

# Ups and downs of a year at Sheffield



Picture:  
Simon Santi

## SPINIFEX STUART MCKINNON



It's been a bumpy 12 months for Bruce McFadzean and shareholders of his aspiring mineral sands miner Sheffield Resources.

Sheffield was riding high last year on a purple patch of positive news about its flagship Thunderbird project between Broome and Derby.

Its share price surged above \$1.20 as the company secured State and Federal environmental approvals, a \$95 million loan from the Northern Australia Infrastructure Facility, a \$US200 million debt deal with Taurus Funds Management and signed up GR Engineering to build the mine.

It even settled protracted negotiations for a native title agreement with a local indigenous group.

But when the company announced a \$115 million jump

in the start-up costs for Thunderbird to \$463 million, citing scope changes, the tide of sentiment changed.

Its share price dived below 60¢ as investors began to question the economics of the project.

They feared Thunderbird couldn't carry the \$350 million debt needed to fund it.

McFadzean, pictured, and his team had no choice but to re-cut the project to lower the start-up costs.

They worked out they could cut the initial capital expense by as much as \$100 million by scrapping plans for an ilmenite roasting plant and replacing the revenue from that product by boosting the project's zircon production.

Sheffield figured it could stockpile its raw ilmenite and build the roaster later.

"We were originally roasting because we could only ever get into the sulphate pigment sector because the chloride pigment sector was vertically integrated by the likes of Rio Tinto, Tronox, Cristal and Chemours,"

McFadzean said. "What's transpired since then is that there's groups that just want our raw ilmenite and they'll roast it."

Raw ilmenite is processed into titanium dioxide, a pigment used in paints, plastics, cosmetics and toiletries, through the sulphate process.

But the chloride process, which typically requires a higher-grade feedstock, is preferred because of its financial and environmental advantages. This month, Sheffield announced China's Bengbu Zhongheng had signed a binding offtake agreement for all 650,000 tonnes a year of unroasted ilmenite from stage one of Thunderbird.

Sheffield won't be getting the same price for its raw ilmenite as it would for the roasted product, but it knocks out the requirement for a big chunk of upfront capital.

"We've recovered all our revenue (with the zircon) and now we've been able to sell all the ilmenite," McFadzean said.

"We never anticipated that at the beginning of this year."

McFadzean believes the new model has substantially improved the economics of the project and also positions Sheffield as a heavyweight of the global zircon market.

While the new plan will shorten the project's 45-year mine life by about a third, the company is confident of extending this by bringing more of its resources into reserves.

Sheffield also needs to find offtake partners for its extra zircon production and a strategic partner is essential for it to help close a \$260 million equity gap that still exists for Thunderbird.

Like most managing directors, McFadzean believes his company's shares have been oversold and are cheap.

The market will decide if that's the case when Thunderbird's revised bankable feasibility study is released in the coming weeks, but if recent share price moves are any guide, he might be right.