

30 October 2020

Hasting's Technology Metals Limited

ABN 43 122 911 399

ASX Code: HAS

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Board

Charles Lew (Executive Chairman)

Guy Robertson (Finance Director)

Jean Claude Steinmetz (Non-Exec Director)

Neil Hackett (Non-Exec Director and Company Secretary)

Mal Randall (Non-Exec Director)

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SEPTEMBER 2020 QUARTERLY REPORT

- Successful capital raising of \$20.7 million, with \$3.0 million raised from a fully underwritten Share Purchase Plan (SPP) in September and a further \$17.7 million in a Placement finalised by early October.
- Strong interest from existing shareholders and new institutional and sophisticated investors resulted in the Placement being oversubscribed.
- Outstanding rare earth oxide grades received from 29 out of 30 drill holes from Fraser's North and South, part of the Yangibana Project.
- High-grade and shallow intersections from Fraser's North and South drilling include:
 - 3m @ 7.28% TREO from 8m
 - including 1m @ 18.57% TREO from 8m;
 - 8m @ 3.51% TREO from 31m;
 - 2m @ 1.67% TREO from 31m;
 - 6m @ 1.42% TREO from 8m; and
 - 4m @ 1.36% TREO from 17m.
- Highest-grade intersections occur south of the current Fraser's Open Pit (Mineral Resource of 1.32 million tonnes grading 1.35% TREO including 0.56% Nd₂O₃+Pr₆O₁₁¹) and extend mineralisation up to 450m in a south-easterly direction.
- Drill results of Fraser's North to date show Nd²O³+Pr⁶O¹¹ as a % of TREO to be as elevated as 58%.
- Drilling results from Fraser's North now confirm contiguous new mineralisation up to 250m from the Fraser's Open Pit limit.
- Project development has accelerated following the capital raising, with a priority on assessing Yangibana process plant decoupling opportunities.

Australia's next rare earths producer, Hastings Technology Metals Limited (**ASX: HAS**) ("**Hastings**" or the "**Company**") is pleased to report on activities carried out during the quarter to 30 September 2020.



Health and Safety

In the September quarter, zero lost time injuries were recorded with the Company-wide lost time injury (LTI) free status extending to 788 days.

COVID-19 systems and protocols continue to be in place to provide support to our employees at Yangibana and in the Perth and Singapore offices.

Regulatory appointments relating to exploration activities have been made to ensure the 2020 exploration drilling program is conducted in the correct manner.

Personal hygiene dust monitoring as well as environmental monitoring conducted during the drilling program indicated very low levels of exposure to drilling crews.

A risk assessment has been developed for the proposed hydrometallurgical plant location specifically in relation to the impact on identified stakeholders. A baseline site radiation survey is planned for early November and will form part of the overall radiation impact assessment.

Environment

Annual compliance reporting has been completed for various environmental licences including:

- Land tenure and Mine Rehabilitation Fund
- Mining proposal (early works)
- 5C licence
- Ministerial Statement 1110

The Department of Mines, Industry Regulation and Safety (DMIRS) undertook a site audit during the quarter. A number of improvement actions were identified and while the audit report is still pending, Hastings has proactively begun to implement suggestions by DMIRS officers.

Environmental studies are well underway for revisions to the Yangibana Project including:

- Yangibana proposed site layout revisions; and
- Decoupling of the process plant and relocating the hydrometallurgical process to a coastal location.

A thorough stakeholder engagement program has commenced with consultation extending into the December 2020 quarter.

2020 Resource Definition Program

During the quarter, Hastings announced drill results above the resource cut-off grade for 29 out of 30 holes drilled, including a large number of drill holes where reported mineralised intercepts were above the average mineral resource grade for the areas to the north and south of the current Fraser's Open Pit proposed location.

This drilling is a key part of the Company's strategy to grow the 8km-long Fraser's-Simon's Find-Bald Hill trend of mineralisation (Fig. 1), which is critical to the start-up and first years of Yangibana's cashflow. A Mineral Resource upgrade is being targeted for the end of this year, incorporating results from drilling conducted since June.





Figure 1: Primary targets for the 2020 drill program.

The potential of Fraser's North is emerging as a coherent zone of ironstone-hosted rare earths mineralisation that trends north into Simon's Find and further along into the Bald Hill deposit. Results to date show $Nd^2O^3+Pr^6O^{11}$ as a % of TREO to be as elevated as 58% (see ASX announcement dated 17 September 2020: Excellent Drill Results High Grade Ext to Fraser's Open Pit), the highest of any known rare earths project globally that is coming to production.





Figure 2: Exploration drilling results from Fraser's North and results received.

The drilling at Fraser's South intercepted consistently above cut-off grade mineralisation targeting outcropping ironstone positions. Results to date have defined a consistent trend in both the strike and orientation of the mineralisation as well as the down-dip component. Further follow-up work is required to close off mineralisation in all directions.

As part of this drilling program, some of the best TREO results ever received from the Yangibana project (since drilling first began in 2014) were recorded in the area immediately south of the proposed Fraser's Open Pit.



Hastings remains confident of extending this mineralised trend in a south-easterly direction based on surface mapping and points to the potential of further development of the mineral resource within the Fraser's South corridor.



Figure 3: Exploration drilling results from Fraser's South and results received.



Metallurgy

Hastings' continuous search for improvement in project beneficiation has yielded favourable outcomes.

A planned test program was completed for development of an alternative reagent collector to mitigate the risk of relying on a single source. The program has successfully developed a new collector with the same performance and equivalent reagents cost as the one identified in the DFS.

Detailed investigations were completed on the heating requirement for the flotation circuit, which resulted in a much-improved understanding on the effect of temperature and water quality on the flotation performance. Results confirmed that the heating requirement can be eliminated in rougher flotation, therefore removing or reducing power requirements by up to 30%.

Flotation Cells

Work was done to investigate the potential opportunities with regards to new flotation technology. This recently developed technology is specially designed to improve the flotation rate of ultra-fine particles, leading to reduced capital expenditure (CAPEX) in the flotation circuit, improvement in the flotation rate for fines and/or reduction in the dose rate of reagents. Test work is scheduled for the December 2020 Quarter.

Reserve Upgrading

An additional variability test work program has been organised in anticipation of the planned upgrade to mining reserves. The initial beneficiation variability test work for the samples selected from the Simon's Find deposit has produced very encouraging results. The test work is ongoing and targeted for completion early in calendar 2021.

Ore Sorting

Hastings has completed the development of a conceptual process flowsheet and draft process design criteria. A variability test program is being scheduled to finalise the process design early in calendar 2021.

Ore sorting is now a key part of the changes made to the project and is fully funded within the CAPEX changes recently announced (see ASX announcement dated 29 July 2020: Yangibana Project Capital Cost Reduced by A\$68m or 13%).

Impurities Removal for MREC

During the quarter Hastings resumed the planned test work for improving the quality of final product (MREC) by optimising the precipitation conditions to reduce the sulphate and aluminium levels in the MREC. Test work continues and is targeted for completion in the December 2020 quarter.



Project Development Update

Engineering continues to progress on multiple work fronts in support of the process plant decoupling project. At Yangibana, work has focused around site optimisation to deliver a more compact site layout (which has long-term benefits in operational efficiency). These efforts have included the following activities:

- Tailings storage facility (TSF) relocation Hastings's geotechnical consultants at GHD have progressed the valley impoundment concept and delivered high-level embankment designs to allow associated permitting and geotechnical planning to progress;
- Process plant relocation the location has been moved 500m to the east to be closer to Yangibana's Eastern Belt mineral resources;
- Camp relocation a site has been selected and proposals sought for conceptual layouts for a location within 2.5km of the process plant;
- Access road realignment a revised alignment for the access road has been completed with considerable CAPEX savings in distance and reduction in the number of engineered creek crossings from 94 to 17; and
- Airstrip relocation new proposed airstrip within the previous TSF footprint to brings it within 2.5km of the process plant and camp areas.

Work on the hydrometallurgical plant relocation study has progressed towards identifying and securing a suitable site that provides access to the required services. In addition, work has continued on the hydrometallurgical plant's associated engineered packages including:

- Kiln and scrubber engineering the detailed engineering for the scrubber package has been completed with the review process from the Hastings processing team underway;
- Site locations discussions continue with Government agencies DevelopmentWA and the Department of Jobs, Training, Science and Innovation (JTSI) around several locations where conditional approval has been granted. Once discussions with third-party service providers are finalised, site layouts will be developed;
- Concentrate and tailings logistics a logistics study was completed by QUBE;
- Water discussions continue with the Water Corporation around access to a suitable water supply. Water is available as either a direct potable supply or from paleo aquifers, which would require further reverse osmosis treatment to upgrade it for use in the hydrometallurgical plant;
- Gas Australian Gas Infrastructure Group (AGIG) has been engaged to provide technical input into the required gas lateral connection; and
- Power proposals for a connection and supply costs are being developed with Horizon Power.

With the increasing project workload, DRA Global Ltd has been re-engaged. DRA's involvement will increase over coming months as the Yangibana project moves towards financial close and the proposed commencement of construction in the June 2021 quarter.



Commercial

In March 2018, Hastings signed an offtake MOU with Thyssenkrupp Raw Materials, a German raw materials trading company with a global marketing and sales footprint. This MOU is now being converted into a contract and drafting has commenced. A long-term offtake contract with another German Tier 1 automotive components supplier is also undergoing late-stage contract drafting. Both contracts are targeted for signing before the end of calendar 2020. The combined volume from these offtake contracts will further support the Yangibana project finance loan terms.

In line with Hastings' vision to become Australia's next rare earths producer to enter production, we continue dialogue with potential customers in Japan and China on opportunities for the Company to widen the geographic spread of our high-quality customer base.

On the back of the Company's offtake contracts, Hastings has begun to work with customers to identify suitable separators for Yangibana's MREC. Separation plants for rare earth oxides are based in the US, eastern Europe and South East Asia. Most of these plants have idle separation capacity, which confirms Hastings' original strategy to produce an MREC (to maintain a compact CAPEX quantum) to feed into these separation plants as a sound and viable business plan while minimising the Company's operational and financial risk as a new non-China producer of rare earths starting up in 2023. Yangibana's advantage is its unique ore body, which has one of the highest NdPr-to-TREO ratios in the world. Recent grade-control drilling further validated this advantageous position and provides Hastings with confidence as we progress discussion with a diversified list of customers.

Project Finance

Hastings has been working extensively with Metso-Outotec, a Tier 1 globally recognised mining process plant equipment manufacturer based in Finland, to supply a substantial value of equipment primarily for Yangibana's beneficiation plant. This equipment purchase can attract export credit financing support from Finnvera Oyj, the Finnish state-owned export credit agency. Finnvera will join the Northern Australia Infrastructure Facility (NAIF) and the German government's untied loan guarantee scheme (UFK) in a tri-partite, non-recourse senior debt facility. These government-supported loan schemes have rigorous criteria and work is progressing to enable Hastings to meet the required criteria. As a result of the increased and favourable investor attention on the rare earths sector, Hastings has also engaged with commercial project finance lenders to test the debt market for pricing and appetite. A combination of government and commercial loans will serve to optimise the over tenure of Hastings' loan commitments and the terms attached to it.

The Yangibana drill program that commenced in June is due to be completed in November. Initial drill results have been supportive of Hastings' belief it can add significantly to Yangibana's existing 13-year mine life. A revised mine schedule is targeted to be completed by the end of calendar 2020. The effect of a longer mine life is to extend loan tenures, provide an even more robust financial model and improve Yangibana's NPV. These improved financials and the additional long-term offtake contracts will influence the negotiations with prospective lenders around financing terms and senior debt facility covenants.

Hastings remains focused on delivering long-term value to its stakeholders as the Company enters the final stages of debt negotiations, which will deliver an optimal debt-equity structure for Yangibana's



development. Hastings remains on track to achieve a financial close for Yangibana's development early in calendar 2021.

Brockman Project

The Company has completed the process of preparing all documentation to support the application of a Mining Lease on the Brockman Project.

Negotiations between the Company, DMIRS and the Kimberly Land Council have been postponed because of regional access restrictions associated with COVID-19.

Corporate

During the quarter, the Company raised \$20.76 million through the issue of 24,000,000 new shares at 12.5¢ per share in a fully underwritten Share Purchase Plan – to raise \$3.0 million – and a placement of 138,080,000 shares at 12.5¢ each raising \$17.26 million. A further \$500,000 (being the placement of 4,000,000 shares at 12.5¢ each) is to be received from the Chairman upon approval at the Annual General Meeting on 30 November 2020.

The Company paid directors salaries and superannuation and directors fees during the quarter in the amount of \$186,000.

Competent Person Statements

The information in this announcement that relates to Exploration Results in relation to the Yangibana Project is based on information compiled by Mr. Andrew Reid BSc (Hons) MSc FAusIMM, a Competent Person, who is a Fellow of the Australian Institute of Mining ad Metallurgy. Mr. Reid is a full-time employee of the company and has sufficient experience that is relevant to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. The Qualified Person has verified the data disclosed in this release, including sampling, analytical and test data underlying the information contained in this release. Mr. Reid consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

This report has been approved by the Board.



About Hasting's Technology Metals Limited

Hastings Technology Metals Limited (ASX: HAS) is a well-led Perth rare earths company primed to become the world's next producer of neodymium and praseodymium concentrate (NdPr).

NdPr are vital components in the permanent magnets used every day in high-tech products ranging from electric vehicles to wind turbines, robotics and medical applications.

Hastings' flagship Yangibana project, in the Gascoyne region of Western Australia, contains one of the most highly valued NdPr deposits in the world. Fully permitted to long-life production and with project finance and offtake talks well advanced, Yangibana's construction is due to start in 2021 ahead of first output in 2023.

Hastings also owns and operates the Brockman project, Australia's largest heavy rare earths deposit, near Halls Creek in the Kimberley. Brockman hosts a JORC resource of 41.4 million tonnes at 2100ppm Total Rare Earths Oxides (TREO).

For further information on the Company and its projects visit <u>www.hastingstechmetals.com</u>

For further information, please contact:

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YANGIBANA PROJECT 30.09.2020 All tenements are in Western Australia		
Tenement	Holder/s	
E09/2364 (Application)	Gascoyne Metals Pty Ltd	
E09/1989	Gascoyne Metals Pty Ltd	
E09/2007	Gascoyne Metals Pty Ltd	
E09/2084	Gascoyne Metals Pty Ltd	
E09/2086	Gascoyne Metals Pty Ltd	
E09/2095	Gascoyne Metals Pty Ltd	
E09/2129	Gascoyne Metals Pty Ltd	
E09/2137	Gascoyne Metals Pty Ltd	
E09/2334	Gascoyne Metals Pty Ltd	
G09/10	Gascoyne Metals Pty Ltd	
G09/14	Gascoyne Metals Pty Ltd	
L09/66	Gascoyne Metals Pty Ltd	
L09/67	Gascoyne Metals Pty Ltd	
L09/68	Gascoyne Metals Pty Ltd	
L09/69	Gascoyne Metals Pty Ltd	
L09/70	Gascoyne Metals Pty Ltd	
L09/71	Gascoyne Metals Pty Ltd	
L09/72	Gascoyne Metals Pty Ltd	
L09/74	Gascoyne Metals Pty Ltd	
L09/75	Gascoyne Metals Pty Ltd	
L09/80	Gascoyne Metals Pty Ltd	
L09/81	Gascoyne Metals Pty Ltd	
L09/82	Gascoyne Metals Pty Ltd	
L09/83	Gascoyne Metals Pty Ltd	
L09/85	Gascoyne Metals Pty Ltd	
L09/86	Gascoyne Metals Pty Ltd	
L09/87	Gascoyne Metals Pty Ltd	
L09/89	Gascoyne Metals Pty Ltd	
L09/91	Gascoyne Metals Pty Ltd	
M09/157	Gascoyne Metals Pty Ltd	
M09/160	Gascoyne Metals Pty Ltd	
M09/164	Gascoyne Metals Pty Ltd	
M09/165	Gascoyne Metals Pty Ltd	
P09/482	Gascoyne Metals Pty Ltd	
P09/489	Gascoyne Metals Pty Ltd	



Gascoyne Metals Pty Ltd (70%) Joint Venture All tenements are in Western Australia		
	Gascoyne Metals Pty Ltd (70%)	
E09/1703	Mojito Resources Limited (30%)	
	Gascoyne Metals Pty Ltd (70%)	
E09/1704	Mojito Resources Limited (30%)	
	Gascoyne Metals Pty Ltd (70%)	
E09/1705	Mojito Resources Limited (30%)	
	Gascoyne Metals Pty Ltd (70%)	
E09/1706	Mojito Resources Limited (30%)	
	Gascoyne Metals Pty Ltd (70%)	
E09/2296	Mojito Resources Limited (30%)	
	Gascoyne Metals Pty Ltd (70%)	
E09/2298	Mojito Resources Limited (30%)	
	Gascoyne Metals Pty Ltd (70%)	
E09/2333	Mojito Resources Limited (30%)	
	Gascoyne Metals Pty Ltd (70%)	
G09/11	Mojito Resources Limited (30%)	
	Gascoyne Metals Pty Ltd (70%)	
G09/13	Mojito Resources Limited (30%)	
	Gascoyne Metals Pty Ltd (70%)	
M09/159	Mojito Resources Limited (30%)	
•	Gascoyne Metals Pty Ltd (70%)	
M09/161	Mojito Resources Limited (30%)	
•	Gascoyne Metals Pty Ltd (70%)	
M09/163	Mojito Resources Limited (30%)	

Yangibana Pty Ltd (100% subsidiary)		
All tenements are in Western Australia		
L09/92 (Application)	Yangibana Pty Ltd	
E09/1700	Yangibana Pty Ltd	
E09/1943	Yangibana Pty Ltd	
E09/1944	Yangibana Pty Ltd	
E09/2018	Yangibana Pty Ltd	
G09/17	Yangibana Pty Ltd	
G09/18	Yangibana Pty Ltd	
G09/20	Yangibana Pty Ltd	
G09/21	Yangibana Pty Ltd	
M09/158	Yangibana Pty Ltd	
M09/162	Yangibana Pty Ltd	



BROCKMAN PROJECT		
Brockman Project Holdings Pty Ltd (100% subsidiary)		
All tenements are in Western Australia		
E80/5248 (Application)	Brockman Project Holdings Pty Limited	
M80/636 (Application)	Brockman Project Holdings Pty Limited	
P80/1626	Brockman Project Holdings Pty Limited	
P80/1627	Brockman Project Holdings Pty Limited	
P80/1628	Brockman Project Holdings Pty Limited	
P80/1629	Brockman Project Holdings Pty Limited	
P80/1630	Brockman Project Holdings Pty Limited	
P80/1631	Brockman Project Holdings Pty Limited	
P80/1632	Brockman Project Holdings Pty Limited	
P80/1633	Brockman Project Holdings Pty Limited	
P80/1634	Brockman Project Holdings Pty Limited	
P80/1635	Brockman Project Holdings Pty Limited	