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#### **Board**

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# NINE (9) MINING LEASES COVERING 48 SQ KM NOW GRANTED AT YANGIBANA PROJECT

#### **HIGHLIGHTS**

- Five (5) additional Mining Leases (MLs) granted at Yangibana
- These MLs cover resources and targets at Bald Hill North, Yangibana and Yangibana South
- In total, nine (9) MLs covering 48 sq km have been granted, including all JORC resources, extensions to these resources, and targets previously drilled
- All granted MLs are free of Native Title claims
- Recent site assessments identify additional targets for drilling

#### **SUMMARY**

The Board of Hastings Technology Metals Limited (ASX:HAS) (Hastings or the Company) is pleased to announce that the remaining five (5) Mining Leases (MLs) in the Yangibana Project area have been granted.

These five (5) MLs cover defined JORC resources at Bald Hill North, and drilled targets at Yangibana and Yangibana South deposits that have yet to have JORC resources defined. In addition the new MLs cover potential extensions to each of these deposits that warrant further exploration.

Hastings now holds nine (9) MLs within the overall Yangibana Project area, with six (6) held 100% by the Company covering 16.6 sq km and three (3) in a joint venture in which Hastings holds 70% interest covering 31.2 sq km.

All granted MLs are free of Native Title claims.

The Company completed site assessments in December 2015 and January 2016 and has identified additional targets that warrant further evaluation and drilling.



#### YANGIBANA PROJECT

#### **Mining Leases Granted**

Hastings Technology Metals Limited has received notification that the remaining five Mining Leases (Ms09/161-165 inclusive) in the Yangibana Project area (Figure 1) have been granted.

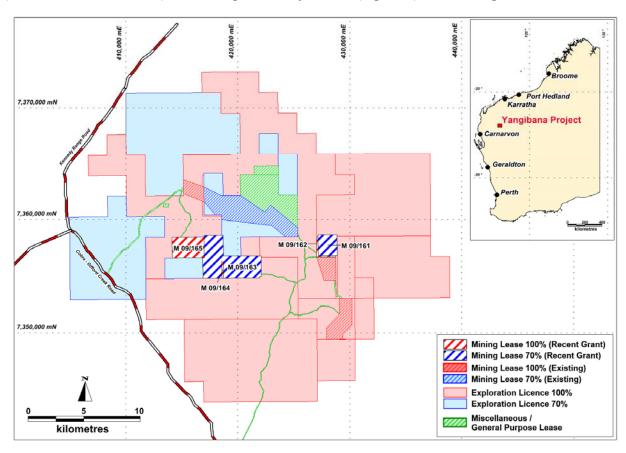


Figure 1 – Yangibana Project – Granted Mining Leases

In Western Australia, Mining Leases provide title for a period of 21 years from grant with the option to renew for a further period of 21 years. In order to operate on a Mining Lease the Company must obtain several different types of approvals –

- approval of a mining proposal that includes a mine rehabilitation and closure plan (DMP -Environment);
- approval of native vegetation clearing permit (DMP Environment);
- approval of a Project Management Plan (DMP Resources Safety);
- Radiation Management Plan (DMP Resources Safety);
- prescribed premises licence (Department of Environment Regulation);
- water licences to drill and construct bores and take water (Department of Water); and
- various appointments required by DMP Safety e.g. Mine Manager.



Other approvals that may be required are from the local council and may include health matters relating to the accommodation camp. All approval, permits, and licences require annual reporting to the relevant government department as well as an annual environment reports, and mining rehabilitation fund reports.

The five (5) new MLs cover defined JORC resources, drilled targets and potential extensions to each of these deposits that warrant further exploration as indicated below:-

- M09/161 includes the Bald Hill North JORC Inferred Resource of 102,000 tonnes at 0.43%TREO with 0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq and the potential northern extension of this mineralisation;
- M09/162 includes the northern portion of the Bald Hill South JORC resource comprising Indicated Resources of 51,000 tonnes at 0.78%TREO with 0.45%Nd<sub>2</sub>O<sub>3</sub>-Eq and Inferred Resources of 108,000 tonnes at 0.83%TREO with 0.49%Nd<sub>2</sub>O<sub>3</sub>-Eq;
- M09/163 includes the eastern portion of the Yangibana Prospect where recent RC drilling (ASX announcement of 24<sup>th</sup> September 2015) returned a best intersection of 1m at 1.39%TREO with 0.98%Nd<sub>2</sub>O<sub>3</sub>-Eq, and the majority of the Yangibana South Prospect where recent RC drilling returned best intersections of 3m at 1.65%TREO with 1.06%Nd<sub>2</sub>O<sub>3</sub>-Eq and 1m at 0.58%TREO with 0.43%Nd<sub>2</sub>O<sub>3</sub>-Eq;
- M09/164 covers a small sliver of the Yangibana South Prospect where previous RC drilling returned a best intersection of 1m at 0.49%TREO with 0.32%Nd<sub>2</sub>O<sub>3</sub>-Eq; and
- M09/165 includes the western extension of the Yangibana Prospect where recent RC drilling has returned best intersections of 4m at 0.94%TREO with 0.60%Nd<sub>2</sub>O<sub>3</sub>-Eq and 5m at 0.93%TREO with 0.69%Nd<sub>2</sub>O<sub>3</sub>-Eq.

With all applications now granted, Hastings now holds interests in a total of nine (9) MLs covering 47.8 sq km within the overall Yangibana Project area as shown in Figure 1. Six (6) of the MLs, covering 16.6 sq km, are held 100% by the Company with three (3) MLs, covering 31.2 sq km, held in a joint venture in which Hastings holds a 70% interest and is the manager.

All JORC resources (currently comprising 8.13 million tonnes at 1.11% TREO in Indicated Resources and 4.24 million tonnes at 1.09% TREO in Inferred Resources), plus deposits tested by previous drilling, plus potential extensions to these are now held under ML.

All granted MLs are free of Native Title claims.

#### **New Targets**

During December 2015 and January 2016 the Company carried out site assessments at a number of targets within the southern portion of the overall project area. Numerous ironstone, quartz and carbonatite lenses were assessed and rock chip samples taken for analysis. A number of new targets have been identified for further evaluation.

Assay results from these sampling programmes are provided in Appendix 1. Samples returning  $Nd_2O_3$ -Eq grades exceeding 0.25% are of immediate interest as this is the cut-off grade for the Yangibana resources. The best results were obtained from outcrops:-

• to the west-southwest of Fraser's deposit, within E09/1989, including 5.28%TREO with 1.51%Nd<sub>2</sub>O<sub>3</sub>-Eq, 4.02%TREO with 1.50%Nd<sub>2</sub>O<sub>3</sub>-Eq and 3.60%TREO with 1.93%Nd<sub>2</sub>O<sub>3</sub>-Eq; and



to the northwest of Spider Hill, within E09/1700, including 2.00%TREO with 1.05%Nd<sub>2</sub>O<sub>3</sub>-Eq and 1.90%TREO with 1.10%Nd<sub>2</sub>O<sub>3</sub>-Eq.

These rock chip sample analyses indicate potential that warrants further evaluation.

Figure 2 provides data on all rock chip samples taken by Hastings over the Yangibana Project and illustrates the comparison of the recent sample results with the overall area.

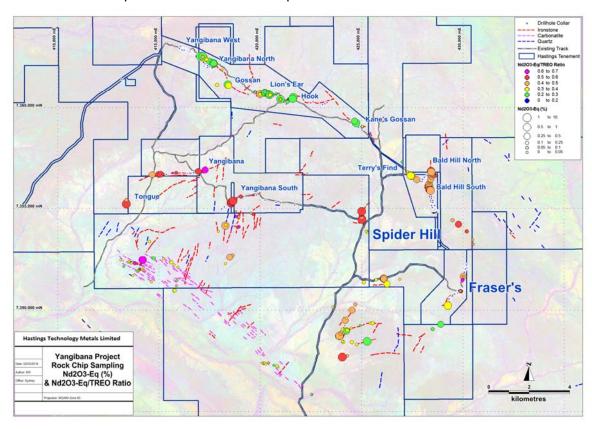


Figure 2 – Yangibana Project – Rock Chip Sampling Results

#### **TERMINOLOGY USED IN THIS REPORT**

**TREO** is the sum of the oxides of the heavy rare earth elements (HREO) and the light rare earth elements (LREO).

**HREO** is the sum of the oxides of the heavy rare earth elements europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb), lutetium (Lu), and yttrium (Y).

**CREO** is the sum of the oxides of neodymium (Nd), europium (Eu), terbium (Tb), dysprosium (Dy), and yttrium (Y) that were classified by the US Department of Energy in 2011 to be in critical short supply in the foreseeable future.

**LREO** is the sum of the oxides of the light rare earth elements lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), and samarium (Sm).

#### For further information please contact:

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#### **About Hastings Technology Metals**

- Hastings Technology Metals is a leading Australian rare earths company, with two rare earths projects hosting JORC-compliant resources in Western Australia.
- The Yangibana Project hosts JORC Indicated and Inferred Resources totalling 12.36 million tonnes at 1.10% TREO, including 0.44% Nd<sub>2</sub>O<sub>3</sub>-Eq (comprising 8.13 million tonnes at 1.11% TREO Indicated Resources and 4.24 million tonnes at 1.09% TREO in Inferred Resources).
- The Brockman deposit contains JORC Indicated and Inferred Resources totalling 41.4 million tonnes (comprising 32.3mt Indicated Resources and 9.1mt Inferred Resources) at 0.21% TREO, including 0.18% HREO, plus 0.36% Nb<sub>2</sub>O<sub>5</sub> and 0.90% ZrO<sub>2</sub>.
- Rare earths are critical to a wide variety of current and new technologies, including smart phones, hybrid cars, wind turbines and energy efficient light bulbs.
- The Company aims to capitalise on the strong demand for critical rare earths created by expanding new technologies. In November 2015 Snowden completed an updated Scoping Study of the Yangibana Project that confirmed the economic viability of the Project and Hastings is advancing work on a Pre-Feasibility Study.

#### Competent Persons' Statement

The information in this announcement 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 announcement 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 announcement 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 announcement of the matters based on his information in the form and context in which it appears.

### **Neodymium Equivalence**

Hastings is concentrating its efforts on the recovery of four important rare earths – neodymium, praseodymium, dysprosium and europium. To portray the grade of the mineralisation Hastings has established neodymium-equivalent figures where:-

Where  $Nd_2O_3$ -Eq =

 $((Nd_2O_3grade * ((Pr_2O_3price/Nd_2O_3price)) + (Dy_2O_3grade * (Dy_2O_3price/Nd_2O_3price)) + (Eu_2O_3grade * (Eu_2O_3price/Nd_2O_3price)))$ 

Such that  $Nd_2O_3 Eq = Nd_2O_3 + (1.1176 \times Pr_2O_3) + (6.4706 \times Dy_2O_3) + (7.4706 \times Eu_2O_3)$ 



Appendix 1 – Recent Rock Chip Sample Assays

Prospect	Sample	%TREO	%Nd2O3-Eq
Fraser's Track	141005	0.67	0.31
Fraser's Track	141006	0.22	0.08
Fraser's Track	141007	0.64	0.22
Spider Hill	141008	0.03	0.01
Spider Hill	141009	2.00	1.05
Spider Hill	141010	0.33	0.14
Spider Hill	141011	0.42	0.23
Spider Hill	141012	0.02	0.01
Spider Hill	141013	1.90	1.10
Terry's Find	141014	0.56	0.26
Terry's Find	141015	0.11	0.04
Terry's Find	141016	0.01	0.00
Terry's Find	141069	0.02	0.01
Northwestern Zone	141070	0.16	0.04
Lion's Ear	141073	0.07	0.02
Lion's Ear	141074	0.05	0.01
Lion's Ear	141075	0.05	0.01
Lion's Ear	141076	0.59	0.23
Bald Hill Lineament	141078	0.35	0.13
Southern Zone	141079	0.38	0.17
Southern Zone	141080	0.57	0.25
Southern Zone	141081	0.07	0.02
Fraser's Southwest	FSW001	4.02	1.50
Fraser's Southwest	FSW002	1.66	0.71
Fraser's Southwest	FSW003	0.47	0.21
Fraser's Southwest	FSW004	0.38	0.17
Fraser's Southwest	FSW005	0.61	0.22
Fraser's Southwest	FSW006	1.42	0.41
Fraser's Southwest	FSW007	0.37	0.12
Fraser's Southwest	FSW008	0.08	0.02
Fraser's Southwest	FSW009	0.17	0.05
Fraser's Southwest	FSW010	0.1	0.03
Fraser's Southwest	FSW011	0.43	0.15
Fraser's Southwest	FSW012	5.28	1.51
Fraser's Southwest	FSW013	0.29	0.09
Fraser's Southwest	FSW014	0.61	0.21
Fraser's Southwest	FSW015	0.55	0.17
Fraser's Southwest	FSW016	0.12	0.04
Fraser's Southwest	FSW017	0.51	0.23
Fraser's Southwest	FSW018	0.12	0.05
Fraser's Southwest	FSW019	3.60	1.93
Fraser's Southwest	FSW020	0.93	0.18
Fraser's Southwest	FSW021	2.25	0.46
Fraser's Southwest	FSW022	0.83	0.21
Fraser's Southwest	FSW023	0.81	0.29
Fraser's Southwest	FSW024	1.94	0.65
Fraser's Southwest	FSW025	0.03	0.01
Yangibana South Ext	Y001	0.18	0.07



# JORC Code, 2012 Edition - Table 1

# Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Rock chip samples of 1-2kg were collected from a number of targets in the southern portion of the Yangibana Project area. These samples were submitted to the laboratory for analysis for rare earths, rare metals, U, Th and a range of rockforming elements. The samples are not considered to be representative of the target, but provide an indication of potential and provide data regarding the likely host mineral to the contained rare earths.</li> <li>Numerous previous rock chip sampling programmes have been undertaken by previous explorers and by Hastings.</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• N/A
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Each rock chip sample is given a sample number in the field.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	• N/A



Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	The samples are not considered to be representative of the target tested.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (egstandards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company	<ul> <li>All geological logging and sampling information is completed firstly into field notebooks before being transferred to Microsoft Excel spreadsheets.</li> <li>No adjustments of assay data are considered necessary.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>A Garmin GPSMap62 hand-held GPS is used to define the location of the rock chip samples.</li> <li>Grid system used is MGA 94 (Zone 50)</li> <li>Topographic control is based on the detailed 1m topographic survey undertaken by Hyvista Corporation in 2014.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	Sample spacing is irregular based on outcrop.



Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	• N/A
Sample security	The measures taken to ensure sample security.	<ul> <li>The chain of custody is managed by the project geologist who places calico sample bags in polyweave sacks. Up to 10 calico sample bags are placed in each sack. Each sack is clearly labelled with:         <ul> <li>Hastings Rare Metals Ltd</li> <li>Address of laboratory</li> <li>Sample range</li> </ul> </li> <li>Samples were delivered by Hastings personnel to the Nexus Logistics base in order to be loaded on the next available truck for delivery to Genalysis. The freight provider delivers the samples directly to the laboratory. Detailed records are kept of all samples that are dispatched, including details of chain of custody.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audit of sampling data has been completed to date.



# Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The rock chip sampling was carried out within M09/158, E09/1700, E09/1989, E09/1705 and E09/2007.</li> <li>All Yangibana tenements are in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Rock chip sampling programmes have been carried out by a number of previous explorers. Although in themselves the assays can only be considered to be indicative of potential, they do provide useful data that can identify the host mineral to the rare earths.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Yangibana ironstones within the Yangibana Project are part of an extensive REE-mineralised system associated with the Gifford Creek Carbonatite Complex. The lenses have a total strike length of at least 12km.</li> <li>These ironstone lenses have been explored previously to limited degree for base metals, manganese, uranium, diamonds and rare earths.</li> <li>The ironstones are considered by GSWA to be coeval with the numerous carbonatite sills that occur within Hastings tenements, or at least part of the same magmatic/hydrothermal system.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	• N/A
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high	N/A.



Criteria	JORC Code explanation	Commentary
	<ul> <li>grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	• N/A.
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Appropriate maps are available in the body of this ASX announcement.</li> </ul>
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>Reporting of results in this report is considered balanced.</li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Geological mapping has continued in the vicinity of the rock chip sampling as the programme proceeds.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions, depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	The Company is currently finalising the Pre- Feasibility Study for the Yangibana Project.