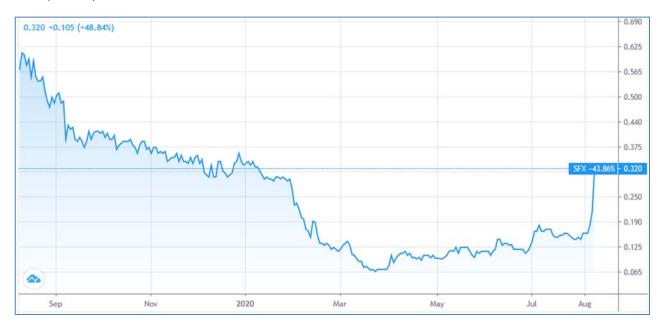
### **RESOURCE BULLETIN** by Gavin Wendt

#### Tuesday 11<sup>th</sup> August, 2020

#### Portfolio Stock Developments

**Sheffield Resources** - (ASX: SFX, Share Price: \$0.32, Market Cap: \$100m, coverage initiated @ \$0.50 in Sep 2015)



#### Key Catalyst

## Non-binding term sheet with China's Yansteel to form a 50:50 Joint Venture on the Thunderbird Mineral Sands Project, with Yansteel to invest A\$130.1m to acquire a 50% project stake.

Since its 2010 listing, SFX has remained focused on exploration, appraisal and commercialisation of its 100%-owned Thunderbird deposit in Western Australia. Thunderbird is a remarkable and rather unique asset, representing one of the world's largest and highest-grade undeveloped zircon-rich mineral sands deposits. SFX was in the right place at the right time to acquire the project when RIO sold it in the wake of the GFC. SFX has since completed two high-quality Bankable Feasibility Studies (BFS) respectively during 2017 and 2019, highlighting robust economics, low technical risks and a long operating life of ~40 years. SFX has also secured offtake for approximately 100% of all Stage 1 zircon and ilmenite production volumes, significantly reducing market and revenue risk. SFX has been exploring all avenues to get its Thunderbird project funded, culminating in a potentially game-changing deal with China's Yansteel.

#### Recent Activity

#### **Thunderbird Project Update**

SFX has provided an enormously encouraging update with respect to its world-class Thunderbird mineral sands project, announcing a transformational joint venture with China's Yansteel that will see the project take major steps towards production - with Yansteel to provide funding, equity and off-take for a 50% project stake.

#### **Overview**

SFX today announced a Non-Binding Term Sheet with China's Yansteel to form a joint venture to develop its Thunderbird Mineral Sands Project. Under the deal, Yansteel will invest \$130.1m in equity to acquire a 50% interest in the project acquire a 9.9% stake in SFX via a \$12.9m placement, and execute a take-or-pay off-take agreement for 100% of the ilmenite produced from Stage 1 of the project.

Formation of the Yansteel and Sheffield Joint Venture is subject to final negotiation, agreement and execution of formal agreements, Foreign Investment Review Board (FIRB) process completion and other regulatory or shareholder approvals. SFX is also engaging with its project financing partners, Taurus and NAIF, to finalise the overall funding package for the Thunderbird Project.

#### **Details**

Aside from Yansteel investing \$130.1m in equity to acquire a 50% project stake, Yansteel will also become a significant shareholder in SFX after receiving board approval for the issue of 34,259,421 fully paid ordinary shares (comprising 9.9% of SFX's post-issue share capital) for a total consideration of approximately \$12.9m. Importantly, the share placement is not conditional upon the completion of the Joint Venture transaction or FIRB process completion. Yansteel and SFX have also executed a take-or-pay off-take agreement for 100% of the ilmenite produced from Stage 1 of the project.

Funds from the share placement will be utilised to advance a Bankable Feasibility Study (BFS) that will include metallurgical test-work and other activities necessary to finalise the project flowsheet, as well as 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.

SFX will fund any project equity shortfall between \$130.1m and \$143m, less project costs incurred prior to a Final Investment Decision. The Joint Venture will secure project finance and, if required, project equity in excess of \$143m will be funded 50:50 by Yansteel and SFX.

#### Technical Significance

Yansteel is a wholly-owned subsidiary of Tangshan Yanshan Iron & Steel Co Ltd, a privately-owned steel manufacturer headquartered in Hebei, China. Tangshan produces approximately 10Mt annually of steel products and generates annual revenues of ~\$6B. Tangshan has commenced the construction of a 500ktpa integrated titanium dioxide processing facility, including a titanium slag smelter, as part of its product diversification away from steel. This complex will consume the Low Temperature Roast (LTR) ilmenite off-take from Stage 1 of the Thunderbird Mineral Sands Project.

The Yansteel \$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.

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.

SFX 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.

#### **Executive Director Appointment**

SFX recently appointed Mr Bruce Griffin as an Executive Director of the company. Mr Griffin joined the executive management team as Commercial Director, following his recent consulting engagement whereby he led a study to assess a range of project development options for the Thunderbird Project.

Mr Griffin most recently held the position of Senior Vice President Strategic Development of Lomon Billions Group, the world's third-largest producer of high-quality titanium dioxide pigments. Mr Griffin has previously held executive management positions in several resource companies, including acting as the Chief Executive Officer and a director of TZ Minerals International Pty. Ltd. (TZMI), the leading independent consultant on the global mineral sands industry, World Titanium Resources, a developmentstage titanium project in Africa, and as Vice President Titanium for BHP Billiton.

#### Summary

Despite all of SFX's hard work in advancing the Thunderbird project and demonstrating its financial viability as a long-life operation, the company has been hamstrung by its inability to secure the final piece of the jigsaw puzzle – specifically, project funding. To be fair, financial markets have moved against the company since the completion of the initial BFS in 2017, which

necessitated the completion of a revised BFS during 2019, in order to try and enhance funding prospects by presenting a lower-capex project.

SFX's share price performance since late 2018 had been negatively impacted by question marks over the company's capacity to finalise project funding for Thunderbird, in what has proven to be a challenging environment. This was reflected in a share price fall from an all-time high of \$1.27 in October 2018 to a low of \$0.065 earlier this year.

The just-announced deal with Yansteel is therefore an important milestone, as it establishes a long-term strategic partnership with a large private steel company that underpins their entry into the titanium dioxide production business. The deal importantly also demonstrates a credible path to construction and production for the Thunderbird project.

The market was impressed with today's developments, with SFX's share price rising by 49% to close at \$0.32. SFX remains within our coverage Portfolio.

**Disclaimer:** Gavin Wendt, who is a director of Mine Life Pty Ltd ACN 140 028 799, compiled this document. It does not constitute investment advice. I wrote this article myself, it expresses my own opinions and I am not receiving compensation for it. In preparing this article, no account was taken of the investment objectives, financial situation and particular needs of any particular person. Investors need to consider, with or without the assistance of a securities adviser, whether the information is appropriate in light of the particular investment needs, objectives and financial circumstances of the investor. Although the information contained in this publication has been obtained from sources considered and believed to be both reliable and accurate, no responsibility is accepted for any opinion expressed or for any error or omission in that information. I have no positions in the stock mentioned and no plans to initiate any positions within the next 72 hours.