MKANGO RESOURCES LTD.

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the three months ended 31 March 2025

This Management's Discussion and Analysis ("**MD&A**") provides a review of the operational performance of Mkango Resources Ltd. ("**Mkango**", or the "**Company**"). The report was prepared in accordance with the requirements of National Instrument 51-102 - Continuous Disclosure Obligations, and it should be read in conjunction with the condensed interim consolidated financial statements for the three months ended 31 March 2025 and the audited consolidated financial statements for the year ended 31 December 2024 (the **"Financial Statements"**). The Financial Statements and the accompanying notes have been prepared in United States dollars ($) unless otherwise indicated in accordance with International Financial Reporting Standards (**"IFRS"**) as issued by the International Accounting Standards Board (**"IASB"**) and interpretations issued by the International Financial Reporting Interpretations Committee ("**IFRIC**") in effect on 1 January 2025. This document is dated 30 May 2025.

The Board of Directors of the Company have reviewed and approved the information contained in this MD&A and the Financial Statements.

Readers are cautioned that this MD&A contains certain forward-looking statements. Please see the section concerning "Forward Looking Statements" below.

Additional information relating to the Company can be found on the SEDARplus website ("**SEDARplus**") at https://www.sedarplus.ca/landingpage/ (Please note these websites do not form part of this MD&A and only contain additional information.) The Company is listed on the TSX Venture Exchange (the "**TSX-V**") and holds an additional listing on the AIM Market of the London Stock Exchange ("**AIM**") under the symbol MKA.

FORWARD LOOKING STATEMENTS

Certain disclosures in this MD&A may constitute forward-looking statements concerning anticipated development of the Company's operations in future periods. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "targeted", "anticipate", "believes", "budget", "continue", "could", "estimate", "forecast", "intends", "may", "plan", "predicts", "projects", should", "will" and other similar expressions. All estimates and statements that describe the Company's future, goals, or objectives, including management's assessment of future plans and operations, including statements regarding expected commencement of equipment delivery and production, expected dates relating to feasibility studies, exploration results and budgets, mineral resource estimates, work programs, capital expenditures, timelines, strategic plans, market price of commodities or other statements that are not statement of fact may constitute forward-looking information under securities laws. Forward-looking information is based on reasonable assumptions that have been made by the Company as at the date of such information but, by their nature, forward-looking statements are subject to numerous risks and uncertainties, some of which are beyond the Company's control, including the impact of general economic and political conditions, the availability of scrap and equipment for the recycling and magnet making processes industry conditions, volatility of commodity prices, currency fluctuations, accuracy of drilling and other analysis or testing results, realization of mineral resource estimates, environmental risks, changes in environmental, tax and royalty legislation or other government regulation, the speculative nature of strategic metal exploration and development including the risks of contests over title to properties, the risks associated with obtaining necessary licences or permits, including and not limited to approval of any future mining licence applications and licence extensions, operating or technical difficulties in connection with development activities; personnel relations, competition from other industry participants, lack of availability of qualified personnel or management, availability of equipment and access, stock market volatility and the ability to access sufficient capital from internal and external sources. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, undue reliance should not be placed on forward-looking statements. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Mkango's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements. Mkango disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Q1 2025 HIGHLIGHTS

- Loss after tax for the three months ended 31 March 2025 of $2,449,427 compared to $1,025,258 for the three months ended 31 March 2024 mainly due to fair value adjustment relating to investor warrants of $1,136,344.

- Cash at 31 March 2025 of $3,031,638.

- On 27 March 2025, the Company received notification that one of its warrant holders had exercised 209,375 warrants over shares in the capital of Mkango ("**Mkango Shares**"), at a price of 8 pence per Mkango Share. Accordingly, the Company issued 209,375 Mkango Shares to satisfy this exercise.

- On 27 March 2025, Mkango granted 800,000 stock options over 800,000 Mkango Shares to directors and employees of the Company in accordance with the Company's existing Option Plan, and 1,455,000 Restricted Share Units ("**RSUs**") to officers of the Company in accordance with its existing RSU Plan.

  Each Option is exercisable for one Mkango Share, with an exercise price of C$0.255 (approximately 13.9 pence) per common share. The stock options will vest over the next 18 months and are valid for a period of ten years from the date of the grant.

- On 25 March 2025, the Pulawy Separation Plant in Poland ("**Pulawy Project**") was designated as a strategic project by the European Commission under the Critical Raw Materials Act ("**CRMA**"). The Pulawy Project's strategic status confirms its importance supplying rare earth oxides to supply chains across the European Union and other markets. Permitting processes will be accelerated and simplified in accordance with time limits set out within the CRMA. The Pulawy Project will benefit from coordinated support from the Commission, Member States and financial institutions, in particular in terms of access to finance and in supporting project promoters by facilitating connections with potential offtakers.

- On 13 March 2025, the Company issued a total of 577,271 Mkango Shares to management. Of the total, 236,363 shares were issued to William Dawes, 236,363 shares to Alexander Lemon and 104,545 shares to Robert Sewell, structured for tax and regulatory reasons as a cash bonus and private placement of the after-tax amounts of the bonus at a price per share of 11 pence. The value of the after-tax bonus invested in the Mkango Shares was £26,000 ($32,880) for William Dawes and Alexander Lemon, and £11,500 ($14,543) for Robert Sewell.

- On 11 March 2025, HyProMag USA, LLC, ("**HyProMag USA**") announced that it will expand the detailed design phase of the development of a state-of-the art rare earth magnet recycling and manufacturing operation in the United States ("**HyProMag USA Project**") to include three Hydrogen Processing of Magnet Scrap ("**HPMS**") vessels. In addition, and concurrently, HyProMag USA will begin conceptual studies to evaluate further expansion to triple the capacity of the HyProMag USA Project, versus that envisaged in the independent feasibility study (the "**US Feasibility Study")**, across the HyProMag USA Project footprint of Fort Worth, Texas ("**Texas Hub**"), South Carolina and Nevada. The studies will also include integrated USA development of long loop chemical processing, which is complementary to the HPMS short-loop process. Long-loop chemical processing is used to process any material not suitable for short-loop recycling as well as swarf generated from magnet finishing.

- On 5 March 2025, HyProMag USA's ISO-compliant product carbon footprint study confirmed an exceptionally low CO2 footprint of 2.35 kg CO2 eq. per kg of neodymium-iron-boron ("**NdFeB**") cut sintered block.

- On 17 February 2025, Mkango Polska Sp. Z.o.o ("**Mkango Polska**") signed a revised exclusive land lease agreement with Grupa Azoty Pulawy for the construction of the Pulawy Project in Poland. The agreement constitutes a continuation of cooperation that the parties first started in 2021.

- On 3 February 2025, Mkango completed a fund raising of £2,335,000 ($2,952,855) through the issuance of 29,187,500 Mkango Shares at a price of 8 pence per share with use of proceeds to fund ongoing recycling development costs in Germany and the UK, and to fund ongoing corporate costs. Furthermore, the Company issued 1,459,375 broker warrants ("**Broker Warrants**") to the brokers who advised in connection with the placing of the Mkango Shares. Each Broker Warrant is exercisable for one Mkango Share for a period of three years with an exercise price of 8 pence per Mkango Share.

- On 13 January 2025, HyProMag UK entered into a non-binding agreement to collaborate with Areera Limited ("**Areera**") on the recovery and recycling of rare earth magnets embedded within speaker assemblies associated with a range of display equipment.

- On 8 January 2025, Lancaster BVI and Mkango Polska signed a non-binding letter of intent ("**LOI**") for a proposed business combination transaction with Crown PropTech Acquisitions ("**CPTK**"), a Cayman Islands exempted company (OTC: CPTK).

Subsequent Events

- On 22 April 2025, HyProMag USA appointed lead engineers PegasusTSI and BBA to perform engineering, procurement and construction management ("**EPCM**") services for HyProMag USA to produce rare earth magnets in the United States.

MKANGO OVERVIEW

Mkango is listed on the AIM and the TSX-V. Mkango's corporate strategy is to become a market leader in the production of recycled rare earth magnets, alloys and oxides, through its interest in Maginito Limited ("**Maginito**"), which is owned 79.4 % by Mkango and 20.6 % by CoTec Holdings Corp ("**CoTec**"), and to develop new sustainable sources of neodymium, praseodymium, dysprosium and terbium to supply accelerating demand from electric vehicles, wind turbines and other clean energy technologies.

Maginito holds a 100 % interest in HyProMag Limited UK ("**HyProMag UK**"), a 90 % direct and indirect interest (following conversion of the German Convertible Loan, as defined on page 9) in HyProMag GmbH ("**HyProMag Germany**"), focused on short loop rare earth magnet recycling in the UK and Germany, respectively, and a 100 % interest in Mkango UK, focused on long loop rare earth magnet recycling in the UK via a chemical route.

Maginito and CoTec are also rolling out HyProMag's recycling technology into the United States via the 50/50 owned HyProMag USA joint venture company. HyProMag is also evaluating expanding into other jurisdictions, and has launched a collaboration with Envipro Holdings Inc. ("**Envipro**") on rare earth magnet recycling in Japan.

Mkango also owns the advanced stage Songwe Hill rare earths project ("**Songwe Hill Project**") and an extensive exploration portfolio in Malawi, and the Pulawy Project in Poland.

Mkango has signed a LOI with CPTK to list Mkango's Songwe Hill Project and Pulawy Project on NASDAQ via a SPAC Merger.

For more information, please visit www.mkango.ca.

OVERVIEW OF THE BUSINESS

Mkango is focused on becoming a market leader in rare earth magnet recycling and manufacturing through its 79.4% owned subsidiary, Maginito. Maginito consolidates Mkango's interests in rare earth recycling and magnet production, supporting the fast-growing demand from electric vehicles, wind turbines, and other clean energy technologies.

Maginito's operations include:

- HyProMag UK (100% ownership) and HyProMag Germany (90% effective ownership), advancing short-loop rare earth magnet recycling in the UK and Germany;
- Mkango UK (100% ownership), focused on long-loop chemical recycling of rare earth magnets; and
- HyProMag USA, a 50/50 joint venture via its 100% owned subsidiary, HyProMag UK, with CoTec, driving expansion into the North American market.

Maginito is commercialising the proprietary HPMS technology — a low-carbon, energy-efficient process for recovering NdFeB magnets from end-of-life products. Recycled powders are reintegrated into the supply chain through:

- Short-loop recycling, enabling direct remanufacturing of magnets with a significantly reduced carbon footprint; and
- Long-loop recycling, producing rare earth oxides and carbonates for broader applications.

Maginito's unique platform — combining innovative technology, growing operational footprint, and global partnerships — positions it at the forefront of the rare earth circular economy and the clean energy transition.

In parallel, Mkango owns the advanced stage Songwe Hill Project in Malawi, as well as an extensive exploration portfolio. Mkango also owns the Pulawy Project in Poland through its subsidiary, Mkango Polska. The Pulawy project is designed to provide downstream processing capability to produce separated rare earth oxides in Europe.

In March 2024, Mkango launched a review of strategic options for its Songwe Hill Project and the Pulawy Project. As part of this process, on 27 November 2024, Mkango's wholly owned subsidiary, Lancaster BVI appointed Cohen as its financial advisor, encompassing U.S. listing, mergers and acquisitions, and broader strategic and financial advice. Welsbach was also appointed as Supply Chain Advisor to support commercial development initiatives.

To provide strategic focus and unlock value for shareholders, Mkango has entered into a non-binding LOI with CPTK for a proposed business combination that would result in the spin-out of Lancaster BVI, including the Songwe Hill Project and the Pulawy Project, via a merger with a NASDAQ-listed SPAC. The next step is to negotiate and execute a business combination agreement. Following completion of the transaction, Mkango will retain a majority interest in the newly listed mining-focused entity.

This strategy will allow Mkango to sharpen its focus on building a world-class rare earth recycling and magnet manufacturing business through Maginito, while positioning Lancaster BVI for independent development and growth with dedicated access to U.S. capital markets.

HyProMag UK

Recent Developments

Initial commercial production is targeted to commence by the end of Q2 2025, subject to completion of the required infrastructure.

Magnet alignment presses are now fully commissioned, and the powder processing plant has been constructed. Infrastructure development is progressing, with data, battery, and electrical rooms completed and electrical and gas pipe installation works advancing well.

The factory acceptance test for the HPMS vessel took place in February and the vessel has arrived in the UK from Germany.

Ongoing HPMS pilot production continues to enable early product deliveries to customers ahead of full-scale production and this has been scaled up in parallel with commissioning of the commercial plant at Tyseley.

In February 2025, representatives from the UK's Department for Business and Trade ("**DBT**") and the Office for Investment visited the site, highlighting continued government support for HyProMag UK's mission to establish a UK-based, sustainable rare earth magnet recycling and manufacturing facility.

A video from the Birmingham Centre for Strategic Elements and Critical Materials featuring the patented HPMS technology, developed by Birmingham University Magnetic Materials Group ("**MMG**") and exclusively licenced to HyProMag, can be accessed via the following link**: https://f.io/5D2MmYzd.**

Development of the Company

HyProMag was founded in 2018 by the late Professor Emeritus Rex Harris, former Head of the MMG within the School of Metallurgy and Materials at the University of Birmingham ("**UoB**"), Professor Allan Walton, current Head of the MMG, and two Honorary Fellows, Dr John Speight and Mr David Kennedy, leading world experts in the field of rare earth magnetic materials, alloys and hydrogen technology, with significant industry experience. The HPMS process for extracting and demagnetising NdFeB alloy powders from magnets embedded in scrap and redundant equipment was originally developed within the MMG and subsequently licenced to HyProMag with a royalty of up to 1.5 % payable to the UoB. The MMG has been active in the field of rare earth alloys and processing of permanent magnets using hydrogen for over 40 years. Originated by Professor Harris, the hydrogen decrepitation method, which is used to reduce NdFeB alloys to a powder, is now ubiquitously employed in worldwide magnet processing.

HyProMag is establishing short loop recycling facilities for NdFeB magnets at Tyseley Energy Park in Birmingham, UK and other locations, using the patented HPMS process to provide a sustainable solution for the supply of NdFeB magnets and alloys for a wide range of markets including, for example, automotive and electronics. Short loop magnet recycling is expected to have a significant environmental benefit, requiring an estimated 95% less energy versus primary mining to separation to metal alloy to magnet production.

HPMS is a radically new recycling technology based on $100 million of research and development work that preserves the quality of the original magnets for reprocessing; a far cleaner and more energy efficient process than the traditional dismantling, thermal demagnetisation and cleaning processes and lends itself to automated and efficient processing. The resulting recycled magnets are being made to recognised industrial grades.

The plant at Tyseley Energy Park is being developed together with the UoB, with a minimum capacity of 100tpa NdFeB. This £4.3 million ($5.47 million) project is being funded by "Driving the Electric Revolution", an Industrial Strategy Fund challenge delivered by UK Research and Innovation. HyProMag UK will be the primary industrial user and operator of the plant and is the exclusive licensee for the underlying HPMS technology, developed at the UoB and now being commercialised by HyProMag. Initial commercial production will be based on 20% capacity utilisation, equivalent to a minimum of 25tpa NdFeB. Initial commercial production of NdFeB is targeted for June 2025.

HyProMag UK is receiving strong interest for recycled magnets from potential customers, underpinning the transition to commercial operations, and for recycling solutions from original equipment manufacturers ("**OEMs**"), and automotive and recycling companies looking for a low cost and energy efficient circular solution for magnet recycling that does not require dismantling – HyProMag's patented HPMS technology provides the solution.

Apart from providing feed during the commissioning phase of the Tyseley development, the pilot plant at the UoB has enabled the testing of a broad variety of scrap streams and the production of a wide range of products since its commissioning in 2022, generating operating information to support the scale-up and commercialisation of operations.

Furthermore, over 3,500 finished rare earth magnets have been produced to date by HyProMag UK and the UoB from recycled HPMS powder produced for project partners and potential customers from the pilot scale equipment. These magnets are being tested in a wide range of applications including multiple automotive, aerospace, electronics applications, and others planned, providing valuable marketing and technical information to further support the scale-up and commercialisation of operations.

In addition to the production of finished magnets, the pilot plant has also produced alloys for re-melt testing and chemical processing, maximising the flexibility of the product suite and the ability to process different scrap streams.

HyProMag UK is participating in a number of other government grant funded projects detailed below.

On 28 May 2020, the Company announced the launch and provided further details of the Innovate UK grant funded project, "Rare-Earth Recycling for E-Machines" ("**RaRE**") in which HyProMag UK is a partner. RaRE will for the first time establish an end-to-end supply chain to incorporate recycled rare earth magnets into electric vehicles, whereby recycled magnets will be built into an ancillary electric motor to ultimately support the development of a commercial ancillary motor suite. In addition to HyProMag UK and UoB, RaRE features a strong set of partners with complementary expertise, comprising Advanced Electric Machines Research Limited, Bentley Motors Limited, Intelligent Lifecycle Solutions Limited and Unipart Powertrain Applications Limited. The total budget for RaRE was £2.6 million ($3.3 million), of which Innovate UK funded £1.9 million ($2.4 million), with RaRE partners funding the £0.7 million ($0.9 million) balance. HyProMag's contribution was fully funded from the £300 k ($382 k) investment made by Maginito in January 2020.

On 30 November 2020, the Company announced that HyProMag and partners, European Metal Recycling Limited ("**EMR**") and UoB were awarded a grant from the Industrial Strategy Challenge Fund, delivered by UK Research and Innovation, for a new ground breaking project entitled "Rare-Earth Extraction from Audio Products", which investigated ways of recycling rare earth magnets from speakers used in automotive and consumer electronics applications, which account for approximately 20% of the current market for rare earth magnets, according to Adamas Intelligence, and therefore represent a significant opportunity for rare earth magnet recycling. On 30 September 2021, the Company announced the successful completion of the project.

On 14 March 2022, the Company announced that HyProMag UK and Mkango UK will collaborate with Bowers & Wilkins, EMR, GKN Automotive Innovation Centre, Jaguar Land Rover and UoB in the "Driving the Electric Revolution" challenge at UK Research and Innovation grant funded project, SCREAM.

SCREAM aimed to establish a recycled source of rare earth magnets in the UK to provide greater security of supply to UK industry, whilst aiming to achieve a 10% reduction in cost and a significant reduction in environmental impact.

HyProMag UK is working with the UoB to develop a new semi continuous version of the HPMS process and to produce short loop recycled sintered magnets at multiple grades to match the requirements for a range of applications.

HyProMag UK is collaborating with EMR, the Offshore Renewable Energy ("**ORE**") Catapult, Magnomatics and the UoB in a £1.5 million ($1.9 million) project, Re-RE Wind, of which £1 million ($1.3 million) or 67% will be funded by Innovate UK's circular critical materials supply chains (CLIMATES) programme. The budget for HyProMag's portion of the project is circa £350 k ($446 k) of which 70% will be funded by the grant.

On 3 October 2024, HyProMag UK and Mkango UK were awarded grants totalling £218,932 ($280,012) as part of the CLIMATES (Circular critical materials supply chains) programme, a £15 million ($19 million) investment delivered by Innovate UK, which aims to strengthen the UK's supply chain resilience within critical minerals.

In the REEmelt Project, HyProMag will collaborate with Less Common Metals ("**LCM**"), ADEY Innovation Ltd ("**ADEY**") and the UoB to liberate end-of-life rare earth magnets via HPMS, followed by remelting, strip casting and remanufacture into a new sintered rare earth magnet for demonstration in an ADEY magnetic filter.

In the Sustainable Alternative to Hydrometallurgical Processes ("**SAHP**") Project, Mkango UK will collaborate with Imperial College spin-out, Nanomox Ltd ("**Nanomox**"), to validate its novel Oxidative Ionothermal Synthesis ("**OIS®**") process at pilot scale, which provides an opportunity to lower the environmental impact and cost of long-

loop chemical processing, leveraging off the existing pilot facilities already developed by Mkango UK at Tyseley Energy Park in Birmingham.

These grant funded projects facilitate the transition to commercial production, enabling product testing across a range of applications, whilst broadening potential customer engagement and enhancing financial flexibility.

Minerals Security Partnership

HyProMag's rare earth magnet recycling HPMS technology has been selected by the MSP for support, as one of its key projects. The technology was selected by the MSP given its strong potential to contribute towards the development of responsible critical mineral supply chains.

The MSP was formed in 2022 by 14 governments and aims to ensure adequate supplies of minerals such as rare earths to meet net zero-carbon goals. It aims to support public and private sector investments building diverse, secure, and responsible global critical minerals supply chains. Partner governments include the United Kingdom, the United States, Australia, Canada, Finland, France, Germany, Japan, India, the Republic of Korea, Norway, Sweden and the European Union.

The MSP promotes responsible growth across the critical minerals sector via a shared commitment to high ESG standards, sustainability and shared prosperity. The MSP partner governments regard the further development of responsible and resilient supply chains to be critically important for an equitable and sustainable energy transition.

MSP is committed to leveraging the collective financial and diplomatic resources of its 14 partners by deepening collaboration between governments, project developers and investors to drive responsible investment in critical minerals projects.

On 13 December 2024, Mkango presented its rare earth magnet recycling and manufacturing projects during the MSP meeting in Brussels.

HyProMag Germany

Recent Developments

Development of the scaled-up rare earth magnet recycling and manufacturing plant in Germany is progressing on track for Q4 2025 production.

A site has been selected near Pforzheim, Germany and lease signed, with the infrastructure development progressing well.

Equipment ordered to date includes HPMS vessel, magnet presses, jet mill, sintering furnaces and other items.

A 3D fly through of the project feasibility design can be accessed via the following link: **https://1drv.ms/v/s!ApFBa3EdjQWApQKPdOSiqu7LkAiz.**

Company Development

In November 2021, HyProMag UK established an 80%-owned subsidiary in Germany, HyProMag Germany, to rollout the commercialisation of HPMS technology into Germany and Europe. HyProMag Germany is 20% owned (10% following conversion of the German Convertible Loan, as defined below) by Professor Carlo Burkhardt of Pforzheim University, coordinator of the €14m ($15.5m) SusMagPro (www.susmagpro.eu) and €13 million ($14.4 million) REEsilience (www.reesilience.eu) EU funded recycling projects, with approximately 40 partners across the European supply chain.

On 23 November 2022, the Company announced that HyProMag Germany had been awarded grants totaling €3.7 million ($4.1 million) for a new project, entitled "Innovation Centre for Science & Economy Northern Black Forest IZWW", comprising a €2.5 million ($2.8 million) grant from the European Regional Development Fund (ERDF) and a €1.2 million ($1.3 million) grant from the Ministry of Economic Affairs, Labour and Tourism Baden-Württemberg.

The total cost of the German Recycling Project is expected to be €6.1 million ($6.8 million), of which approximately 60% will be funded by the grants, on the basis that for each €1 spent on the project by HyProMag Germany, a further €1.50 contribution can be claimed from the grants. The first phase of the project includes the development of a production facility in Baden-Württemberg State with a minimum capacity of 100 tpa NdFeB comprising recycled rare earth sintered magnets, alloys and powders. This will be the first in Germany using the patented HPMS process, with first production targeted for 2025, and a similar size to the £4.3 million ($5.5 million) UK Recycling Project being developed by HyProMag UK and the UoB at Tyseley Energy Park in the UK.

Maginito has entered into a convertible loan (the "**German Convertible Loan**") with HyProMag Germany. Under the terms of the German Convertible Loan, Maginito has granted HyProMag Germany a loan facility for €2.5m ($2.8m) available to be drawn down in accordance with an agreed investment plan and convertible into a 50% interest in HyProMag Germany. This investment by Maginito into HyProMag Germany will contribute to the match funding requirements to unlock the abovementioned grant.

HyProMag Germany is targeting commercial production in Q4 2025.

HyProMag Germany is participating in the €8 million grant ($8.54 million) funded GREENE project, of which HyProMag Germany will receive €350,125 ($447,806).

The GREENE Project

Rare earth element permanent magnets based on NdFeB are vital components of high-tech products enabling a green energy future. They are highly valued due to their outstanding properties. They are complex materials consisting of multiple phases and their overall performance is determined by a high remanence, reflected in magnet strength, and a high intrinsic coercivity, making them resistant to demagnetization. Their maximum energy product is thus composed of both remanence and coercivity.

The need to operate at temperatures over 100 °C in applications such as traction motors in electric vehicles means that a high coercivity is usually prioritised over a high remanence, which negatively affects power output linked to remanence. In conventionally sintered magnets, NdFeB grains are microscopic and the regions between the grains are called grain boundaries. When exposed to a demagnetizing force, demagnetization begins at the grain interfaces with the grain-boundary phase before rapidly spreading, influencing the magnet's coercivity.

GREENE partners aim to push the boundaries of material science by developing Single-Grain Re-Engineered NdFeB permanent magnets with a new grain-boundary interface, thus allowing for a reduction of rare earth element content. The new GREENE magnets are expected to be more resource-efficient, offering a roughly 20% increase in coercivity, 10% in remanence, and 20% in overall maximum energy product.

As a first step, novel grain boundaries and interfaces will be created using micromagnetic simulations and computational thermodynamics. Following an initial testing phase, the technology will then be applied to isolated grains from recycled and fresh streams with the intention of developing a new form of NdFeB magnet. By the end of the project, the magnet manufacturing system is intended to be set up in an actual operational setting.

To achieve this ambitious undertaking, 15 European partners with outstanding expertise in their respective fields have joined forces, including leading material scientists, magnet manufacturers and recyclers, lifecycle analysis experts as well as end user representatives. Several of them have already cooperated in predecessor projects like SUSMAGPRO, INSPIRES and REEsilience. The project is coordinated by the Slovenian Jožef Stefan Institute.

HyProMag USA

On 2 January 2024, Maginito, via its 100% owned subsidiary, HyProMag UK and CoTec formed a 50/50 joint venture company, HyProMag USA, to roll-out HPMS technology into the United States, with CoTec responsible for funding the US Feasibility Study and development costs, subject to the results of the US Feasibility Study, which is now complete.

Sintered NdFeB magnets will be produced in the United States using materials sourced in the United States, contributing to security of NdFeB permanent magnet supply and enabling economical, traceable, domestic U.S. production of recycled NdFeB magnets (DFARS compliant) supporting the defense, aerospace, automotive, medical science, hyperscale data centres, robotics, and energy transition industries.

The US Feasibility Study was based on the construction of a state-of-the art rare earth magnet recycling and manufacturing operation in the United States, with a central Dallas Fort Worth, Texas hub supported by two pre-processing spoke sites in the eastern and western regions of the United States and produced the following positive results:

- US$262 million post-tax NPV and 23% real IRR based on current market prices
- US$503 million post-tax NPV and 31% real IRR based on forecast market prices
- Payback is achieved at current market prices in 3.9 years at a profitability index ("**PI**") of 2.1, at forecast market prices payback is achieved in 3.1 years at a PI of 4.0. Up-front capital cost of the Project is US$125 million (inclusive of a 10% contingency margin and Class 3 AACE estimated detailed design study and engineering costs) over a 1.7 year construction phase
- Production of 750 metric tons per annum of recycled sintered NdFeB magnets and 291 metric tons per annum of associated NdFeB co-products (total payable capacity – 1,041 metric tons NdFeB) over a 40-year operating life. Expansion potential with the inclusion of a third HPMS vessel within three years following commissioning for an additional capital cost of approximately US$7 million, funded by CoTec.
- Low all-in sustaining cost ("**AISC**") of US$19.6 per kg of NdFeB product which compares to current weighted average market prices of US$55 per kg of NdFeB product; the latter reflects underlying prevailing low rare earth prices with significant scope for price recovery.

First revenue is targeted in H1 2027 with a Notice to Proceed ("**NTP**") expected in mid-2025 following completion of the Detailed Engineering Design and Value Engineering phase funded by CoTec, which has commenced and will include:

- Evaluation of significant opportunities to optimize construction and operational efficiency, and to reduce capital expenditure and operating costs, as well as to expand production
- Parallel product and operational testing in the UK at the UoB MMG pilot plant and in conjunction with HyProMag commercial developments in the UK and Germany
- Completion of commercial arrangements with potential feed suppliers and product off takers – discussions with several potential parties are underway
- Continued discussions with U.S. federal, state and municipal governments in relation to financing opportunities and other economic incentives, including carbon price premiums which could improve economics

The HyProMag USA Project will help secure the re-vitalization of NdFeB magnet production in the United States with the creation of approximately 90 jobs across Texas, South Carolina and Nevada.

HyProMag USA is targeting supplying 10% of U.S domestic demand for NdFeB magnets within five years of commissioning. The design is modular and can be replicated and accelerated to additional facilities in the eastern and western United States.

The US Feasibility Study was undertaken by a multidisciplinary team appointed by CoTec and Mkango and led by independent engineers, Canada-based BBA USA Inc and U.S. based PegasusTSI Inc with other independent experts and support from the UoB, HyProMag UK and HyProMag Germany.

CoTec was responsible for funding the US Feasibility Study and the project development costs. Funding provided by CoTec is in the form of shareholder loans to HyProMag USA.

In parallel, HyProMag USA is working on securing U.S. Government funding, U.S. state financial grants and incentives and strategic partnerships with U.S. companies for feed supply and recycled NdFeB magnet offtake.

On 2 March 2025, an independent, Product Carbon Footprint (the "**PCF**") analysis was conducted in accordance with ISO 14067:2018 by Minviro Limited ("**Minviro**").

Minviro confirmed a PCF of 2.35 kg of CO_2 eq. per kg of NdFeB cut sintered block product under the independent Feasibility Study base case scenario of 750 metric tons payable of sintered NdFeB magnets and 291 metric tons of associated NdFeB co-products annually. Furthermore, Minviro assessed that the associated HPMS recycled NdFeB alloy powder, which is a co-product produced by HyProMag USA would have a carbon footprint of 0.38 kg of CO_2 eq. per kg of NdFeB alloy powder product.

On 11 March 2025, HyProMag USA announced that it will expand the detailed design phase of the HyProMag USA Project to include three HPMS vessels. In addition, and concurrently, HyProMag USA will begin conceptual studies to evaluate further expansion to triple the capacity of the HyProMag USA Project, versus that envisaged in the US Feasibility Study, across the HyProMag USA Project footprint of Texas Hub, South Carolina and Nevada. The studies will also include integrated USA development of long loop chemical processing, which is complementary to the HPMS short-loop process. Long-loop chemical processing is used to process any material not suitable for short-loop recycling as well as swarf generated from magnet finishing.

On 22 April 2025, HyProMag USA appointed lead engineers PegasusTSI and BBA to perform engineering, procurement and construction management ("EPCM") services for HyProMag USA to produce rare earth magnets in the United States.

Mkango Rare Earths UK Limited

Mkango UK recently commissioned a long-loop recycling pilot plant at Tyseley, which processes NdFeB magnet scrap or swarf to produce rare earth carbonates and oxides via a chemical route.

This complements the short-loop recycling plant currently being commissioned by HyProMag UK and the UoB also at Tyseley, which processes NdFeB magnet scrap to produce rare earth alloys and magnets.

Both long-loop and short-loop recycling technologies are underpinned by the patented HPMS technology developed at the UoB, which liberates magnets from end-of-life scrap streams in a cost effective and energy efficient way to produce a recycled NdFeB alloy powder, which is manufactured into a magnet (via the short loop process) or into a rare earth carbonate or oxide (via the long loop chemical process).

Optimisation of long-loop pilot operations is underway, targeting near-term pilot scale production of the first 50kg batch of rare earth carbonates and oxides, in parallel with completion of scoping studies and evaluation of options to advance long loop recycling via stand-alone development, joint venture or other commercial arrangements. The long-loop recycling route is used to process NdFeB HPMS powder not suitable for short-loop recycling or for the processing of magnet swarf (i.e. the powder produced from grinding and finishing magnets).

The long-loop pilot plant received 70% of its funding from the UKRI's Driving Electric Revolution Challenge, delivered by Innovate UK, as part of the grant-funded project "Secure Critical Rare Earth Magnets for the UK" (SCREAM). Project partners include HyProMag UK, Bowers & Wilkins, European Metal Recycling (EMR), GKN Automotive, Jaguar Land Rover, and the UoB.

RARE EARTH MINING

Mkango has several properties in the Republic of Malawi, including Songwe Hill and the Nkalonje Hill exploration target, both held within 11 Phalombe retention licences (the "**Phalombe Licences**"). Mkango is also pursuing mineral exploration opportunities with the Thambani retention licences ("**Thambani Licences**").

Mkango holds a 100% interest in Lancaster BVI, which holds a 100% interest in 16 exploration licences, 15 of which are held as 5-year retention exploration licences in southern Malawi, the Phalombe Licences and the Thambani Licence.

The table below splits out the mineral project expenditure into more detail for the three months ending 31 March 2025 and 31 March 2024.

Licence/Capital Project	Project	For the three months ended 31 March 2025	2024
Phalombe	***Songwe Hill Project***		
	Metallurgy expenses	4,579	-
	Government fees	350	361
	ESHIA (1)	-	-
	Technical studies	-	-
	Consulting fees	-	-
	Malawi office and camp expenses	11,584	14,903
Phalombe total		16,513	15,264
Pulawy Separation Plant Pre-feasibility Study	Consulting fees	-	-
Thambani and Nkalonje	Mineral project expenditures	-	25,625
Total mineral project and research and development expenses		16,513	40,889

(1) Environmental Social Health Impact Assessment and Corporate Social Responsibility expenditures.

Exploration and evaluation expenditure is recognised in the consolidated statement of comprehensive loss as mineral project expenditures. Following the completion of the Definitive Feasibility Study (the "**DFS**") for Songwe Hill on 5 July 2022, exploration and evaluation expenditure for Songwe Hill is being capitalised in accordance with IFRS 6 and the Company's accounting policies.

Songwe Hill Project

Background

The Phalombe Licences are located in southeast Malawi, within which the Songwe Hill is the main development target and features carbonatite hosted rare earth mineralisation. Songwe Hill was subject to historical exploration programs during the late 1980s. Lancaster BVI was awarded the licence by the Malawi government on 21 January 2010 and has subsequently renewed it, with the most recent renewal on 1 June 2021 when the Phalombe Licence was transferred into 11 retention licences covering a total of 250 km^2. Each retention licence is for a 5-year period from 1 June 2021.

Exploration

Mkango has been exploring and evaluating Songwe Hill since January 2010. Following confirmation of the previously investigated enriched zones, exploration focused on identifying the nature and extent of the rare earth mineralized carbonatites and related rocks. Mkango's early exploration activities consisted of litho-geochemical sampling, soil sampling, channel sampling, geological mapping, ground magnetic, density and radiometric surveys, and petrographic/mineralogical analyses, followed by significant diamond drilling to support metallurgical testing and the resource estimate.

Definitive Feasibility Study

In 2018, Mkango commenced the DFS, the initial phases of which comprised an extensive diamond drilling programme, metallurgical optimisation and work in relation to the then ongoing Environmental, Social, and Health Impact Assessment ("**ESHIA**"), which has since been completed in accordance with IFC Performance Standards and Equator Principles.

On 4 February 2019, Mkango announced an updated Mineral Resource estimate for Songwe Hill: 8 Mt grading 1.50% Total Rare Earths Oxides ("**TREO**") in the Measured Mineral Resource category, 12.2 Mt grading 1.35% TREO in the Indicated category and 27.5 Mt grading 1.33% TREO in the Inferred Mineral Resource category, applying a base case cut-off grade of 1.0% TREO.

Scientific and technical information in relation to these results and related disclosure, including sampling, analytical, and test data underlying the information, has been approved and verified by Dr. Scott Swinden of Swinden Geoscience Consultants Ltd, who is a "Qualified Person" in accordance with NI 43-101.

Sample preparation and analytical work for the drilling and channel sampling programmes was provided by Intertek-Genalysis Laboratories (Perth, Australia) employing ICP-MS techniques suitable for rare earth analyses and following strict internal Quality Assurance/Quality Control ("**QAQC**") procedures inserting duplicates, blanks and standards. Internal laboratory QAQC was also completed to include blanks, standards and duplicates.

In terms of other aspects of the DFS, Mkango shipped a 60-tonne bulk sample to Australia for pilot test work. The bulk sample was selected from areas within the previously announced upgraded Measured and Indicated Mineral Resource Estimates, which underpin the DFS.

Potential pilot plant facilities were reviewed through a detailed tender process and ALS Metallurgy in Perth, Australia was selected. On 24 February 2021 the Company announced the commencement of flotation pilot test plant work.

On 5 July 2022, the Company announced the results of the DFS for the Songwe Hill Project.

Highlights of the DFS included the following:

- $559.0 million post-tax NPV, using a 10% nominal discount rate, with an IRR of 31.5%, payback period of 2.5 years from full production (5 years from start of capital expenditure) and post-tax life-of-operations nominal cash flow of $2.1 billion.
- The DFS is for 100% of Songwe on a stand-alone basis.
- The Songwe Hill Project is confirmed as one of the very few rare earths projects globally to have reached the DFS stage, with a full ESHIA completed in compliance with IFC Performance Standards and the Global Industry Standard for Tailings Management (2020) ("**GISTM**") adopted for design and management of the tailings storage facility.
- Long operating life of 18 years, with mining assumed to commence 24 months from securing development financing. Production averages 5,954 tpa TREO for the first five years of full production, including 1,953 tpa of neodymium and praseodymium oxides, and 56 tpa of dysprosium and terbium oxides, in a mixed rare earth carbonate ("**MREC**") grading 55% TREO, generating nominal EBITDA of $215 m per year.
- Neodymium, praseodymium, dysprosium and terbium are critical for the low-carbon transition, as they are critical components of permanent magnets for electric vehicles, wind turbines and a wide array of electronic devices.
- Initial capital expenditure of $277 m (excluding a $34 m contingency) is required for the development of mine, mill, flotation and hydrometallurgy plants, tailings storage facility, and related project infrastructure in Malawi.

The DFS for the Songwe Hill Project and subsequent work identified a number of areas for potential cost optimisation, and the Company continues to evaluate these and other cost reduction opportunities in light of the currently weak rare earth market pricing environment.

On 26 January 2023, the Malawi Environmental Protection Agency ("**MEPA**") approved the ESHIA for the Songwe Hill Project. The approval of the ESHIA was a significant achievement and an important milestone in the Mine Development Agreement ("**MDA**") approval process. As the MEPA approval is a precursor requirement for the granting of a mining licence, this achievement is expected to unlock significant stakeholder value and future investment for the development of Songwe Hill. On 10 November 2023 the Hon Minister Monica Chang'anamuno MP and her team from the Ministry of Mines visited the Songwe Hill Project.

Scientific and technical information in relation to flotation piloting and metallurgy has been approved and verified by Nicholas Dempers Pr.Eng (RSA) Reg. No 20150196, FSAIMM of SENET (a DRA Global Group Company), who is a "Qualified Person" in accordance with National Instrument 43-101 -- Standards of Disclosure for Mineral Projects.

In late July 2024, Lancaster BVI, and Lancaster Malawi, direct and indirect 100% owned subsidiaries of Mkango, and the Government of Malawi signed the MDA for the Songwe Hill Project.

Key components of the MDA include:

- 5% royalty of gross revenue
- 30% corporate tax rate
- 10% non-diluting equity interest in the Songwe Hill Project to the Malawi Government
- Exemption from customs and excise duties – Lancaster Exploration Limited (Malawi) ("**Lancaster Malawi**") will be exempted from Export Duty, Import Duty, Import Excise and Import VAT on imports and exports of capital goods as provided in the applicable law
- 10 year stability period
- 10 year tax loss carry forward
- Community development expenditure is an allowable tax deduction

On 21 August 2024, EIT RawMaterials provided funding of €200,000 ($255,798) which will fund the commencement of process optimisation for the Songwe Hill Project, a future source of MREC feed for the Pulawy Project.

To provide strategic focus and unlock value for shareholders, Mkango has entered into a non-binding LOI for a proposed business combination that would result in the spin-out of Lancaster BVI, including the Songwe Hill Project and the Pulawy Project, via a merger with a NASDAQ-listed SPAC. The next step is to negotiate and execute a business combination agreement. Following completion of the transaction, Mkango will retain a significant shareholding in the newly listed mining-focused entity.

Other targets in Phalombe Licences

Apart from Songwe Hill, there are two other identified hypabyssal systems in the Phalombe Licence, namely Nkalonje Hill and Namangale. In both cases, the World Bank Survey indicates strong thorium radiometric anomalies coincident with the intrusive rocks, which, similar to Songwe Hill, are expressed as steep hills rising above the surrounding plain.

Based on work to date, the highest priority of the targets within the Phalombe Licence is the above mentioned Nkalonje Hill hypabyssal system, where outcrop is largely fenite (altered country rock) with occasional carbonatite, with the potential for underlying and larger zones of mineralised carbonatite.

Nkalonje Hill

Background

Nkalonje Hill is located 23 km by road (14 km straight line) north-west of Songwe Hill within the Company's Phalombe Licences. Nkalonje Hill is approximately 95 km by road from Blantyre. Paved roads run from Blantyre to within 19 km of Nkalonje Hill.

On 7 April 2022, the Company announced the completion of initial sampling and ground geophysics at Nkalonje Hill and the identification of drill targets. Highlights included:

- Carbonatite dyke sample assay grades of up to 5.92% TREO (median 2.96%).
- Mapping and geophysics result confirmation that the major geological features of Nkalonje Hill are those of an alkali silicate-carbonatite intrusive complex, similar to Songwe Hill.
- Identification of a primary shallow drilling target beneath exposed mineralised dykes in addition to a secondary deeper drilling target.
- Geological mapping and geophysics data for Nkalonje Hill confirms the presence of previously mapped nepheline syenite, breccia and carbonatite.
- The ground geophysics data support the geological interpretation of a ring complex structure, as seen at Songwe Hill, and at other carbonatite vents in Malawi. The overall diameter of this structure is approximately 1.7 km and comprises an outer ring of nepheline syenite and a central vent of breccia.
- The breccia body is approximately 0.9 km in diameter and comparable in lateral extent to Songwe Hill.
- Mapping to date has identified eight carbonatite dykes reaching 4 meters in width and traceable at surface up to 90 meters along strike.
- Two different carbonatite types are noted at Nkalonje Hill: (1) calcite carbonatite and (2) a banded ferroan calcite carbonatite.
- Assay results for 12 calcite carbonatite and 17 ferroan calcite carbonatite grab samples returned total rare earth oxide (TREO) grades of up to 5.92%, with a median value of 2.96% in the ferroan calcite carbonatite, suggesting concentration of the REE in the more evolved carbonatite phases.

The similarities between Nkalonje Hill and Songwe Hill, and the high TREO grades from the assay results, demonstrate a strong case for further investigation. In the long term, the close proximity of Nkalonje Hill to Songwe provides a good potential source of additional feedstock for processing at Songwe Hill.

Thambani Uranium Licences

Background

Lancaster BVI was granted the Thambani Licence by the Malawi Minister of Natural Resources, Energy and Environment on 10 September 2010 in respect of an area, which was originally 468 km^2 in Thambani, Mwanza District, Malawi. Exploration has identified a number of areas with potential for uranium, tantalum, niobium, zircon and corundum.

The licence was originally issued by the Malawi government on a three-year basis and was subsequently renewed on 10 September 2015 for an additional two-year term when the Company requested a reduction in the Thambani Licence area to the current 136.9 km^2. The Thambani Licence was renewed for a further two years to 10 September 2019 and was subsequently renewed for an additional two years to 10 September 2021. The Company has subsequently been granted four (4) retention licences for a period of five years to 19 October 2026.

The exploration activities conducted during 2011 and 2012 included acquisition of Landsat7 and ASTER satellite imagery for the Thambani Licence area, systematic ground radiometric surveys to confirm and detail previously-known airborne anomalies, reconnaissance geological mapping and litho-geochemical sampling programs. The work has identified a number of potential uranium targets over the Thambani Massif, which is mainly composed of nepheline syenite gneiss, forming two prominent ridges known as Thambani East Ridge and West Ridge. Historical airborne radiometric surveys and ground radiometric survey programs carried out by Mkango have revealed two distinct uranium anomalies occurring along the two ridges. A strong uranium anomaly, measuring approximately 3 km by 1.5 km, occurs along the length of the Thambani East Ridge with a north-south trend and a second uranium

anomaly, measuring approximately 1.5 km by 0.4 km along the western foot of the West Ridge possibly coincident with the contact between the nepheline syenite body and the biotite-hornblende gneisses to the west.

Initial results from follow up reconnaissance geochemical sampling conducted in 2013 returned locally anomalous uranium values, ranging up to 1,545 ppm U_3O_8, on both Thambani East Ridge and West Ridge. During the year ended 31 December 2014, the Company continued to progress the geological exploration studies on the Thambani project area, data analysis and geological modeling.

Mkango completed a trenching programme across the Thambani Massif primarily focused on two sites of historical uranium exploration, known as the Chikoleka and Little Ngona targets. An initial set of nine trenches, selected on the basis of anomalous ground radiometric results, have been re-examined and geochemically sampled across profiles from soil/overburden into bedrock.

The first set of assay results of 142 soil and rock chip samples returned variably anomalous U, Nb and Ta values in most trenches, ranging up to 4.70 % $U_3O_8$8, 3.25 % Nb_2O_5 in soil and up to 0.42 % U_3O_8, 0.78 % Nb_2O_5 and 972 ppm Ta_2O_5 in rock chips, notably higher than results from the 2013 reconnaissance surface geochemical sampling programme.

Preliminary mineralogical studies carried out on six rock samples from the Little Ngona River and Chikoleka targets, using Scanning Electron Microscopy at the Natural History Museum London, indicate that pyrochlore group minerals, mainly betafite, are the principal carriers of U, Nb and Ta for these samples.

Airborne Geophysical Survey

On 12 July 2016, Mkango announced results of the airborne geophysical survey covering approximately two thirds of its Thambani Licence. As with the Phalombe Licence, this survey was part of a $25 million World Bank funded nationwide airborne geophysical programme flown at 250 m spacings.

The World Bank Survey confirmed the presence of the previously identified uranium radiometric anomaly, referred to previously, along the western flank of the Thambani East Ridge. The Little Ngona prospect, which previously yielded very encouraging uranium, niobium and tantalum values from geochemical sampling, is located at the northern end of this anomaly.

Further discrete uranium anomalies orientated approximately east-west, are located to the south of these anomalies and are yet to be investigated in detail. The previously identified uranium radiometric anomalies on the West Ridge and Chikoleka prospect in the north-west of the Thambani Licence area, which also yielded very encouraging results from previous geochemical sampling, were not covered by the World Bank Survey.

A map showing the uranium radiometric anomalies superimposed on a topographic map, indicating local infrastructure, and a digital elevation model can be accessed via the following link (This link does not form part of this MD&A): http://www.mkango.ca/i/maps/Results_of_Airborne_radiometric_survey_on_topo_U_July.jpg

The airborne survey also highlighted a number of magnetic anomalies not previously identified, including a 2.3 km linear magnetic high anomaly along the Thambani East Ridge, a further 1 km by 0.5 km magnetic high anomaly located to the north along the Thambani East Ridge, a magnetic low anomaly approximately co-incident with the abovementioned east–west orientated uranium anomaly and anomalies in a number of other locations. These areas require further investigation to determine the significance of the magnetic anomalies and whether they are related to mineralisation or geological features.

A map showing the magnetic anomalies superimposed on a topographic map, indicating local infrastructure, and a digital elevation model can be accessed via the following link (This link does not form part of this MD&A):

http://www.mkango.ca/i/maps/Results_of_Airborne_magnetic_survey_on_topo_July_2016.jpg

During 2019, Mkango commenced a subsequent exploration programme focused on further definition of uranium, tantalum and niobium mineralisation in the licence area. Results were as follows:

Assay results from 128 rock samples collected during the 2019 exploration programme returned uranium, tantalum and niobium values ranging up to 0.74% U_3O_8, 0.41% Ta_2O_5 and 3.24% Nb_2O_5. Of the total, 43 graded above 500 ppm

U_3O_8, of which 13 graded above 1,000 ppm U_3O_8; all but one of these 43 samples were in-situ rock samples. Results associated with the ten best U_3O_8 assays are summarised in the table below, nine of which are grab samples from outcrop (prefixed G-) and one a hand-auger sample of highly weathered rock in a trench (prefixed T-).

The objective of the programme was to identify new areas of outcropping mineralisation through further geological reconnaissance and sampling, guided by handheld spectrometer. Sampling was focussed on the uranium anomalies identified by previous airborne and ground radiometric surveys, including areas where previous sampling gave encouraging results. The aims of the sampling were to better delineate the mineralised zones and to localise future drill sites to test the downdip extension of surface mineralisation. Field observations and sampling results suggest that mineralisation occurs in zones that are conformable with gneissic banding.

The 2019 sampling programme was focused on radiometric uranium anomalies associated with the Thambani Massif, a body of nepheline-bearing syenite gneiss which dominates the north-eastern part of the licence. Previous work has shown the uranium anomalies to be associated with niobium and tantalum mineralisation.

Two suites of samples were collected: 1) in-situ grab samples from outcrop; and 2) extremely friable, highly weathered rock from trenches that were manually excavated to approximately 10 m long, 1.5 m wide and 2 m deep, and oriented west to east across the regional strike of the gneissic foliation. Grab samples are selective and are not necessarily representative of the mineralisation on the property.

A location map and sampling maps can be found at https://mkango.ca/projects/thambani (This link does not form part of this MD&A)

A total of 58 surface grab samples were collected, 54 of which were from outcrop associated with the prominent radiometric anomaly along the western slope of the Thambani East Ridge, and four from outcrop in the Supe River.

Ten trenches were excavated by hand over radiometric anomalies. Three of these (the Western Trenches) were spaced 25 m apart, immediately adjacent to a pit where the highest grades were encountered in 2017. The seven other trenches were excavated over radiometric anomalies at widely separated locations on the lower slope of the Thambani East Ridge. In all of the trenches, highly weathered nepheline syenite gneiss was encountered below a bouldery soil horizon approximately 0.5 m thick. The westward dip of the banded gneiss observed in outcrop on the ridges was recognisable in the trenches despite strong weathering.

In the Western Trenches, 70 samples were collected, 61 of which were horizontal channel samples of 2 m length collected along each wall in all of the three trenches. Five similar samples were collected in one trench at the foot of the Thambani East Ridge.

This programme provides new information on the nature, disposition and grade ranges of mineralisation in the Thambani Massif. Sampling of mainly fresh samples on the Thambani East Ridge indicates that the U-Ta-Nb mineralisation occurs within the gneissic bands, and surface observations indicate that it may occur in conformable zones. This provides a target for shallow drilling on the down-dip extension of the surface showings.

Mkango retains a 100% interest in the Thambani License and is currently evaluating strategic options, including opportunities for joint ventures and other potential avenues to create value.

Scientific and technical information contained in this section has been approved and verified by Dr. Scott Swinden of Swinden Geoscience Consultants Ltd, who is a “Qualified Person” in accordance with NI 43-101.

RARE EARTH SEPARATION

On 7 June 2021, the Company announced that Mkango and Grupa Azoty PULAWY had agreed to work together towards development of the Pulawy Project in Poland. The Pulawy Project will process the purified MREC derived from the Songwe Hill Project into separated rare earth oxides.

Mkango Polska was established and is headed by a highly experienced Country Director for Poland, Dr Jarosław Pączek, together with rare earth separation experts, Carester, and a strong team of technical advisors and engineers.

Grupa Azoty PULAWY (Warsaw Stock Exchange: ZAP) is part of the Grupa Azoty Group, the European Union's second largest manufacturer of nitrogen and compound fertilizers, and a major chemicals producer. Its products are exported to over 20 countries around the world, including Europe, the Americas and Asia.

Mkango Polska and Grupa Azoty PULAWY have signed an exclusive lease option agreement for a site adjacent to Grupa Azoty PULAWY's large scale fertiliser and chemicals complex at Pulawy, which provides excellent infrastructure, access to reagents and utilities on site, and an attractive operating environment, resulting in a highly competitive operating cost position for the Pulawy Project, based on scoping studies to date. On 17 February 2025, the lease option agreement was extended.

Located within a Polish Special Economic Zone, the site provides excellent access to European and international markets. Production from the Pulawy Project will strengthen Europe's security of supply for rare earths used in electric vehicles, wind turbines and other green technology and strategic applications, and aligns with European initiatives to create more robust, diversified supply chains.

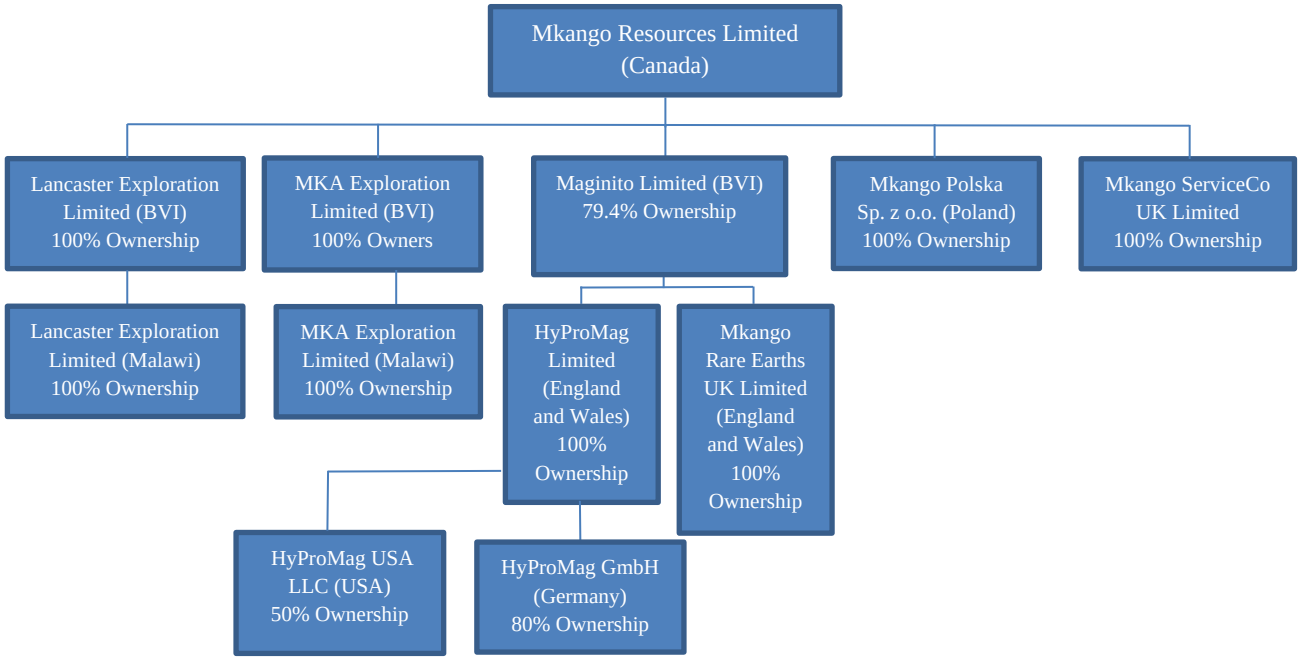
Development of the Pulawy Project is expected to bring significant benefits, including:

- Higher value-added products with increased margins – targeting 2,000 tpa of separated neodymium (Nd)/praseodymium (Pr) oxides, and 50 tpa dysprosium (Dy) and terbium (Tb) oxides in a heavy rare earth enriched carbonate.
- Greater integration – plant development fully underpinned by sustainably sourced, purified mixed rare earth carbonate from Songwe Hill's operations, with other synergies being evaluated.
- Increased marketing flexibility with a broader range of potential customers – future opportunities to produce and market separated heavy rare earths.
- Catalyst for regional growth and the green transition – potential for further downstream developments and related businesses, including renewables, creating additional jobs in the region.
- Engagement with financial institutions is underway to accelerate development, and additional strategic partnerships, downstream developments and marketing opportunities are being evaluated.

On 25 March 2025, the Pulawy Project was designated by the European Commission as one of the 47 strategic projects under the CRMA and one of only five focused on rare earth elements.

CORPORATE STRUCTURE

The Company is incorporated in the province of British Columbia, Canada. The Company's registered office is Suite 2900, 550 Burrard Street, Vancouver, British Columbia, Canada, V6C 0A3. The Company's current structure as at the date of this report is as follows:



The Phalombe Licences and the Thambani Licence, in Malawi, are held by Lancaster BVI, a company which was incorporated under the laws of the British Virgin Islands ("**BVI**") on 3 August 2007. Lancaster BVI is 100% owned by Mkango.

Lancaster Malawi was incorporated on 19 May 2011, under the laws of Malawi. Lancaster Malawi is a wholly owned subsidiary of Lancaster BVI.

Maginito was incorporated under the laws of the BVI on 3 January 2018 and is 79.4% owned by Mkango. Maginito is focused on developing green technology opportunities in the rare earths supply chain, encompassing NdFeB magnet recycling as well as innovative rare earth alloy, magnet and separation technologies. This includes its investment in HyProMag as discussed below. The remaining 20.6% of Maginito is owned by CoTec.

Mkango Polska was incorporated under the laws of Poland and 100% ownership was acquired by the Company on 22 March 2021. Mkango Polska is developing the Pulawy Project in Poland, working with Grupa Azoty PULAWY. The Pulawy Project is expected to process the purified MREC derived from the Songwe Hill Project into separated rare earth oxides.

Mkango UK was incorporated on 23 June 2021 under the laws of England and Wales. Mkango UK is 100% owned by Maginito and was established to further develop the Company's rare earths strategy in the UK.

HyProMag UK was incorporated on 19 July 2018 under the laws of England and Wales. HyProMag UK is 100% owned by Maginito. HyProMag UK is focused on the extraction and demagnetisation of NdFeB magnets embedded in scrap and redundant equipment using the HPMS process.

HyProMag Germany was incorporated on 3 November 2021 under the laws of Germany. HyProMag Germany is 80% owned by HyProMag, with the remaining 20% owned by Professor Carlo Burkhardt of Pforzheim University. HyProMag Germany has sublicensed HPMS from HyProMag UK for use in Germany. Maginito, pursuant to the German Convertible Loan, has the right to acquire 50% of HyProMag Germany.

Mkango ServiceCo UK Limited ("**Mkango ServiceCo**") was incorporated on 9 December 2022 under the laws of England and Wales. Mkango ServiceCo was set up to house corporate costs in London.

On 2 January 2024, Maginito, via its 100% owned subsidiary, HyProMag UK and CoTec incorporated a 50/50 joint venture company, HyProMag USA, to roll-out the HPMS technology into the United States, with CoTec responsible for funding the US Feasibility study and development costs, subject to the results of the US Feasibility Study.

SUSTAINABILITY

Sustainability Governance Architecture

Mkango recognises that sound corporate governance and transparency are expectations of our stakeholders and enable confidence in the credibility of our business conduct. Mkango's Board of Directors (the "**Board**") is the highest corporate governance body within our organisation. The Board's mandate is to oversee the management of the business and affairs of the Company. It delegates responsibility for day-to-day operations – including sustainability management – to the executives and the subsidiaries' management teams.

The Board operates within a framework of charters and standards in line with good corporate governance practice. The Board has established a Sustainability Committee, the primary function of which is to assist the Board in the oversight of Mkango's commitments to work in a socially and environmentally responsible manner, to maintain stakeholder dialogue to ensure social best practice, to ensure workplace safety and health, environmentally sound and responsible resource development, and the protection of human rights. Board committee charters are periodically reviewed, in line with our approach to sound corporate governance, to ensure they reflect evolving corporate needs as well as external developments related to effective management.

The commercial scale facilities now being constructed in the UK by the UoB, which will be utilised by HyProMag UK, will be additionally managed under a framework of policies and systems established by the UoB at the Tyseley Energy Park.

Risk Management Framework

In early 2025, ahead of the expected first commercial production from HyProMag UK, Mkango commenced its first formal materiality assessment to inform on these materiality elements of its activities:

- The risk that the Group's activities pose to the environment, including the climate; and
- The risks that the environment, including climate change, pose to the Company's activities.

The outcomes of these processes will inform the development of objectives, key performance indicators specific to the business and any material aspects for future disclosures.

Stakeholders and Transparency

The materiality assessment, developed in line with the Global Reporting Initiative ("**GRI**") and following best practices, will incorporate the involvement of a cross section of key stakeholders – both internal and external. The process, overseen by the Sustainability Committee, is a strategic exercise designed to identify material environmental, social and governance (sustainability) topics for disclosure and ongoing management by the business. The process draws on internal documentary sources and perspectives, as well as international sustainability reporting standards and corporate practice. Topics will be assessed against views of the significance of our economic, environmental, and social impacts incorporating outputs from:

- Internal and external stakeholder surveys
- Company risk registers
- Peer company disclosures
- Industry standards and frameworks relevant to the Company

It is intended that the finalised materiality matrix will be validated by management, with routine reviews forming part of corporate disclosure undertakings to inform on the frequency of update of the materiality assessment.

Complementing this enhancement of the Company disclosures, Mkango continues to maintain its intention to support the Extractive Industries Transparency Initiative ("**EITI**") and, as required by Canadian law, our Extractive Sector Transparency Measures Act ("**ESTMA**") disclosures.

Safety, Health and Environment

Mkango's Sustainability Committee Charter incorporates the commitments to work in a socially and environmentally responsible manner – ensuring workplace safety and health and environmentally sound and responsible resource development.

Climate Change

The Paris Agreement has been ratified by 194 nation states and the European Union, including all parties to the United Nations Framework Convention on Climate Change – representing over 98% of global greenhouse gas emissions and showing the extent of global recognition of this threat.

Reflecting this context, there is also increasing global recognition of the need for critical and transitional minerals to enable the energy transition, and to attain climate targets. The Mkango business model directly reflects these global goals – both as an enabler: through the future production of rare earths, and as an example of circularity: in the Mine-Refine-Recycle strategy of the business.

At Mkango, management is accountable for executing our approach to climate change. Reflecting the early-stage development of the business, the team's performance is primarily linked to achievement of successful milestones. Mkango is continuing to develop its performance recognition and reward systems, and the completion of the materiality process will assist in informing any dimension of sustainability that should form part of short and long-term incentive plans. This will help to drive outcomes that protect and create long-term value.

As a developer that is not yet in commercial production, Mkango is yet to commence processes that will allow climate-related risks, opportunities, impacts and dependencies to be identified in a more granular way within the business. It is envisaged that like other strategic risks, climate-related risks will be an integral part of the Company Enterprise Risk Management and materiality processes.

Decarbonisation

Whilst Mkango has not yet commenced the commercial scale production of rare earths and therefore is yet to advance related strategy on how best to support the objectives of the Paris Agreement through the lifetime of our assets, the Company has started processes to understand the relative carbon footprint of our recycled rare earths products. HyProMag USA commissioned Minviro to undertake a PCF analysis to determine the carbon footprint of the process, and HyProMag UK and HyProMag Germany have similarly completed internal analyses in advance of near term commercial production. Additional information on the HyProMag USA PCF can be found at the following link:

https://mkango.ca/news/hypromag-usas-iso-compliant-product-carbon-footprint-study-confirms-exceptionally-low-co-sub-2-sub-footprint-of-2.35-kg-co-sub/

Responsible Consumption

In seeking to align with the recommendations of the Task Force on Climate-Related Financial Disclosures ("**TCFD**"), Mkango expects to commence processes to enhance our understanding of climate related risks and opportunities for the business as our business units progressively attain commercial scale production. These processes are anticipated to entail the consideration of risks (physical and transitional) and opportunities using third-party verified and credible global climate data and model providers, including sources utilised by the World Bank Climate Knowledge hub and the World Resources Institute Aqueduct. Information compiled and performance data collected from the business units (such as energy and water consumption and related emissions) will be subject to analysis to inform strategic decisions and investments, including those to advance climate change goals.

SELECTED CONSOLIDATED FINANCIAL INFORMATION

Information discussed herein reflects the Company as a consolidated entity.

Financial Position

The following financial data is derived from the Company's consolidated statements of financial position as at 31 December 2024, 2023 and 2022:

As at 31 December	2024	2023	2022
Total assets	10,711,520	9,293,371	1,526,901
Total equity	6,433,611	4,561,306	(1,166,116)

Total assets

Total assets were $10,711,520 as at 31 December 2024 as compared to $9,293,371 as at 31 December 2023. Total assets increased by $1,418,149 as a result of capital expenditure on both the HyProMag UK and HyProMag Germany recycling projects. Furthermore, the manufacturing facility lease for HyProMag Germany in Germany commenced in September 2024 resulting in a Right-of-Use asset being recognised during the year.

Total assets were $9,293,371 as at 31 December 2023 as compared to $1,526,901 as at 31 December 2022. Total assets increased by $7,766,470 as a result of the acquisition of HyProMag which included the fair value of the HPMS technology intangible asset as well as goodwill.

As at 1 January 2024, the Company had an opening cash position of $996,782. Cash received during the year ended 31 December 2024 was $2,953,794 from the net proceeds relating to the equity raises that took place during the year as well as CoTec cash calls to maintain its 20.6% interest in Maginito. Cash used in operations was $2,135,502 and cash of $715,742 was spent on exploration and evaluation intangible assets and equipment for the HyProMag UK and HyProMag Germany recycling projects (net of government grants received). The effect of exchange rate changes on cash was a decrease of $60,745 during the year for a closing cash position of $1,159,807.

As at 1 January 2023, the Company had an opening cash position of $493,703. Cash received during the year ended 31 December 2023 was $6,490,494 from the proceeds relating to an equity raise in February 2023 together with CoTec's investment into Maginito (both direct investment into Maginito for a 10% interest in Maginito and through advance notes to Mkango which were subsequently converted into a further 10.6% interest in Maginito). Cash used in operations was $3,558,422 and cash of $1,001,554 was spent on exploration and evaluation intangible assets and property, plant and equipment. Furthermore, the net cash component relating to the HyProMag acquisition was $1,040,057. The effect of exchange rate changes on cash was a decrease of $387,363 during the year for a closing cash position of $996,782.

Total shareholders' equity

Total shareholders' equity was $6,433,611 as at 31 December 2024 compared to $4,561,306 as at 31 December 2023. The increase of $1,872,305 is largely due to the to the proceeds relating to equity raises in April and September 2024.

Total shareholders' equity was $4,561,306 as at 31 December 2023 compared to ($1,166,116) as at 31 December 2022. The increase of $5,727,422 is largely due to the proceeds relating to an equity raise in February 2023 together with CoTec's investment into Maginito.

RESULTS OF OPERATIONS

Summary Results of Operations

The following financial data is derived from the Company's consolidated financial statements as at 31 December 2024, 2023 and 2022:

	Year ended 31 December		
	2024	2023	2022
Mineral project and research and development expenditures	(89,677)	(358,542)	(2,402,070)
General and administrative expenses*	(3,110,097)	(4,134,980)	(3,470,482)
Other items**	2,635,253	254,475	(113,411)
Income tax	143,242	59,097	-
Total net loss after tax	(421,279)	(4,179,951)	(5,985,963)
Total net loss attributable to non-controlling interest	364,939	(122,926)	-
Total net loss attributable to the common shareholders	(786,218)	(4,057,025)	(5,985,963)
Basic and diluted loss per share	$ (0.0029)	$ (0.017)	$ (0.028)
Weighted average number of common shares (basic and diluted)	272,447,996	238,757,233	215,088,397
Distributions or Dividends	$ Nil	$ Nil	$ Nil

** Other expenditures represent all other expenditures, other than mineral project and research and development expenditure, disclosed in the statement of comprehensive loss and includes non-cash items.*

*** Other items are share of associated company losses, gains on the revaluation of options, embedded derivative fair value adjustments, interest income and finance expense and in 2024 a reversal of contingent consideration.*

The net loss after tax for the year ended 31 December 2024 was $421,279 compared to the net loss reported for the year ended 31 December 2023 of $4,179,951. The net loss decreased by $3,758,672 for the comparable periods. The significant items contributing to the change include:

- A once off reversal of contingent consideration of $3,327,152 based on missed contractual milestones relating to the HyProMag acquisition in 2023 have not been met.
- Decreased general and administrative expenses and mineral project and research and development expenditures as a result of cost cutting initiatives across the Company.

The net loss after tax for the year ended 31 December 2023 was $4,179,025 compared to the net loss reported for the year ended 31 December 2022 of $5,985,963. The net loss decreased by $1,928,938 for the comparable periods. The significant items contributing to the change include:

- Decreased mineral project expenditure of $2,043,528 as a result of the Songwe DFS being completed during 2022.

- General and administrative expenses, including share-based payments, increased by $664,498, as a result of HyProMag and HyProMag Germany costs being included from 2 August 2023, being the HyProMag acquisition date.

The selected period information and summary of financial results below is derived from and should be read in conjunction with the Financial Statements.

Summary Of Quarterly Financial Results

The following is selected financial data from the company's quarterly financial statements for the last eight quarters ending with the most recently completed quarter, being the quarter ended 31 March 2025.

	2025	2024				2023		
	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2
Expenses	(1,345,188)	(960,578)	(558,882)	(662,035)	(1,018,279)	(1,036,776)	(1,411,336)	(1,131,617)
Other items	(1,139,462)	2,536,768	173,978	(32,899)	(42,594)	(517,785)	(136,019)	46,525
Net profit/(loss) before tax for quarter	(2,484,650)	1,576,190	(384,904)	(694,934)	(1,060,873)	(1,554,561)	(1,547,355)	(1,085,092)

The financial data for the eight periods reported have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and interpretations issued by the International Financial Reporting Interpretations Committee. The Company's principal activities require expenditures which include both exploration and general and administrative expenses.

In Q1 2025, the Group recorded a net loss before tax, largely due to a significant fair value adjustment relating to a derivative liability associated with investor warrants. Operating expenses also increased modestly compared to Q4 2024 due to the timing of project costs.

The Group reported a net profit before tax in Q4 2024, primarily due to the reversal of contingent consideration liabilities relating to the HyProMag acquisition. This non-cash gain resulted from certain acquisition milestones not being achieved by the specified dates.

Expenses decreased significantly in Q2 and Q3 2024 as a result of cost-cutting initiatives implemented by the Group during the first half of 2024.

Expenses remained elevated in Q4 2023 and Q1 2024, primarily due to continued HyProMag and HyProMag Germany development costs and the amortisation of the HPMS technology asset acquired as part of the HyProMag transaction.

Expenses decreased in Q2 2023 compared to Q1 2023 due to timing of project-related activity, but increased significantly in Q3 2023 as a result of share option charges and the consolidation of HyProMag and HyProMag Germany expenses into the Group's results following the HyProMag acquisition.

Given the early-stage nature of the Group's operations and the significant impact of non-cash items and project development activity, quarterly results may continue to vary materially in future periods.

RELATED PARTY TRANSACTIONS AND BALANCES

Leo Mining and Exploration Ltd. ("Leo Mining") is considered related by virtue of common directors and officers, namely William Dawes, Alexander Lemon and Shaun Treacy. Leo Mining pays certain costs such as rental on behalf of Mkango. Mkango reimburses Leo Mining for these costs.

As of 31 March 2025, Leo Mining owed the Company an amount of $4,035 (31 December 2024: Company owed Leo Mining $2,055). The amount is unsecured and due on demand.

CoTec Holdings ("CoTec") is considered related as they have a 20.6% interest in Maginito.

As of 31 May 2025, CoTec/HyProMag USA LLC owed the Company $24,014 (31 December 2024: $57,781) relating to costs incurred by the Company relating to the roll-out of HPMS technology into the United States on behalf of HyProMag USA LLC. CoTec are responsible for these costs.

The amounts due to related parties were as follows:

	31 March 2025	31 December 2024
Due to key management and directors	40,009	298,508
Due to related parties with common directors (Leo Mining)	-	2,055
Total due to related parties	**40,009**	**300,563**

The amounts due from related parties were as follows:

	31 March 2025	31 December 2024
CoTec/HyProMag USA	24,014	57,781
Due from related parties with common directors (Leo Mining)	4,035	
Total due from related parties	**28,049**	**57,781**

EXPENDITURES

Total expenses attributable to common shareholders and non-controlling interest	Quarter ended 31 March 2025	Quarter ended 31 December 2024	Quarter ended 31 March 2024
General and administrative			
Audit and tax management	(250,770)	(35,169)	(79,823)
Legal fees	(27,882)	(40,993)	(65,057)
Salaries and consulting fees	(488,486)	(643,005)	(262,547)
Rent, storage, telephone and insurance	36,875	259,664	(37,390)
Travel	(18,157)	(9,476)	(11,945)
AIM listing expense	(19,034)	(32,111)	(29,523)
Share-based payments	(88,047)	(101,468)	(51,938)
Depreciation	(73,274)	(26,852)	(42,593)
Amortisation	(131,274)	(134,192)	(132,733)
Investor relations and marketing	(19,300)	(53,489)	(44,749)
Expected credit losses	-	(96,609)	-
HyProMag UK	(49,676)	(145,904)	(57,479)
HyProMag Germany	(53,016)	(66,324)	(53,633)
Mkango UK	(146,634)	176,482	(107,980)
Sub total - General and administrative	(1,328,675)	(949,446)	(977,390)
Mineral project expenditures			
Songwe Hill Project			
Metallurgy expenses	(4,579)	-	-
Government fees	(350)	191	(361)
ESHIA	-	-	-
Technical studies	-	-	-
Consulting fees	-	-	-
Malawi office and camp expenses	(11,584)	(11,107)	(14,903)
REE Separation Plant Pre-feasibility Study	-	-	-
Thambani, Mchinji and Chimimbe projects	-	(216)	(25,625)
Sub total - Mineral projects	(16,513)	(11,132)	(40,889)
Total expenses	(1,345,188)	(960,578)	(1,036,777)
Interest income	4	7	-
Finance Expense	(11,165)	(47,944)	(35,712)
Share of associated company's losses	-	-	-
Fair value losses	-	-	-
Fair value adjustment – derivative liability	(1,136,344)	(316,673)	-
Reversal of contingent consideration	-	3,237,152	-
Foreign exchange gain/(loss)	8,043	(335,774)	(6,882)
Sub total – Other items	(1,139,462)	2,536,768	(42,594)
Net profit before tax	**(2,484,650)**	**1,576,190**	**(1,060,873)**

Three months ended 31 March 2025 compared to the three months ended 31 December 2024

Total expenses increased by $384,610 from $960,578 for the three months ended 31 December 2024 to $1,345,188 for the three months ended 31 March 2025, primarily as a result of the following:

a) General and administrative: General and administrative expenses increased by $379,229 for the three months ended 31 March 2025 compared to the three months ended 31 December 2024. The increase was largely driven by higher audit and tax management fees, which rose by $215,601 due to the timing of audit work and annual reporting processes. Additionally, depreciation increased by $46,422 following the recognition of new depreciable assets, and Mkango UK costs returned to normal levels after a Q4 reversal.

b) Mineral Projects: Mineral project expenditures increased modestly by $5,381 for the three months ended 31 March 2025 compared to the three months ended 31 December 2024, with spending remaining broadly in line quarter-on-quarter.

The Company recorded a fair value adjustment of $1,136,344 on the derivative liability related to investor warrants, compared to $316,673 in Q4 2024. This increase was due to a rise in the Company's share price during the quarter. Unlike the prior quarter, no reversal of contingent consideration was recorded. A small foreign exchange gain of $8,043 was recognized in Q1 2025, compared to a loss of $335,774 in Q4 2024.

Three months ended 31 March 2025 compared to the three months ended 31 March 2024

Total expenses increased by $308,411 from $1,036,777 for the three months ended 31 March 2024 to $1,345,188 for the three months ended 31 March 2025, primarily due to the following:

a) General and administrative: General and administrative expenses increased by $351,286 compared to the corresponding prior-year quarter. The main driver was a $225,939 increase in salaries and consulting fees, reflecting expanded operations and headcount. Audit and tax fees also increased materially, rising by $170,947, due to timing of audit activities and billing. Depreciation and amortisation were relatively consistent year-over-year.

b) Mineral Projects: Mineral project expenditures decreased by $24,376 compared to the same period in 2024, due to reduced activity across regional exploration projects, particularly at Thambani, Mchinji and Chimimbe.

A fair value adjustment of $1,136,344 was recognized in Q1 2025 related to the derivative liability, whereas no such item was recorded in Q1 2024. Foreign exchange gains in Q1 2025 also contrasted with a minor loss of $6,882 in Q1 2024.

DISCLOSURE CONTROLS AND PROCEDURES

In connection with National Instrument 52-109 (Certificate of Disclosure in Issuer's Annual and Interim Filings) ("**NI 52-109**"), the chief executive officer and chief financial officer of the Company have filed Form 52-109FV1 – *Certificate of Annual Filings - Venture Issuer Basic Certificate* with respect to the financial information contained in the Financial Statements for the three months ended 31 March 2025 and this accompanying MD&A (together, the "**Filings**").

In contrast to the full certificate under NI 52-109, the Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109. For further information the reader should refer to the Venture Issuer Basic Certificate filed by the Company with the Annual Filings on SEDARplus at www.sedarplus.ca/landingpage.

COMMITMENTS

Malawi Commitments

The Company was first granted the Phalombe Licence for the Songwe property on 21 January 2010. The licence was issued by the Government of Malawi on an initial three-year basis. The licence was subsequently renewed every two years and was renewed for a third time on 21 January 2019. On 1 June 2021, the Phalombe Licence was transferred into 11 retention licences covering a total of 250 sq km. Each retention licence is for a five-year period from 1 June 2021. The future spending commitments for the exploration rights with the Government of Malawi were 150,000,000 Kwacha ($86,536) over two years, which have been met.

On 10 September 2010, the Company was granted an additional exploration licence by the Malawi Minister of Natural Resources, Energy and Environment in the Thambani area, Mwanza District, Malawi. The licence was issued by the Government of Malawi on an initial three-year basis and was subsequently renewed from 10 September 2015 for additional two-year periods. The Company has subsequently been granted four retention licences for a period of five years from 9 November 2021.

HyProMag Commitments

As at 31 March 2025, the Company had outstanding commitments related to the purchase of specialised equipment for use in its German operations. Contracts for all three items have been signed, and progress payments have been made during the year.

The remaining committed payments, which fall due within the next 12 months, total approximately $1,554,760 and are expected to be settled in line with the agreed manufacturing and delivery schedules.

ISSUED AND OUTSTANDING SHARE INFORMATION

As at the date of this report, the Company has 327,052,907 Shares, 3,100,000 broker warrants, 25,000,000 investor warrants, 18,718,334 stock options and 12,882,023 restricted share units in issue.

OFF BALANCE SHEET ARRANGEMENTS

The Company is not party to any off-balance sheet arrangements or transactions.

ACCOUNTING POLICIES AND ESTIMATES

Management is required to make judgments, assumptions and estimates in the application of IFRS that have a significant impact on the financial results of the Company. Details outlining Mkango's accounting policies are contained in the notes to the Financial Statements.

RISK FACTORS

Environmental Risk

The Company is subject to substantial environmental requirements at all its operations, including its project at Songwe Hill, the Pulawy Project**,** the UK Recycling Projects, the German Recycling Project and the US Recycling Project being undertaken by Maginito.

The current and anticipated future operations and exploration activities of the Company in Malawi, Poland, the UK, Germany and the US require permits from various governmental authorities and such operations are and will be governed by local laws and regulations governing various elements of the mining industry and industrial developments including, without limitation, land use, the protection of the environment, prospecting, development, production, exports, taxes, labour standards, occupational health, waste disposal, toxic substances, and other matters. Globally, environmental legislation is evolving towards stricter standards and enforcement, more stringent environmental impact assessments of new mining projects and increasing liability exposure for companies and their directors and officers.

Climate change poses transitional and physical risks to global society.

There is no assurance that future environmental regulations will not adversely affect the Company's operations.

Macroeconomic Risk

From a macroeconomic perspective, ongoing global market uncertainty has led to a significant reduction in risk appetite with respect to funding investment into mining companies and startup companies in general. The ability for the Company to access capital through traditional means may be significantly diminished, with the possible long-term result that projects may take longer to develop or may not be developed at all.

Commercial and Technological Viability Risks

The Company does not currently produce rare earth elements from Songwe Hill. Some of the factors that affect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure and the realizable value of the minerals extracted. These factors include, but are not limited to, government approval for mining licences and exploration licence extensions applications, government regulations, taxes, royalties, land tenure, land use,

environmental protection and reclamation and closure obligations. All or some of these factors may have an impact on the economic viability of Songwe Hill.

The technical and commercial viability of the recycling businesses, the HPMS process and the chemical recycling process being developed by Mkango UK have not yet been utilized for commercial production and is subject to the various risks of scaling up processes that have been successfully tested at bench and pilot scale. The development of the recycling business also requires that the Company obtain sufficient scrap at a reasonable price to make its projects viable. There is no guarantee that it can secure the quantity and quality of scrap required. The recycling businesses face a number of competitors developing their own rare earths recycling technologies. While the Company believes that these technologies are not competitive with its patented HPMS technology, many of these competitors will compete with Mkango for rare earth scrap.

Geopolitical Risk

The Company has interests in properties that are located in the developing country of Malawi, in addition to UK, Poland, Germany (and are proposed for the US). The Company's projects may be affected in varying degrees by political instability and government regulations relating to foreign investment and the mining, refining and recycling industries. Changes, if any, in mining or investment policies or shifts in political attitude in Malawi may adversely affect the Company's operations in Malawi and Poland. Operations may be affected in varying degrees by government regulations with respect to, but not limited to, restrictions on production, price controls, export controls, currency remittance, direct and indirect taxes, tax assessments, royalties, expropriation of property, foreign investment, maintenance of claims, environmental legislation, land use, land claims of local people, water use and mine safety. Failure to comply with applicable laws, regulations, and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory of judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions.

There is no assurance that ongoing and future geopolitical issues and conflicts will not adversely affect the Company's operations.

Resource and Reserve Risk

Estimates of reserves and resources are inherently uncertain. There is a degree of uncertainty attributable to the calculation of reserves, resources and corresponding grades being mined or dedicated to future production. Until reserves or resources are actually mined and processed, the quantity of reserves or resources and grades must be considered as estimates only. In addition, the quantity of reserves or resources may vary depending on rare earth prices, operating costs and mining efficiency. Any material change in the quantity of reserves, resources or grade may affect the economic viability of Songwe Hill.

Price Risks

Rare earth oxide, metal, alloy and magnet prices have been subject to considerable price volatility, over which companies have little control, and a material decline in these prices could result in a significant decrease in the Company's future anticipated revenues. The mining, refining and recycling industries have inherent business risks and there is no assurance that products can continue to be produced at economical rates or that in the case of mining produced reserves will be replaced.

Readers are cautioned that the foregoing is a summary only of certain risk factors and is not exhaustive and is qualified in its entirety by reference to, and must be read in conjunction with the additional information on these and other factors that could affect Mkango's operations and financial results that are included in reports on file with Canadian securities regulatory authorities and may be accessed through on SEDARplus at www.sedarplus.ca/landingpage.

Global Trade and Tariff Risk

The Company operates within a globally integrated rare earths supply chain and is therefore exposed to risks arising from changes in international trade policy, including tariffs, export controls, and other regulatory restrictions. In April 2024, the United States introduced reciprocal tariffs on imported NdFeB magnets, which may support domestic magnet manufacturing but add complexity to downstream market access. At the same time, China — the dominant supplier of rare earth magnet materials — has imposed export restrictions on certain rare earth processing technologies and magnet alloy know-how, further tightening control over strategic segments of the supply chain.

These developments may impact the Company's strategic planning, technology partnerships, and long-term competitiveness, particularly in relation to its downstream operations in the UK and Germany and potential expansion into the U.S. market. Further trade restrictions, shifts in tariff regimes, or disruption of cross-border collaboration could have a material effect on project execution, cost structures, and global positioning.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

Determination of fair values

Financial assets and liabilities have been classified into the following categories: (i) fair value through profit or loss and, (ii) amortised costs. Each category has a defined basis of measurement. If a category is measured at fair value, any changes in fair value is recognised in the consolidated financial statements of comprehensive loss.

In establishing fair value, the Company uses a fair value hierarchy based on levels defined below:

- Level 1 - quoted prices in active markets for identical assets or liabilities;
- Level 2 - inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 - inputs for the asset or liability that are not based on observable market data.

The carrying value of cash, government and other receivables, accounts payable and accrued liabilities, and amounts due to related parties, approximates the fair value due to their short-term nature and maturity.

Financial risk management

The Company's management monitors and manages the financial risks relating to the operations of the Company. These include foreign currency, interest rate, liquidity and credit risks.

Foreign currency risk

The Company enters into transactions denominated in the C$, the US dollar, the Euro, the GBP, the Australian dollar, the South African Rand, the Polish Zloty and the Malawian Kwacha. The Company raises its equity in the C$, and the GBP, and then purchases the US dollar, the Australian dollar, the South African Rand, the Euro, the Polish Zloty and the Malawian Kwacha to settle liabilities. The Company minimizes exposure to foreign exchange loss by converting funds to the appropriate currencies upon receipt of funding based on the expected use of the various foreign currencies. The Company's exposure to foreign currency risk as at 31 March 2025 and 31 December 2024, is most significantly influenced by the following cash amounts held in foreign currencies (amounts shown in US dollars):

	31 March 2025	31 December 2024
Cash:		
Canadian Dollar	282	390
United States Dollar	18,687	14,934
Pound Sterling	2,788,957	752,905
Euro	220,872	386,865
Malawian Kwacha	971	2,918
Australian Dollar	73	73
Polish Zloty	1,796	1,722
	3,031,638	**1,159,807**

A 5% reduction in the value of the CAD, Euro, GBP, MWK, PLN and AUD in comparison to the USD would cause a change in net loss of approximately $150,648 (31 December 2024: $57,244).

Interest-rate risk

The Company's exposure to interest-rate risk relates primarily to its cash at bank. However, the interest-rate risk is expected to be minimal. The Company does not presently hedge against interest rate movements.

Liquidity risk

Liquidity risk includes the risk that, as a result of the Company's operational liquidity requirements:

a) The Company will not have sufficient funds to settle a transaction on the due date;

b) The Company will be forced to dispose of financial assets at a value which is less than the fair value; or,

c) The Company may be unable to settle or recover a financial asset at all.

The Company's operating cash requirements including amounts projected to complete the Company's existing capital expenditure program are continuously monitored and adjusted as input variables change. As these variables change, liquidity risks may require the Company to conduct equity issuances or obtain other forms of financing. The Company manages its liquidity risk by maintaining adequate cash and is actively seeking additional funding to improve its exposure to liquidity risk. The Company continually monitors its actual and forecast cash flows to ensure that there are adequate reserves to meet the maturing profiles of its financial liabilities.

The following table outlines the maturities of the Company's financial liabilities as at 31 March 2025:

	Contractual Cash Flows	**Less than 1 Year**	**Greater than 1 Year**
Accounts payable and accrued liabilities	960,288	960,288	-
Due to related parties	40,009	40,009	-

The following table outlines the maturities of the Company's financial liabilities as at 31 December 2024:

	Contractual Cash Flows	**Less than 1 Year**	**Greater than 1 Year**
Accounts payable and accrued liabilities	648,389	648,389	-
Due to related parties	300,563	300,563	-

Credit risk

The Company's principal financial assets are cash. The credit risk on cash is limited because the majority are deposited with banks with high credit ratings assigned by international credit-rating agencies.

Financial instruments by category

Financial Assets	**Fair value through profit or loss**		**Amortised cost**	
	31 March 2025	**31 December 2024**	**31 March 2025**	**31 December 2024**
Cash	-	-	3,031,638	1,159,807
Receivables	-	-	221,270	30,401
Due from related parties	-	-	28,049	57,781
Total financial assets	**-**	**-**	**3,280,957**	**1,247,989**
Financial liabilities				
Accounts payable and accrued liabilities	-	-	960,288	648,389
Due to related parties	-	-	40,009	300,563
Finance lease liability	-	-	1,195,140	1,185,259
Derivative liability	2,422,550	1,286,206	-	-
Total financial liabilities	**2,422,550**	**1,286,206**	**2,195,527**	**2,134,211**

LIQUIDITY AND CAPITAL RESOURCES

As of 31 March 2025, the Company had net current liabilities of $178,767 (including a derivative liability of $1,286,206 that was recognised as a result of the 25,000,000 investor warrants issued in connection with the 5 September 2024 equity raise.) The deficit attributable to the shareholders of the Company was $49,700,231 (31 December 2024 - $47,372,085).

DIRECTORS AND OFFICERS

William Dawes, Director and Chief Executive Officer
Alexander Lemon, Director and President (Sustainability Committee)
Derek Linfield, Non-Executive Chairman of the Board of Directors (Remuneration Committee)
Shaun Treacy, Non-Executive Director (Audit Committee Chair, Remuneration Committee)
Susan Muir, Non-Executive Director (Remuneration Committee Chair, Audit Committee, and Corporate Secretary)
Philipa Varris, Non-Executive Director (Sustainability Committee Chair, Audit Committee, Remuneration Committee)
Robert Sewell, Chief Financial Officer