

## THUNDERBIRD BFS, FINANCING AND PROJECT UPDATE

Sheffield Resources Limited (“Sheffield” “the Company”) (ASX: SFX) is pleased to advise that Kimberley Mineral Sands Pty Ltd (“KMS”) has completed a Bankable Feasibility Study (“KMS BFS”) on a simplified process flowsheet following a detailed review of the product mix from Sheffield’s 50% owned Thunderbird Mineral Sands Project (“Thunderbird” or “Project”). This has resulted in lower capital costs and improved margins for a significant improvement in project economics for the KMS BFS for this world class project. In summary:

- Low Temperature Roaster (“LTR”) removed to further simplify the flowsheet
- Yansteel offtake for 100% of magnetic concentrate product
- Zircon concentrate remains primary revenue product (59% of LOM revenue)
- Stage 1 direct capital expenditure of \$361m<sup>1</sup> (including contingency)
- Stage 1 & 2 Pre-finance, Post Tax NPV<sub>8</sub> increased by 31% to A\$1.28B and post-tax IRR has increased from 24% to 27.5% compared to 2019 BFSU results
- Sheffield’s 50% share of Stage 1 & 2 NPV of A\$640m
- Estimated total funding requirement of A\$484m
- Project financing process well advanced via proposed NAIF loan & commercial debt facility
- Estimated new equity required of A\$62m after KMS cash reserves and sunk equity
- Sheffield share of KMS new equity estimated at A\$36m – within forecast cash reserves
- GRES EPC agreement executed and mobilising to site in April to maximise 2022 dry season
- Financial close is subject to due diligence, binding documentation and approvals, targeted by late Q2 2022, with first production remaining targeted in Q1 2024

Sheffield Executive Chair, Bruce Griffin, said: “*Sheffield is very pleased in the material increase in NPV and IRR from the 2019 BFSU. Significant value has been created by working with our partner Yansteel to optimise the Thunderbird flowsheet and create value for both Yansteel and Sheffield.*”

*Sheffield’s share of Thunderbird’s NPV is \$640m. Based upon this plan, we expect to contribute \$36m in JV equity to deliver this value, forecast to be funded from our existing cash reserves.”*

KMS is a 50/50 joint venture between Sheffield and YGH Australia Investment Pty Ltd (“Yansteel”), formed in 2021 to develop the Thunderbird Mineral Sands Project. The KMS BFS is based on a simplified flowsheet with removal of the Ilmenite Processing Circuit (“IPC”) which included the Low Temperature Roaster circuit and Ilmenite Magnetic Separation circuit (“IMS”).

Yansteel’s offtake agreement for 100% of the LTR ilmenite from Stage 1 has been amended to 100% of the magnetic concentrate from Stage 1 (refer ASX announcement “*KMS Executes EPC Construction and Offtake Agreements*” 24 March 2022). The removal of the LTR leverages facilities already under construction at Yansteel’s smelter and pigment plant in China. The 100% offtake with Yansteel as co-owner of KMS mitigates the potential market risk associated with producing a magnetic concentrate.

The KMS BFS estimates direct capital expenditure of \$361m including contingency for the Stage 1 development of Thunderbird. The Stage 1 & 2 NPV (pre-finance, post tax, 8% discount rate) has increased by 31% over the 2019 BFSU to \$1.28B and the post-tax IRR has increased from 24% to 27.5% (refer ASX

<sup>1</sup> Includes c.\$36m of project equity invested since the KMS joint venture was formed in March 2021

announcement “*BFS Update Materially Improves Project Economics*” 31 July 2019). Sheffield’s 50% share of the NPV is estimated at \$640m.

The total funding requirement is estimated at \$484m, including capitalised financing costs, working capital and a cost overrun facility. Financing due diligence is well advanced, with a financing structure targeting a gearing ratio of approximately 60% through a proposed Northern Australia Infrastructure Facility (“NAIF”) loan and commercial debt facility in conjunction with a cost overrun facility. KMS new estimated equity of \$62m, supplements Yansteel’s prior equity finding of \$130.1m. In accordance with the terms of the KMS shareholder agreement, Sheffield is required to contribute \$10m plus 50% of the remaining estimated new equity for a new estimated joint venture equity contribution of \$36m, with Yansteel forecast to contribute \$26m of new equity.

Sheffield’s cash reserve of \$5.1m at the end of December 2021, combined with \$36m in cash proceeds received to date from the sale of the Eneabba and McCalls projects means that Sheffield is expected to fund 100% of the KMS new equity required from existing cash reserves.

In order to minimise cost escalation risk, KMS has executed an EPC contract with GR Engineering Services Limited (“GRES”) for the process facilities with the fixed price of \$179.5m. A Limited Notice to Proceed (“LNTP”) has been issued to enable GRES to mobilise to site in April 2022 and commence site works. The combination of executing the EPC agreement and LNTP is expected to further mitigate cost escalation risk during the project financing documentation and approvals process. (refer ASX announcement “*KMS Executes EPC Construction and Offtake Agreements*” 24 March 2022).

The due diligence, documentation and approvals process for the combined NAIF and commercial debt facility is targeted for completion in late Q2 2022. With the mobilisation of GRES to site in April 2022 and the targeted financial close of the debt facilities thereafter, the target date for first production of Q1 2024 remains unchanged.

This ASX announcement has been authorised for release by the Company’s Board of Directors.

**ENDS**

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## KMS BFS Results

### Executive Summary

The KMS BFS delivers a pre-finance, post-tax NPV<sub>8</sub> result of A\$1.28B and IRR of 27.5%, with the NPV outcome representing a 31% increase over the Bankable Feasibility Study Update (BFSU) result announced by the Company in July 2019 (refer Table 1 and ASX announcement “BFS Update Materially Improves Project Economics” 31 July 2019).

**Table 1: Bankable Feasibility Study – Financial Metrics & Key Comparatives**

Metric	2022 BFS	2019 BFSU <sup>1</sup>	2017 BFS <sup>2</sup>
NPV <sub>8</sub> post-tax	<b>A\$1.28B</b>	A\$0.98B	A\$0.62B
IRR post-tax	<b>27.5%</b>	24.0%	20.6%
Project Capital (Stage 1)	<b>A\$361m</b>	A\$392m	A\$463m
Total Funding Requirement (Stage 1)	<b>A\$484m</b>	A\$478m	A\$579m
Life of Mine (LOM) Revenue	<b>A\$16.8B</b>	A\$15.1B	A\$13.6B
LOM Operating Costs	<b>A\$7.7B</b>	A\$7.2B	A\$7.6B
EBITDA	<b>A\$8.1B</b>	A\$6.8B	A\$5.1B
Revenue to Cost Ratio (Year 1 - 10) <sup>3</sup>	<b>2.4</b>	2.3	2.1
Capex Payback (Stage 1&2; years)	<b>5.00</b>	5.25	6.00
Product sales (avg kt pa; all products)	<b>1,424</b>	1,163	775
Process Rate (Stage 1; tonnes per hr)	<b>1,085</b>	1,085	788
Mine Life	<b>36 years</b>	37 years	42 years
Long Term Average FX Rate (A\$/US\$)	<b>0.75</b>	0.75	0.75
Long Term Zircon Price - FOB (TZMI)	<b>US\$1,516</b>	US\$1,469	US\$1,387

Reference:

1. ASX Announcement “BFS Update Materially Improves Project Economics” 31 July 2019
2. ASX Announcement “Thunderbird BFS Delivers Outstanding Results” 24 March 2017
3. Excludes royalties payable

The KMS BFS removes the Ilmenite Processing Circuit (IPC) which contained the Low Temperature Roaster (LTR) previously contemplated by the Project and removes the Mineral Separation Plant (MSP) components

included within the 2019 BFSU. The KMS BFS flowsheet is forecast to produce three products, a Non-Magnetic Concentrate (NMC) product containing zircon and rutile, an ilmenite rich Magnetic Concentrate (MC) and a Paramagnetic Concentrate (PMC).

KMS has executed an amended binding offtake agreement for 100% of the magnetic concentrate on an arm's length basis. Construction of a vertically integrated complex in Tangshan, China is underway by joint venture and ilmenite offtake partner Yansteel, with the facility comprising a pre-treatment process for ilmenite feedstocks to achieve the same intended outcome as the previous LTR design for Thunderbird, thereby avoiding duplication and a material capital investment by the joint venture.

The two stage Thunderbird development pathway sees the initial Stage 1 mining and processing feed rate forecast at 1,085 dry tph at the Wet Concentrate Plant (WCP), with Stage 2 doubling the WCP feed rate to 2,170tph targeted during Year 5 of operations. Stage 1 and 2 of operations is estimated to produce 1.4mtpa of zircon and ilmenite concentrates over an estimated 36 year Life of Mine (LOM). Ongoing supply shortages within mineral sands markets is resulting in strong demand for Thunderbird products, with approximately 80% of the KMS BFS Stage 1 revenues contracted under binding, long term offtake agreements.

The KMS BFS estimates an updated Ore Reserve of 754 million tonnes at 11.0% HM (refer ASX announcement "*Thunderbird Ore Reserve Update*" 24 March 2022). The Ore Reserve update reflects changes in market product pricing, the flow sheet, product mix, ore feed blending strategy and geotechnical information and mining cost data gathered from the trial mining programs at Thunderbird.

The Stage 1 flowsheet design, including removal of the IPC and LTR and reviewed by independent technical experts (ITE) SRK and TZMI, requires an estimated Stage 1 capital investment of \$361m and estimated total Stage 1 funding requirement of A\$484m. KMS is in the advanced stages of securing project finance facilities targeting a gearing ratio of 60% in addition to a \$40m cost overrun facility. Including equity already invested by KMS and existing KMS cash reserves, the remaining equity to be contributed by joint venturers Sheffield and Yansteel is approximately A\$62m, with approximately A\$36m to be contributed by Sheffield.

Project financing activities to support a Final Investment Decision are well underway. Lender due diligence of the KMS BFS has been conducted by SRK and TZMI on behalf of potential lenders, with ITE technical and financial recommendations included within the KMS BFS. Expressions of interest sought from mining credit funds, senior secured bond products and royalty/streaming providers, with term sheet negotiations currently in progress in parallel with proposed NAIF financing. The Company will continue to assess financing options and provide the market with material updates to project financing activities as they mature over the foreseeable future.

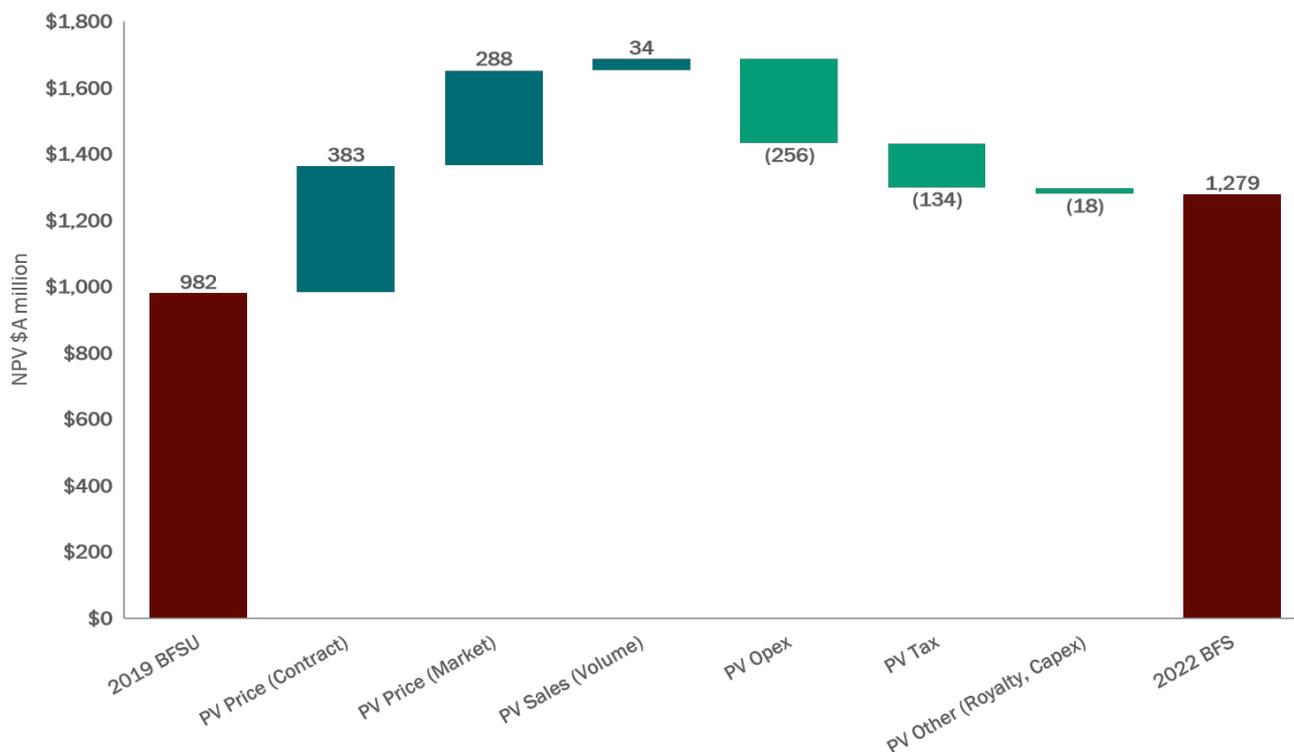
**Table 2: Thunderbird Project Key Financial Metrics (A\$m)**

A\$m, Real 2022 Prices	Stage 1 Year 1- 4	Stage 1 and 2 Year 5 - 10	LOM
Revenue	1,338	3,521	16,811
Royalties	(77)	(205)	(1,098)
<b>Net Revenue</b>	<b>1,261</b>	<b>3,316</b>	<b>15,713</b>
Opex: Mining	(275)	(481)	(3,267)
Opex: Processing	(148)	(410)	(2,287)
Opex: Logistics	(177)	(314)	(1,198)
Opex: Site G&A	(97)	(156)	(907)
<b>Total</b>	<b>(697)</b>	<b>(1,361)</b>	<b>(7,659)</b>
<b>EBITDA</b>	<b>564</b>	<b>1,954</b>	<b>8,054</b>
<b>Revenue to Cost Ratio<sup>1</sup></b>	<b>1.92</b>	<b>2.59</b>	<b>2.20</b>

1. Excludes royalties payable

The KMS BFS delivers a pre-finance, post-tax NPV<sub>s</sub> result of A\$1.28B and IRR of 27.5% over the 36 year Life of Mine. As described in Figure 1 below, a strengthening zircon and ilmenite market outlook coupled with an improved offtake contracting basis for magnetic concentrate has resulted in an increase in estimated NPV, offset by increased mine operating and labour cost assumptions, in addition to volume related logistics cost increases and increase in tax take associated with increased EBITDA margin. The net effect is a 31% increase in the measured NPV from the 2019 BFSU.

Figure 1: Key Drivers of Change to NPV: 2022 KMS BFS vs 2019 BFSU (A\$m)



**Kimberley Mineral Sands Bankable Feasibility Study: Assumptions Underpinning Production Targets and Forecast Financial Information**

The KMS BFS costs have been informed by further technical work following the formation of the Kimberley Mineral Sands joint venture in 2021. This includes:

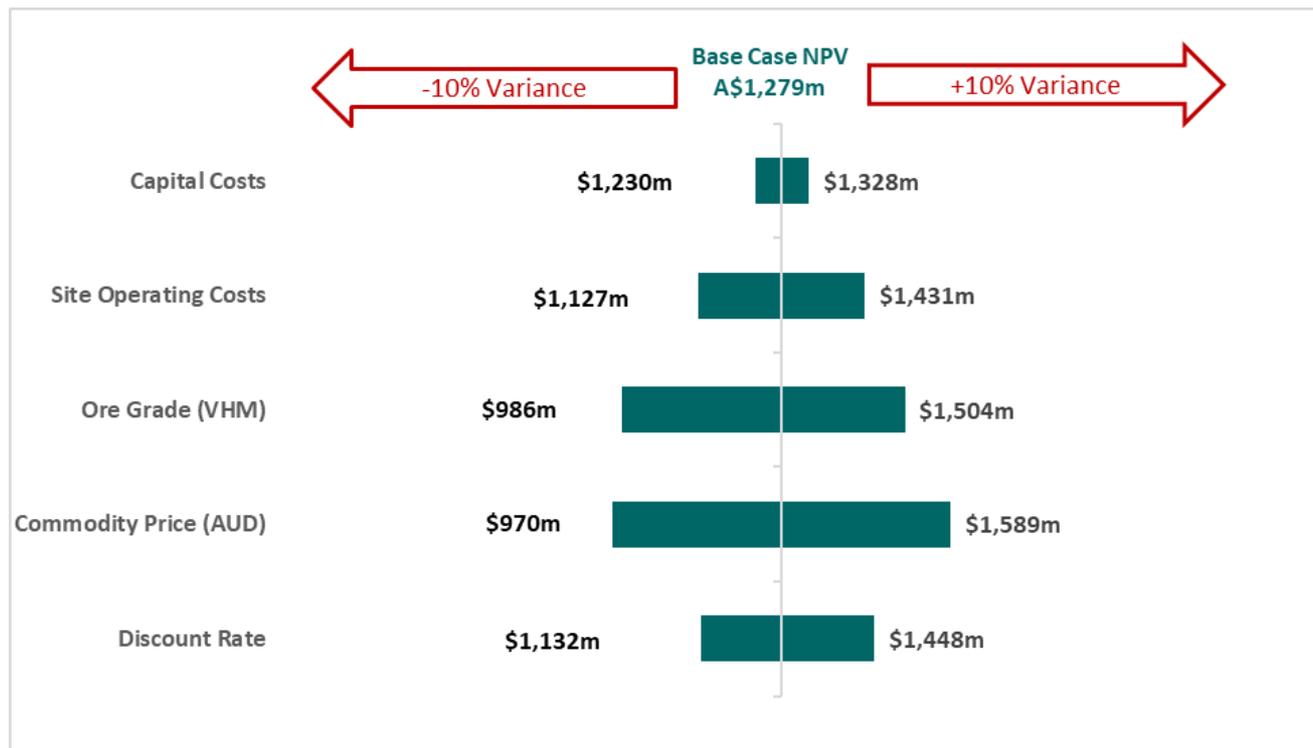
- Two trial mining programs in late 2020 and mid-2021, which mined through a full section of the orebody and confirmed the suitability of dozer push as the ore mining method.
- Updated dozer push productivity assumptions, waste mining costs, geotechnical parameters and pit wall slope angles.
- The collection of a 25t bulk sample of ore material excavated by dozer push method.
- A 25t bulk sample metallurgical test program on the KMS BFS flowsheet, with full scale equipment or scalable equipment to produce final products and confirm process recovery assumptions.

The KMS BFS costs and modifying factors applied to the estimation process have been completed to Bankable Feasibility Study level to a ± 10% accuracy (with a ± 25% accuracy applied to Stage 2 development capital expenditure). Product prices, grades, recoveries, mining parameters and costs contained in the KMS BFS were used to identify economically mineable blocks and included within the Ore Reserve estimate (refer ASX announcement “Thunderbird Ore Reserve Update” 24 March 2022). The

mining schedule and Ore Reserve is technically achievable, economically viable and robust and has been tested to variations in long term product pricing, operating costs and capital costs. (refer Figure 2 below).

Financial modelling has been prepared and tested by varying revenue, cost and macro-economic factors. These factors include commodity prices, operating and capital costs, production volume and ratios, along with economic discount factors. Material positive outcomes for NPV, IRR and cash flows were generated in all cases from the financial modelling. An A\$/US\$ exchange rate of 0.75 was assumed for the life of mine, based on consensus forecasts.

**Figure 2: Thunderbird Project Key Sensitivity Analysis**



The staged development strategy has been maintained to materially reduce pre-development capital, lower construction risk and increase revenues, focusing on a substantial increase in production units:

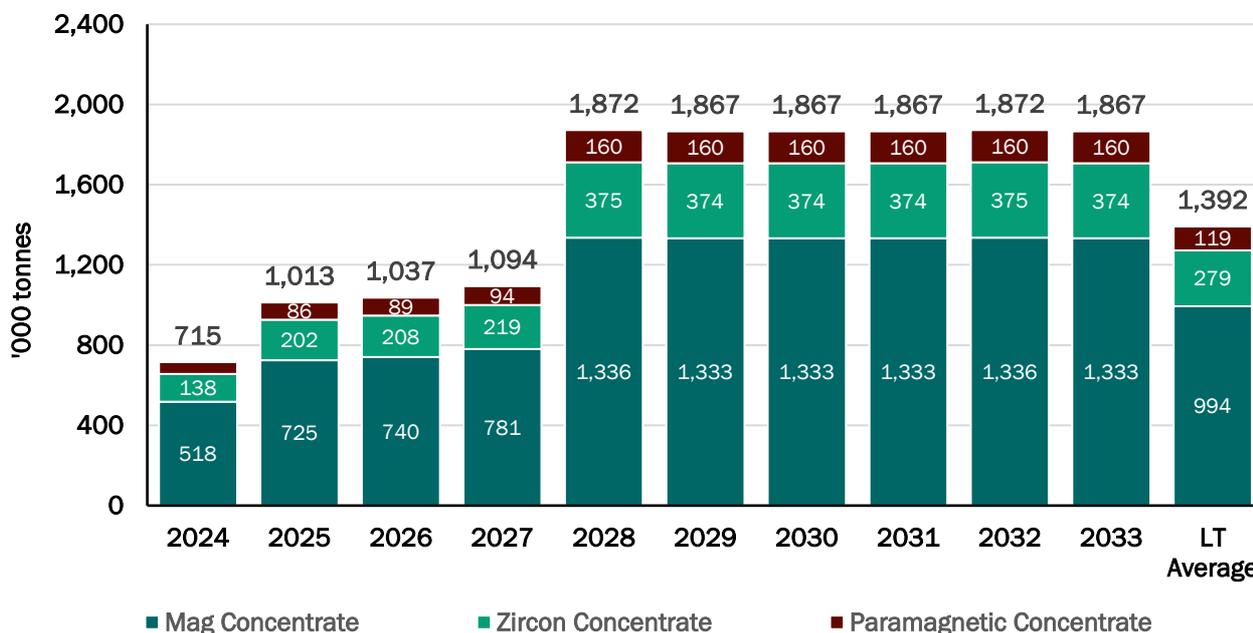
- **Stage 1:** Single Mining Unit Plant (MUP) underpinning a 10.4Mtpa mining operation and a processing plant design feed rate of 170tph
- **Stage 2:** Duplication in year 5 of Stage 1 mining underpinning a 20.8Mtpa mining operation and an increase in the processing plant feed rate to 290tph

Figure 3 below shows estimated production volumes across the product suite for Stage 1 year 1 to 4, Stage 1 & 2 years 5 to 10 and the remaining LOM average for the Project.

In parallel with the formation of KMS, a binding offtake agreement for 100% of the LTR Ilmenite product from Stage 1 was previously agreed with Yansteel. Under this agreement, Yansteel also secured a first right of refusal to all LTR Ilmenite produced from Thunderbird. With the change in the flowsheet to produce a Magnetic Concentrate instead of the LTR Ilmenite, KMS has subsequently concluded a binding offtake agreement with Yansteel for 100% of MC from Stage 1 and a first right of refusal for all Magnetic Concentrate produced from Thunderbird.

KMS also has approximately 75% of the zircon rich Non-Magnetic Concentrate product under binding offtake agreements with three prominent customer groups. The committed offtake of Non-Magnetic Concentrate and the Magnetic Concentrate represents approximately 80% of the value of all products.

Figure 3: Annual and Long Term Average Targeted Production Volumes



KMS has identified a valuable Paramagnetic Concentrate (PMC) produced during the upgrading of the NMC. This product stream contains has a commercially marketable levels of  $TiO_2$ ,  $ZrO_2$  and monazite. KMS is exploring the potential opportunities to supply this PMC to the market. Feedback received from potential consumers has confirmed that the PMC is suitable for supply to the market. KMS has chosen not to enter into contracts for the sale of the PMC at this stage and intends to do so prior to the commencement of operations.

The material assumptions underpinning the post-tax, pre-finance NPV<sub>8</sub> of A\$1.28B and post-tax IRR of 27.5% are described in Tables 1 – 4 of this document and the accompanying attached KMS BFS presentation. Other assumptions such as sale prices for mined products, plant recoveries, ore feed grade, mining costs, metallurgical factors, processing factors, infrastructure, and other macro-economic conditions are also reported within the body of this document. These assumptions also extend to marketing, legal, environmental, social and Government factors.

### Financial Analysis

The financial analysis is based on capital costs, operating costs and revenue assumptions informed by executed and negotiated contracts, consensus product pricing and foreign exchange rates and a real discount rate of 8%. Material financial assumptions have been reviewed by third party independent technical experts acting on behalf of KMS and potential project financiers. The Project is estimated to produce an average of 1.4mtpa of Magnetic Concentrate, zircon rich Non-Magnetic Concentrate and Paramagnetic Concentrate products over a 36 year mine life and is forecast to generate a life of mine EBITDA of A\$8.1 billion.

Please refer to the KMS BFS presentation (refer ASX Announcement “KMS Bankable Feasibility Study Presentation” dated 24 March 2022) for further details of the underlying targeted financial metrics.

Figure 4 below provides an overview of estimated revenues and EBITDA for the first ten forecast years of production in conjunction with a long term average for the remaining mine life. Estimated production years 2024 to 2027 inclusive describe Stage 1 development with an estimated production increase to include Stage 2 of operations from 2028 onwards.

Figure 4: Annual EBITDA, Gross and Net Revenue (A\$m)

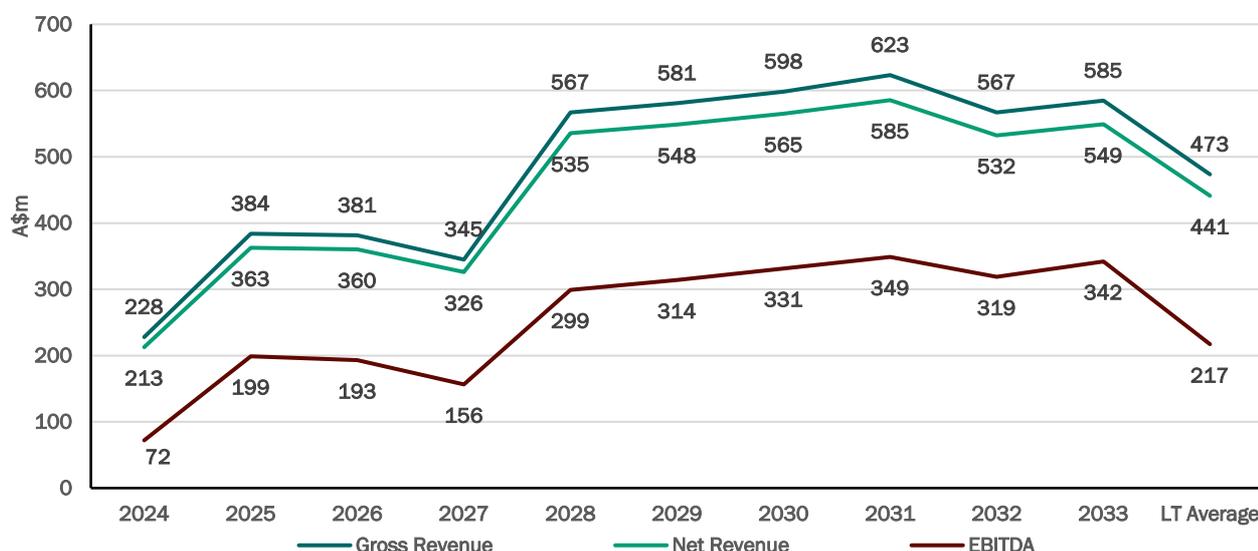
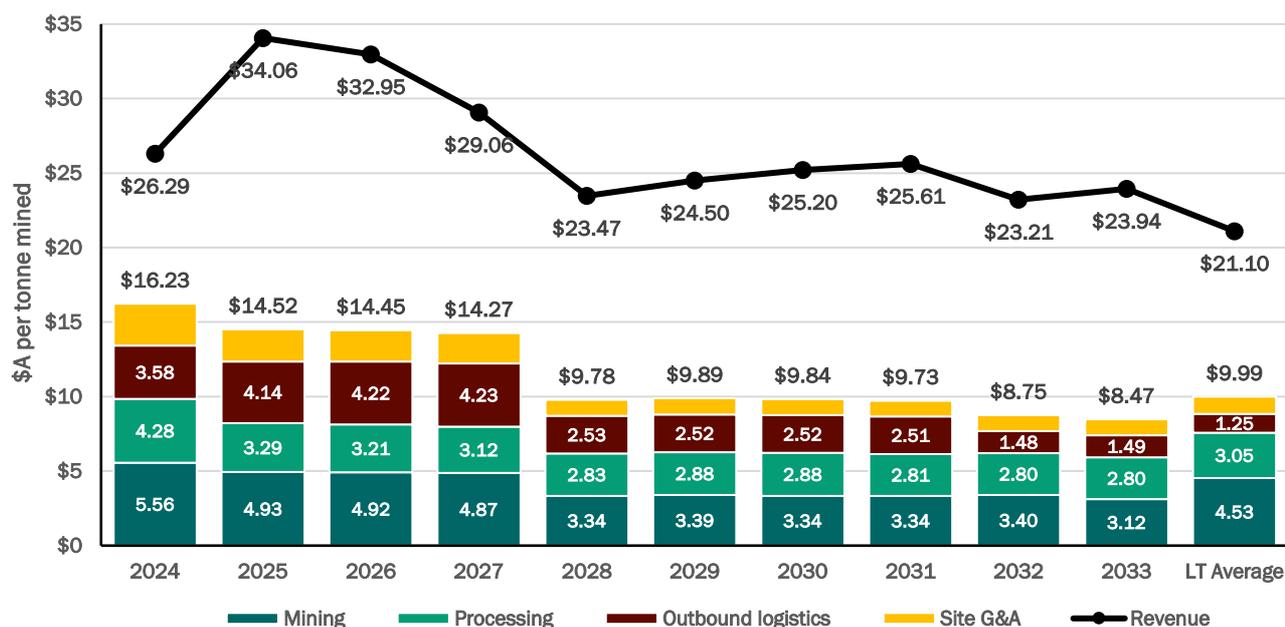


Figure 5: Cash Operating Margin (A\$ per ore tonne mined)



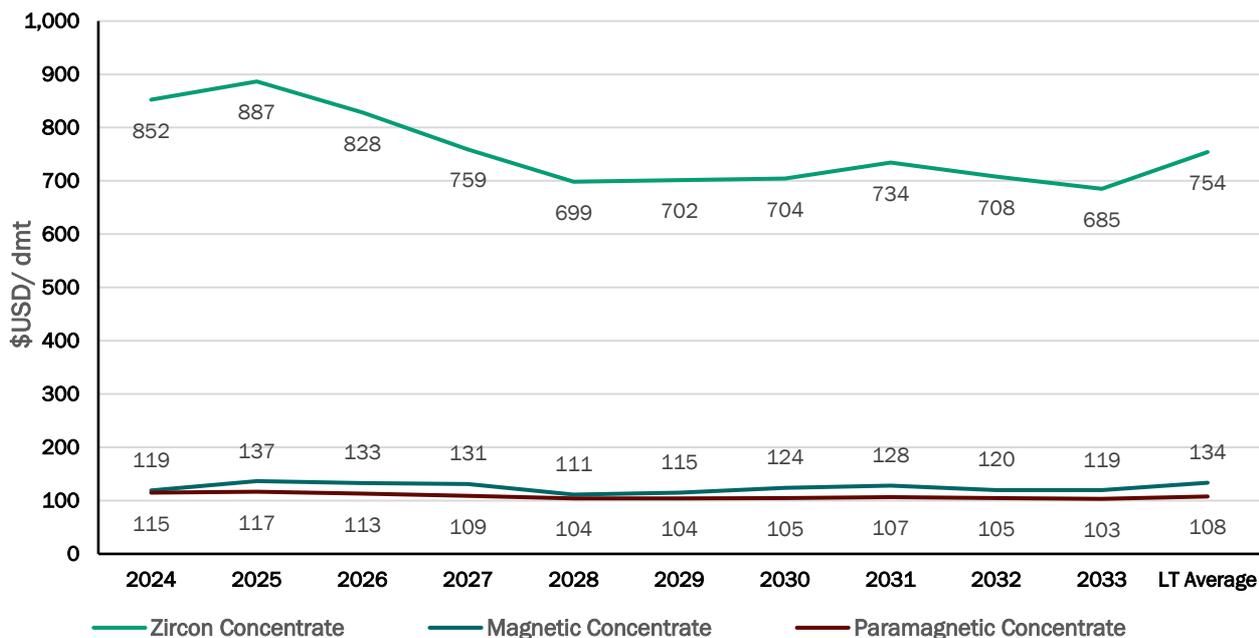
Thunderbird is expected to deliver strong cash margin with a revenue to cost ratio above 2:1 (refer Table 2), based upon the economic parameters assumed within the KMS BFS. Figure 5 above describes the site cash operating costs per tonne of ore mined, relative to the revenue per tonne of ore mined. The estimated change in scale of operations forecast for Stage 2 from 2028 onwards provides for healthy cash margins in line with conservative long term commodity pricing assumptions.

The product pricing assumptions used to determine Project economics are shown in the Table 3 and Figure 6 below and are based on independent industry expert (TZMI) short-term and long-term forecast, in real dollars. TZMI have reviewed the proposed product specifications of the Thunderbird products and have verified that they will meet various market uses and typical specifications required for those markets.

**Table 3: Thunderbird Project Product Price Assumptions**

Commodity Prices (US\$/t, FOB)	Stage 1 Year 1- 4	Stage 1 and 2 Year 5 - 10	LOM
Non-Magnetic (zircon) Concentrate	806	705	745
Magnetic Concentrate	130	120	130
Paramagnetic Concentrate	112	105	107

**Figure 6: Forecast Product Pricing – Thunderbird Products**



The KMS BFS includes terms and conditions of current binding offtake agreements for the revenue assumptions. The agreements for zircon rich Non-Magnetic Concentrate contain payment terms based upon contained ZrO<sub>2</sub> and TiO<sub>2</sub> products to deliver a long term real FOB price. With the change in the flowsheet to produce a Magnetic Concentrate in lieu of LTR Ilmenite, KMS has concluded a binding offtake agreement with Yansteel for 100% of MC from Stage 1 and a first right of refusal for all Magnetic Concentrate produced from Thunderbird. For the first 5 years the Magnetic Concentrate price is an arm’s length fixed price reflective of TiO<sub>2</sub> content and during this period the price varies from TZMI forecast pricing assumptions.

**Mining and Processing**

Thunderbird is a typical dry-mining mineral sand operation whereby a moving void extracts the valuable mineral sands, with waste materials returned to the void enabling progressive rehabilitation of the mined area. Topsoil and overburden are excavated and transported using truck and excavator. Ore is excavated, screened, slurried and then pumped to a nearby wet concentration plant. Retaining cells are constructed in the developed mine void for the return of process tails. Topsoil is returned in a continuous rehabilitation process (refer Figure 7). As the mining void is established, increasing amounts of overburden are mined and directly returned to the mining void as backfill.

Conventional open pit bulk dry mining techniques have been chosen for ore mining, incorporating dozer traps and in-pit feed preparation units (“Mining Unit Plant” or “MUP”). Initially one MUP is scheduled, with an additional MUP scheduled from year five of operations. The selected mining method is considered appropriate and has been trialled through the full thickness of the orebody by two trial mining programs in late 2020 and mid-2021 and is suited to the large, relatively thick and sheet-like characteristics of the

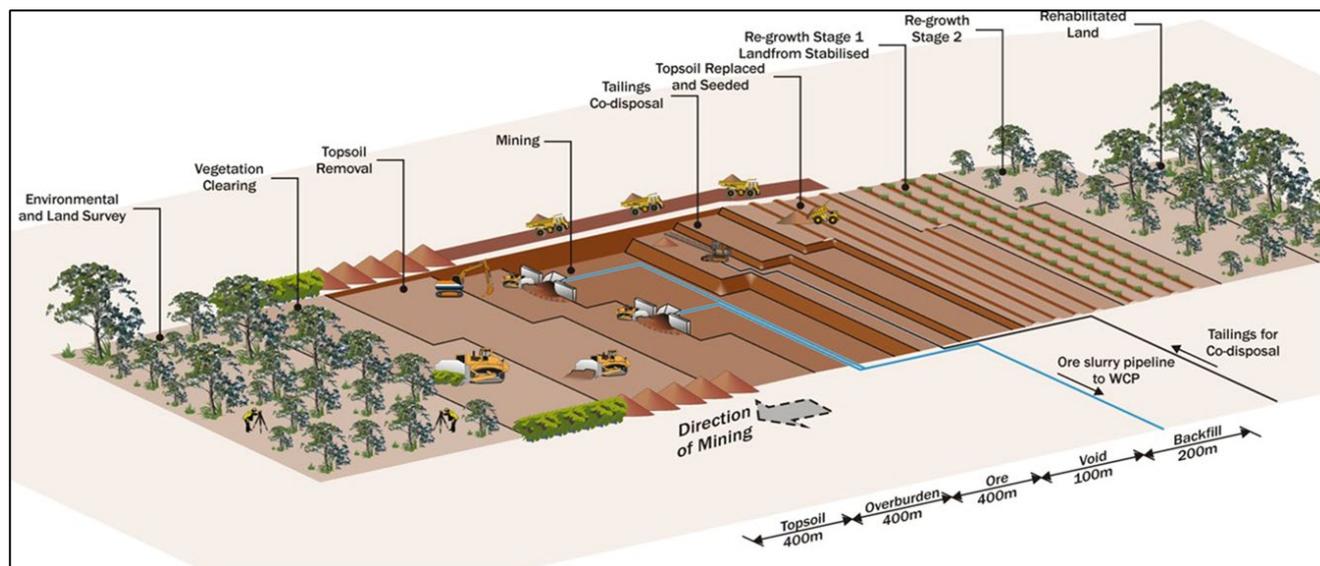
orebody. Minimal pre-strip is required to access the orebody with topsoil and overburden being excavated, hauled and stockpiled using conventional earthmoving equipment. Following mining and feed preparation, the ore will be slurried and pumped to a nearby wet concentration plant (WCP).

The two trial mining programs also identified a consistent zone of indurated material within 10 – 12 metres of the natural surface. The indurated or consolidated ore material was identified as a risk to mining and processing performance. During the Enterprise Optimisation studies undertaken by Whittle Consulting Pty Ltd, the oversize field within the Mineral Resource was used as a proxy for induration and a mining pathway was developed that minimized the quantity of oversize in the mining schedule during the period of single MUP operation. This resulted in the starter pit location being moved approximately 1,250 metres down dip and an increase in waste pre-stripping to expose ore material below the indurated zone.

Figure 3 (above) shows targeted production volumes across the product suite for Stage 1 year 1 to 4, Stage 1 & 2 years 5 to 10 and the remaining LOM average for the Project.

Mineral processing consists of extraction of valuable heavy mineral concentrates (primarily containing zircon and ilmenite with small quantities of leucoxene, rutile and monazite also recovered). This is achieved through a series of processes involving gravity separation (spirals) and magnetic separation (wet and dry) methods. The non-magnetic fraction, containing zircon, rutile, leucoxene, and monazite is to be sold as a Non-magnetic (zircon) Concentrate. The magnetic fraction containing ilmenite and titanohematite forms the Magnetic Concentrate product.

**Figure 7: Thunderbird mining operation schematic**



Conventional modern process beneficiation and mineral separation equipment has been selected in the processing plant and associated infrastructure to produce a zircon rich Non-Magnetic Concentrate and a Magnetic Concentrate containing approximately 38.5% TiO<sub>2</sub>. The Magnetic Concentrate is a mixture of ilmenite and titanohematite that can be separated by reduction and magnetic separation into a high quality ilmenite that is ideal as feedstock for chloride slag (TiO<sub>2</sub>) production and for direct use in sulfate pigment production. After separation the titanohematite can be used in a steel production

The feed to the Wet Concentrate Plant (WCP) is estimated at a consistent rate of 1,085 dry tph of ore greater than 38µm and less than 2mm. The process infrastructure is fit for purpose and includes the Mining Unit Plant (MUP), Wet Concentration Plant (WCP), Concentrate Upgrade Plant (CUP), Non-Magnetic Finisher Circuit (NMFC) and site buildings, bore field, LNG gas supply and storage, power station and power distribution infrastructure, new and upgraded roads, accommodation village and upgraded materials handling facilities at the Port of Derby.

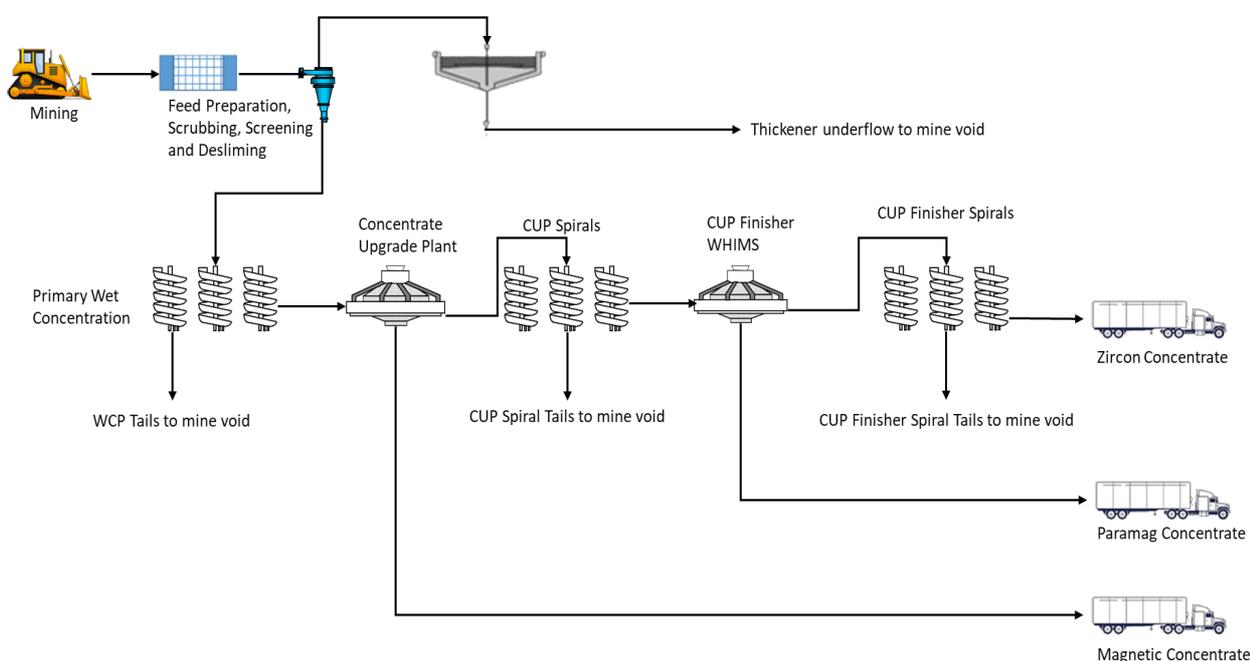
KMS has selected the Port of Derby as its base case logistics solution and is exploring the use of the Port of Broome as an opportunity to reduce operating risk. No significant difference in capital or operating expenditures are expected as both solutions are assumed to be provided on a Build-Own-Operate (BOO) basis.

An 87.5% utilisation factor has been applied to the MUP and WCP operations and a 94% utilisation factor has been applied to the processing operations in determining annual operating hours and throughput capacity respectively. The MUP and WCP operations and the processing operations can operate independently of each other due to the installation of heavy mineral concentrate (HMC) stockpiles between the WCP and CUP plant areas. The HMC stockpiles significantly increase operational flexibility.

The KMS BFS process and plant capital costs have informed an EPC (engineer, procure and construct contract for the Stage 1 processing plant executed with GR Engineering Services Limited (GRES). The processing infrastructure is based on a process design and PFDs, mechanical equipment lists and plant and an overall mine site layout, which has been reviewed and agreed with KMS, GRES and third party independent technical experts. KMS and GRES have executed a fixed price lump sum EPC agreement totalling \$179.5m (refer ASX announcement “KMS Executes EPC Construction and Offtake Agreements” dated 24 March 2022) inclusive of recovery and performance test guarantees.

Capital costs for the Stage 2 expansions were estimated by KMS on a factored basis to replicate the current plant area and utilise common or expended elements within the Stage 1 plant area where appropriate to do so.

**Figure 8: Thunderbird processing flowsheet**



Non-Processing Infrastructure (NPI) scope items are consistent with the 2019 BFS Update in terms of physical definition. However commercial and execution arrangements will be different to previous studies for the following scope items:

- Power and Gas Facility – supplied under BOO arrangement
- Village infrastructure – supplied as procurement of new units and installation. Accommodation for the Stage 2 expansion has been cost as a new build.

The Stage 1 NPI scope items are well defined and capable of being executed as execution strategy and plans are in place with appropriate contracts and management capacity. Estimates of the Stage 2 expansion have been made based on the Stage 1 requirements.

### Thunderbird Ore Reserve Update

The Ore Reserve of 754 million tonnes at 11.0% HM contains 83 million tonnes of HM compared to the previous Ore Reserve of 748 million tonnes at 11.2% HM containing 84 million tonnes of HM (refer ASX announcement “Thunderbird Ore Reserve Update” 24 March 2022). The Ore Reserve update reflects changes in market product pricing, the flow sheet, product mix, ore feed blending strategy and geotechnical information and mining cost data gathered from the trial mining programs at Thunderbird. The majority of the cost estimates applied to determine the Ore Reserve have been informed by negotiated agreements or cost estimates prepared by independent third parties. In addition, binding offtake agreements account for approximately 80% of estimated Stage 1 development revenues.

The Ore Reserve for Thunderbird, as at 24 March 2022, is outlined in the Table below:

**Table 4: Thunderbird Ore Reserve March 2022**

Ore Reserve			Valuable HM Grade (In-Situ) <sup>1</sup>				Oversize (%)	Slimes (%)
Reserve Category	Material (Mt)	HM (%)	Zircon (%)	HiTi Leuc (%)	Leucoxene (%)	Ilmenite (%)		
Proved	239	12.9	0.96	0.29	0.28	3.4	14	16
Probable	514	10.1	0.79	0.26	0.27	2.9	11	15
<b>Total</b>	<b>754</b>	<b>11.0</b>	<b>0.84</b>	<b>0.27</b>	<b>0.27</b>	<b>3.1</b>	<b>12</b>	<b>15</b>

Ore Reserve			Mineral Assemblage <sup>3</sup>						Oversize (%)	Slimes (%)
Reserve Category	Material (Mt)	HM (Mt)	HM (%)	Zircon (%)	HiTi Leuc (%)	Leucoxene (%)	Ilmenite (%)			
Proved	239	31	12.9	7.5	2.2	2.2	27	14	16	
Probable	514	52	10.1	7.8	2.6	2.6	28	11	15	
<b>Total</b>	<b>754</b>	<b>83</b>	<b>11.0</b>	<b>7.7</b>	<b>2.4</b>	<b>2.5</b>	<b>28</b>	<b>12</b>	<b>15</b>	

1. Ore Reserves are presented both in terms of in-situ VHM grade, and HM mineral assemblage. Tonnes and grades have been rounded to reflect the relative accuracy and confidence level of the estimate, thus the sum of columns may not equal. Ore Reserves reported for the Dampier Project were prepared and first disclosed under the JORC Code (2012). Refer to Sheffield's ASX announcement dated 24 March 2022 titled "Thunderbird Ore Reserve Update" for further detail. Ore Reserve is reported to a design overburden surface with appropriate consideration for modifying factors, costs, mineral assemblage, process recoveries and product pricing.

2. The in-situ grade is determined by multiplying the percentage of Heavy Mineral (HM) by the percentage of each valuable heavy mineral within the heavy mineral assemblage at the mineral resource block model scale. Tonnes and grades have been rounded to reflect the relative accuracy and confidence level of the estimate, thus the sum of columns may not equal. See Appendix A for additional details.

3. Mineral Assemblage is reported as a percentage of HM Grade. It is derived by dividing the in-situ grade by the HM grade.

### Mineral Sands Market

Thunderbird, one of the largest undeveloped mineral sands projects in the world, is well located with respect to offtake customers in Asia. China consumes more than 50% of the world's zircon and ilmenite feedstocks. China is the dominant consumer of zircon and titanium rich concentrates, consuming approximately 90-95% of all concentrates consumed globally.

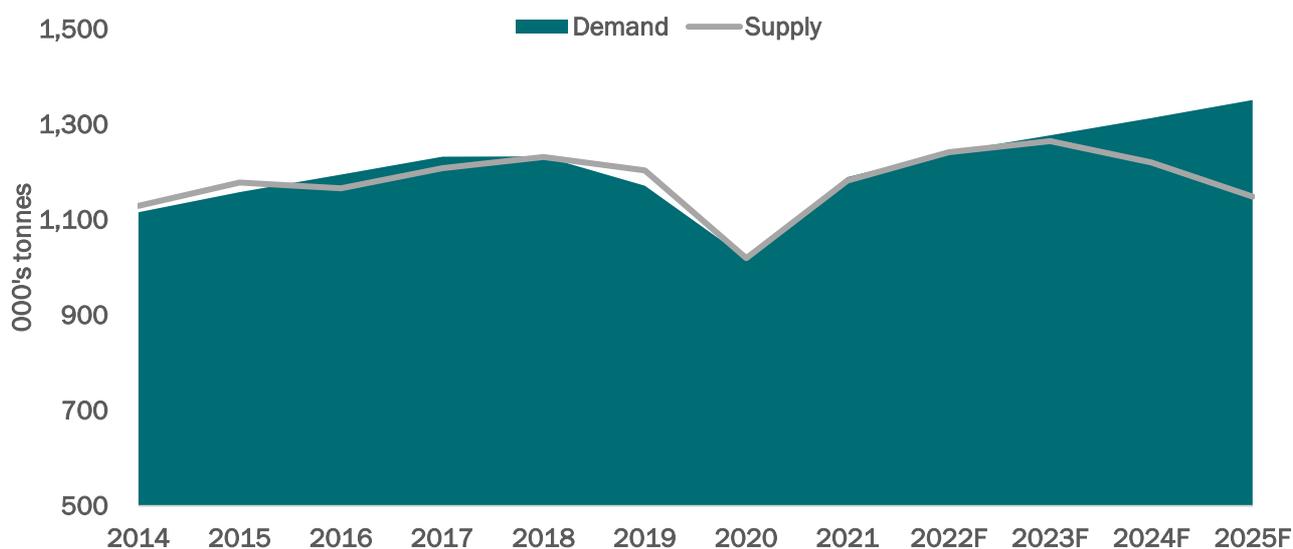
KMS commissioned independent mineral sands consultant TZMI to provide expert opinion on the relevant markets and pricing for the Thunderbird products.

The TZMI long term inducement price for premium zircon is US\$1,516 per tonne FOB. Current pricing is higher than US\$2,000 per tonne and peak pricing is forecast for the latter part of 2022 at US\$2,200 per tonne before dipping slightly to an estimated price of US\$1,900 per tonne over the following two years.

Price increases in recent years are closely linked to the supply side constraints for high-grade zircon products. With limited new supply entering the market, coupled with several of the larger deposits globally nearing the end of operation, supply side constraints are expected to continue. This shortfall in supply of high-grade zircon products has contributed to the rapidly increasing the appetite for zircon rich concentrates in China, with many concentrate processing plants actively seeking increased supply of zircon rich concentrates. Through 2019 to 2021, TZMI have reported imports of approximately one million tonnes annually, with the increased demand supporting expansion of existing processing facilities as well as the construction of new processing facilities.

The Thunderbird zircon rich Non-Magnetic Concentrate is expected to be a high demand product due to the high percentage of high grade zircon, high-quality titanium and rare earth oxides contained within the product.

Figure 9: Zircon Supply and Demand (Actual and Forecast)<sup>1</sup>



1. Source: TZMI and Company estimates

Total demand for titanium feedstocks reported by TZMI is forecast to grow from circa 8.5 million TiO<sub>2</sub> units in 2021 to 10.5 million TiO<sub>2</sub> units by 2030. Sulfate ilmenite is the largest sector of the TiO<sub>2</sub> feedstock market and is forecast to grow from circa 5 million TiO<sub>2</sub> units to 6 million TiO<sub>2</sub> units by 2030. Sulfate ilmenite is predominantly used in the production of sulfate pigment and or titanium slag. The titanium slag sector is the fastest growing sector in the titanium feedstock market and sulfate ilmenite is the preferred feedstock for this process.

The magnetic concentrate produced by Thunderbird is a mixture of ilmenite and titanohematite than can be separated by reduction and magnetitic separation into a high quality ilmenite that is ideal as feedstock for chloride slag (TiO<sub>2</sub>) production which is the intended use by Yansteel.

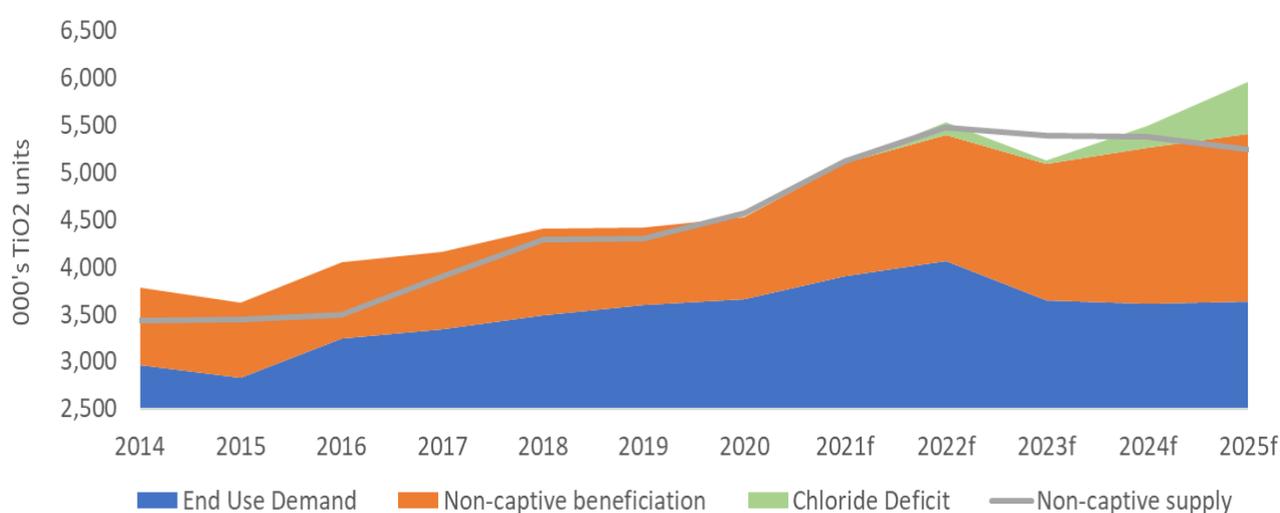
High grade TiO<sub>2</sub> minerals or upgraded material such as slag and synthetic rutile have usually been used to produce chloride pigment, however sourcing such high grade material as a feedstock is becoming challenging. Ore depletion of several mineral sands operations and a lack of new mineral sands deposit discoveries are evident. The chloride-slag production method is expanding rapidly in China and is a market

for TiO<sub>2</sub> feedstock that previously was almost solely restricted to vertically integrated pigment producers in Europe, Africa, and North America.

However, demand for sulfate ilmenite as feed chloride slag (titanium slag) production is continuing to experience strong and consistent growth, which is forecast to continue over the period of 2020-2023 and beyond.

Following the formation of KMS in 2021, KMS has a 100% offtake in place for the ilmenite product, contracted by Yansteel. With the change in the flowsheet to produce a Magnetic Concentrate in lieu of LTR Ilmenite, KMS has concluded a binding offtake agreement with Yansteel for all Stage 1 estimated ilmenite production, whilst approximately 75% of the zircon rich Non-Magnetic Concentrate (NMC) product has been committed to by three other significant customer groups. The committed offtake represents over 80% of the value of all products to be produced at Thunderbird.

**Figure 10: Sulfate Ilmenite Supply & Demand (Actual and Forecast) <sup>1,2</sup>**



1. End Use includes Sulfate Pigment and Other Sectors that consume sulfate ilmenite without upgrading to slag
2. Sourced from TZMI November 2021 and Sheffield estimates

Furthermore, KMS identified value in a Paramagnetic Concentrate (PMC) as a co-product stream that is of interest to customers for its contained zircon and titanium and rare earth oxides. PMC offtake has been requested by several prospective customers, however KMS has chosen not to enter into contracts at this time. PMC product represents less than 5% of total sales revenue to be derived from Thunderbird.

### **Material Regulatory Approvals and Other Factors informing the KMS BFS assumptions**

#### **Environmental, Native Title and Tenure**

All Project environmental approvals from State and Federal Government are in place. These include:

- Ministerial Statement 1080,
- Department of Water and Environmental Works Approval
- License to take Water GWL201977(1)
- Australian Government Department of Environment and Energy EPBC approval 2018-7648

Amendments to secondary approvals being the Works Approval, Mining Proposal and the Groundwater License will be required over time as these approvals relate to details of Project design and implementation associated with the staged development of the Project and increases in mining and processing capacity. The current approvals strategy ensures the Project is fully approved at all Stages, but also maintaining flexibility in scope, timing and licensing and approval costs.

The Project has a granted Mining Lease and Native Title and Heritage agreements. The Company signed a Co-existence Agreement (Native Title Agreement) for Thunderbird on 31 October 2018. The Co-existence Agreement establishes the framework by which KMS can work with the Traditional Owners to protect Aboriginal heritage and the environment while delivering sustainable employment and business outcomes for Traditional Owners and the wider Aboriginal community.

In 2018, an ethnographic site was registered over the Mining Lease by a third-party non-member of the Mt Jowlaenga Polygon #2 Named Applicants, which is now part of the Joombarn Buru Native Title Determination. This was addressed via a Section 18 process under the Aboriginal Heritage Act, 1972, in consultation and with the consent of Mt Jowlaenga Polygon #2 Named Applicants and the Kimberley Land Council (KLC).

The Thunderbird Project comprises 483 square km of mining tenure in the West Kimberley Mineral Field of Western Australia. All the mining tenements within the Project are 100% held by Thunderbird Operations Pty Ltd, a 100% subsidiary of Kimberley Mineral Sands.

Mining and processing operations will be conducted on mining lease M04/459 whilst the accommodation village will be located on miscellaneous license L04/85. The Project's access roads and future power and pipeline corridors will be on granted miscellaneous licenses L04/82, L04/83, L04/84 and L04/86.

The Project straddles the boundary of two pastoral leases, mining lease M04/459, miscellaneous licenses L04/84 – L04/86, the northern portion of miscellaneous license L04/82 and miscellaneous licenses L04/92 and L04/93 are within the Mt Jowlaenga Pastoral Lease (N050161), and the southern portion of miscellaneous license L04/82 and miscellaneous license L04/83 are within the Yeeda Pastoral Lease (N050691). Both pastoral leases are owned and operated by Yeeda Pastoral Company Pty Limited. KMS is currently negotiating an agreement with the pastoral lessee in respect of the rights and obligations to mine and operate on the pastoral lease.

The southern portions of miscellaneous licenses L04/82 and L04/83 where they intersect with the Great Northern Highway fall within the overlying Crown Reserve 9697 (Kimberley De-Grey Stock Route) managed by the Department of Regional Development and Lands. KMS has engaged the relevant authority and there are no outstanding matters regarding the required construction and use of the entry.

An assessment has considered existing key characteristics for the Ministerial Statement 1080 (State environmental approval) and the EPBC Act Approval 2016/7648 (Federal environmental approval). The increased level of activity in Stage 2 is expected to require a change of two key characteristics of the State environment approval being:

- A forecast land clearing area increase of approximately 124 ha of the approved total of 1,635 ha. This approval would not be required until approximately Year 30 of the Project.
- A proposed increase in return truck movements for products on public roads between Thunderbird and the Port of Derby. This approval would not be required until Year 5 of the Project, when Stage 2 moves into operation.

Both changes to the approved key characteristics are expected to be obtained using the provisions of Section 45C of the EP Act. This relates to non-significant changes where the changes are considered not likely to result in significantly different environmental impacts to what has already been assessed. Approval for such changes are typically able to be obtained in a six month timeframe, after submission of the application.

Amendments to secondary approvals being the Works Approval, Mining Proposal and the Groundwater Licence will be required over time as these approvals relate to details of Project design and implementation associated with the staged development of the Project and increases in mining and processing capacity.

### Logistics and Port Access

Thunderbird is conveniently located near two existing ports: Port of Broome is located 148km from the Project including 115km of major national highway, and the Port of Derby is at a distance of 146km, including 113km of major national highway. It is proposed the product will be trucked from mine to port.

Port of Derby has been selected for exporting bulk products for the purposes of the KMS BFS, as it has existing bulk loading facilities conveyor and shiploader and an access agreement in place for port storage, wharf and bulk handling facility with the Shire of Derby West Kimberley. Bulk products will be stored in a purpose-built 100kt facility (Stage 1) at the port and loaded by conveyor onto barges, increased to 150kt (Stage 2) with transhipped 20-30kms to meet a moored ocean-going vessel where products will be transferred. The barging & transshipment of bulk products has been successfully operated by previous users at 500ktpa.

KMS is exploring the use of Port of Broome as an opportunity to lower operating risk. The Port of Broome is well equipped with existing infrastructure and stevedoring services to load products directly to ship hold. No significant difference in capital or operating expenditures is expected and both solutions are assumed to be provided on a Build-Own-Operate (BOO) basis. KMS estimate of overall cost to vessel hold do not vary materially between either option, however consideration of operating factors and/or commercial arrangements or benefit to customers may lead to a change to the Port of Broome. Subject to activities being substantially complete to enable this transition, export through the Port of Derby using a BOO arrangement is assumed. Appropriate allowance has been made for the relevant operating cost charges.

### Project Execution Capability

KMS has commenced building internal capacity to manage the execution of the various scopes of work, project implementation. Following the inception of the KMD joint venture in 2021, KMS has recruited key personnel including Project Director, Chief Financial Officer and General Manager People for project execution activities. Other key project construction and execution staff have also been recruited to execute the project. Project planning is underway to manage all aspects of the Project to a Financial Investment Decision and immediately thereafter move into full execution.

An EPC construction contract has been executed with GRES. Other material contracts including, gas supply, power generation and mining services are at an advanced stage of completion and remain subject to a Final Investment Decision.

### Project Financing

Development of Thunderbird commenced in mid-2021 utilising \$130.1m of equity funding provided by Yansteel following completion of the joint venture transaction. KMS does not have the capacity to solely fund the full development of the Thunderbird Mineral Sands Project. Requisite funding from third party project financing sources including government funding providers, mining credit funds, senior secured bond products and royalty/streaming providers are potential sources of project finance.

KMS is currently progressing project financing arrangements with NAIF, following NAIF's completion of a non-binding strategic assessment in late 2021. Due diligence processes are well advanced, supported by commissioned independent technical experts. Subject to completion of due diligence, definitive documentation, approvals and customary conditions precedent, proposed project financing is targeted for completion by late Q2 2022.

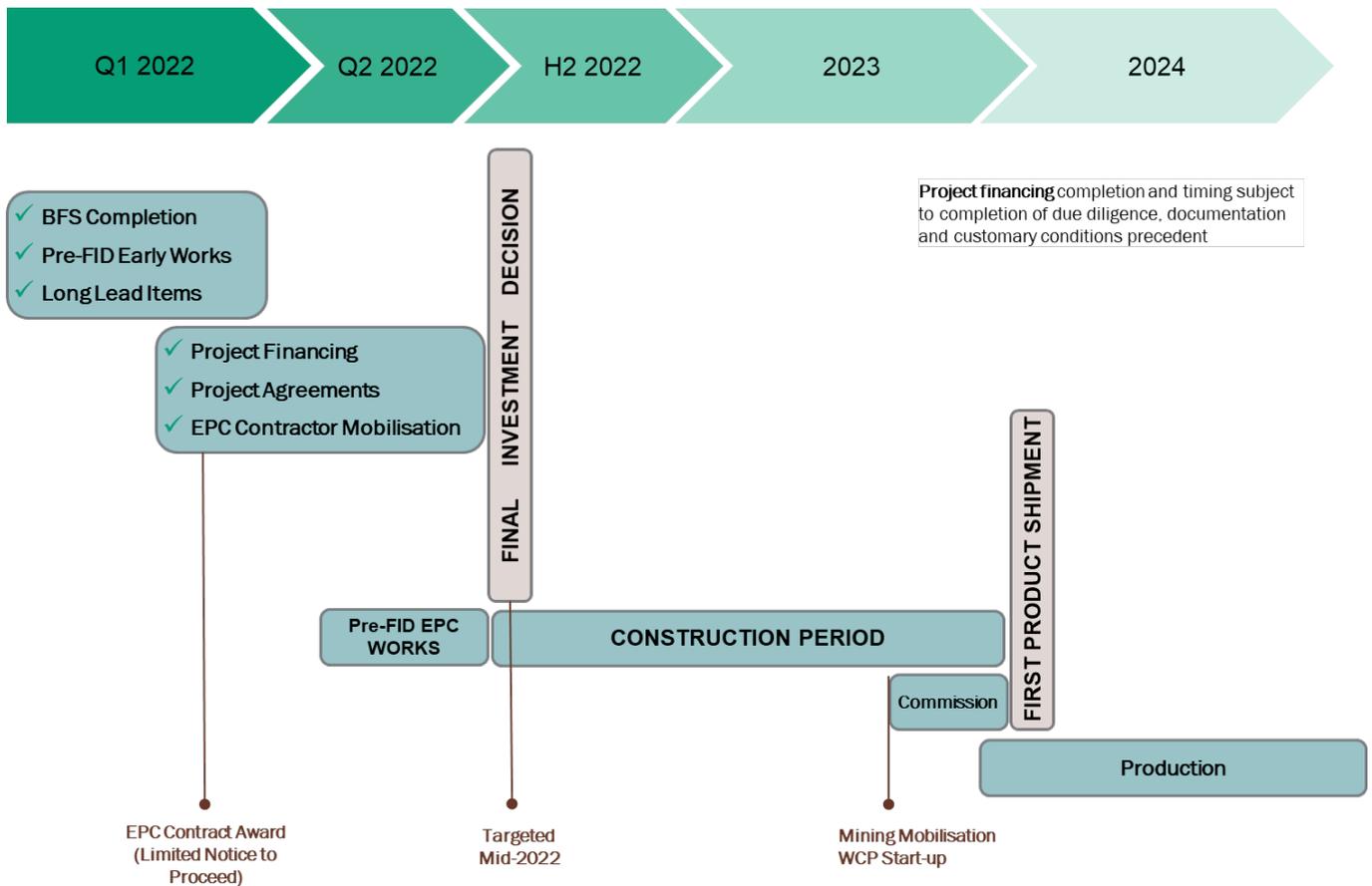
In parallel with the NAIF process, expressions of interest have been sought from mining credit funds, senior secured bond products and royalty/streaming providers. Term sheet negotiations are currently in progress, with KMS assessing and evaluating a commercial debt tranche to be concluded in parallel with the forecast NAIF financing process.

Equity funding will be from a combination of KMS sunk equity, KMS cash reserves and equity contributions from Sheffield and Yansteel.

**Project Timetable**

The proposed Project timeline and estimate to first production in 2024 is described below.

Figure 11: Targeted Timeline to Production



## COMPLIANCE STATEMENTS

Information and documentation which forms the basis of the KMS BFS in relation to Mineral Resources, Ore Reserves and metallurgy and process design has previously been reported as detailed below. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of the July 2016 Thunderbird Mineral Resources and the March 2022 Thunderbird Ore Reserve, 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 announcements.

## PREVIOUSLY REPORTED INFORMATION

### **The Mineral Resources and Ore Reserves of Sheffield have been extracted from Sheffield's ASX releases;**

"THUNDERBIRD ORE RESERVE UPDATE" 24 March 2022  
"MINERAL RESOURCE AND ORE RESERVE STATEMENT" 24 September 2019  
"THUNDERBIRD ORE RESERVE UPDATE" 31 July 2019  
"THUNDERBIRD ORE RESERVE UPDATE" 16 March 2017  
"SHEFFIELD DOUBLES MEASURED MINERAL RESOURCE AT THUNDERBIRD" 5 July 2016

A copy of these announcements is available at <http://www.sheffieldresources.com.au/>

### **Bankable Feasibility Study ("BFS")**

This document contains information that relates to a Bankable Feasibility Study. This information was extracted from the following ASX releases by Sheffield:

"KMS BANKABLE FEASIBILITY STUDY PRESENTATION" 24 March 2022  
"BFS UPDATE MATERIALLY IMPROVES PROJECT ECONOMICS" 31 July 2019  
"THUNDERBIRD BFS DELIVERS OUTSTANDING RESULTS" 24 March, 2017

### **Other Extracted Information**

In addition to those ASX releases referred to above, this Information Memorandum contains information extracted from the following ASX releases:

"JOINT VENTURE COMPLETION AND BOARD RESTRUCTURE" 12 March 2021  
"SHEFFIELD AND YANSTEEL EXECUTE BINDING JV AGREEMENTS" 6 January 2021  
"NAIF COMPLETES THUNDERBIRD STRATEGIC ASSESSMENT" 19 November 2021  
"TRANSFORMATIONAL THUNDERBIRD JOINT VENTURE" 11 August 2020  
"NATIVE TITLE AGREEMENT SIGNED BY TRADITIONAL OWNERS" 1 November 2018  
"MINING LEASE GRANTED OVER THUNDERBIRD MINERAL SANDS PROJECT" 26 September 2018  
"FEDERAL ENVIRONMENTAL APPROVAL GRANTED FOR THUNDERBIRD" 28 September 2018  
"DOZER TRAP MINING METHOD PREFERRED FOR THUNDERBIRD" 17 September 2015

The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, 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 announcements.

## FORWARD LOOKING AND CAUTIONARY STATEMENTS

The contents of this announcement reflect various technical and economic conditions at the time of writing. Given the nature of the resources industry, these conditions can change significantly over relatively short periods of time. Consequently, actual results may vary from those detailed in this announcement.

Some statements in this announcement regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "forecast", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "predict", "foresee", "proposed", "aim", "target", "opportunity", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies

which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Please also refer to the additional risk factors described below on Pages 20 - 28.

Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. There can be no assurance that actual outcomes will not materially differ from these forward-looking statements.

These statements are subject to significant risks and uncertainties that include but are not limited to those inherent in mine development and production, geological, mining, metallurgical and processing technical problems, the inability to obtain and maintain mine licenses, permits and other regulatory approvals required in connection with mining and processing operations, competition for among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of projects and acquisitions, changes in commodity prices and exchange rate, currency and interest rate fluctuations and other adverse economic conditions, the potential inability to market and sell products, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, environmental, native title, heritage, taxation and other legal problems, the potential inability to secure adequate financing and management's potential inability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward-looking statements will prove to be correct. Please refer to the section headed "Key Risks" in Appendix 1 of this announcement for further information.

Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and on a reasonable basis. No representation or warranty, express or implied, is made by the Company that the matters stated in this announcement will in fact be achieved or prove to be correct.

Except for statutory liability which cannot be excluded, the Company, its officers, employees and advisers expressly disclaim any responsibility for the accuracy or completeness of the material contained in this announcement and exclude all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this announcement or any error or omission there from.

This announcement does not take into account the individual investment objectives, financial or tax situation or particular needs of any person. It does not contain financial advice. You should consider seeking independent legal, financial and taxation advice in relation to the contents of this announcement.

Except as required by applicable law, the Company does not undertake any obligation to release publicly any revisions to any forward-looking statement to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

## APPENDIX 1: KEY RISKS

There are a number of risks, specific to Sheffield Resources Limited, Kimberley Mineral Sands Pty Ltd (**KMS**) and of a general nature, which may, either individually or in combination, affect the operational and financial performance of KMS, and the industry in which KMS operates. This Appendix describes some, but not all, of the risks associated with KMS which prospective investors should consider together with publicly available information about KMS or the Thunderbird Mineral Sands Project (**Thunderbird** or **Thunderbird Project**) before making any investment decisions.

### 1. RISKS SPECIFIC TO KMS, SHEFFIELD AND THE THUNDERBIRD PROJECT

#### 1.1 Thunderbird Project

First production from the Thunderbird Project is expected in or around early 2024, with the first full year of production and first significant financial contribution (from production) expected in 2025. KMS performance is dependent on the successful completion of Stage 1 of the proposed Thunderbird Project, and thereafter, a future investment decision to enable Stage 2 development. The completion of both stages is subject to a number of risks and uncertainties. For Stage 1, such risks include, but are not limited to the following:

- Slippage in the Stage 1 completion schedule as a result of delays in obtaining, or a failure to obtain government permits or approvals, shortages of or delays in the procurement or supply of labour and materials, or other items necessary for the construction and operation of Stage 1 of the Thunderbird Project, or delays in the negotiation of key contracts or the engagement of personnel.
- Escalation in capital costs for the construction, commissioning, ramp up and development of Stage 1 of the Thunderbird Project.
- Failure to secure Northern Australia Infrastructure Fund (NAIF) Board approval or agree definitive project financing agreements with the State of Western Australia under back-to-back loans from NAIF in respect of proposed debt facilities. Any failure to access project financing from NAIF will require KMS to source alternate financing to complete the development of Stage 1 of the Thunderbird Project.
- Failure to secure sources of project finance from third parties other than NAIF. Any failure to access project financing from third party sources will require KMS to source alternate financing to complete the development of Stage 1 of the Thunderbird Project, including equity financing from its shareholders.
- Failure to comply with environmental conditions placed on environmental approvals obtained by KMS in connection with mine development and operation;
- Inability to secure the development of Stage 1 of the Thunderbird Project within the timeframe and budget on which the Thunderbird Project's development model is predicated.
- Unforeseen conditions or challenges associated with COVID-19 that make completion of Stage 1 the Thunderbird Project economically unfeasible or unattractive.
- Unforeseen geological, physical, environmental, engineering, construction or economic conditions or challenges that make completion of Stage 1 the Thunderbird Project impossible or economically unfeasible or unattractive.
- Unanticipated natural disasters, accidents, political opposition, litigation or other events associated with construction, development or operation of the Thunderbird Project.
- Lack of water, if the current source proves to be insufficient, and technical risks related to dewatering as mining commences and progresses.

Any of these risks or uncertainties could delay, or increase the costs associated with, Stage 1 of the Thunderbird Project or otherwise negatively impact the Thunderbird Project's development or operations, which, in turn, could have a material adverse effect of KMS financial and operational performance.

In addition, any of the aforementioned risks or uncertainties in relation to Stage 1 of the Thunderbird Project may also give rise to an increase in the costs associated with, or delay, Stage 2 of the Thunderbird Project. No assurance can be given that the capital cost and development timeline estimates for Stage 1 or Stage 2 the Thunderbird Project will ultimately be achieved.

The scope, timing and estimated capital costs for Stage 2 of the development of the Thunderbird Project are management estimates based on the BFS and the EPC contract. The specific scope, timing and estimated capital costs for Stage 2 will be confirmed prior to any future investment decision being made. Accordingly, no assurances can be given in relation to those matters and the indicated operating cost, revenue and production profile included for Stage 2 in this presentation.

### 1.2 Additional requirements for capital

KMS capital requirements for Stage 1 of the Thunderbird Project depend on a number of factors. Subject to KMS fulfilling necessary conditions precedent required to access funds under project financing facilities, KMS expects to have sufficient funding for the development of Stage 1 of the Thunderbird Project during its construction period, in conjunction with any equity contribution to be provided by KMS shareholders.

While appropriate investigation and due consideration has been applied to estimating the capital costs and other start-up related costs for Stage 1 of the Thunderbird Project, including a degree of contingency, the actual costs incurred in developing Stage 1 of the Thunderbird Project may vary from current estimates. Additionally, the amounts contributed by KMS shareholders, and the amounts available to KMS under proposed project financing facilities, are intended to fund only Stage 1 of the Thunderbird Project.

KMS may require further financing in the future, including to fund Stage 2 of the Thunderbird Project, to fund exploration, or to fund other development or ongoing activities or because operating costs for the Thunderbird Project are different to those anticipated. To the extent that the amounts contributed by KMS shareholders, available to KMS under its debt facilities, or to be sourced from KMS future operating cash flow, are not sufficient to meet its capital or operating expenditure or future funding requirements, as above, KMS may need to seek to fund this expenditure or these requirements through KMS shareholder equity or loan contributions, procuring additional debt funding from its financiers or a combination of each.

The terms that debt financiers are willing to offer may vary from time to time depending on (among other things) macro-economic conditions, the performance of KMS and an assessment of the risks associated with the debt, including the intended use of funds. Any additional debt financing, if available, may involve restrictions on KMS, including its financing and operating activities, or its business strategy.

Any additional equity requested by KMS from its shareholders including Sheffield may result in the dilution of holdings of existing shareholders, with equity raising potentially being undertaken at lower prices than the current market price of Sheffield shares (or the price at which existing shareholders acquired some or all of their Sheffield shares).

### 1.3 Commodity price volatility

Following the commencement of production at the Thunderbird Project, KMS financial performance will rely on the sale of its mineral sands products to customers under offtake agreements. Mineral sands prices may fluctuate as a result of a number of factors beyond KMS control, including changes to global supply, demand, currency exchange rates, general economic conditions and other factors. Currency exchange rates are relevant because mineral sands prices are denominated in United States Dollars and the income and expenditures of KMS are predominantly taken into account in Australian Dollars. Therefore, KMS will be exposed to the fluctuations and volatility of the rate of exchange between the United States Dollar and the Australian Dollar as determined in international markets.

As noted elsewhere in this presentation, KMS already has in place a number of conditional offtake agreements with proposed customers. The price that KMS will receive for the supply of mineral sands products under those offtake agreements will be determined predominantly through periodic pricing negotiations.

The offtake agreements have a fall-back position if the parties cannot agree on a negotiated price – in most instances, referring to industry prices as published or determined by TZ Minerals International Pty Ltd (TZMI). Accordingly, KMS revenues are directly affected by fluctuations in price, and its ability to maintain its pricing position through those negotiations (including having regard to applicable developments in commodity prices generally). For the reasons mentioned above, KMS can give no assurances as to the prices it will achieve for any of its mineral sands products in the future. Any extended or prolonged decrease in the prices for mineral sands (particularly zircon and ilmenite) could have a material adverse effect on KMS the results of the Thunderbird Project's operations and could make the development or operation of the Thunderbird Project uneconomic.

#### 1.4 Supply risk and competition

The mineral sands industry is a concentrated market with a relatively small number of large producers dominating the market, coupled with a variety of much smaller producers.

According to analysis undertaken by TZMI, the mineral sands industry is expected to see a sustained curtailment in supply, particularly within the zircon sector, for the foreseeable future. However, there is no certainty that such supply shortages will exist in the future.

KMS competes with other mineral sands producers on the basis of price, quality and reliability of delivery. KMS main competitors include major international mineral exploration and mining companies, such as Rio Tinto, Tronox, Iluka and Lomon Billions. These competitors are well established and have significantly greater financial resources than KMS. In addition, consolidation among any of KMS competitors could enhance their business, financial resources, competitive position or ability to bring resources from development projects to market faster than KMS.

Discoveries by others of large mineral sands deposits or the development or expansion of projects undertaken by KMS competitors, including those capable of establishing very large projects or those capable of completing projects more quickly than KMS, could create a material increase or oversupply in the market and a significant market imbalance. In addition, KMS own actions in developing the Thunderbird Project are expected to increase supply and may have an impact on prices. KMS can give no assurances that there will not be an oversupply of its products, particularly zircon and ilmenite. Any oversupply of mineral sands could have a material adverse effect on mineral sands prices and therefore the results of the Thunderbird Project's operations.

KMS also faces competition from smaller mineral sands producers that operate in countries where labour and other costs are lower than in Australia, such as Indonesia. If KMS is unable to successfully compete in the markets in which it operates or is unable to establish a competitive position, this could have a material adverse effect on its business, financial condition and results of its future operations.

#### 1.5 Demand risk

A sustained reduction in demand for mineral sands would reduce KMS market and adversely affect prices.

KMS can give no assurances that there will be sufficient demand for its mineral sands products following the commencement of production at the Thunderbird Project. In addition, it is possible that substitutes to KMS mineral sands products could be developed. If technological change resulted in affordable alternatives to KMS products and KMS offtake partners and/or targeted future customers switched to use of the alternative, demand for KMS products could fall. Any substantial or extended decrease in demand for KMS mineral sands products could have a material adverse effect on KMS the results of the Thunderbird Project's operations and could make the development or operation of the Thunderbird Project uneconomic.

#### 1.6 Title risk

Interests in tenements in Australia are governed by applicable State-based legislation and are evidenced by the granting of licences or leases. Each licence or lease is for a specific term and carries with it annual expenditure and reporting commitments, as well as other terms and conditions. Consequently, there is a risk that KMS could lose title to or its interest in its tenements, including the tenements comprising the Thunderbird Project, if any conditions are not met or (for example) if insufficient funds are available to meet expenditure commitments.

All of the tenements in which KMS has or may (in the future) have an interest, including the tenements comprising the Thunderbird Project, will be subject to renewal in accordance with their terms of grant. Such renewals are or will be at the discretion of the relevant government bodies and ministries in the jurisdiction, and often depend on KMS being successful in obtaining other required statutory approvals for its proposed activities. There is no assurance that such renewals or subsequent grants will be made, or that they will be granted or renewed without different or further conditions attached. If any of the tenements are not renewed for any reason, KMS may suffer loss (including through loss of opportunity to develop) and its financial position and performance may be materially adversely impacted as a result or otherwise.

### 1.7 Regulatory risk

The proposed operations of KMS at the Thunderbird Project will be subject to various Federal, State and local laws and policies, including (but not limited to) those relating to prospecting, development, mining, permit and licence requirements, industrial relations, environment, land use and access, royalties, water, native title and cultural heritage, mine safety and occupational health. Approvals, licences and permits required to comply with such laws and policies may, in some instances, be subject to the discretion of the applicable government or government officials, and, in some cases, the local community or other stakeholders. No assurance can be given that KMS will be successful in obtaining any or all of the various approvals, licences and permits or maintaining such authorisations in full force and effect without modification or revocation. To the extent such authorisations are required and not obtained or retained in a timely manner or at all, KMS may be curtailed or prohibited from continuing or proceeding with development, mining and/or exploration activities (at the Thunderbird Project or otherwise).

Mining development and operations can be subject to public and political opposition. Opposition may include legal challenges to exploration, development and mining permits, political and public advocacy, electoral strategies, ballot initiatives, media and public outreach campaigns and protest activity, all of which may delay or halt development, operations or expansion. For example, native title claimants (or determined native title holders) may oppose the validity or grant of existing or future tenements held by KMS in Australia, which may potentially impact KMS future operations and plans. For tenements in Australia (that may be subject to registered native title claims or determinations) to be validly granted (or renewed), there are established statutory regimes that will need to be followed in connection with those grants (or renewals).

### 1.8 Contract and counterparty risk

As mentioned elsewhere, KMS has contracts with various counterparties with respect to the sale of Stage 1 product from the Thunderbird Project. These contracts currently do not cover all product expected to be produced from the Thunderbird Project. There is no guarantee that KMS will be able to reach agreement on terms satisfactory to it for the sale of product not presently contracted. If KMS cannot reach agreement on satisfactory terms, this may have an adverse effect on KMS future revenues.

KMS will rely on a contracted customer base to generate its revenue. Such exposure will be increased if KMS markets to customers in developing countries. If key customers default, exercise termination rights, cease dealing with KMS or reduce their demand for KMS product once it has commenced mining, the ability of KMS to generate revenue from the Thunderbird Project may be adversely impacted (unless KMS is able to find and agree terms with replacement customers), and there can be no guarantee that KMS would be able to recover the full amount of any loss through legal action.

However, KMS has commercial practices in place designed to ensure that contracts for the sale of products are entered into with customers with an appropriate credit history or rating – or that otherwise have provided guarantees in the form of irrevocable letters of credit or parent company guarantees from parent companies which have an appropriate credit rating.

Additionally, a number of material contracts, including a mining services agreement, a gas supply agreement, and certain downstream power and gas arrangements, are currently being negotiated between KMS and the applicable proposed counterparties. There is a risk that these contracts will not be agreed or will be agreed only on terms that are less favourable to KMS than anticipated, which could have a material adverse effect on KMS financial and operational performance.

### 1.9 Key contractors

KMS has appointed GR Engineering Services Pty Ltd as its EPC contractor, and is currently using, and will in the future use, other external contractors or service providers for many of its activities, including mining services. As such, the failure of any current or proposed contractors, subcontractors appointed by its current or proposed contractors or other service providers to perform their contractual obligations may negatively impact the business of KMS. Whilst KMS has selected its appointed key contractors carefully and with suitable regard to their performance and delivery track record, KMS cannot guarantee that such parties will ultimately fulfil their contractual obligations and there is no guarantee that KMS would be successful in enforcing any of its contractual rights through legal action. Disagreements between KMS and key contractors or a failure of a key contractor to adequately manage a project

poses a further risk of financial loss or legal or other disputes. Further, the insolvency or managerial failure by any such contractors or other service providers may pose a significant risk to KMS future operating and financial performance and financial position.

#### **1.10 Reliance on key personnel**

KMS is dependent on the experience, skills and knowledge of its senior management team and key employees, including to manage the day-to-day requirements of its business. Such senior managers and key employees provide expertise and experience in the implementation of its strategy and are important to KMS ability to carry out its business and to attract and maintain key relationships. The loss of any of KMS existing senior management or key employees, or the inability to recruit relevant staff, as needed, may cause a significant disruption to KMS and adversely affect KMS business, cash flow, financial condition and results of its proposed operations at the Thunderbird Project.

In addition, KMS proposed Thunderbird Project is located in a relatively remote area where lack of access to skilled labour could be an issue. Any inability by KMS or its key contractors to obtain skilled workers when required could have a material adverse effect on KMS business, financial condition and future results of operations.

#### **1.11 Interest rate risk**

The interest on proposed KMS project finance facilities may include fixed and floating interest rates. Accordingly, any significant or sustained increase in LIBOR may have a material adverse effect on KMS.

#### **1.12 Contingent royalty risk**

Taurus Mining Finance currently retains certain contingent rights to a dormant royalty arrangement in respect of the Thunderbird Project. If certain events occur under the Taurus royalty deed (namely, a change in control of Sheffield Resources Limited or a change (other than in the ordinary course of business) of the primary tenements associated with the Thunderbird Project), contingent royalty obligations may become enlivened and payable by KMS over a 22.5 year period.

#### **1.13 Ore Reserves and Mineral Resources**

KMS JORC Code-compliant ore reserves (Ore Reserves) and mineral resources (Mineral Resources) for the Thunderbird Project are expressions of judgement based on industry practice, experience and knowledge and are estimates only. Estimates of Ore Reserves and Mineral Resources are necessarily imprecise and depend to some extent on interpretations which may prove inaccurate. No assurance can be given that the estimated Ore Reserves and Mineral Resources are accurate or that the indicated level of zircon, ilmenite or any other mineral will be produced. Such estimates are, in large part, based on interpretations of geological data obtained from drill holes, and geological testing and sampling techniques. Actual mineralisation or geological conditions may be different from those predicted. Furthermore, no assurance can be given that any or all of KMS Mineral Resources constitute or will be converted into Ore Reserves.

Actual Ore Reserves and Mineral Resources may differ from those estimated, which could have a positive or negative effect on KMS financial performance. Commodity price fluctuations as well as increased production and capital costs may render KMS Ore Reserves unprofitable to develop at a particular site or sites for periods of time or may render Ore Reserves containing relatively lower grade mineralisation uneconomic. Estimated Ore Reserves may have to be recalculated based on actual production experience. Any of these factors may require KMS to reduce its respective Ore Reserves and Mineral Resources, which could have a negative impact on KMS financial results and the expected operating life of the Thunderbird Project.

#### **1.14 Operational risks**

KMS proposed operations at the Project following the commencement of production may be affected by various factors, including (but not limited to):

- failure to locate or identify mineral deposits;
- failure to achieve expected grades in exploration and mining;
- unanticipated operational and technical difficulties encountered in mining and production activities;

- difficulties in commissioning and operating plant and equipment;
- mechanical failure of operating plant and equipment;
- interruption or loss of power, fuel or spare parts;
- unanticipated metallurgical problems which may affect extraction costs;
- seasonal weather patterns, storms, heavy rains and floods, bushfires, high winds and cyclone activity and other natural disasters;
- industrial and environmental accidents, industrial disputes, work stoppages and other events;
- the level of experience of the workforce;
- unexpected shortages or increases in the costs of labour, consumables, spare parts, plant and equipment and certain commodities necessary to KMS's proposed mining process (such as water, fuel, gas and electricity);
- inability to obtain necessary consents or approvals;
- increased or unexpected reclamation and rehabilitation costs;
- health and safety risks; and
- changes to applicable laws and regulations.

The occurrence of any of these circumstances could result in KMS not realising its development, commissioning or operational plans, or such plans costing more than expected or taking longer to realise than expected. Any of these outcomes could have a material adverse effect on the Project's (and therefore KMS and Sheffield's) financial and future operational performance.

#### **1.15 Infrastructure, transportation and remoteness of operations**

The product from the Thunderbird Project will need to be transported to customers internationally. Each stage of the transportation process poses risks, including, as a result of the remoteness of the Thunderbird Project. Fuel costs, unexpected delays and accidents could materially impact KMS financial position. Further, there are risks associated with the availability of adequate trucking and port facilities and the process for obtaining approvals to access these facilities (including the timing and conditions on which access may be granted). If KMS is not able to access the required infrastructure within a certain time period or at a reasonable cost, this could adversely affect KMS proposed operations and financial performance. The price of sea freight, smelting and refining charges are market driven and can vary throughout the life of the Thunderbird Project. These will also impact on the overall profitability of KMS.

#### **1.16 Native title**

In relation to tenements in which KMS has an interest or will in the future acquire such an interest (including through a tenement application and grant process), there may be areas over which native title rights exist or are found to exist in the future. If native title rights do exist, the ability of KMS to gain access to tenements (through obtaining consent of any relevant landowner), or to progress from the exploration phase to the development and mining phases of operations may be adversely affected.

KMS entered into a native title agreement covering the grant of M04/459 and associated activities with the Mount Jowlaenga #2 People ("Mining Agreement"), and a separate native title agreement covering the grant of L04/82 and L04/83 and associated activities with the Walalakoo Aboriginal Corporation on behalf of the Nyikina Mangala People ("Infrastructure Agreement") (together, the "Agreements"). The Agreements cover future renewals or replacements of M04/459, L04/82 and L04/83, but do not otherwise cover the grant of other tenure.

Where native title rights may or do exist, KMS cannot do anything that may affect native title without first complying with the applicable procedural provision of the Native Title Act 1993 (Cth) (NTA) (otherwise, the relevant "act" will be invalid as it affects native title (e.g., the grant of a new tenement)). Where native title rights may or do exist, and KMS applies for the grant of new tenements by the State that may affect native title (e.g. mining leases, prospecting licences, miscellaneous licence), the State may be unable or unwilling to grant the tenure until the relevant NTA procedural requirement has been discharged. However, once the NTA procedural requirement has been discharged and the tenement validly granted to it, KMS can then exercise its rights pursuant to those tenements.

Where KMS acquires (or already holds) an existing interest, that interest will only be valid (from an NTA perspective) if – when it was granted or last renewed, if applicable – the relevant NTA procedural requirement was complied with.

Under the NTA, determined native title holders whose native title has been (or is, in the future) affected (eg by the grant of, and development on, a mining lease), are in certain circumstances entitled to compensation for the impact on their native title. While the Commonwealth, State and Territory governments are predominantly responsible for native title compensation under the NTA, there are also circumstances where that liability has or can be passed on to proponents (for example, see s125A of the Mining Act 1978 (WA)).

In relation to the Thunderbird Project, native title claims have been registered, and further claims may be lodged and registered, over certain areas of mining tenements in which KMS has an interest.

Under the NTA, where a proposed "act" (e.g., the grant of a mining lease) attracts the "right to negotiate" NTA procedure, KMS is required to negotiate in good faith for at least 6 months with the Native Title claimants/holders with the aim of reaching agreement as to whether the proposed "act" can be done. Future KMS projects may require tenure that attracts the "right to negotiate" procedure. Should negotiations not result in an agreement, an application may then be made to the National Native Title Tribunal (NNTT) for a determination that the grant proceed, notwithstanding an agreement was not reached (the relevant NTA procedure does not require an actual agreement be entered into, it requires that the parties negotiate in good faith towards that end). If the NNTT can be convinced that the "right to negotiate" procedure has been properly discharged, the NNTT will determine that the relevant grant can proceed (following which, the State will proceed to grant the tenement).

For various reasons, KMS may elect to negotiate and enter into an agreement with native title claimants or determined native title holders. Such agreements often go beyond native title consents, and can cover matters such as cultural heritage, environmental approvals, monitoring, the payment of compensation, etc.

Should agreements be reached, those agreements may be extensive and costly to perform, depending on the outcome of negotiations.

If KMS is required to litigate a native title matter (for example: (a) it may need to seek a determination from the NNTT that the "right to negotiate" procedural requirement has been discharged, (b) it may need to contest a native title determination where the native title claim group allege existing KMS tenure is invalid as it affects native title, or (c) it may be the respondent party in a native title compensation claim), or if KMS enters into a costly agreement with a Native Title claim group or determined holders, this could have a material adverse effect on KMS business, financial condition or results of its future operations.

Where KMS is entering into a contractual agreement with a native title claim group (that have not had their claim determined), there is always a risk that a competing native title claim may be filed that overlaps the existing claim. If that new/overlapping claim meets the NNTT's registration test (as set out in the NTA), the applicable procedural requirements of the NTA (e.g. for the grant of new tenure), would need to be discharged in respect of both claims. Where KMS has an agreement with one claim group, but not the other, KMS will not have the benefit of the contractual consents from the new/overlapping group, which may cause significant costs and delays (eg to the grant of the proposed tenement).

### **1.17 Aboriginal heritage**

In Western Australia, the Aboriginal Heritage Act 1972 (WA) (AHA) protects Aboriginal remains, relics and ethnographic sites from undue interference. The AHA makes it an offence for any person to excavate, destroy, damage, conceal or in any way alter any "Aboriginal site" without authorisation from the Registrar of Aboriginal Sites or the consent of the Minister for Aboriginal Affairs.

The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth) (HPA) provides for the preservation and protection of "significant Aboriginal areas" and "significant Aboriginal objects" throughout Australia which are of particular significance to Aboriginal persons in accordance with Aboriginal custom. The HPA does not provide blanket protection to any area or object that meets the statutory requirements (unlike the AHA). Protection is instead afforded to an area or object when the Minister or an "authorised officer" makes a declaration in respect of that area or object upon an application by an Aboriginal person. Such a declaration has the effect of prohibiting injury to, or the desecration of, the relevant "area" or "object" specified in the declaration.

Although there is a State register of known Aboriginal sites maintained by the Department of Aboriginal Affairs, it is not comprehensive and Aboriginal sites are protected whether or not they have been identified on the register. Agreements negotiated with traditional owners in relation to heritage, and processes associated with identifying (and

seeking statutory consents to impact, where available) Aboriginal heritage sites, could have a material adverse effect on KMS business, financial condition or results of its future operations.

In relation to the Thunderbird Project, no such sites are known to exist following extensive surveying spanning several years.

### 1.18 Environmental risks

Mining and exploration can be potentially environmentally hazardous, giving rise to potentially substantial costs associated with environmental rehabilitation, damage control and other losses. KMS is subject to State and Federal environmental laws and regulations in connection with KMS activities and intended operations at the Thunderbird Project. There is a risk of environmental damage arising from KMS proposed operations, including through accident, which may give rise to liabilities and costs for KMS. As a result, KMS could be subject to liabilities and the potential for its proposed Thunderbird Project operations to be delayed, suspended or shut down due to risks inherent in its activities, including as a result of unforeseen circumstances or events.

Additionally, environmental laws and regulations are increasingly evolving to require stricter standards and enforcement behaviours, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility (and liability) for companies and their officers, directors and employees. Changes in environmental laws and regulations deal with air quality, water and noise pollution and other discharges of materials into the environment, plant and wildlife protection, the reclamation and restoration of mining properties, greenhouse gas emissions, the storage, treatment and disposal of wastes, the effects of mining on the water table and groundwater quality. Changes in environmental legislation could increase the cost of KMS exploration, development and mining activities or delay or preclude those activities altogether.

### 1.19 Water sources

KMS proposed mining process will require significant amounts of water. Climate-related changes to precipitation patterns in Australia could exacerbate water stress in some areas and therefore potentially have a negative impact on KMS ability to access fresh water and process ore at its Thunderbird Project.

KMS is seeking to extract water from borefields within the Thunderbird Project site to access the Broome aquifer. Total extraction of the aquifer is immaterial relative to its size and hydrological structure. Notwithstanding this, where water shortages are present, the effects of changes in rainfall patterns, water allocations and storm patterns and intensities may adversely impact the cost, production and financial performance of KMS future operations, as well as its ability to mine certain deposits in future.

## 2. GENERAL RISKS

### 2.1 Market conditions

There are general risks associated with investments in equity capital. The trading price of Sheffield shares may fluctuate with movements in equity capital markets in Australia and internationally and may also be influenced by a number of factors, some of which are specific to Sheffield and its proposed operations and some of which affect listed companies generally. Generally applicable factors which may affect the market price of shares include:

- general movements in Australian and international stock markets;
- changes in investor sentiment toward particular market sectors;
- general Australian and international economic conditions and outlook;
- changes in interest rates and the rate of inflation;
- the demand for, and supply of, capital;
- changes in government regulation and policies;
- announcement of new technologies; and
- geo-political instability, including international hostilities and acts of terrorism.

The market price of shares can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and resource stocks in particular.

## 2.2 Liquidity risk

There can be no guarantee that there will always be an active market for Sheffield's shares or that the price of Sheffield's shares will increase. There may be relatively few buyers or sellers of shares on ASX at any given time, and the demand for Sheffield shares specifically is subject to various factors, many of which are beyond Sheffield's control. This may affect the stability or volatility of the market price of Sheffield shares, and may also affect the prevailing market price at which Sheffield shareholders are able to sell their Sheffield shares at any given time.

## 2.3 Taxation

Future changes in taxation law, including changes in the interpretation or application of the law by the courts or taxation authorities, may affect taxation treatment of KMS, an investment in Sheffield shares or the holding and disposal of those shares. Further, changes in tax law, or changes in the way tax law is expected to be interpreted, in the various jurisdictions in which Sheffield operates, may impact the future tax liabilities and performance of KMS or Sheffield.

## 2.4 Litigation

As at the date of this announcement, Sheffield is not aware of any material disputes or litigation with respect to it or its activities or the activities of KMS. However, like any company operating in the resources sector, it is possible that Sheffield or KMS may be involved in disputes and litigation in the course of its future operations. There is a risk that any material or costly dispute or litigation (including any compensation or damages ultimately payable by KMS or Sheffield) could adversely impact the financial position or performance of Sheffield.

### ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited is focused on developing the world class Thunderbird Mineral Sands Project, located in north-west Western Australia.

### ABOUT YANSTEEL

Yansteel is a wholly-owned subsidiary of Tangshan Yanshan Iron & Steel Co., Ltd, a privately owned steel manufacturer headquartered in Hebei, China producing approximately 10mt per annum of steel products and has annual revenues of ~A\$6bn.

Construction of a 500ktpa integrated titanium dioxide processing facility including a titanium slag smelter has commenced by the company. This complex will consume the magnetic concentrate from Stage 1 of the Thunderbird Mineral Sands Project under a take or pay offtake agreement.

### THUNDERBIRD MINERAL SANDS

Thunderbird is one of the largest and highest grade mineral sands discoveries in the last 30 years. The 2022 KMS Bankable Feasibility Study shows Thunderbird is a technically low risk, that generates strong cash margins from globally significant levels of production over a decades long mine-life.

Thunderbird will generate a high-quality suite of mineral sands concentrate products suited to market requirements. These products include a zircon concentrate and a magnetic concentrate that contains a high quality ilmenite suitable smelting into chloride slag or for manufacturing titanium dioxide pigment.

Thunderbird is located in one of the world's most attractive mining investment jurisdictions and is well placed to deliver long term, secure supply of high quality products to a range of potential customers.

### KIMBERLEY MINERAL SANDS

Kimberley Mineral Sands Pty Ltd, (KMS) is a 50:50 Joint Venture between Sheffield and Yansteel. The joint venture owns and is developing the Thunderbird Mineral Sands Project and adjacent tenements on the Dampier Peninsula.

KMS is governed by a four person Board of Directors with Sheffield and Yansteel each nominating two directors. Key Joint Venture decisions require unanimous approval of both shareholders. KMS operates as a standalone entity with its own management and employees.