
THUNDERBIRD PROJECT AND JOINT VENTURE UPDATE

- FIRB application for Sheffield and Yansteel Joint Venture submitted in August 2020
- Sheffield and Yansteel progressing definitive Joint Venture documentation
- Work program commenced targeting FID ahead of the 2021 dry season

Sheffield Resources Limited (“Sheffield” or “the Company”) (ASX: SFX) is pleased to provide an update on the proposed *Thunderbird Joint Venture* (the “Joint Venture”) between YGH Australia Investment Pty Ltd (“Yansteel”) and Sheffield and the Thunderbird Mineral Sands Project.

Yansteel Joint Venture Update

Yansteel submitted its Foreign Investment Review Board (“FIRB”) application in August 2020 to acquire a 50% interest in Thunderbird through the formation of the Joint Venture. The FIRB application was prepared in collaboration with Sheffield and Yansteel and Sheffield are working together to respond to questions and requests for further information received from FIRB.

Sheffield and Yansteel have progressed drafting of definitive Joint Venture documentation and continue to target the end of October 2020 for the execution of the agreements.

Thunderbird Project Update

To maximise the probability of reaching FID ahead of the 2021 dry season and enabling construction to proceed, Sheffield has commenced a work program to ensure completion of a Bankable Feasibility Study (“BFS”) on the revised project scope and enable completion of project financing in a timely manner following Joint Venture formation.

Engineering Studies

The flowsheet agreed in the Joint Venture term sheet reintroduces the Low Temperature Roast (“LTR”) from the 2017 BFS and removes the zircon-related Mineral Separation Plant (“MSP”) components included in both the 2017 BFS and 2019 BFS Update. The detailed engineering work completed during these prior studies will be updated to account for the above changes. Procurement and construction schedules will be updated in addition to capital and operating cost estimates.

Trial Mining and Variability Sample Collection

A full-scale trial mining program is planned during Q4 2020 to confirm mining plant design and mining contract costs, and to collect a bulk ore sample. Variability samples will be collected across the initial mining area by air-core drilling.

Flowsheet Confirmation and Non-Magnetic Concentrate Product Samples

The bulk and variability samples will be processed through the revised flowsheet to confirm the non-magnetic concentrate related flowsheet design parameters. The resulting non-magnetic concentrate to be produced will be used to supply product samples to existing and new offtake partners.

Enabling Early Works

Site investigation, design and tendering work is scheduled during Q4 2020 and will be completed to enable early works ahead of the 20/21 Kimberley wet season.

The total cost of these works is estimated as A\$2.9m and will be funded from the Yansteel placement proceeds (A\$12.9m) received by Sheffield in August 2020. Yansteel and Sheffield have agreed that the

work program is reimbursable from the Joint Venture and will reduce Sheffield's requirement to fund any Joint Venture equity shortfall between A\$130.1m and A\$143m.

This announcement was authorised for release by the Company's Board of Directors.

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ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited is focused on developing its 100% owned, world class Thunderbird Mineral Sands Project, located in north-west Western Australia. Sheffield continues to assess other regional exploration opportunities.

THUNDERBIRD MINERAL SANDS

Thunderbird is one of the largest and highest grade mineral sands discoveries in the last 30 years. Sheffield's 2019 Bankable Feasibility Study Update shows Thunderbird is a technically low risk, modest capex project that generates strong cash margins from globally significant levels of production over an exceptionally long mine-life spanning multiple decades.

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

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.

FORWARD LOOKING AND CAUTIONARY STATEMENTS

The contents of this document may 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 contained in this report.

Some statements in this document 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", "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 report 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. 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. So there can be no assurance that actual outcomes will not materially differ from these forward-looking statements.

THUNDERBIRD JOINT VENTURE

In August 2020 Sheffield and Yansteel executed a Non-Binding Term Sheet for the formation of a 50:50 Joint Venture to own and develop the Thunderbird Mineral Sands Project and adjacent tenements on the Dampier Peninsula. The parties have agreed that the development concept for Stage 1 of the Project will be a 10.4mt per annum mine and process plant producing a zircon rich non-magnetic concentrate and LTR ilmenite.

Yansteel will subscribe for a 50% interest in the Joint Venture and provide A\$130.1m in project equity funding. Sheffield will fund any project equity shortfall between A\$130.1m and A\$143m, less Project costs incurred prior to a Final Investment Decision (“FID”). The Joint Venture will secure project finance and, if required, project equity in excess of A\$143m will be funded 50:50 by Yansteel and Sheffield.

The Yansteel A\$130.1m project equity investment via the Joint Venture transaction, together with the A\$12.9m funding under the Yansteel Share Placement completed on 12 August 2020 and combined with existing project financing is expected to deliver a fully funded project.

The Joint Venture will be governed by a four person Board of Directors with Sheffield and Yansteel each nominating two directors. Key Joint Venture decisions will require unanimous approval of both shareholders. The Joint Venture will be operated as a standalone entity with its own management and employees, with Sheffield personnel to be appointed as the key management persons upon the formation of the Joint Venture.

The Joint Venture agreements will include customary dispute resolution, default, dilution and pre-emption terms and these have been defined in-principle within a Non-Binding Term Sheet.

The formation of the Joint Venture is subject to final negotiation, agreement and execution of formal agreements, FIRB process completion and where required, any other applicable regulatory approval.

YANSTEEL OFFTAKE AGREEMENT

Yansteel and Sheffield have entered into a binding life of mine take or pay offtake agreement for 100% of the LTR ilmenite from Stage 1 at market price. Yansteel has a first right of refusal to purchase ilmenite from later stages.

In the unlikely event that the Joint Venture cannot be formed for any reason, the offtake will convert automatically to a minimum 7 + 3 year take or pay offtake agreement for 100% of the ilmenite produced from Stage 1 of the Project.

ABOUT YANSTEEL

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

Tangshan has commenced the construction of a 500ktpa integrated titanium dioxide processing facility including a titanium slag smelter. This complex will consume the Low Temperature Roast (“LTR”) ilmenite offtake from Stage 1 of the Thunderbird Mineral Sands Project.

ASX Code:	SFX	Market Capitalisation:	A\$99m
Issued shares:	346.1m	Cash (unaudited, 30 June 2020):	A\$7.1m