





Sierra Leone



Sierra Rutile is a key part of the economy in Sierra Leone.



- Sierra Leone is a coastal nation in West Africa, known for its vast and numerous beaches, as well as its rainforests and wildlife preserves.
- A stable democracy for over 22 years.
- ▲ The 5th safest country in Africa¹.
- Moderate annual economic growth, with agriculture and mining representing key contributors to the country's exports, GDP and employment.
- Sierra Rutile has an established operating history of more than 50 years in Sierra Leone.
- With a population of only 7.5 million², Sierra Leone's economy is relatively small overall so, with ~ 2,200 direct employees and another ¬800 contractors, Sierra Rutile plays a critical role economically as one of the largest private sector employers.



Area 1 Operations



Area 1 represents an established well understood operation that is positioned to deliver value and support the transition to Sembehun.

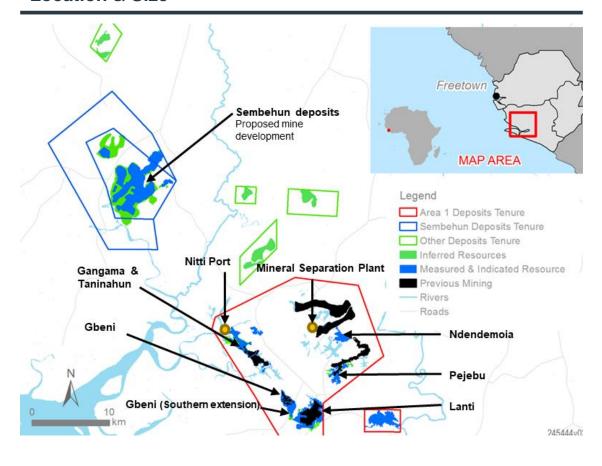
Overview

541Kt Contained Rutile Ore Reserve¹ Contained Rutile Mineral Resource¹ 144kt FY22 Rutile Production Guidance² U\$\$892/t of rutile FY22 Unit Cost Guidance (net of co-products)³

Work program to extend the Area 1 LOM Plan is underway

Products	 Standard Grade Rutile (SGR) Industrial Grade Rutile (IGR) High-grade ilmenite Zircon-in-concentrate (ZIC) 	
Mining method	Dry mining: truck and excavator with dozer support.	
Processing ⁴	 Four wet concentrator plants (WCPs) producing mineral concentrate with feed capacity of 500-600tph. Mineral concentrate from Area 1 is processed in the mineral separation plant (MSP), which includes a feed preparation plant and dry plant. The MSP has capacity to produce 175ktpa of rutile. 	
Other assets	Products are exported through the Nitti Port facilities situated in the Area 1 mining lease. The mine also maintains an extensive network of water supply ponds, power generation facilities, accommodation for senior and management staff, offices, extensive workshops, laboratory, a clinic and roads.	

Location & Size





Sembehun Project

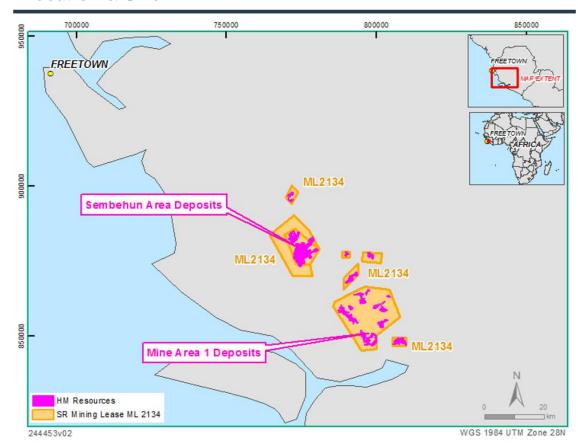


Sierra Rutile will be focused on advancing its Sembehun Project, representing one of the largest and highest grade natural rutile deposits in the world.

Sembehun

- One of the largest and highest-grade natural rutile deposits in the world.
- · Phased development approach to:
 - leverage the significant Area 1 existing infrastructure in place; and
 - integrate the development of Sembehun with the remainder of operations at Area 1.
- This approach contemplates Sembehun to be developed in two phases, minimising Sembehun pre-production capital expenditure and maximising Sierra Rutile's ability to utilise cash flows generated from Area 1 to assist in funding the development of Sembehun.
- The Sembehun June 2022 PFS completed with the assistance of specialist consultant, Hatch.
- The DFS and EISHA is expected to be completed by end of September 23, which would allow Sierra Rutile to reach a final investment decision for Sembehun in late 2023.

Location & Size



Sembehun PFS Summary



The PFS sets out an attractive project and pathway to developing Sembehun, leveraging the significant Area 1 infrastructure in place, remaining Area 1 Ore Reserves and Mineral Resources and forecast Area 1 cash flows to develop Sembehun in a two phased approach.

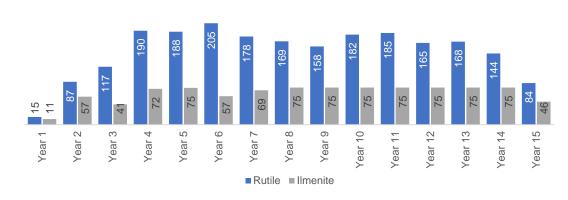
Sembehun PFS Highlights

Ore Reserves ¹	• 174Mt @ 1.45% Rutile
Mineral Resources ¹	• 508Mt @ 1.10% Rutile
Mine Life	• >13 years
Mining Method	Dry mining (truck & excavator)
Processing	 Mineral concentrate from Sembehun will be processed in a magnetic separation circuit (to be constructed) and proceed to the company's existing mineral separation plant, which includes a feed preparation plant and dry plant
Project Net Present Value (8%, post tax real) ²	• US\$318m
Project Internal rate of return (post tax real) ²	• 24%
Capital cost (US\$m real)	Total: U\$\$337mPhase 1: U\$\$284m Phase 2: U\$\$52m
Steady state average unit cash costs of production (US\$/t Z/R, real)	US\$726/t rutile and zircon produced (excluding royalties and rehabilitation)
Steady state average unit cash costs of production, net of co-product credits (US\$/t R, real) ³	US\$535/t rutile produced (excluding royalties and rehabilitation)

Production Tonnes (Mt) vs Grade (% rutile)4



Annual Rutile and Ilmenite Production (kt)⁴

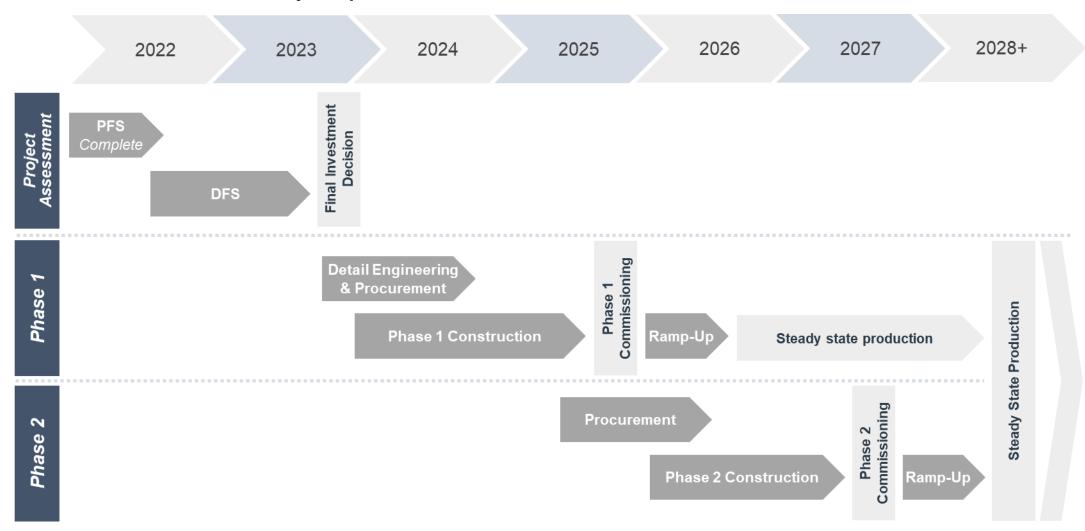


Note: (1) Ore Reserve and Mineral Resource estimate as at 31 December 2021. Please see Appendices F and G for more information. (2) Excludes head office corporate costs. (3) Unit cash costs (net of co-products) represent the total cash costs of production less the revenue earned from co-products (ZIC, TIC and ilmenite), divided by the total tonnes of rutile produced (exclusive of TIC). (4) Please see Appendix G for more information on Production Targets. Production Targets are based on current Ore Reserves only.

Indicative Timeline



Sierra Rutile's approach is expected to see the development of Sembehun integrated with the remaining operations at Area 1. The below timeline is based on the recently completed Sembehun PFS





Sierra Rutile Health, Safety & Environment



The health and safety of all employees, contractors and visitors is of fundamental importance to Sierra Rutile.

Health & Safety

Health

The Sierra Rutile Clinic, established in the 1970s, comprises a dedicated team of doctors, nurses, intensive care paramedics, laboratory specialists and support staff to provide medical support to employees and their families. In 2021, the Clinic supported the delivery of 63 babies.

Safety

Sierra Rutile has recorded a strong safety performance in recent years, attributable to the implementation of training programs, risk assessment and enhanced hazard identification.

Sierra Rutile aims for continuous improvement in performance and the ultimate aim is to achieve zero workplace incidents.

LTIFR & TRIFR (2018 - 2022)



Environment

Committed to compliance with the Environmental Project Agency of Sierra Leone

...and is at the forefront of environmental management in the Sierra Leone mining industry.

Preparation of an Environmental, Social and Health Impact Assessment (ESHIA)

...and Management Plan to ensure compliance and management of obligations in regards to all aspects of environmental management including water, biodiversity, rehabilitation and waste management.

Community rehabilitation initiatives

...through engaging in progressive rehabilitation, which commences during the operational phase of the mine lifecycle. This minimises the mining footprint and assists with the development and risk assessment of mine closure plans. Sierra Rutile has rehabilitated approximately 665 hectares since 2016,¹ supported by the ongoing efforts of Sierra Rutile's nursery team.





Supporting the Local Communities



Sierra Rutile is proud of its social investments in Sierra Leone and its contributions to the development of a strong, healthy and vibrant local community.



Health

Sierra Rutile has actively invested in primary healthcare since 2018, leveraging existing infrastructure including water supply, power, land tenure and security, to provide healthcare to employees and their dependents as well as emergency care to members of the local community.

The Sierra Rutile Clinic, which was established in the 1970s, provides medical support to employees and their families.



Education

Sierra Rutile invests in education in Sierra Leone through its investment in a school bursary program, and its support of the Ruby Rose Educational Resource Centre, which provides educational facilities to children from nearby schools. The centre provides access to a library and internet facilities to young learners, outdoor play areas and a feeding program.

Sierra Rutile also established a school bus service for local children.



Workforce Security &

Conduct
In 2020, Sierra Rutile entered into a Memorandum of Understanding (MoU) with the Sierra Leone Police in relation to mutual support, cooperation, coordination and collaboration in enhancing the security regime within the mining area.

Further, Sierra Rutile has established Anti-Bribery & Corruption and Whistleblower Policies.



Social Investment &

DevelopmentSierra Rutile seeks to promote the development of its local communities through the following initiatives:

- establishment of a local sourcing initiative;
- implementation of community infrastructure projects;
- support of the Extractive Industries Transparency Initiative; and
- the Sierra Rutile Partnership Program, which is aimed at contributing to positive social, environmental and operational outcomes in the communities and regions in which the company operates.

Appendix A: History of Sierra Rutile



1920s

Titanium-bearing mineral sands first discovered in south-western Sierra Leone

1960s

BTP and Pittsburgh Plate Glass formed Sherbro Minerals (SML) and began mining operations at Mogbwemo

1995

The second dredge was under construction when the mine was shut down and placed on care and maintenance

2005

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Refurbishment commenced (funded by GoSL Ioan & equity) and Sierra Rutile listed on AIM

2016

Iluka completed the acquisition of Sierra Rutile by means of a merger, making Sierra Rutile a wholly owned subsidiary of Iluka

2021

Sierra Rutile
won the
International
SOS
Foundation
Duty of Care
Award in the
Remote
Resilience
category

1950s

British Titan Products (BTP) began exploring Gangama and Lanti-Teso-Gbeni deposits, confirming reserve estimates in 1957

1970s

Nord Resources Corporation (Nord) and Armco Steel acquired SML's interests and formed Sierra Rutile

1983 - 1995

Mine operated continuously and profitably under Nord's management

1993

Nord sold 50% of
Sierra Rutile to
Consolidated Rutile
Limited and the
decision was made to
expand to a twodredge operation
2004

Sierra Rutile changed ownership and the European Union gave a €25m grant to GoSL to loan to Sierra Rutile

2019

Iluka commissioned the expansions of Lanti and Gangama, doubling the production capacity of these mines

2006

Sierra Rutile resumed mining operations in the Lanti North Deposit

2022

Iluka announced its intention to demerge Sierra Rutile