

## EXCEPTIONAL INFRASTRUCTURE IN PLACE TO UNLOCK NEWLY DISCOVERED RUTILE POTENTIAL

Exceptional logistics infrastructure is already in place that links Sovereign's newly identified rutile discoveries, within its >4,000km<sup>2</sup> ground package in central Malawi, to the global rutile markets.

### KEY HIGHLIGHTS

- ❖ **Nacala Logistics Corridor (the "NLC" or "Corridor")** provides an established, newly upgraded and operating rail network with significant spare capacity direct to the deep-water port of Nacala in Mozambique
- ❖ **Total containerised freight capacity of the NCL is ~4Mt per annum**, with approximately 15% of this capacity currently being utilised<sup>1</sup>
- ❖ The rail concessionaire, Central East African Railways ("**CEAR**"), is **actively seeking new freight customers** and Sovereign has an existing MoU with CEAR for rail freight, port access & port handling services for graphite concentrates to be produced from the Malingunde Project, with the drafting of a binding agreement currently underway
- ❖ Prior studies by the Company and recent quotes from NLC logistics operators suggest all in transportation costs of potentially less than **US\$66 per tonne<sup>2</sup>** from mine gate to FOB vessel
- ❖ In addition the projects close proximity to Lilongwe, Malawi's capital, provides access to additional established infrastructure including: paved roads, grid power potential and a skilled labour pool
- ❖ Access to the existing NLC infrastructure as well as the other additional established infrastructure will have the **advantage of significantly reducing upfront capital costs** for project development



**References:** 1. CDN & CEAR Corporate Presentation and recent discussions between the Company and CEAR  
2. Based on the 2018 Malingunde Pre-feasibility Study (See ASX Announcement 7 November 2018)

Sovereign’s Managing Director Dr Julian Stephens commented:

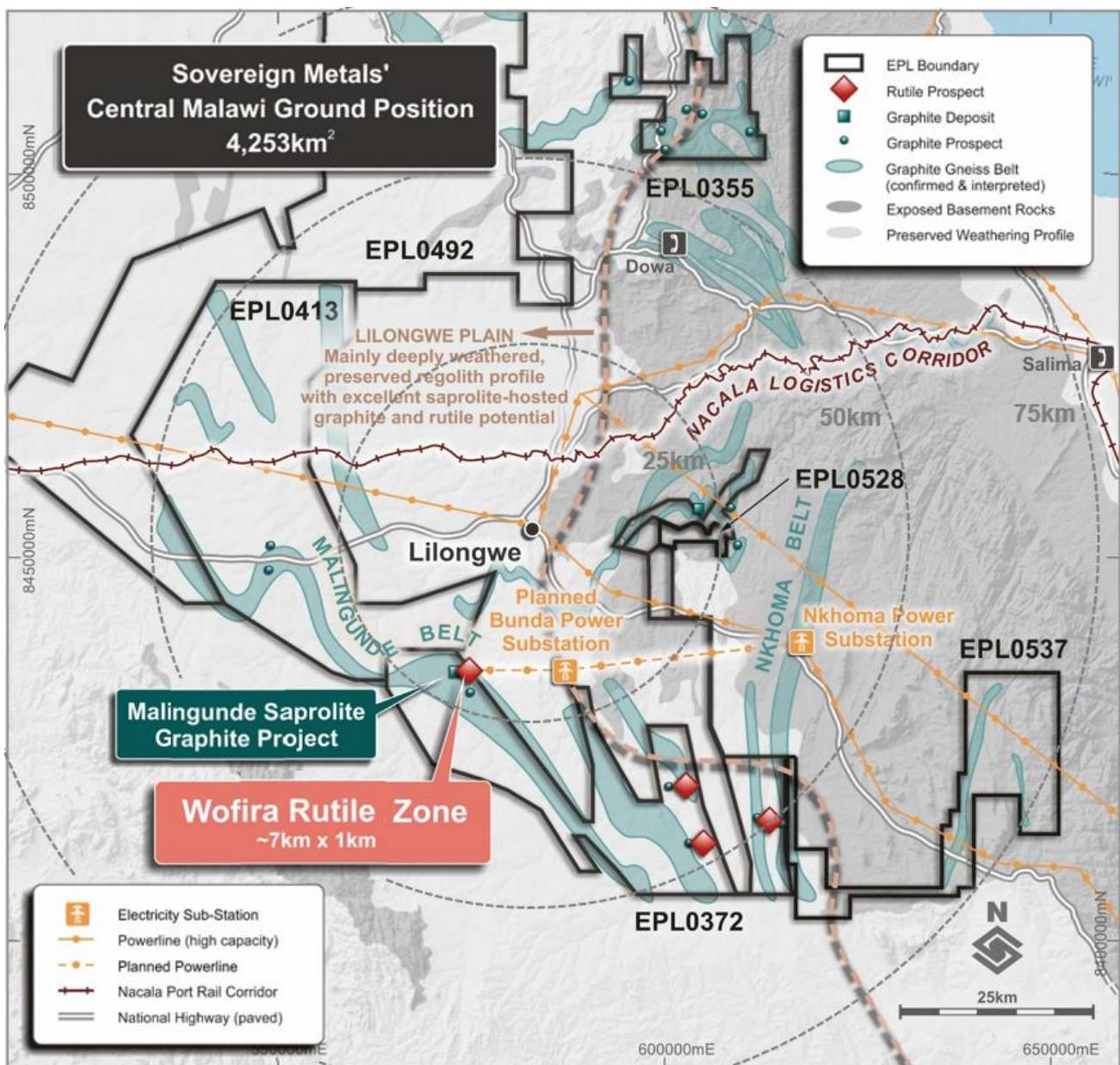
*“The exceptional established infrastructure in Malawi potentially will result in significantly reduced up-front capital and operating costs and also provides additional operational and development advantages. The fortunate geographic position of Sovereign’s large ground holding allows the Company to fully utilise this infrastructure. Having a cost-effective solution to be able to export products to global markets presents an excellent opportunity to truly unlock the rutile potential in Malawi.”*

## ENQUIRIES

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**Figure 1: Sovereign’s large ground holding with supporting infrastructure**

## THE NACALA LOGISTICS CORRIDOR

### Nacala Railway

The Nacala Logistics Corridor is a recently refurbished 912km rail line for the purpose of transporting coal from mines in western Mozambique east to the port of Nacala via Malawi. For Malawi, the NLC provides the shortest and most direct access to the sea and the global commodity markets. The Corridor stretches from Moatize, Mozambique and Chipata, Zambia and passes through Lilongwe in Malawi to the Port of Nacala on the Indian Ocean.



*Figure 2: Nacala Logistics Corridor in Operation*

The development of the NLC was essential for the expansion of global miner Vale SA (“**Vale**”) & Japanese conglomerate Mitsui & Co.’s (“**Mitsui**”) coal extraction activities in the Tete region of Mozambique, with over US\$4.4B<sup>3</sup> having been invested to date. The NLC connects Tete to Nacala with the Kachaso-Nkaya railway section passing through Malawi. Malawi’s part of the NLC was inaugurated in August 2017 and followed a 30-year public-private partnership (“**PPP**”) arrangement between the Government of Malawi and Vale Logistics Limited agreed in 2011. Malawi is expected to directly benefit from the NLC through significant cost savings on exports and imports and the creation of more than 12,000 jobs.

The railway in Malawi is operated by CEAR which is responsible for handling the NLC’s capacity of four million tonnes of general cargo annually through Malawi.

3. <https://www.railwaygazette.com/news/freight/single-view/view/nacala-corridor-officially-inaugurated.html>

The landmark infrastructure project was driven by the governments of Malawi, Mozambique and Zambia, Vale, Mitsui, a consortium of several international and African banks and export credit agencies including the Japan Bank for International Co-operation, Nippon Export and Investment Insurance and African Development Bank (“**AfDB**”). Specifically, the governments of Malawi, Mozambique, and Zambia have gradually increased their investment in the NLC to approximately US\$758 million, with support from the European Union, AfDB, the Japanese International Cooperation Agency and the Export-Import Bank of Korea.

Importantly for Sovereign, the railway includes an operating rail line north to Lilongwe, passing through Sovereign’s licence areas. Access to the existing NLC has the significant advantage for Sovereign of reducing upfront capital cost for and future project development. CEAR is actively seeking new freight customers.

## **Nacala Port**

The deep water Port of Nacala is at the Eastern end of the NLC and is the deepest port in Southern Africa. The port’s infrastructure extends for approximately 600 hectares at the bay of Nacala, Nacala-a-Velha district, northern Mozambique. With deep waters and multiuse standard, it allows the access of several companies to its infrastructure. It was designed to receive and export about 18 million tons of coal, in addition to general cargo and daily passenger transportation.



***Figure 3: Container terminal at the deep-water port of Nacala.***

In November 2018, Sovereign announced the Pre-Feasibility Study (“**PFS**”) results for its Malingunde Graphite Project (“**Malingunde**”) in Malawi. Based on the findings of the PFS, the Company estimated all-in **transportation costs to be US\$66 per tonne** for a 52,000 tonne per annum graphite operation including rail freight costs of approximately **US\$40 per tonne**. The cost of US\$66 per tonne includes transportation from mine gate to rail, rail freight transport to port, ship loading and all storage and handling costs. The process of transporting graphite and rutile is the same. Based on recent discussions with rail providers and active freight forwarders in the region, the rail freight costs may be reduced with increased production levels and tonnage.

Sovereign has an existing MoU with CEAR for rail freight, port access & port handling services for graphite concentrates produced from the Malingunde Project, with the drafting of a binding agreement currently underway.



**Figure 4: Container storage and loading facilities at the port of Nacala**

**ACCESS AND ROAD NETWORK**

The majority of Sovereign’s ground holding occurs within a 75km radius from Malawi’s capital city of Lilongwe. This provides the Company with excellent access to sealed roads and short haulage distances to the rail head at the underutilised operational intermodal rail siding at Kanengo to access the Nacala Logistics Corridor.

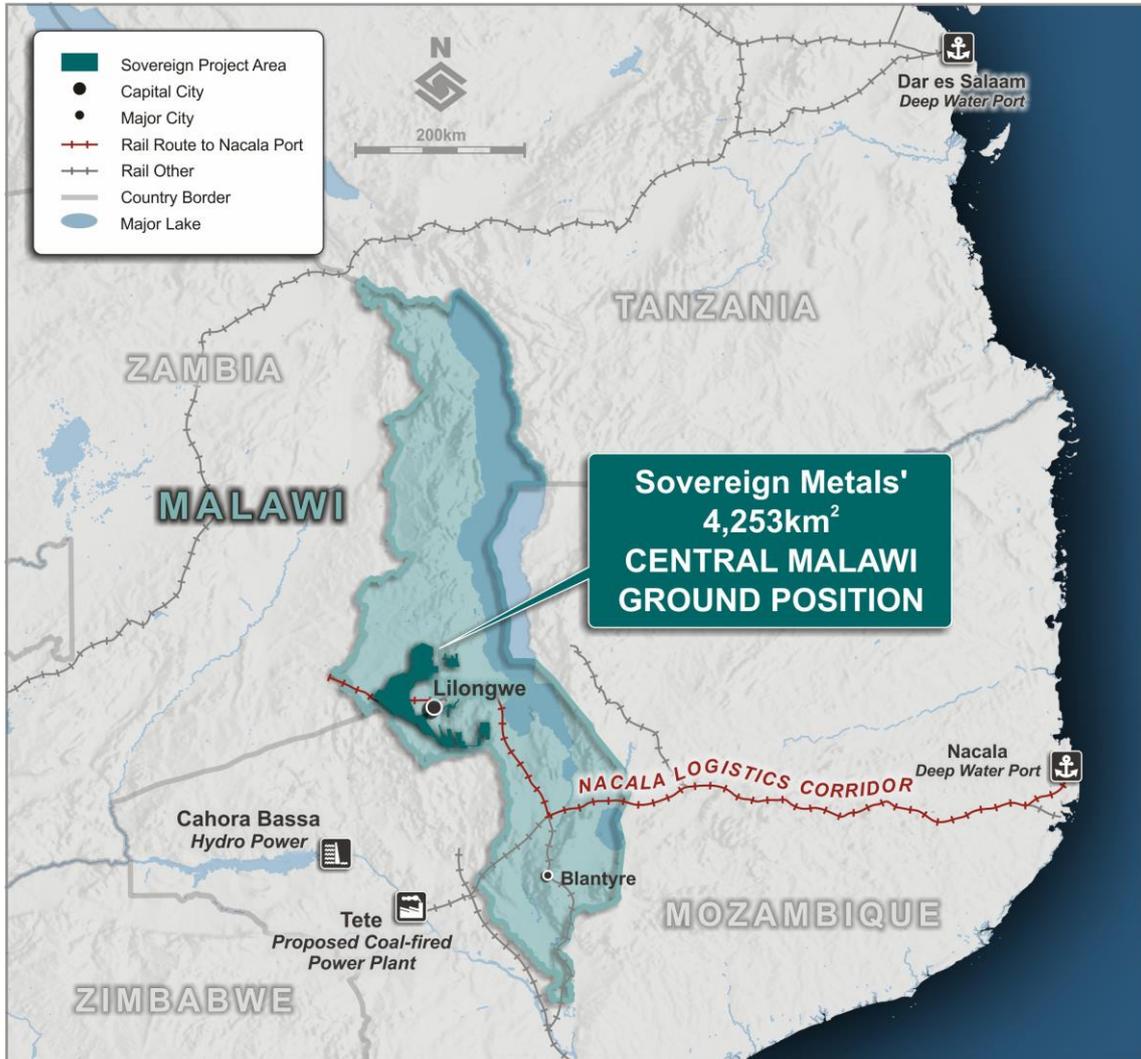


**Figure 5 and 6: Container storage, loading and operating rail facilities at Kanengo (Lilongwe)**



## SOVEREIGN OVERVIEW

Sovereign controls a large ground package of over 4,000km<sup>2</sup> which contains the Malingunde saprolite-hosted graphite project and newly identified areas of rutile mineralisation. The Company is completing the Definitive Feasibility Study on the Malingunde graphite deposit whilst also actively assessing the potential for commercial rutile operations from deposits potentially hosted within the soft, saprolite material.



**Figure 7: Map showing Sovereign's significant ground position in Malawi.**



**Forward Looking Statement**

*This release may include forward-looking statements, which may be identified by words such as "expects", "anticipates", "believes", "projects", "plans", and similar expressions. These forward-looking statements are based on Sovereign's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Sovereign, which could cause actual results to differ materially from such statements. There can be no assurance that forward-looking statements will prove to be correct. Sovereign makes no undertaking to subsequently update or revise the forward-looking statements made in this release, to reflect the circumstances or events after the date of that release.*

**Competent Person Statements**

*The information in this Announcement that relates to Production Targets and Ore Reserves is extracted from an ASX announcement on 7 November 2018. This announcement is available to view on [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au). The information in the original announcement that relates to Production Targets and Ore Reserves was based on and fairly represent information provided by Mr Ryan Locke, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Locke is employed by Orelogy Group Pty Ltd, an independent consulting company. Mr Locke has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not materially modified from the original market announcement.*

*The information in this Announcement that relates to Processing, Infrastructure and Capital and Operating Costs is extracted from an ASX announcement on 7 November 2018. This announcement is available to view on [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au). The information in the original announcement that related to Processing, Infrastructure and Capital and Operating Costs was based on and fairly represent information compiled or reviewed by Mr Matthew Langridge, a Competent Person, who is a Fellow Member of The Australasian Institute of Mining and Metallurgy. Mr Langridge is employed by Minново Pty Ltd, an independent consulting company. Mr Langridge has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not materially modified from the original market announcement.*