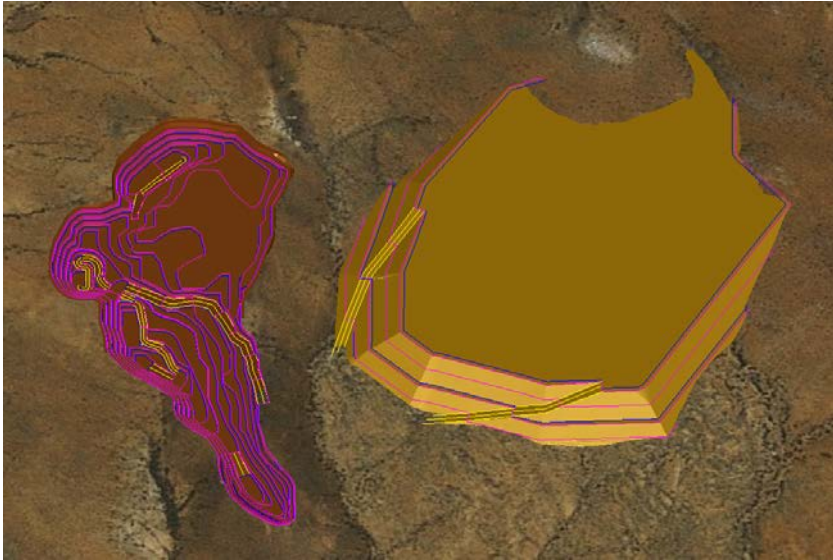


Mine Scheduling: Studies show a *superior financial outcome is generated by commencing mining operations on the Eastern Belt*

Firstly at Bald Hill South & Fraser's prior to mining Yangibana West & Yangibana North



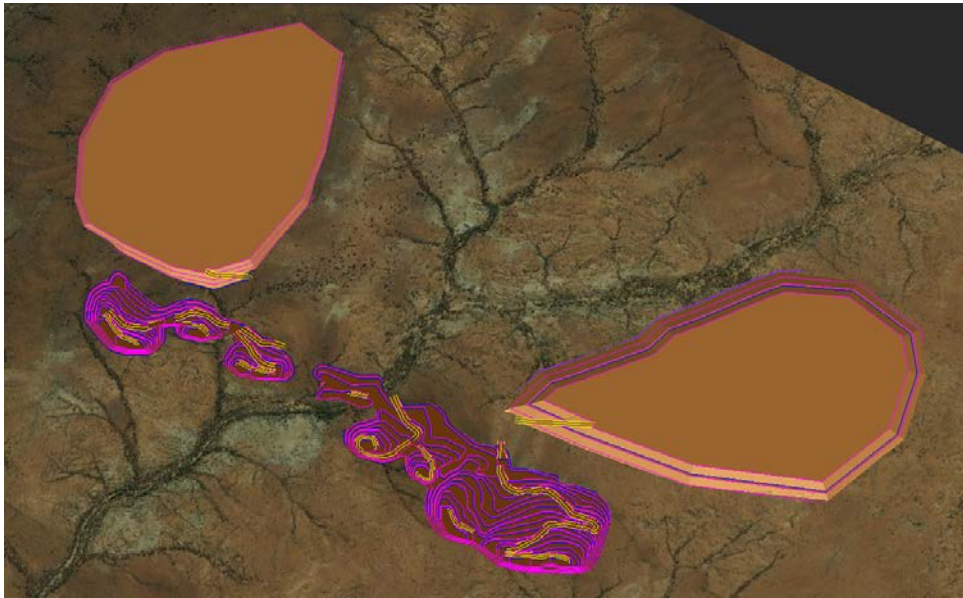
**BALD
HILL
SOUTH
PIT**



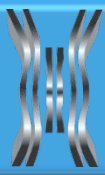
FRASER'S PIT



Optimised pits and associated
waste dump designs:



YANGIBANA WEST – YANGIBANA NORTH PITS



Comminution:

- Standard tests confirm mineralisation is quite friable and significantly different to the host granite

Beneficiation Test Work

- Gravity, magnetics, and flotation techniques all showed promise
- Flotation showing vastly superior results

Hydrometallurgical Test Work

- Caustic cracking having a well documented history in the treatment of monazite-hosted rare earths projects has shown promising results

Refining Test Work

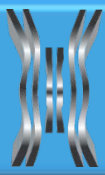
- Scouting tests indicate the main targets, Nd and Pr, can be readily separated from other rare earths

Beneficiation by Flotation: (*Bench scale testing composite drill samples at 80% passing -75micron*)

Eastern Belt Deposits (Composite sample Bald Hill South & Fraser's Deposits): concentrate produced with an **18 times** increase in TREO grade to **20.3% TREO** containing **6.9%Nd₂O₃** (10.5%Nd₂O₃-Eq), at a recovery of **80%** into a mass of **5%** of the original mineralisation

Beneficiation Flowsheet: Rapid kinetics. A simple beneficiation flow sheet rougher float, single cleaner and re-cleaner floats and low capital and operating cost beneficiation plant

Hydrometallurgical Plant: small plant of around 50,000 tonnes per annum required

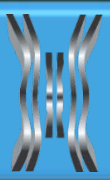


Beneficiation

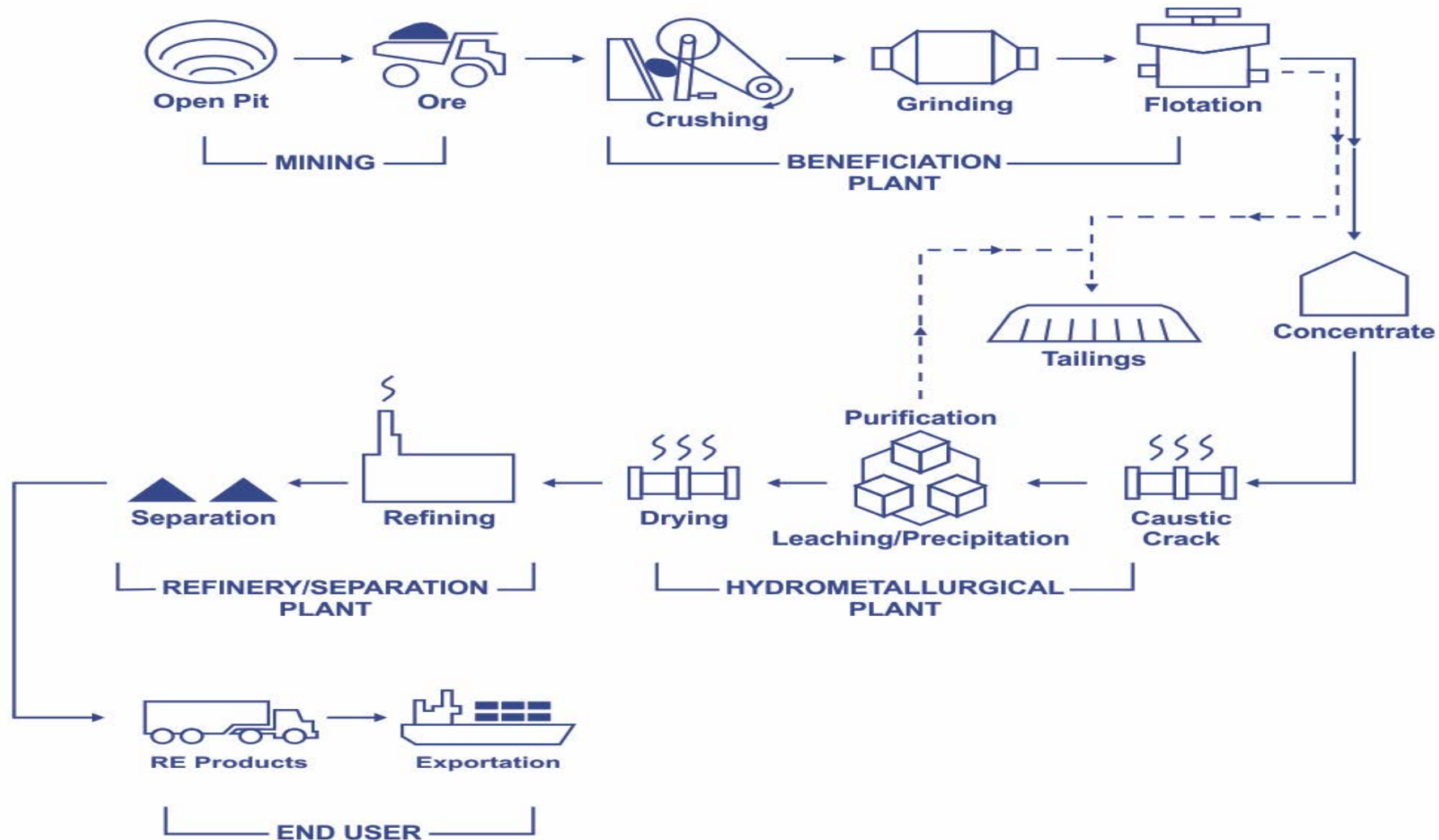


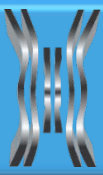
Flotation
technique



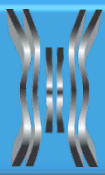


Yangibana Rare Earths Project CONCEPTUAL PROCESSING ROUTE



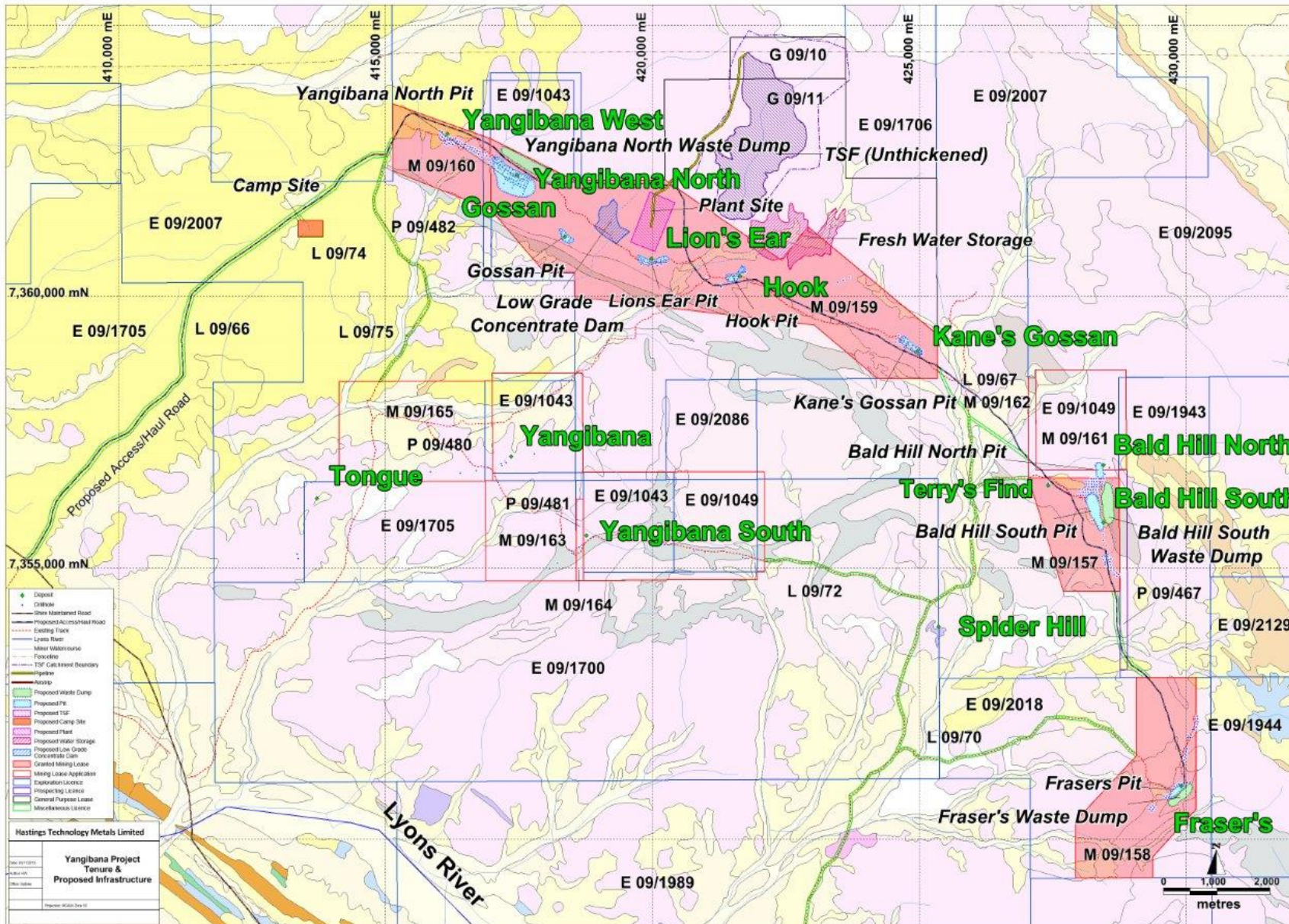
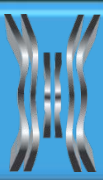


- **Water Resources:** The Company has identified sources of water of potable quality from within existing Mining Leases sufficient to meet the long term requirements of a one million tonne per annum mining operation.
- **Flora and Fauna studies:** Consultants have completed with no issues identified
- **Native Title:** There are no claims over the Yangibana Project



- Solar Power Panels
- Chlor-Alkali Plant

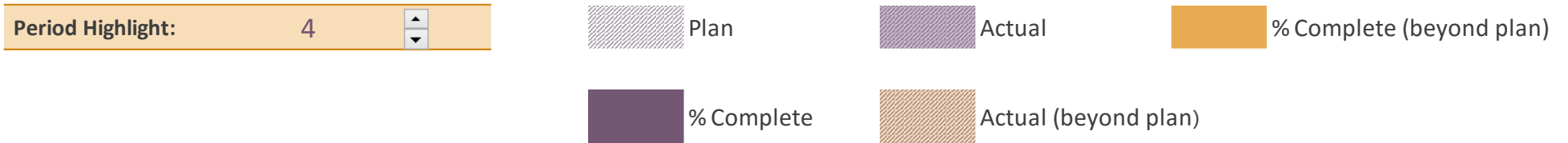




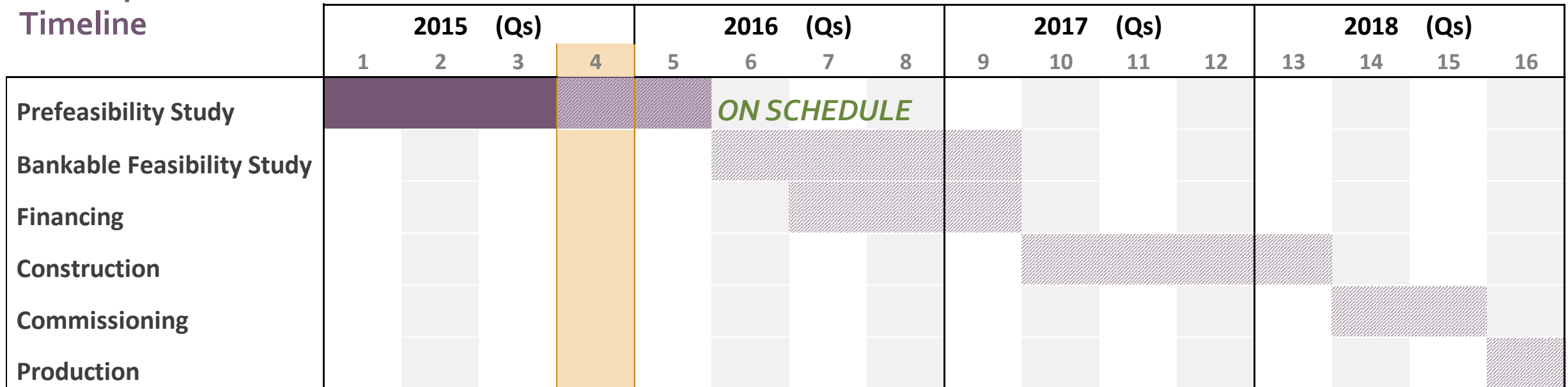
Mining Leases
Granted (shaded in
pink) covering all of
current JORC
Resources

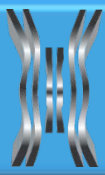
All applications
including
Miscellaneous and
General Purpose
Leases expected to
be granted by
March 2016

*Production now only
requires compliance
with standard
regulatory processes*



Yangibana Project - Development Timeline





Item	Units	Base Case
Plant Throughput	Million tonnes per annum (mtpa)	1.0
Project Life	Years	7.5
Product Value Neodymium	A\$m	2,307
Product Value Praseodymium	A\$m	530
Product Value Dysprosium	A\$m	151
Product Value Europium	A\$m	243
Exchange Rate	AUD:USD	0.75
Capital Cost	A\$m	411
IRR	%	52
NPV at 10% discount rate	A\$m	650-750
Payback after construction completed	Years	1.5

Yangibana Project : Nov 2015 Scoping Study Capital Costs

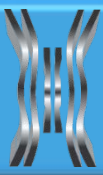
Category	Cost A\$m
Geology and Mining	9
Processing Plant	154
Project Services	10
Accommodation Camp	20
Infrastructure	28
Management/Services	62
Pre-Production Costs	12
Contingency (40%)	116
Total Capital Costs	411

Per Tonne Run of Mine*	Cost A\$m
Net Revenue	468
Operating cost	205
Net Profit	263

* That is per tonne delivered to Treatment Plant

Extrapolated Case

- Based on an additional 8 years production of similar material
- Financial evaluation indicates NPV (10% discount rate) of \$900million to \$1.1billion
- Sound expectation of sufficient resources
 - with +4 million tonnes already delineated in Inferred Resources at Bald Hill South, Fraser's, Yangibana West, Yangibana North, Gossan, Lion's Ear, Hook, Kane's Gossan and Bald Hill North
 - Additional targets identified and drilled at Yangibana, Yangibana South and Terry's Find
 - All resources remain open at depth and along strike
 - Major exploration target at greater depth

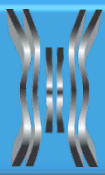


The Macro Economic Case for Nd/Pr/Dy Magnets



★ Yangibana



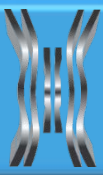


- In 2014 the world wide sales of mobile phones exceeded global population => 7.3B sales
- Est of 0.1g of Nd in each mobile => 730 tons Nd/year

- Wind turbine present one of the most significant potential areas of growth in demand for NdFeB magnets (permanent magnets)
- A 2MW wind turbine contains 340-420kg REE

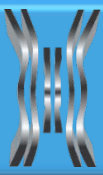


- Each HEV contains about 27kg REE
- In the EU, 117.9% increase in HEV sales for 1Q2015 vs 1Q2014
- Compare this to 36.6% increase in 2014 over 2013

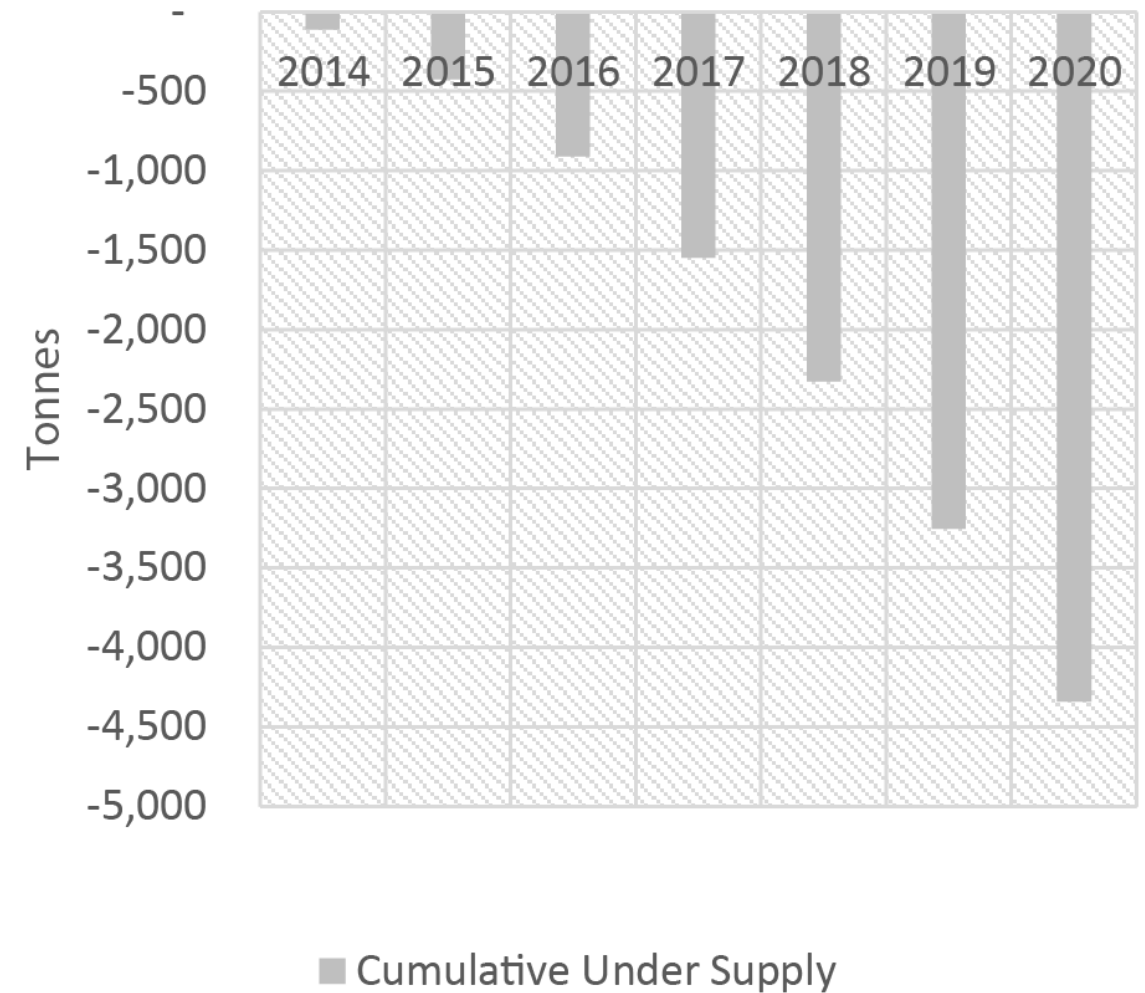
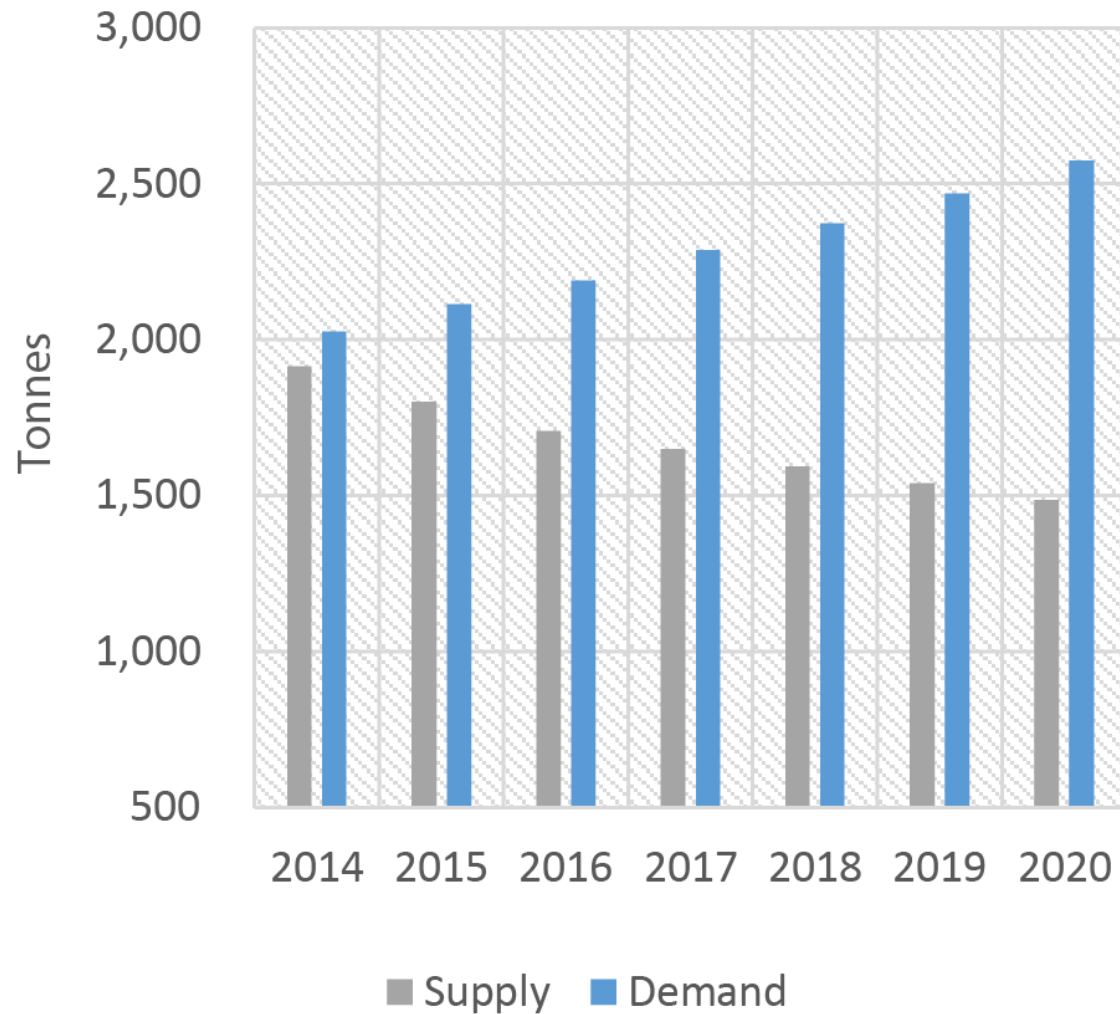


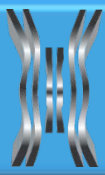
Demand vs Supply - Neodymium Oxide





Demand vs Supply - Dysprosium Oxide



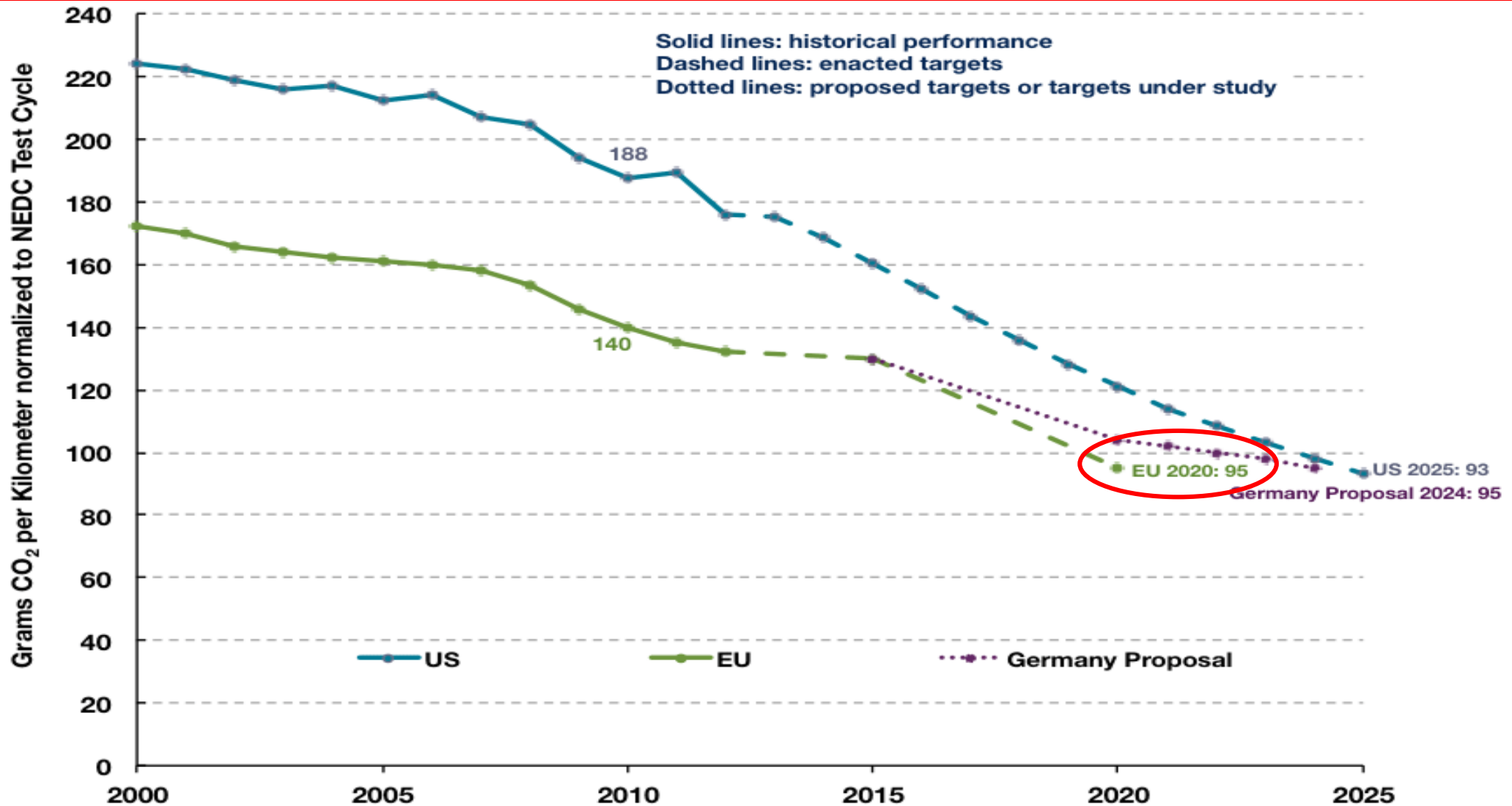
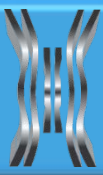


“Internal combustion engine may have died... This is sort of the end game for internal combustion engines to a degree.” – Mike Guy, The Drive Editor

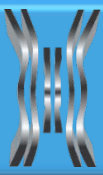
“Risk that diesel manufacturers globally will be tarnished” – Matthew Beasley, Henderson Global Investors.

“The crisis is bad for diesel! The fuel that was encouraged for years as substantially better than petrol when it comes to green house gas emissions is now exposed as potentially worse than thought when it comes to other emissions” – UK Newsnight

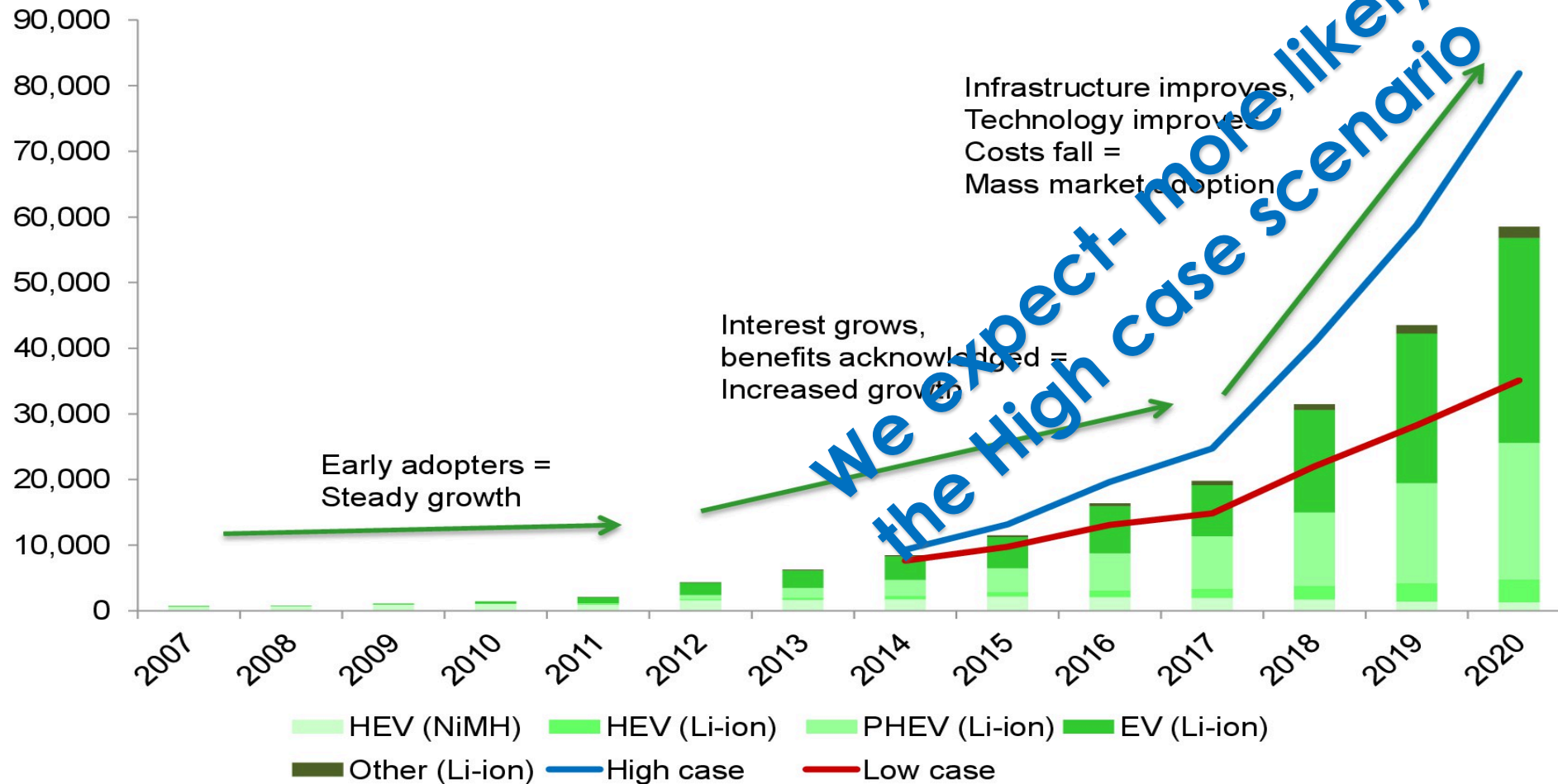
“It will probably kill the market in US... This is going to be a bigger issue going forward & we may see a declining diesel sales in Europe as a result of it and the winners will be the petrol hybrid & maybe the electric cars of the future” - David Bailey, Professor of Industry, Aston University

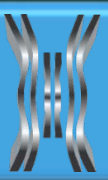


Supporting data can be found at: <http://www.theicct.org/info-tools/global-passenger-vehicle-standards>

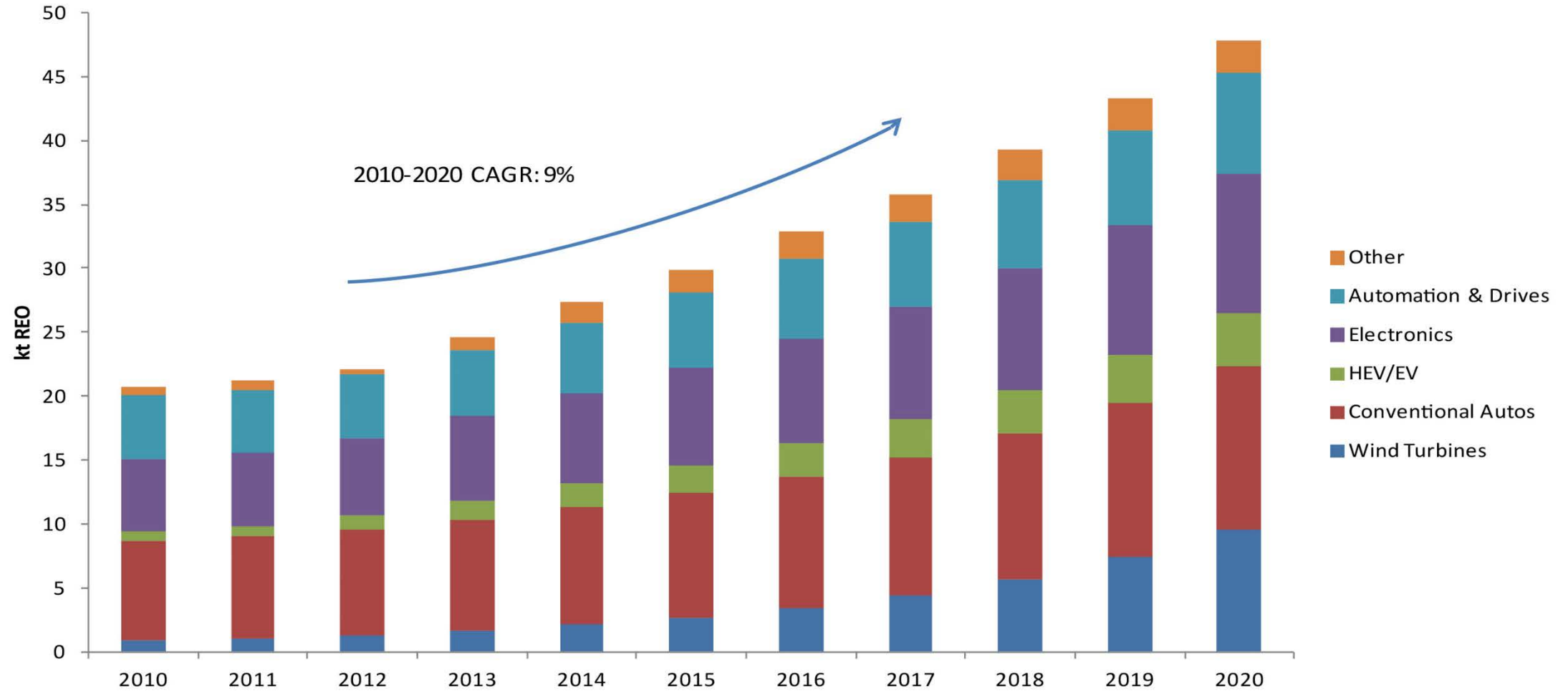


Forecast electric vehicle sales by type, by battery capacity (MWh)





RE market outlook – green technology driving NdPr demand growth



Roskills Intel



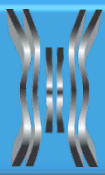
- Carbon emissions targets imposed by EU & US governments effective 2020
- Green technology driving NdPr demand growth

United Nations' "COP21" climate summit in Paris (Dec 2015) - likely to be a landmark event that starts to shut the door on parts of the fossil industry. "It is a non-exchangeable, one way ticket to a low carbon economy".

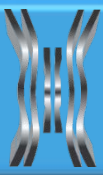
China is fully on board – will introduce its own emissions trading scheme in 2017

- VW scandal - ramifications to the fate of the internal combustion engines
- APPLE to ship electric cars by 2019

"The impact on electric vehicles is significant. If the world's most valuable company were to make a car, we strongly believe it will be an all electric, battery-powered vehicle. Having a company with Apple's resources and technical expertise throw its weight behind EVs could accelerate development and consumer adoption." **WSJ**



1. High grade, neodymium rich beneficiated concentrate
2. Low cost, simple flotation via open pit mining
3. Granted Mining leases free of Native title claims
4. NPV_{10} A\$650 - 750m (7 years), IRR 52% with payback of 1.5 years
5. Australia: availability of skilled services; & AAA sovereign risk rating
6. An unstoppable clean & green revolution



HASTINGS
Technology Metals Limited

THANK YOU



HASTINGS
Technology Metals Limited

[www. hastingstechmetals,.com](http://www.hastingstechmetals,.com)

★ Yangibana