1 November 2018

STRANDLINE
resources limited

Stronger mineral sands prices increase Fungoni's value and forecast returns

Updated Feasibility Study based on strengthening market outlook results in higher NPV and IRR

HIGHLIGHTS

- **Updated DFS results in significant increases in forecast project financial returns and reduced implementation risk:**
  - **Project pre-tax NPV^{10} of US\$48.7m (A\$64.9m at USD:AUD 0.75, up from US\$42.9m)**
  - **Project post-tax NPV^{8} of US\$34.8m (A\$46.4m) and NPV^{10} of US\$30.8m (A\$41.1m)**
  - **Project pre-tax IRR of 61% (up from 56%) and project post-tax IRR of 42%**
  - **Project-only cashflows would support a payback period from first production of 1.7 years**
  - **Life-of-Mine (LOM) Revenue of US\$184m (up from US\$168m)**
  - **LOM EBITDA of US\$115m (up from US\$98m)**
  - **Binding offtake agreements secured covering 100% of Fungoni production and revenue**
  - **Fixed-price EPC contract awarded; equivalent development capital US\$32m (up from US\$30m) (excluding applicable taxes and levies)**
- **With key mining and environment licences in place, 100% product pre-sold via offtake, strong Government support, EPC contract now executed and project financing underway, Strandline is well positioned to capitalise on the growing mineral sands market**

Strandline Resources (**ASX: STA**) is pleased to announce updated Definitive Feasibility Study (DFS) results for its 100%-owned, high-grade Fungoni mineral sands project (**Fungoni**) in Tanzania.

The original DFS results were announced to the ASX on 06 October 2017 ("Original DFS"). The DFS has been updated to reflect the latest information on the project ("Updated DFS"), including terms of binding offtake agreements and higher mineral sands commodities price forecasts published by TZ Mineral International Pty Ltd (TZMI) in August-2018.

Capital and operating cost estimates have also been revised in line with advancing execution contracts, such as the award of the fixed-price EPC contract with international contractor GR Engineering Services. Other material assumptions underpinning the Original DFS remain unchanged.

The updates have resulted in an overall enhancement to the project financial metrics, including an outstanding Internal Rate of Return of 61% (from 56%) and first quartile revenue-to-operating cost ratio of 2.8.

The projected LOM revenue has increased to US$184m (or A$246m) from US$168m and EBITDA to US$115m from $98m. The increase is driven by the strengthening market outlook for Fungoni's high-value product suite and favourable offtake terms compared to the assumptions made in the Original DFS.

Strandline Managing Director Luke Graham said Fungoni was set to continue benefiting from the forecast supply shortages in the global zircon and TiO2 market.

"With the ongoing tightening in the mineral sands market, Fungoni offers additional opportunities to grow reserves and mine life, resulting in increasing financial returns over time," Mr Graham said.

"The modular relocatable infrastructure planned for Fungoni can be re-used at Strandline's other mineral sands assets.

"Importantly, Strandline's two most advanced projects, Fungoni and Coburn, differentiate through their premium zircon-titanium product suite and relatively low capital intensity.

"The funding process for Fungoni is well underway and, importantly, the Company continues its close collaboration with the Government of Tanzania and local communities."

Summary of Updated DFS

The Fungoni project is favourably located ~25km from the Dar es Salaam port in Tanzania. The updated DFS re-affirms the project will deliver strong financial returns, has a high unit-value product suite (fully pre-sold under offtake), is capital-efficient and strategically, paves the way for a succession of the Company's mineral sands developments along the coastline of Tanzania.

The Original DFS was completed by a range of independent and highly reputable consultant/contractors with experience in mineral sands and African project development.

Since the Original DFS, in addition to the improving market forecast conditions (published by TZMI in August 2018) the Company has also progressed key execution readiness activities to further de-risk the implementation of the project. This includes, but is not limited to, awarding a fixed price EPC contract for the engineering procurement construction and commission of the processing facilities (refer ASX announcement 22 October 2018) to international contractor GR Engineering Services (ASX: GNG) and advancing tendering activities for other major works packages including contract mining, bore field, logistics and power solutions.

The first production bore has recently been installed at Fungoni, confirming the DFS design parameters relating to hydrology and water supply.

Environmental and social re-baselining is also underway to prepare for final compensation and resettlement activities following FID. The growth in capex of US$2m can be mainly attributed to this package.

Strandline has applied the new pricing assumptions to the Fungoni financial model. Project economics are based on known current ore reserves for an initial 6.2 year LOM.

It is reasonable to expect that the increases in commodity pricing may also result in an increase to Ore Reserves (see ASX announcement 06 October 2017), which may increase mine life and enhance financial returns from the project. The Company intends to evaluate these additional value improvements following the final development decision.

The discounted cash flow (DCF) analysis has been updated on the Fungoni Project incorporating the estimated capital and operating expenditures and revenue assumptions based on the latest TZMI published forecast product prices (August 2018). The project pre-tax NPV has increased to US$48.7m from original US42.9m (up 14%).

The NPV has been calculated using project related costs only and does not consider Strandline's corporate costs. The assets relating to the Fungoni Project are held in Strandline's 100%-owned subsidiary Jacana Resources (Tanzania) Limited (Jacana).

The key financial results and underlying assumptions used are outlined in the following tables:

Table 1 – DFS Key Financial Metrics

Description	Original DFS Result (Oct-17)	Updated DFS Result (Oct-18)	Comment
NPV (10% WACC, Real, Pre Tax, no debt)	US$42.9m	**US$48.7m**	Up US$5.8m or 14%
IRR	56.2%	**61.1%**	Up 4,900bps
NPV (10% WACC, Real, Post Tax, no debt)	n.a.	**US$30.8m**	See commentary regarding taxes below
IRR	n.a.	**42.1%**	Original DFS IRR was pre-tax
NPV (8% WACC, Real, Post Tax, no debt)	n.a.	**US$34.8m**	See commentary regarding taxes below
Operational Cashflow Payback Period of Initial Capital	2.72 years	**2.67 years**	From commencement of project execution
LOM Revenue	US$168.1m	**US$184.2m**	Up US$16.1m or 10%
LOM EBITDA	US$97.8m	**US$114.8m**	Up US$17.0m or 17%
LOM OPEX C1 Costs inc transport	US$63.1m	**US$66.1m**	Up US$3.0m or 5%
LOM All-in Sustaining Costs (AISC)	US$71.2m	**US$74.9m**	Up US$3.7m or 5%
Revenue to C1 Cost Ratio	2.7	**2.8**	First quartile RC ratio
Annual Average Operating Margin	US$348/t	**US$391/t**	Up US$43/t or 12%
LOM Project Cash Flow	US$71.5m	**US$81.7m**	Up $10.2m or 14%

Table 2 – DFS Key Assumptions

Description	Original DFS Result (Oct-17)	Updated DFS Result (Oct-18)	Comment
Annual Production Rate (Steady State)	2.0Mt	**2.0Mt**	No change
LOM Production	12.3Mt	**12.3Mt**	Re-optimisation based on increased commodity prices may increase reserves and mine life
Mine Life (Initial)	6.2 Years	**6.2 Years**	
Exchange Rate (A$/US$)	0.75	**0.75**	No change
Capital Expenditure (Pre-production)	US$30.0m	**US$32.1m**	Pre-production Capex excluding tax & levies
Product Price Zircon (FOB) Avg. LOM	US$1,134/t	**US$1,229/t**	Premium grade zircon in concentrate form
Product Price Rutile (FOB) Avg. LOM	US$1,072/t	**US$1,129/t**	Final product welding rod grade
Product Price Ilmenite (FOB) Avg. LOM	US$232/t	**US$266/t**	Chloride grade ilmenite
Product Price Monazite (FOB) Avg. LOM	US$1,722/t	**US$1,804/t**	In concentrate form

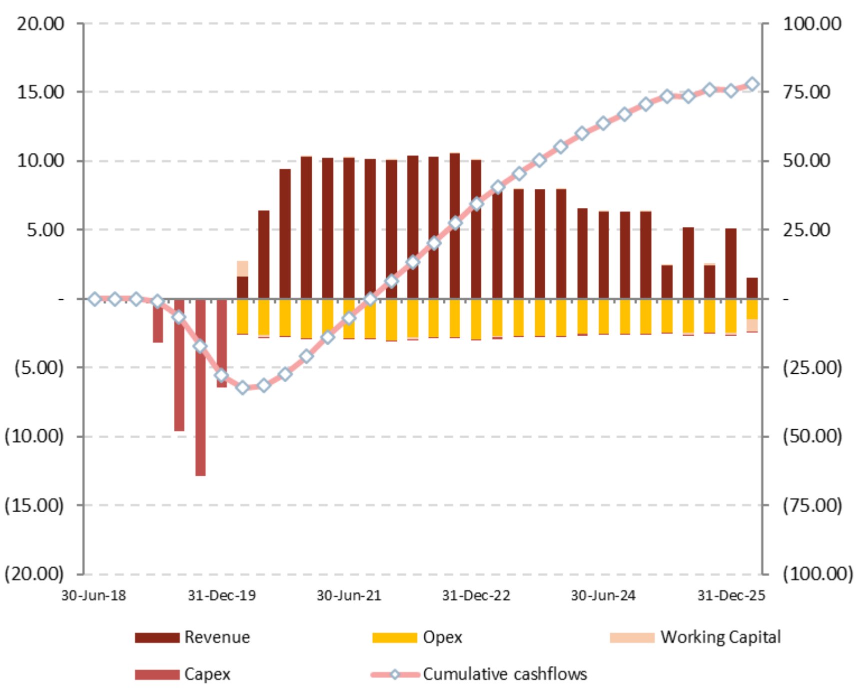

Figure 1 Quarterly Net Operating Cash Flow (excluding Corporate Overheads) (US$m)

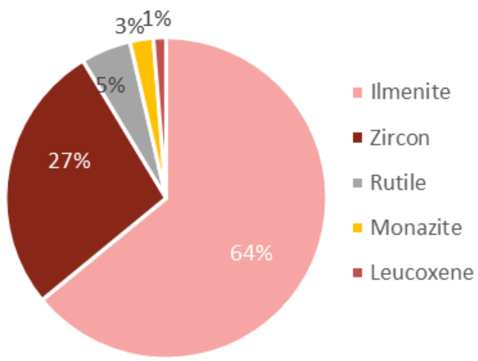

Figure 2 Production by Product (tonnes)

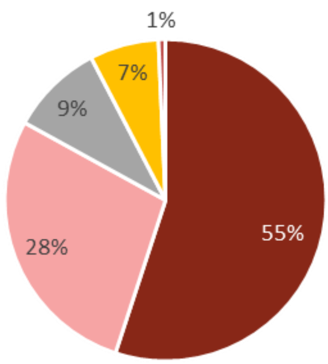

Figure 3 Revenue by Product (US$m)

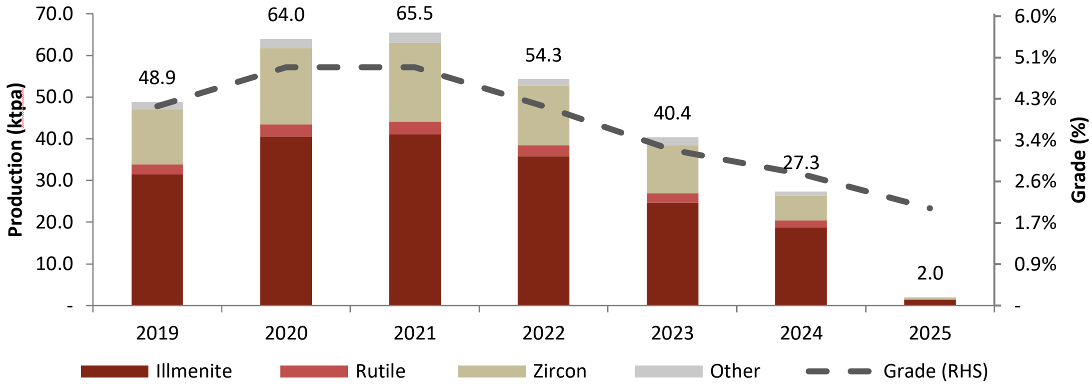

Figure 4 Production and Grade Profile (Other consists of monazite and leucoxene mineral)

The royalty and tax profile for the project required under the laws of Tanzania has remained unchanged from the Original DFS and is based on specialist taxation advice received:

- Corporate income tax rate of 30% on taxable profit;
- Capital expenditure is depreciable (written off) for tax purposes at 20% per annum on a straight-line basis over five years;
- Royalty paid to the Tanzanian Government of 3% of the Project revenue (for industrial minerals);
- An export clearance and inspection fee of 1% of Project revenue paid to the Government and a service levy of 0.3% of Project revenue paid to the local Government (District);
- Value added tax (VAT) of 18%, where applied to capital and operating cost items, is paid upfront and will be recoverable as an offset to corporate tax payable upon commencement of production revenue; and
- Withholding tax of 10% on interest and dividends, and 15% applied on services provided by non-residents and 5% applied on services provided by residents.

A Government invoked non dilutable free-carried interest in the Project has not been included as the detail is not yet known, however the legislation refers to the Government owning 16% of the equity in the Project. A further 5% of the equity is required to be owned by indigenous Tanzanian residents.

Funding Process:

Following the recent approval of the Fungoni mining license from the Tanzanian Government, the Company engaged Azure Capital to lead the project financing process for the Fungoni project and has progressed the process of engagement with potential lenders.

The project is well positioned to transition into development underpinned by a robust DFS, key project approvals in place, 100% of product pre-sold under binding offtake agreement and the fixed price EPC contract to design and build the process plant all in place.

Project Opportunity and Risk:

As an integral part of the DFS key project risks were assessed to better understand the material risks and opportunities associated with the development strategy and implementation activities. This process is critical to inform the on-going risk management activity and support decision making.

The assessment indicates that while the Project has sound fundamental characteristics across all aspects, there remain several material risks that relate specifically to Tanzania around the areas of sovereign risk, processing complexity, and controlling operating costs and efficiencies. The assessment also confirms the rigour of the management activities undertaken prior to and during the review.

The key risks include:

- Delays in securing project capital funding, land access or final project approvals;
- An increase in working capital or pre-production expenditure resulting in top-up funding being required;
- Negative movements in commodity prices;
- Performance of implementation partners across performance indicators of quality, schedule, cost and safety;
- Process performance relating to plant throughput, recovery, grade and specification; and
- The impact of the Tanzanian legislative regime for mining operations.

Treatment strategies and controls were identified and considered reasonable and effective to reduce the residual risks to an acceptable level suitable for project development. These strategies and controls have been incorporated into the final implementation and management plans for the Project.

Potential opportunities to further enhance the Project were also identified and these will be subject to review as the Project develops and throughout the operations phase.

The key opportunities include:

- Further optimising the mine pits as product pricing improves thus expanding mineral resource that can be mined profitably;
- Asset recycling; use the Fungoni modular relocatable processing plant and related infrastructure to support development of Strandline's other mineral sands assets in the future;
- Positive movement in commodity prices above forecast;
- Modular design concept provides design flexibility to allow the plant to be efficiently reconfigured to adapt to market drivers further maximising ROI;
- Improved process performance including recoveries, throughput and specification; and
- Additional capital reduction initiatives, including transferring capital items into operating cost items, such as build-own-operate laboratory and logistics equipment.

Synopsis:

The main conclusions of the DFS are as follows:

- The DFS has been compiled by a range of independent and experienced consultants and contractors and the Project is at an advanced stage of development ready for execution;
- Ore will be excavated and hauled to the MFU where it will be screened, slurried and pumped to the WCP at a nominal rate of 253 tph for the 6.2 year LOM;
- The WCP will separate the coarse material and clays using screens and cyclones and then use spirals and classifier technology to separate the heavy mineral from the sand;
- The HM concentrate (grade 94%) will be processed in the MSP, using electrostatic separation, gravity and magnetic fractionation to separate rutile, ilmenite, and zircon-monazite into saleable products;
- The coarse (sand-sized) tailings will be used to construct the walls of the TSF as required and fine (clay-sized) tailings will be deposited within the tailings facility in such a way as to facilitate solar drying and water recovery;
- The products will be stored onsite in readiness for shipping and then trucked in container form (for zircon and rutile) and bulk form (for ilmenite), 25kms to the Dar es Salaam port on a 'just in time' shipping basis without the need for product staging at the port;
- The water supply will be from a bore field located on the mine lease with ongoing recycle and dewatering to provide the main operational needs once established;

- Power for the operation will be supplied by diesel generators strategically located near the main loads;
- Environment approvals have been received and, at the time of publishing the DFS, the mining license application was under review by the Ministry of Energy and Minerals;
- Land access for construction will be obtained after compensation and land access agreements with land holders have been finalised;
- The Project provides significant benefits to the people of Tanzania including key social benefits of job creation, training and job diversity and community engagement programmes, and paves the way for future mineral sands development in country;
- The financial analysis indicates that the total capital expenditure is expected to be US$32.1M on start-up including contingencies, or US$35.6m including upfront taxes and levies, with a further US$0.93M of sustaining capital and mine closure cost of US$0.44M during future years.;
- LOM operating cost (C1 cash costs) is US$66.1M with an All-in Sustaining Cost of US$74.9M;
- The Project has a NPV^{10} of US$48.7M and an IRR% of 61.1, on a 100% owned basis pre-tax. Post-tax the Project has a NPV^{10} of US$30.8m and IRR% of 42.1. The revenue to C1 operating cost ratio is compelling (first quartile of mineral sands projects) at 2.8; and
- The Project production will start nominally 52 weeks after project development commences which is in the EPC contract conditions.

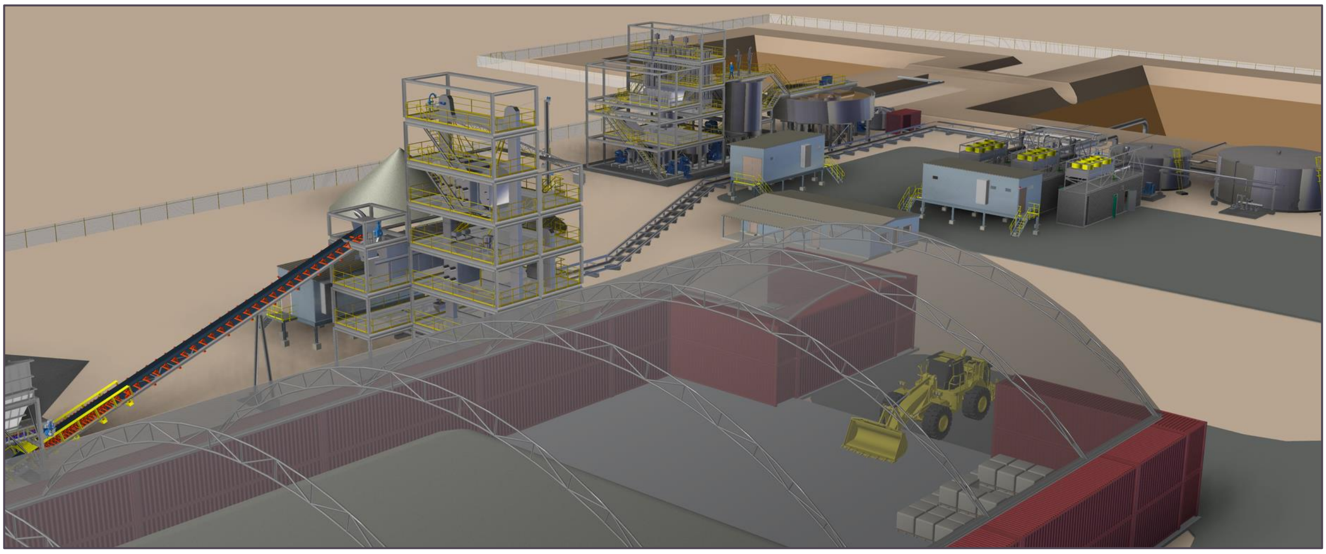

Figure 5 Preliminary 3D design model of Fungoni Process Infrastructure

For further enquiries, please contact:
Luke Graham
CEO and Managing Director
Strandline Resources Limited
T: +61 8 9226 3130
E: enquiries@strandline.com.au

For media and broker enquiries:
Paul Armstrong
Read Corporate
T: +61 8 9388 1474
E: paul@readcorporate.com.au

ABOUT STRANDLINE – CAPITALISING ON THE GROWING MINERAL SANDS MARKET

Strandline Resources Limited (**ASX: STA**) is an emerging heavy mineral sands (**HMS**) developer with a growing portfolio of 100%-owned development assets located in Western Australia and within the world's major zircon and titanium producing corridor in South East Africa. Strandline's strategy is to develop and operate quality, high margin, expandable mining assets with market differentiation and global relevance.

Strandline's project portfolio comprises development optionality, geographic diversity and scalability. This includes two zircon-rich, 'development ready' projects, the Fungoni Project in Tanzania and the large Coburn Project in Western Australia, as well as a series of titanium dominated exploration targets spread along 350km of highly prospective Tanzanian coastline, including the advanced Tanga South Project and highly prospective Bagamoyo and Sudi projects.

The Company's focus is to continue its aggressive exploration and development strategy and execute its multi-tiered and staged growth strategy to maximise shareholder value.

Figure 6 Strandline's world-wide mineral sands exploration & development projects

FORWARD LOOKING STATEMENTS

This report contains certain forward looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside of the control of Strandline. These risks, uncertainties and assumptions include commodity prices, currency fluctuations, economic and financial market conditions, environmental risks and legislative, fiscal or regulatory developments, political risks, project delay, approvals and cost estimates. Actual values, results or events may be materially different to those contained in this announcement. Given these uncertainties, readers are cautioned not to place reliance on forward looking statements. Any forward looking statements in this announcement reflect the views of Strandline only at the date of this announcement. Subject to any continuing obligations under applicable laws and ASX Listing Rules, Strandline does not undertake any obligation to update or revise any information or any of the forward looking statements in this announcement to reflect changes in events, conditions or circumstances on which any forward looking statements is based.