



GRAPHITE EXPERT APPOINTED TO KASIYA DEVELOPMENT TEAM

- Sovereign further strengthens owner's team through the appointment of graphite and battery anode specialist consultant Dr Surinder Ghag as Chief Technology Officer – Graphite
- Dr Ghag is an expert metallurgist with 25 years of experience across critical minerals including graphite and rutile
- Sovereign is poised to become the global leader in natural flake graphite production, a significant by-product of the Kasiya Rutile-Graphite Project in Malawi
- Dr Ghag's appointment further bolsters the world-class Sovereign Project Development Team which is working alongside strategic investor Rio Tinto to develop Kasiya

Sovereign Metals Limited (ASX:SVM; AIM:SVML) (the **Company** or **Sovereign**) is pleased to announce the appointment of consultant Dr Surinder Ghag to Sovereign's owner's team as Chief Technology Officer – Graphite. Dr Ghag will assist Sovereign's graphite strategy in qualifying the graphite product from its Kasiya Rutile-Graphite Project (**Kasiya** or **Project**) for lithium-ion battery anodes.

A highly qualified metallurgist, Dr Ghag brings 25 years of industry experience including developing graphite test work programs, ore-to-anode graphite strategies, anode plant feasibility studies, and project development and commissioning. Recently, Dr Ghag was instrumental in developing an environmentally friendly and commercially viable method for purifying graphite, working alongside the Australian Government scientific research entity CSIRO (**Commonwealth Scientific and Industrial Research Organisation**). Prior to his work in graphite, Dr Ghag's work included process engineering at various Australian mineral sands operations.

A major component of graphite sales agreements is customer qualification. As Chief Technology Officer–Graphite, Dr Ghag will be responsible for designing and delivering graphite downstream test work programs to be aligned with graphite product development and qualification as Sovereign continues discussions with battery anode processors, end-users, and potential future offtake partners.

Upon the appointment, Managing Director Frank Eagar commented:

"I am pleased to welcome Dr Ghag as we continue to strengthen our owner's team in preparation for project execution. Kasiya will deliver the world's lowest cost, lowest carbon footprint graphite. Dr Ghag joining Sovereign will significantly enhance our graphite metallurgical expertise and understanding of the downstream market to translate Kasiya's bottom-of-the-cost curve advantage into significant active anode market capture."

Previously reported initial characterisation test work on Kasiya's graphite has indicated excellent suitability for use in lithium-ion batteries with high purity and high crystallinity being the key features (see ASX announcement from 8 June 2023: Kasiya Graphite Shows Excellent Suitability For Use in Lithium Ion Batteries, <https://www.investi.com.au/api/announcements/svm/fe3830af-843.pdf>).

Additional spheronisation and purification testwork is presently underway at a leading German graphite laboratory to validate key parameters at a larger scale with results imminent.

Furthermore, Sovereign is currently undertaking a graphite bulk sampling program to produce large quantities of flake graphite product for further downstream test work and initial product qualification to support ongoing discussions with battery anode processors, end-users, and potential future offtake partners.

BACKGROUND TO KASIYA'S MARKET-LEADING GRAPHITE POTENTIAL

Kasiya is the world's largest known rutile (titanium) deposit hosting a JORC-Compliant Mineral Resource Estimate (MRE) of 17.9Mt. It is also one of the largest known flake graphite resources with a MRE of 24.4Mt.

Sovereign's Prefeasibility Study (PFS) confirmed Kasiya as a potential major critical minerals project with an extremely low CO₂ footprint delivering significant long-term volumes of natural rutile (the highest-grade, purest, natural titanium feedstock) and graphite (a key component of an electric vehicle battery) while generating significant economic returns. Both titanium and natural graphite are critical to several of the world's economies as well as crucial to decarbonisation solutions required to meet "Net-Zero" and other targets set by policymakers.

The PFS confirmed Kasiya's potential to be the world's largest natural graphite producer at 244kt per annum of graphite concentrate. On an incremental cost basis, Kasiya would also be the world's lowest-cost graphite producer at US\$182 per tonne (FOB Nacala).

In June 2023, downstream test work on Kasiya's graphite demonstrated it to have superior qualities, showing excellent suitability for use in lithium-ion batteries. In July 2023, Rio Tinto invested A\$40.4 million in Sovereign resulting in an initial 15% shareholding. Under the Investment Agreement, Sovereign and Rio Tinto will work together to qualify Kasiya's graphite product with a particular focus on supplying the spherical purified graphite segment of the lithium-ion battery anode market.

ENQUIRIES

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Competent Person Statement

The information in this announcement that relates to the Mineral Resource Estimate is extracted from an announcement dated 5 April 2023 entitled 'Kasiya Indicated Resource Increased by over 80%' which is available to view at www.sovereignmetals.com.au and is based on, and fairly represents information compiled by Mr Richard Stockwell, a Competent Person, who is a fellow of the Australian Institute of Geoscientists (AIG). Mr Stockwell is a principal of Placer Consulting Pty Ltd, an independent consulting company. The original announcement is available to view on www.sovereignmetals.com.au. Sovereign confirms that a) it is not aware of any new information or data that materially affects the information included in the original announcement; b) all material assumptions included in the original announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this announcement have not been materially changed from the original announcement.

The information in this announcement that relates to Production Targets, Ore Reserves, Processing, Infrastructure and Capital Operating Costs, Metallurgy (rutile and graphite) is extracted from an announcement dated 28 September 2023 entitled 'Kasiya Pre-Feasibility Study Results' which is available to view at www.sovereignmetals.com.au. Sovereign confirms that: a) it is not aware of any new information or data that materially affects the information included in the original announcement; b) all material assumptions and technical parameters underpinning the Production Target, and related forecast financial information derived from the Production Target included in the original announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this presentation have not been materially modified from the original announcement.

Ore Reserve for the Kasiya Deposit						
Classification	Tonnes (Mt)	Rutile Grade (%)	Contained Rutile (Mt)	Graphite Grade (TGC) (%)	Contained Graphite (Mt)	RutEq. Grade* (%)
Proved	-	-	-	-	-	-
Probable	538	1.03%	5.5	1.66%	8.9	2.00%
Total	538	1.03%	5.5	1.66%	8.9	2.00%

* RutEq. Formula: Rutile Grade x Recovery (100%) x Rutile Price (US\$1,484/t) + Graphite Grade x Recovery (67.5%) x Graphite Price (US\$1,290/t) / Rutile Price (US\$1,484/t). All assumptions are taken from the PFS ** Any minor summation inconsistencies are due to rounding

Kasiya Total Indicated + Inferred Mineral Resource Estimate at 0.7% rutile cut-off grade					
Classification	Resource (Mt)	Rutile Grade (%)	Contained Rutile (Mt)	Graphite Grade (TGC) (%)	Contained Graphite (Mt)
Indicated	1,200	1.0%	12.2	1.5%	18.0
Inferred	609	0.9%	5.7	1.1%	6.5
Total	1,809	1.0%	17.9	1.4%	24.4

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.

This announcement has been approved and authorised for release by the Company's Managing Director & CEO, Frank Eagar.