

---

## TRANSFORMATIONAL THUNDERBIRD JOINT VENTURE

---

- Sheffield Resources and Yansteel execute a non-binding term sheet to form a 50:50 Joint Venture on the Thunderbird Mineral Sands Project and associated tenements (Project)
- Yansteel to invest A\$130.1 million to acquire 50% of the Project
- Sheffield completes a 9.9% placement to Yansteel for approximately A\$12.9 million at approximately A\$0.376 per share, a 131% premium to the Sheffield 10-day VWAP<sup>1</sup>
- Yansteel to take or pay offtake for 100% of the Stage 1 ilmenite
- Establishes a long term strategic partnership with a large private steel company that underpins their entry into titanium dioxide production
- Demonstrates a credible path to construction and production for Thunderbird, bringing hundreds of jobs and economic opportunities for the Kimberley and the rest of Australia

Sheffield Resources Limited (“Sheffield” or “the Company”) (ASX: SFX) is pleased to announce that it has entered into a Non-Binding Term Sheet with Yangang (Hong Kong) Co., Ltd’s wholly owned subsidiary YGH Australia Investment Pty Ltd (“Yansteel”) to form a Joint Venture to develop the Thunderbird Mineral Sands Project. Yansteel will invest A\$130.1m in equity to acquire a 50% interest in the Project. Formation of the Yansteel and Sheffield Joint Venture (“Joint Venture”) is subject to final negotiation, agreement and execution of formal agreements, Foreign Investment Review Board (“FIRB”) process completion and where required, any other applicable regulatory or shareholder approval.

Sheffield is also pleased to welcome Yansteel as a significant shareholder after the Board approved the issue of 34,259,421 fully paid ordinary shares (comprising 9.9% of the post-issue share capital) in Sheffield to Yansteel for a total consideration of approximately A\$12.9m (“Share Placement”). The Share Placement is not conditional upon the completion of the Joint Venture transaction or FIRB process completion.

Yansteel and Sheffield have also executed a take or pay offtake agreement for 100% of the ilmenite produced from Stage 1 of the Project.

Sheffield is engaging with its project financing partners Taurus and NAIF to finalise the overall funding package for the Thunderbird Project.

Additional information on the Joint Venture, Share Placement and offtake agreement is set out below.

“The Joint Venture with Yansteel, if completed, will provide the project equity presently estimated to fund Stage 1 of the Thunderbird Project. The transaction with Yansteel also secures offtake for all of the ilmenite. We welcome Yansteel as a shareholder and look forward to working with them to develop Thunderbird. To attract such a strong partner is testimony to the quality of the Thunderbird Mineral Sands Project. This outcome achieves all of the objectives of the strategic partner process undertaken by Sheffield over the past 18 months and, if completed, will provide the means by which Sheffield shareholders can realise the underlying value of the Project”, said Bruce McFadzean Sheffield Resources’ Managing Director.

---

<sup>1</sup> Based on the volume weighted average price of Sheffield shares traded on ASX between 24 July - 6 August 2020 inclusive.

“Following our extensive technical, legal and financial due diligence, Yansteel is pleased to enter this partnership with Sheffield. We share the same strong commitment as Sheffield to protecting the environment and creating employment and business opportunities for local and indigenous communities to benefit from the Project development. We are supportive of the strong social licence and stakeholder engagement undertaken by Sheffield through the study, approvals and project financing processes,” expressed the Board of Tangshan Yanshan Iron & Steel Co., Ltd the ultimate owner of Yansteel.

Mr McFadzean added that “Whilst the Joint Venture would now progress a Bankable Feasibility Study based on a flowsheet to produce a zircon rich non-magnetic concentrate and a high quality LTR Ilmenite product, the 2019 Bankable Feasibility Study Update (“BFSU”) estimated an after-tax NPV<sub>8</sub> of A\$980m (refer ASX announcement dated 31 July 2019 “BFS Update Materially Improves Project Economics”) and the Joint Venture transaction commences the journey of realising this value for Sheffield shareholders”.

### **Yangang (Hong Kong) Co., Ltd**

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.

### **Thunderbird: Project Benefits**

Thunderbird is expected to be a major development for the Kimberley and regional Western Australia, providing approximately 400 construction jobs and 200 Kimberley-based operational jobs for 37 years.

For Australia, Thunderbird is estimated to generate A\$750m in royalties and A\$2B in taxes over its project life. At a global level, the introduction of a new supplier of ilmenite and zircon, as well as Yansteel’s new downstream processing operation, will provide a new source of competitive supply into mineral sands and downstream product markets that are facing an emerging structural decline in supplies.

### **Thunderbird Joint Venture**

Sheffield and Yansteel will form a 50:50 Joint Venture to own and develop the Thunderbird Mineral Sands Project and adjacent tenements in 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. The Board of the Joint Venture will agree the final Project scope, complete the Bankable Feasibility Study and secure project finance.

Sheffield has always believed that the LTR process produced the best ilmenite product from Thunderbird. It was removed from the BFSU flowsheet in 2019 to reduce capital intensity. The current flowsheet reintroduces the LTR and removes the Mineral Separation Plant (MSP) components related to producing a final zircon product with the non-magnetic concentrate product now containing all of the premium zircon and zircon-in-concentrate materials. This scenario was modelled via a pre-feasibility standard study with the net effect being a reduction in the project capital compared to the BFSU. The Yansteel A\$130.1m project equity investment via the Joint Venture transaction, together with the A\$12.9m funding under the Share Placement and combined with existing project financing is expected to deliver a fully funded project.

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 or shareholder approval. Yansteel expects to submit its FIRB application during August 2020 and Sheffield is working

with Yansteel to complete the application process in a timely manner. Sheffield and Yansteel expect to secure a favourable outcome to the FIRB process and the early completion of the Share Placement reflects this view.

Based on the Non-Binding Term Sheet, it is expected that 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 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 initial 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 the Non-Binding Term Sheet.

Negotiation, agreement and execution of formal agreements are expected to complete within the likely timeframe for FIRB process completion.

Sheffield has agreed an exclusivity period ending at the earlier of six months following the Share Placement or completion of the FIRB process. If FIRB process completion occurs prior to 31 October 2020, the exclusivity period will continue until 31 October 2020 to allow for finalisation of the definitive Joint Venture documentation.

#### **Yansteel Share Placement**

Sheffield has agreed to issue 34,259,421 fully paid ordinary shares (comprising 9.9% of the total share capital) in Sheffield to Yansteel for a total consideration of approximately A\$12.9m. The share price of approximately A\$0.376 paid for these shares represents a 131% premium to the Sheffield 10-day VWAP ending 6 August 2020.

#### **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. The offtake agreement is independent from formation of the Joint Venture. 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.

#### **Project Advancement**

Funds from the Share Placement will be utilised to advance the Bankable Feasibility Study (“BFS”) and includes metallurgical test work and other activities necessary to finalise the project flowsheet and updating capital and operating costs. The study work will benefit from detailed engineering work completed during the 2017 BFS and the 2019 BFSU and is expected to enable project financing to be completed within a similar timeframe to the Joint Venture transaction. The costs associated with the BFS will be reimbursed from the Joint Venture upon completion of the transaction.

The Board of Directors of Sheffield has authorised this announcement for release to the market.

ENDS

For further information please contact:

Bruce McFadzean  
Managing Director  
Tel: 08 6555 8777  
[info@sheffieldresources.com.au](mailto:info@sheffieldresources.com.au)  
Website:  
[www.sheffieldresources.com.au](http://www.sheffieldresources.com.au)

Media: Paul Ryan  
Citadel-MAGNUS  
Tel: +61 409 296 511  
[pryan@citadelmagnus.com](mailto:pryan@citadelmagnus.com)

## 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 also 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 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 will contain zircon suitable for the ceramic sector and ilmenite suitable for the paint pigment industry.

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.



Figure 1: Location of Thunderbird Mineral Sands Project

## COMPETENT PERSONS AND COMPLIANCE STATEMENTS

The Company's Ore Reserves and Mineral Resources Statement is based on information first reported in previous ASX announcements by the Company. These announcements are available to view on Sheffield's website [www.sheffieldresources.com.au](http://www.sheffieldresources.com.au). Mineral Resources and Ore Reserves reported for the Dampier Project and Mineral Resources reported for the Eneabba and McCalls Projects, are prepared and disclosed under the JORC Code 2012. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant original market announcement continue to apply and have not materially changed.

The Competent Persons for reporting of Mineral Resources and Ore Reserves in the relevant original market announcements are listed below. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the relevant original market announcement.

| Item                        | Name                   | Company             | Professional Affiliation |
|-----------------------------|------------------------|---------------------|--------------------------|
| Exploration Results         | Mr Seb Gray            | Sheffield Resources | MAIG                     |
| Mineral Resource Reporting  | Mr Mark Teakle         | N/A                 | MAIG, MAusIMM            |
| Mineral Resource Estimation | Mrs Christine Standing | Optiro              | MAIG, MAusIMM            |
| Ore Reserve                 | Mr Per Scrimshaw       | Entech              | MAusIMM                  |

## PREVIOUSLY REPORTED INFORMATION

This document may include references to information that relates to Exploration Results, Mineral Resources and Ore Reserves prepared and first disclosed under the JORC Code 2012 and a Bankable Feasibility Study. The information was extracted from the Company's previous ASX announcements as follows:

- Mineral Resource and Ore Reserve Statement: "MINERAL RESOURCE AND ORE RESERVE STATEMENT" 24 September 2019
- Thunderbird Ore Reserve Update: "THUNDERBIRD ORE RESERVE UPDATE" 31 July 2019
- Thunderbird BFS Update: "BFS UPDATE MATERIALLY IMPROVES PROJECT ECONOMICS", 31 July 2019

These announcements are available to view on Sheffield's website [www.sheffieldresources.com.au](http://www.sheffieldresources.com.au).

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, Ore Reserves and the Bankable Feasibility Study Update, 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 Persons' findings are presented have not been materially modified from the relevant original market announcements.

## 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.