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The Manager Companies  
ASX Limited  
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(5 pages by email)

## MoU Secures Next Phase of Growth

**Nickel Mines and Shanghai Decent agree to expand their strategic partnership with a multi-faceted Memorandum of Understanding ('MoU') incorporating:**

- Acquiring a 70% interest in 4 next-generation rotary kiln electric furnace ('RKEF') lines currently under construction within the Indonesia Morowali Industrial Park ('IMIP').
- Establishment of a "Future Energy" collaboration framework to optimise the transition to renewable energy sources across the Company's operations.
- Planned participation in future HPAL projects utilising Nickel Mines' current and prospective resources across Indonesia to produce battery grade nickel and further diversify the Company's operations.

The Directors of Nickel Mines Limited ('Nickel Mines' or 'the Company') are pleased to advise the Company has signed a multi-faceted MoU with Shanghai Decent Investment (Group) Co., Ltd ('SDI') setting out a framework for future collaborations between the parties over the next several years.

The MoU consolidates and expands the strong existing strategic partnership between the parties and outlines a plan by which Nickel Mines can participate in numerous future development projects the Tsingshan group has planned across Indonesia with an immediate focus on the IMIP and the Indonesia Weda Bay Industrial Park ('IWIP') where the Company has existing ownership interests in projects in partnership with SDI.

Importantly, the MoU also outlines a framework under which both parties will collaborate on future energy projects aimed at delivering significantly reduced carbon emissions and cleaner energy solutions across both industrial parks.

## Oracle Nickel Project

Nickel Mines has agreed to purchase a 70%<sup>1</sup> interest in the Oracle Nickel Project ('ONI' or 'ONI Project'), a new development project that has commenced construction within the IMIP comprising four (4) next-generation rotary kiln electric furnace ('RKEF') lines with an annual nameplate production capacity of 36,000 tonnes of nickel metal (in nickel pig iron).

The ONI project company will also separately undertake the construction of a 380MW captive power plant that will support both the ONI RKEF lines and IMIP's overall grid power requirements.

The ONI asset specifications will replicate those of the Company's 80%-owned Angel Nickel Project ('ANI') within the IWIP on Halmahera Island that is anticipated to commence commissioning in March 2022.

ONI's total valuation of US\$750M (on a 100% basis) represents a modest uplift in valuation from ANI (US\$700M on a 100% basis) with the increase attributable to rising input and construction costs and a weakening US\$, but still representing industry low levels of capital intensity for newly installed nickel production capacity.

Under the terms of the MoU the Company will secure its 70% interest in ONI through an "acquisition" component comprising US\$371M (US\$530M \* 70%) in addition to providing US\$154M (US\$220M \* 70%) of "construction" funding by way of shareholder loans.

The agreed payment schedule and Nickel Mines' ownership interest in the ONI Project is as follows:

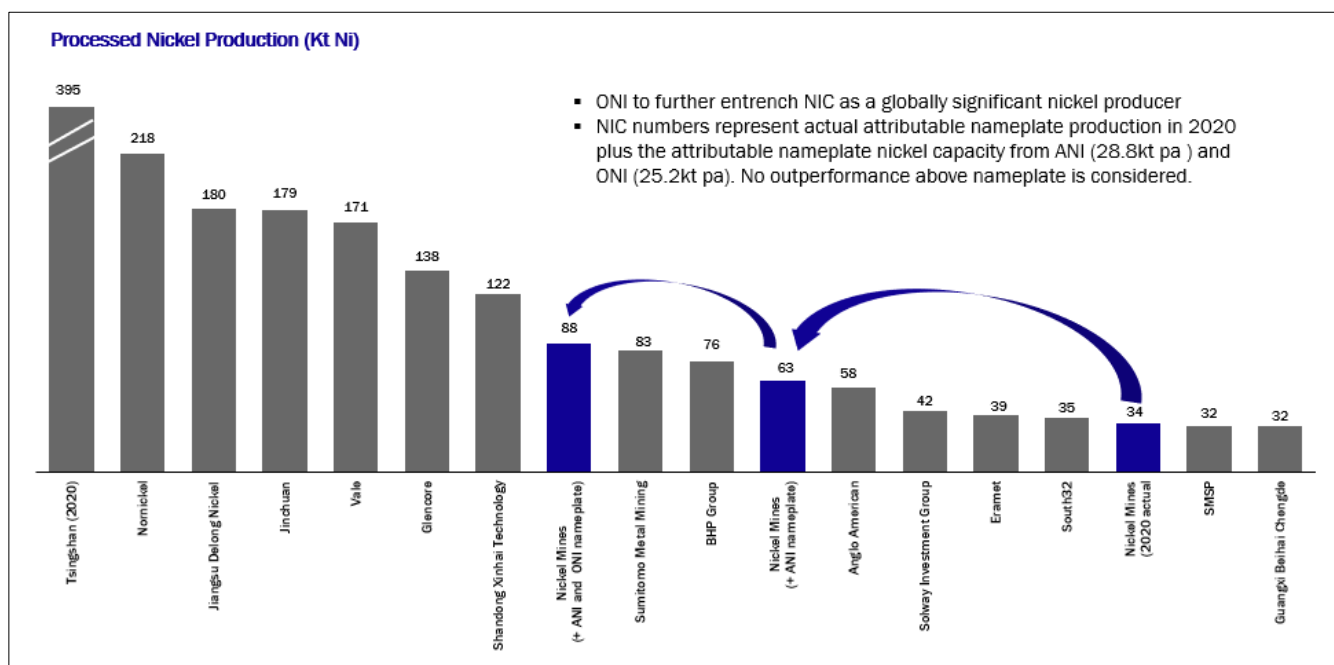
Date	Amount (US\$M)	Cumulative (US\$M)		% of ONI
Signing of MoU	10.0	10.0		
Definitive Agreement (By 31 January 2022)	20.0	30.0		
By 31 March 2022	23.0	53.0		10%
By 30 June 2022	106.0	159.0		30%
By 30 September 2022	46.2	205.2	1 <sup>st</sup> shareholder loan	
By 31 December 2022	212.0	417.2		70%
	46.2	463.4	2 <sup>nd</sup> shareholder loan	
By 31 March 2023	61.6	525.0	3 <sup>rd</sup> shareholder loan	
<b>Total</b>	<b>525.0</b>			

<sup>1</sup> The remaining 30% interest in ONI will be retained by SDI.

Nickel Mines' 70% interest in ONI represents 25,200 tonnes per annum ('tpa') of attributable nameplate nickel metal capacity taking the Company's total attributable nameplate capacity to 78,000tpa of nickel metal.

		IMIP	IMIP	IMIP	IWIP	Total
Annual capacity		HNI	RNI	ONI	ANI	
Nameplate	<i>Ni tonnes</i>	15,000	15,000	36,000	36,000	102,000
NIC attributable	<i>Ni tonnes</i>	12,000	12,000	25,200	28,800	78,000

As illustrated in the chart below, the ONI Project will further cement Nickel Mines as a globally significant nickel producer.



Source: Wood Mackenzie, Company data

SDI will again take the lead role in the design, construction and operation of the ONI Project. Furthermore, the Company will benefit from a construction cost guarantee with SDI contractually committing that total construction costs of ONI shall not exceed US\$750M.

The ONI RKEF lines are presently expected to commence commissioning in Q1 2023 with the power plant due to commission not more than 6 months later.

ONI company registrations have commenced under a replica corporate structure to the Company's existing RKEF assets with two Singaporean incorporated holding companies that will own an Indonesian incorporated PMA operating company.

The acquisition of the Company's 70% interest in the ONI Project is subject to the execution of a binding Definitive Agreement and shareholder approval for which an Extraordinary General Meeting is planned for early 2022.

## Future Energy Collaboration Framework

Nickel Mines and Shanghai Decent are committed to reducing carbon emissions from CO<sub>2</sub> production and under a newly devised “Future Energy” collaboration framework have undertaken to jointly explore opportunities to transition current energy sources utilised across the Company’s operations to renewable energy and other lower carbon emitting solutions. Discussions are already well advanced on collaborations involving solar and LNG-based energy solutions to begin the transition away from current coal-fired power sources.

“Future Energy” projects currently under discussion between the parties include but are not limited to:

- co-investment in the IMIP’s first solar power plant with an installed capacity of 200MWp. Nickel Mines could participate up to a level of 100MWp, with electricity generated to contribute to the power requirements of the Company’s RKEF lines. This project would mark a larger foray into solar power for the Company with its 80%-owned HM Mine nearing completion of its own 450kwp solar project that will significantly reduce the requirement for diesel-fired generators to power the mine and camp facilities; and
- the development of an LNG-to-Power solution for IMIP utilising a parcel of land within the HM Mine IUP whereby LNG receiving jetty, storage and regasification facilities, auxiliary pipelines and transmission lines could fuel a 180MW combined-cycle gas turbine power plant.

The “Future Energy” projects identified above represent two of the more immediate opportunities, with both parties committed to exploring other opportunities to significantly reduce carbon emissions from the Indonesian nickel industry.

## Future HPAL Collaborations

The Company and SDI have agreed to actively explore the feasibility of jointly developing and investing in a High-Pressure Acid Leach project (‘HPAL’) utilising Nickel Mines’ current and prospective nickel resources to broaden the Company’s product offerings. The identification of suitable land parcels and other preliminary studies are underway, in combination with the securing of additional limonite resources, to jointly develop an HPAL project, the delivery of which would see Nickel Mines become a producer of battery grade nickel (MHP and sulphates) for sale into the booming electric vehicle (‘EV’) market.

Commenting on the signing of this new multi-faceted MoU, Nickel Mines’ Managing Director Justin Werner said:

*“We are delighted with this opportunity to expand our partnership with Shanghai Decent and further enhance our value to the Tsingshan group. The four RKEF lines of the Oracle Nickel Project will take our total RKEF lines to 12, more than any other of Tsingshan’s project partner companies. Importantly, these additional lines will also increase our annual attributable nameplate nickel production capacity to just under 80k tonnes of nickel metal, with likely actual performance to increase this to approximately 100k tonnes of attributable nickel metal, a remarkable achievement having only commenced as a producer in January 2019.*

*While our nickel investments to date have been confined to RKEF projects, we are excited to now be actively exploring the developing and investing in a new HPAL project. The delivery of such a project would see Nickel Mines become a direct producer of battery grade nickel for sale into the EV market and position it as a truly-diversified nickel producer selling material volumes of nickel into the stainless steel and battery markets.*

*Most pleasingly, this MoU represents a broadening of our partnership with Tsingshan beyond just nickel production. With both Nickel Mines and Shanghai Decent committed to a transition to cleaner energy solutions for the Indonesian nickel industry, we are both excited and enthused to now be collaborating across several projects to make this a reality. Discussions and scoping working around co-investment in the IMIP's first solar project are advancing, and while at a slightly earlier stage, our LNG-to-power solution for the IMIP offers enormous potential to materially change the mix of power use within the IMIP to lower carbon emitting options. With Tsingshan's vision and demonstrated ability to deliver projects we look forward to embarking on this next phase of growth with them."*

Commenting on its expanded collaboration with Nickel Mines, SDI Chairman Mr Weifeng Huang commented:

*"We are extremely pleased to have reached agreement with Nickel Mines on the Oracle Nickel Project, another important development project for Tsingshan and for the continued expansion of the IMIP. We are equally pleased to now be collaborating together on power supply and clean energy initiatives that will be the foundation of the necessary transition to renewable and lower carbon emitting energy solutions. As these initiatives will underpin the long-term sustainability of Indonesia's Nickel industry we are delighted to be working alongside our trusted friend and partner to jointly play our parts in achieving this objective."*

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