

VIKING ENGAGES METALLURGICAL CONSULTANT FOR THE CANEGRASS BATTERY MINERALS PROJECT

- **METS Engineering, a highly skilled consultancy with extensive experience in Vanadium projects for over 30 years, has been engaged as lead metallurgical consultant.**
- **METS has previously developed testwork programmes and process flow sheets for ASX listed companies with Vanadiferous Titanomagnetite (VTM) projects.**
- **Review of historical metallurgical testwork completed on the Canegrass Battery Minerals Project has commenced.**
- **METS will advise Viking on the design of metallurgical sampling programme to provide input in drill programme planning with the objective of drilling in H1 2023.**
- **Scope to include investigation into options for extracting maximum value from the contained commodities of Vanadium, Iron, Titanium, Nickel, Copper and Cobalt.**

Viking Mines Ltd (ASX: VKA) ("**Viking**" or "**the Company**") is pleased to announce that it has engaged METS Engineering ("**METS**") to act as lead metallurgical consultant and advisor to Viking for the Canegrass Battery Minerals Project ("**the Project**" or "**Canegrass**").

The appointment will assist the Company in the final stages of Due Diligence being completed prior to commencing with Stage1 of the Farm-In Agreement, as announced to market on 30 November 2022¹.

METS have extensive experience working on Australian Vanadium projects with the same Vanadiferous Titanomagnetite ("**VTM**") style of mineralisation (Table 1).

Table 1; Vanadium Projects located in Australia which METS Engineering have previously worked on with the same VTM type mineralisation as present at the Canegrass Battery Minerals Project.

Company	Project	Location	Study Level	METS Involvement
TNG Ltd. (ASX: TNG)	Mount Peake	Northern Territory	DFS	TIVAN® Process Development. Metallurgical testwork and input.
Technology Metals Australia Ltd. (ASX: TMT)	MTMP (Gabanintha & Yarrabubba)	Western Australia	DFS	Metallurgical testwork and input.
Neometals Ltd.(ASX: NMT)	Barrambie	Western Australia	DFS	Metallurgical testwork and input.
Atlantic Pty. Ltd. (not listed)	Windimurra	Western Australia	BFS	Optimisation Work. Re start studies.
Surefire Resources Ltd. (ASX: SRN)	Victory Bore	Western Australia	Scoping Study	Metallurgical testwork and input.

METS are preparing a scope of work via a series of stages to advance the Project. Stage 1 of the scope is to review the historical data and Viking has instructed METS to commence with this step ahead of completion of the remainder of the scope. The historical data review is a vital step required to determine the current status of the testwork and will lead into the subsequent stages. METS will also act as Competent Person for Viking for reporting of metallurgical results.



Viking will work with METS to define the scope of work for the metallurgical testwork programme for the Project. Key aspects to this scope of work are expected to include:

- Historical data review (commenced).
- Mineralogical assessment to determine deportment characteristics.
- Process options study for Canegrass development (pyromet vs hydromet).
- Metallurgical testwork programme.
- All activities to be completed to a level sufficient for Scoping Study or Pre-Feasibility Study.

Commenting on the appointment of METS, Viking Mines Managing Director & CEO Julian Woodcock said:

"I am extremely pleased that we have been able to secure the services of METS Engineering to assist us with the advancement of the Canegrass Battery Minerals Project.

METS have extensive experience working on Vanadium projects and the development of metallurgical testwork programmes and process flow sheet design. They have been involved at some point with many of the major VTM projects in Australia and bring with them a wealth of knowledge to support Viking with Canegrass.

The engagement of METS is a critical step in assessing the Project's potential and forms a key part of the Company's strategy to rapidly advance Stage 1 of the Farm-in Agreement."

NEXT STEPS

Viking has commenced with a number of activities to advance the Project and envisaged to be undertaken as part of the stage 1 Farm-In. Immediate priorities are as follows:

- Completion of the scope of works for metallurgical programme for the Project.
- Field mapping scheduled for the 16th -20th of December 2022.
- Submission of heritage survey requests for priority areas undergoing drill planning.
- Review and submission of Programme of Work applications to facilitate drilling in late Q1/ early Q2 2023.

END

This announcement has been authorised for release by the Managing Director.

Julian Woodcock
Managing Director and CEO
Viking Mines Limited

For further information, please contact:
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Sarah Wilson - Company Secretary
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1: ASX Announcement Viking Mines (ASX:VKA) 30 November 2022 - VIKING TO FARM IN TO SUBSTANTIAL BATTERY MINERAL RESOURCE

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Viking Mines Limited's planned exploration programme and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Viking Mines Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.





CANEGRASS BATTERY MINERALS PROJECT

The Canegrass Battery Minerals Project is located in the Murchison region, 620km north-east of Perth, Western Australia. It is accessed via sealed roads from the nearby township of Mt Magnet to within 22km of the existing Resources. The Project benefits from a large undeveloped Inferred Vanadium Resource hosted in vanadiferous titanomagnetite (VTM) Mineralisation as part of the Windimurra Layered Igneous Complex.

The Project benefits from ~95km² of exploration tenements with very limited follow up exploration targeting the growth potential of the vanadium pentoxide (V₂O₅) Resources in the +10 years since the Resource was first calculated. Multiple drill ready targets are present which have the potential to significantly add to the already large Resource base, with high grade intercepts presenting an opportunity to substantially increase the average grade.

JORC (2012) RESOURCE

The Canegrass Battery Minerals Resource has been calculated across two separate areas called the Fold Nose and Kinks deposits, each with eight and four separate mineralised domains modelled respectively. The Resource has subsequently been reported above a cut-off grade of 0.5% V₂O₅ and above the 210 RL (equivalent to a maximum depth of ~250m).

Canegrass Project Vanadium Mineral Resource estimate, 0.5% V₂O₅ cut-off grade, >210m RL (due to the effects of rounding, the total may not represent the sum of all components).

Deposit	JORC Classification	Tonnage (Mt)	V ₂ O ₅ %	Fe %	TiO ₂ %	Al ₂ O ₃ %	P %	SiO ₂ %	LOI %
Fold Nose	Inferred	59	0.66	30.5	6.5	11.9	0.006	22.9	2.9
Kinks	Inferred	20	0.57	27.4	5.5	13.0	0.009	25.9	3.1
TOTAL		79	0.64	29.7	6.0	12.2	0.007	23.6	3.0

VIKING MINES FARM-IN AGREEMENT

Viking commenced with a Farm-In arrangement with Flinders Mines Ltd (ASX:FMS) on 28 November 2022 to acquire an equity interest in the Canegrass Battery Minerals Project. Through the terms of the Farm-In, Viking can acquire up to 99% of the Project through completion of 4 stages via a combination of exploration expenditure of \$4M and staged payments totalling \$1.25M over a maximum period of 54 months. If Viking complete the Farm-In to 99% equity interest, Flinders may offer to sell to Viking the remaining 1% of the Project for future production and milestone related payments totalling \$850,000. If Flinders do not offer to sell within a prescribed timeframe their right lapses, they must offer Viking the right (but not the obligation) to buy the remaining 1% for the same terms. The Project has a legacy 2% Net Smelter Royalty over the project from when Flinders Mines acquired it from Maximus Resources in 2009.

Competent Persons Statement - Mineral Resources

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr Aaron Meakin, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Meakin is a consultant to Flinders Mines Ltd and Viking Mines Ltd, employed by CSA Global Pty Ltd, independent mining industry consultants. Mr Meakin has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). The Company is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.



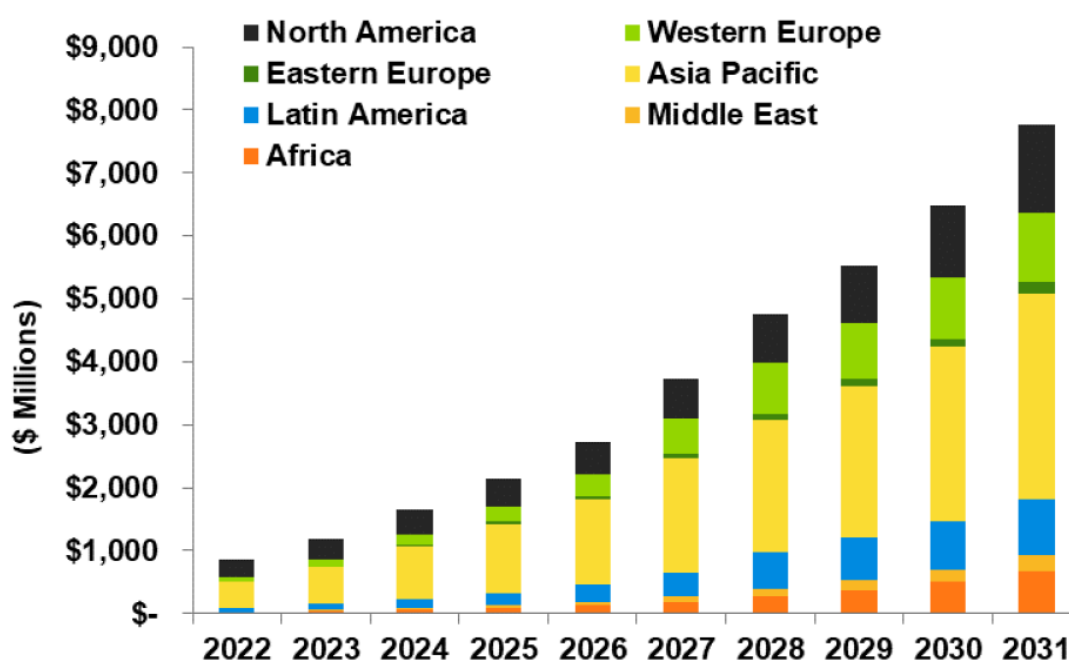


VANADIUM REDOX FLOW BATTERIES - GREEN ENERGY FUTURE

Viking Mines recognise the significant importance of Vanadium in decarbonisation through the growth of the Vanadium Redox Flow Battery ("VRFB's") sector.

VRFB's are a developing market as an alternate solution to lithium-ion ("Li-ion") in specific large energy storage applications. Guidehouse Insights Market Intelligence White Paper² published in 2Q 2022 forecasts the VRFB sector to grow >900% by 2031 through the installation of large, fixed storage facilities (Figure 1).

Annual Installed VRFB Utility-Scale and Commercial and Industrial Deployment Revenue by Region, All Application Segments, World Markets: 2022-2031



(Source: Guidehouse Insights)

Figure 1; Forecast growth of the VRFB Sector through to 2031 (source – Guidehouse Insights²)

The reason for this forecast growth is that VRFB's have unique qualities and advantages over Li-ion in the large energy storage sector to complement renewable energy sources to store the energy produced. They are durable, maintain a long lifespan with near unlimited charge/discharge cycles, have low operating costs, safe operation (no fire risk) and have a low environmental impact in both manufacturing and recycling. The Vanadium electrolyte used in these batteries is fully recyclable at the end of the battery's life.

Importantly, and unlike Li-ion, the battery storage capacity is only limited by the size of the electrolyte storage tanks. This means that with a VRFB installation, increasing energy storage capacity is only a matter of adding in additional electrolyte (via the installation of additional electrolyte storage tanks) without needing to expand the core system components. Increasing the energy storage directly reduces the levelized cost per kWh over the installation's lifetime. This is not an option with Li-ion batteries.

It is for these reasons that VRFB's are an ideal fit for many storage applications requiring longer duration discharge and more than 20 years of operation with minimal maintenance.

2: Guidehouse Insights White Paper Vanadium redox Flow Batteries Identifying Market Opportunities and Enablers Published 2Q 2022 https://vanitec.org/images/uploads/Guidehouse_Insights-Vanadium_Redox_Flow_Batteries.pdf