MKANGO RESOURCES LTD.

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the three and six months ended 30 June 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 unaudited interim consolidated financial statements for the three and six months ended 30 June 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 29 August 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 this website does not form part of this MD&A and only contains 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.

Q2 2025 HIGHLIGHTS

- Loss after tax for the three months ended 30 June 2025 of $1,209,955 compared to $659,320 for the three months ended 30 June 2024 mainly due to a fair value adjustment relating to investor warrants of $701,438.
- Cash at 30 June 2025 of $1,208,005.
- On 16 June 2025, Mkango provided a technical update for HyProMag Limited ("**HyProMag UK**") and its ongoing advanced pilot programme for the scale-up and roll out of Hydrogen Processing of Magnet Scrap ("**HPMS**") technology to produce domestically-sourced and short-loop recycled rare earth magnets with a minimal carbon footprint in the UK (2025), Germany (2025) and United States (2027).
- On 12 June 2025, HyProMag USA, LLC, a Delaware corporation ("**HyProMag USA**") received a Make More in America ("**MMIA**") domestic finance letter of interest from the U.S. Export-Import **("EXIM")** Bank for its first integrated rare earth recycling and magnet making facility in Dallas-Fort Worth, Texas. In terms of the letter, EXIM may be able to consider potential financing of up to $92 million of the project's costs with a repayment tenor of 10 years.
- On 4 June 2025, the Songwe Hill Rare Earths Mining Project in Malawi **("Songwe Hill Project")** was designated as a Strategic Project by the European Commission under the Critical Raw Materials Act **("CRMA")**.
- On 3 June 2025, a Note Purchase Agreement (the "**NPA**") was signed whereby $750,000 was committed to be invested in Mkango's subsidiary, Lancaster Exploration Limited (BVI) ("**Lancaster BVI**"), in connection with its proposed SPAC merger and NASDAQ listing. At the time, $500,000 of such commitment was deposited in escrow with release pending the signing of a definitive Business Combination Agreement ("**BCA**") for the SPAC merger and certain approvals by the TSX-V. These funds were deployed to Lancaster BVI on 3 July 2025, post the signing of the BCA. $250,000 of such commitment is to be invested pending the filing of a registration statement on Form F-4 with the U.S. Securities and Exchange Commission. Committed funds continue to provide working capital to assist Lancaster BVI in completing the SPAC merger and advancing its standalone public listing on NASDAQ.
- 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 develop infrastructure for the production of rare earth magnets in the United States.

Subsequent Events

- On 15 August 2025, 3,250,000 investor warrants were exercised at a price of £0.07 ($0.091) for proceeds of £227,500 ($294,974).
- On 24 July 2025, HyProMag USA and global electronics recycling company, Intelligent Lifecycle Solutions, LLC **("ILS")** entered into a feedstock supply and pre-processing site share agreement. ILS will secure and store neodymium-iron-boron **("NdFeB")** feedstock from hard disk drives **("HDDs")** and other sources for

HyProMag USA at the ILS pre-processing sites in Williston, South Carolina and Reno, Nevada in advance of the commissioning of HyProMag USA's advanced stage rare earth magnet recycling and manufacturing plant to be located in Dallas-Fort Worth, Texas (**the "DFW Hub"**). ILS will utilise the INSERMA ANOIA SL **("Inserma")** '3rd generation' HDD magnet separation system at its pre-processing sites. An exclusive agreement was signed between HyProMag UK and Inserma in September 2024, and the Inserma technology is being rolled out across multiple jurisdictions. The 3rd generation Inserma units provide fast, efficient magnet separation from HDDs for HPMS processing, together with clean separation of the printed circuit board for immediate resale to 3rd parties. HyProMag USA is, inter alia, targeting HDD recycling geared to the growth of hyperscale data centres, which is expected to accelerate significantly in coming years.

- On 16 July 2025, 600,000 broker warrants were exercised at a price of £0.05 ($0.065) and 5,090,000 investor warrants were exercised at a price of £0.07 ($0.091) for proceeds of £386,300 ($500,703).

- In June 2025, first production runs were completed for the commercial scale HPMS vessel, which is currently being commissioned by the University of Birmingham **("UoB")** with the support of commercial partner, HyProMag UK, as part of the new scaled-up rare earth magnet recycling and manufacturing plant (**the "Plant"**) located at Tyseley Energy Park, Birmingham, UK **("TEP")**. The HPMS vessel is fundamental to the Plant, producing a high grade, recycled NdFeB alloy powder for commercial sale or to feed downstream magnet manufacturing. All major equipment for the Plant has been constructed on site and is currently being commissioned. To date, 905 kilograms of recycled NdFeB has been produced and is being prepared for shipment to customers. HyProMag will continue to optimise NdFeB product preparation and transport logistics over the coming months as production ramps up at TEP.

- On 3 July 2025, Lancaster and Crown PropTech Acquisitions ("**CPTK**") signed a BCA to create a geographically strategic pure-play global rare earth platform (expected to be renamed Mkango Rare Earths Limited (**"MKAR"**)) with the goal to provide a mined, refined and separated supply of rare earth oxides to supply chains across North America, Europe and Asia. The pro forma value of Mkango's shareholding in MKAR (which excludes Mkango's current recycling businesses) pursuant to the BCA is $400 million prior to transaction expenses and excluding any net proceeds from a Private Investment in Public Equity ("**PIPE**") financing and any amounts available from CPTK's trust account. Transaction proceeds will support MKAR's strategic growth plan, which includes development of the Songwe Hill Project and Pulawy Separation Plant in Poland ("**Pulawy Project**").

Market Overview/Insights

The reporting period was dominated by the news of restrictions on the export of rare earths from China, and their subsequent consequences. While framed as a national-security measure, the restrictions were widely perceived as retaliation in response to higher tariffs imposed by the USA on China.

There was immediate fallout as a result of the restrictions. The scrutiny of Chinese customs officials slowed shipments, with magnet exports in April 2025 reported to be approximately 50% lower than the previous month. Later in the reporting period, China began granting licences and signalled selective easing for some companies in the supply chain, leading to a partial rebound in June magnet exports. Volumes, however, remained below 2024 levels.

The European Parliament formally criticised the export restriction curbs in July 2025. In contrast to previous years, the Chinese authorities also issued the 2025 domestic mining and smelting quotas for rare earth, without publishing

the specific quantities allocated, underscoring tighter state control. An August US – China truce extension cooled some of the rhetoric, but the export restrictions remained in place.

The imposition of the export controls has exposed the severe vulnerability of the ex-China supply chain to China's domination of capacity to produce materials. It has also accelerated a number of pragmatic shifts of perspective, with stockpiling, a willingness to pay premiums for non-China supply, and the accelerated diversification of the supply chain making mainstream headlines – including greater scrutiny and impetus for the recycling of rare earths. HyProMag, through its relationships with ILS, Inserma and Areera, as well as its collaboration with Envipro, is advancing its position in regard to recycled feed stock supply.

China has demonstrated the ability to weaponise a supply-chain chokepoint, but the USA, the EU and other countries have also gained 'political cover' for the hardening of industrial policies and the coordination of cross-border procurement, yet remain exposed in the near term given projected demand growth. Recent announcements of planned investments in the rare earths supply chain by the governments of Australia, India, France, Saudi Arabia and others amplify this point. The selection of HyProMag as a Minerals Security Partnership supported project, designation of the Pulawy Project as a strategic project under the CRMA, and the Songwe Hill Project as a strategic project under the EU Critical Raw Materials Act, evidence the interest of governments in the Mkango 'portfolio' and its strategy in positioning itself to be a supplier of rare earths across the mineral value chain.

NdPr Rare Earth Oxide rose to $84,671/tonne on 29 August 2025. Over the past three months, NdPr Rare Earth Oxide price has risen 41%, and is up 50% compared to the same time last year, as reported by SP Angel's morning notes.

MKANGO OVERVIEW

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 GmbH ("**HyProMag Germany**") (90% effective ownership): advancing short-loop rare earth magnet recycling in the UK and Germany;
- Mkango UK Limited ("**Mkango UK**") (100% ownership): focused on long-loop chemical recycling of rare earth magnets; and
- HyProMag USA: a 50/50 joint venture with CoTec Holdings Corp ("**CoTec**") via HyProMag UK, 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, a growing operational footprint, and global partnerships — positions it at the forefront of the rare earth circular economy and the clean energy transition. During the first half of 2025, HyProMag continued to progress the development of its UK and German operations, while also advancing project planning and permitting activities in North America through the HyProMag USA joint venture.

In parallel, Mkango owns the advanced-stage Songwe Hill Project in Malawi and an extensive regional exploration portfolio, as well as the Pulawy Project in Poland through its subsidiary, Mkango Polska Sp. z o.o. ("**Mkango Polska**"). The Pulawy Project is designed to provide downstream processing capability to produce separated rare earth oxides in Europe. Following a review of strategic options for the Songwe Hill and Pulawy Projects, 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.

On 3 June 2025, the **NPA** was signed whereby $750,000 was committed to be invested in Lancaster BVI, in connection with its proposed SPAC merger and NASDAQ listing. $500,000 of such commitment was released to Lancaster BVI on 3 July 2025 following the execution of the BCA. The remaining $250,000 is to be invested upon the filing of a registration statement on Form F-4 with the U.S. Securities and Exchange Commission. The committed funds provide working capital to support Lancaster BVI in completing the SPAC merger and advancing its standalone U.S. listing.

On 3 July 2025, Lancaster BVI and CPTK signed the BCA to create a geographically strategic, pure-play global rare earth platform (expected to be renamed Mkango Rare Earths Limited ("**MKAR**")). MKAR's strategy is to provide a mined, refined and separated supply of rare earth oxides to supply chains across North America, Europe and Asia. The pro forma value of Mkango's shareholding in MKAR (excluding its existing recycling businesses) pursuant to the BCA is $400 million prior to transaction expenses and excluding any net proceeds from a PIPE financing and any amounts available from CPTK's trust account. Transaction proceeds are expected to support MKAR's strategic growth plan, including the development of the Songwe Hill Project and the Pulawy Project.

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 (to be MKAR) for independent development and growth with dedicated access to U.S. capital markets.

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

HyProMag UK

Recent Developments

Initial commercial production commenced at the end of Q2 2025. To date, 905 kilograms of recycled NdFeB alloy powder has been produced and is being prepared for shipment to customers. HyProMag UK will continue to optimise NdFeB product preparation and transport logistics over the coming months as production ramps up at TEP.

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.**

Company Development

HyProMag UK 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 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 UK 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 TEP in Birmingham, UK, Pforzheim, Germany and Dallas Texas USA, 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 TEP, Birmingham, UK is being developed together with the UoB, with a minimum capacity of 100tpa NdFeB. This £4.3 million ($5.47 million) project was funded by "Driving the Electric Revolution", an Industrial Strategy Fund challenge delivered by UK Research and Innovation. HyProMag UK is 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 commenced at the end of Q2 2025.

HyProMag UK continues to receive 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 was a partner. RaRE established, for the first time, an end-to-end supply chain to incorporate recycled rare earth magnets into electric vehicles, whereby recycled magnets were 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 featured 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. RaRE came to a successful conclusion in April 2023 with demonstration magnets being manufactured for two motors. During the project HyProMag UK made excellent progress into process enhancement, pushing coercivity requirements and remanence requirements further than previously achieved using short-loop recycling techniques.

On 30 November 2020, the Company announced that HyProMag UK 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 would 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, Securing Critical Rare Earth Materials "**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. The project was successfully completed in March 2025.

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% is being 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 TEP.

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.

On 16 June 2025, HyProMag UK provided a technical update for HyProMag Limited on its ongoing advanced pilot programme for the scale-up and roll out of HPMS technology. Key points covered in this technical update include the following:

- Magnets produced from HPMS generated alloys are the first sintered NdFeB magnets to be produced in the UK since 2003.
- Increased magnetic performance has been achieved through ongoing process optimisation, with positive feedback from customers who are stress testing magnet prototypes. Further technical details, including magnet grades and performance, are provided in a HyProMag technical bulletin on this link: https://hypromag.com/executive-summary-of-recent-technical-progress-by-hypromag-ltd-june-2025
- Over 100 different blends of recycled material have been created in the last six months to meet customer requirements and demonstrate range. Magnets derived from both single and blended batches of HPMS powder have demonstrated consistent performance - validating the short-loop recycling and magnet manufacturing process.
- HPMS has been successfully demonstrated on at least 18 different morphologies of HDDs and commercial grade N45M and N42M magnets has been produced from the recycled HPMS powder.
- Magnets (ranging in grade from N48 remanence and UH coercivity) produced from a range of scrap sources are currently being tested in a wide range of applications, including automotive, audio and others, for example:
    - HyProMag in collaboration with ZF Automotive and UoB, has recently supplied magnets produced from recycled sources for prototype testing in automotive ancillary applications, with resulting successful performance.

    - GKN Automotive (a global leader in drive systems) delivered simulation and physical testing that verified that the HyProMag magnets have equivalent performance to primary magnets of the same grade (conducted as a SCREAM project).
- HPMS continues to demonstrate very effective removal and recycling of magnets from electric motor rotors and the team is now engaging with e-bike, medical device and professional audio unit sectors to advance development of pre-processing and recycling solutions.
- Optimisation of the Inserma magnet separation system is continuing and the first production-ready unit is expected to be delivered to HyProMag in Q3. The addition of a printed circuit board removal module is also at an advanced stage of development, further transforming and enhancing the Information Security requirements of HDD Recycling.
- Acceleration of work on blending recycled HPMS powders with virgin materials (from primary as well as medium and long-loop recycled sources) is underway and will broaden the range to higher magnet grades, aligning with incoming thresholds for minimum recycled content under the European Union CMRA.

In parallel with commissioning of the commercial plants in UK and Germany, and to support ongoing HyProMag USA detailed design, HyProMag UK has conducted a range of piloting, onboarded new production engineers and tripled the throughput capacity of the HPMS pilot vessel and processes. In the next six months, multiple sources of scrap feeds will be processed with a target to produce and convert two tonnes of HPMS power into commercial grade magnets. HyProMag will provide these samples to potential customers, as well as targeting further improvements in the engineering design criteria, recoveries and magnet making capability to support the commercial developments.

The main objectives of the Accelerated Pilot Programme are to:

- **Provide NdFeB block and finished magnet samples to customers**, to support product marketing, offtake discussions and scale-up in Europe and North America, and to complement HyProMag UK's 2025 commercial production of NdFeB alloys, blocks and finished magnets derived from the commercial scale plant being commissioned at TEP by the UoB.
- **Enhanced QAQC planning** - Commercial production at TEP is targeted at 600 kg batches of HPMS powder that will be analysed by ICP-OE, XRF and gas analysis. These characterised batches will be blended for targeted magnet qualities based on the development know-how from piloting. These batches will be large and consistent in quality; 1.2 tonnes of blended powder can, for example, deliver 50,000 magnets based on a typical 25 g speaker application. Sampling QAQC procedures are being developed with end-users.
- **Further demonstrate and optimise HPMS**, including pre-processing for larger volumes and broader variety of scrap feeds to derive optimal process conditions and estimates of recovery, NdFeB magnet content and yield to short loop recycling for different scrap feeds
- **Complete further variability analysis** across different HPMS batches of the same type of scrap feed.
- **Further demonstrate the ability to blend HPMS powders from different HPMS batches** of the same scrap feed with or without virgin feed additions

The Accelerated Piloting Programme targets over 50 additional HPMS runs using the following scrap feeds: separated magnet scrap, VCMs from different sources, pre-processed HDD feed, surface mounted and embedded rotors from electric motors, MRI, wind turbine feed, speaker assemblies and other forms of NdFeB scrap material provided by strategic partners.

HyProMag UK is initially targeting sales of around an average of 0.5 tonnes per month of recycled HPMS NdFeB product, increasing to a minimum of 2 tonnes per month by the end of 2025, in advance of potential expansion to 100-350 tonnes per year in 2026 with further expansion options being evaluated.

The NdFeB product from HPMS has a total rare-earth content (neodymium/praseodymium together with dysprosium/terbium) exceeding 28% and is analogous to a typical NdFeB alloy for magnet manufacture, whilst having a minimal CO_2 footprint relative to both primary and other recycled NdFeB products. Initially sold to third parties for long-loop chemical processing, this material will in future be used for magnet manufacture within HyProMag UK.

Following the commissioning of the plant's downstream powder processing plant (for HPMS powder sieving, blending and jet milling), magnet manufacturing presses and sintering furnaces, targeted by the end of Q3 2025, HyProMag UK will have access to capacity for production of value-added magnets at scale - enabling both customer

qualification and commercial sales of rare earth magnets, which will form an increasing proportion of the NdFeB product mix going forward.

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 and installation 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 €9.3 million ($10.9 million), of which approximately €3.7 million ($4.4 million) will be funded by 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 Q4 2025, and a similar size to the UK Recycling Project being developed by HyProMag UK and the UoB at TEP 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.

The GREENE Project

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).

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

Recent Developments

On 24 July 2025, HyProMag USA and global electronics recycling company, ILS entered into a feedstock supply and pre-processing site share agreement. ILS will secure and store NdFeB feedstock from HDDs and other sources for HyProMag USA at the ILS pre-processing sites in Williston, South Carolina and Reno, Nevada in advance of the commissioning of HyProMag USA's advanced stage rare earth magnet recycling and manufacturing plant to be located in DFW Hub. ILS will utilise the Inserma "3rd generation" HDD magnet separation system at its pre-processing sites. An exclusive agreement was signed between HyProMag and Inserma in September 2024, and the Inserma technology is being rolled out across multiple jurisdictions. The improved Inserma units provide fast, efficient magnet

separation from HDDs for HPMS processing together with clean separation of the printed circuit board for immediate resale to 3rd parties. HyProMag USA is, inter alia, targeting HDD recycling geared to the growth of hyperscale data centers, which is expected to accelerate significantly in coming years.

On 12 June 2025, HyProMag USA received a MMIA domestic finance letter of interest from the U.S. EXIM Bank for its first integrated rare earth recycling and magnet making facility in Dallas-Fort Worth, Texas. In terms of the letter, EXIM may be able to consider potential financing of up to US$92 million of the project's costs with a repayment tenor of 10 years. The issuance of this letter of interest is aligned with Executive Order 2421 of 20 March 2025 "Immediate Measures to Increase American Mineral Production" which includes near-term actions to be determined and implemented by the agencies to fast-track permits, mobilise capital for mineral producers, and create offtake agreements for strategic stockpiling for minerals critical to the United States' defense, technology, and energy.

On 22 April 2025, HyProMag USA appointed lead engineers PegasusTSI and BBA to perform EPCM services for HyProMag USA to produce rare earth magnets in the United States.

Company Development

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 DFW 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 then current market prices
- US$503 million post-tax NPV and 31% real IRR based on then forecast market prices
- Payback would be achieved at then 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 the then 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 by the end of 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

- 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 DFW 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.

Mkango Rare Earths UK Limited

Mkango UK recently commissioned a long-loop recycling pilot plant at TEP, 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 commissioned by HyProMag UK and the UoB also at TEP, 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).

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, SCREAM. Project partners include HyProMag UK, Bowers & Wilkins, EMR, GKN Automotive, Jaguar Land Rover, and the UoB.

RARE EARTH MINING

Mkango, through its 100% subsidiary Lancaster BVI, has mining properties in the Republic of Malawi, including Songwe Hill and the Nkalonje Hill exploration target, both held within its Phalombe retention licences (the "**Phalombe Licences**"). Mkango is also pursuing mineral exploration opportunities with the Thambani retention licences ("**Thambani Licences**").

Lancaster BVI, holds a 100% interest in a total of 16 exploration licences, 15 of which are held as 5-year retention exploration licences in southern Malawi.

The table below splits out the mineral project expenditure into more detail for the six months ending 30 June 2025 and 30 June 2024.

Licence/Capital Project	Project	For the six months ended 30 June 2025	2024
Phalombe	***Songwe Hill Project***		
	Metallurgy expenses	4,579	14,016
	Government fees	703	1,154
	ESHIA (1)	1,661	-
	Technical studies	-	-
	Consulting fees	2,575	-
	Malawi office and camp expenses	43,568	24,329
Phalombe total		53,086	39,499
Pulawy Project	Consulting fees	-	-
Thambani and Nkalonje	Mineral project expenditures	-	26,066
Total mineral project and research and development expenses		53,086	65,565

(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 Songwe Hill is the main development target. Featuring 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.

Project Development

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. Whilst the DFS was completed and announced in July 2022, it is currently being revised as part of the NASDAQ listing process.

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.

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.

In late July 2024, Lancaster BVI, and Lancaster Exploration Malawi Limited ("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 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 funded the commencement of process optimisation for the Songwe Hill Project, a future source of MREC feed for the Pulawy Project.

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:

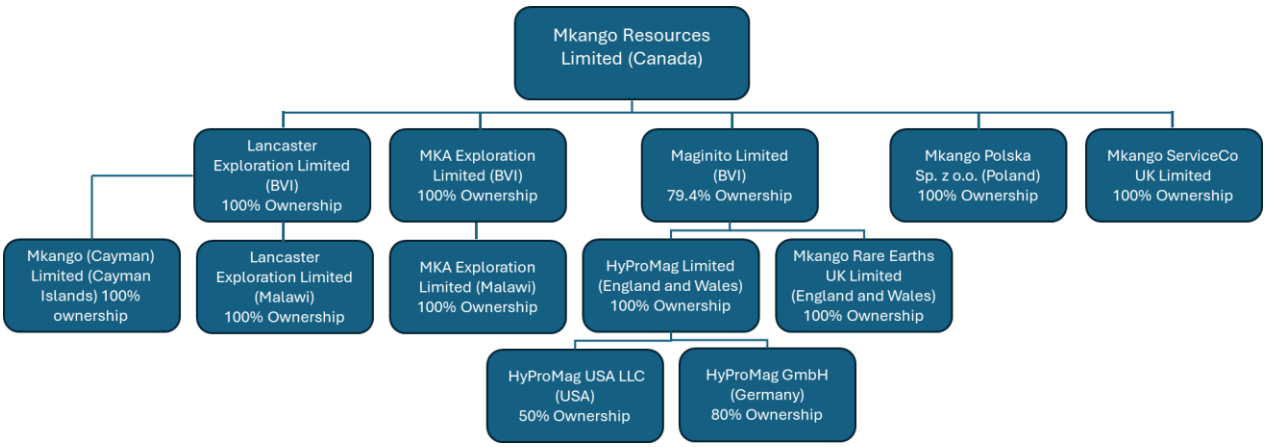
- Higher value-added products with increased margins – targeting 2,000 tpa of separated neodymium (Nd)/praseodymium (Pr) oxides, and 50 tpa dysprosium (Dy) and terbium (Tb) oxides in a heavy rare earth enriched carbonate.
- Greater integration – plant development fully underpinned by sustainably sourced, 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.

Mkango plans to publish a prefeasibility study for the Pulawy Project as part of the NASDAQ listing process.

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 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.

On 19 June 2025, Mkango (Cayman) Limited ("**Mkango Cayman**") was incorporated to act as a merger subsidiary in the SPAC merger transaction. Lancaster BVI own 100% of Mkango Cayman. No transactions went through this company as at 30 June 2025.

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 Mkango'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. This materiality assessment is underway.

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 30 June 2025.

	2025		2024				2023	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Expenses	(1,272,247)	(1,345,188)	(960,578)	(558,882)	(662,035)	(1,018,279)	(1,036,776)	(1,411,336)
Other items	26,677	(1,139,462)	2,536,768	173,978	(32,899)	(42,594)	(517,785)	(136,019)
Net profit/(loss) before tax for quarter	(1,245,570)	(2,484,650)	1,576,190	(384,904)	(694,934)	(1,060,873)	(1,554,561)	(1,547,355)

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 Q2 2025, Mkango recorded a net loss before tax of £1.2 million, an improvement compared to Q1 2025. The result was primarily impacted by a fair value adjustment of £0.7 million relating to the derivative liability associated with investor warrants, which was lower than the £1.1 million charge recorded in the previous quarter. In addition, Mkango recognised a foreign exchange gain of £740k, compared to a negligible £8k gain in Q1 2025, reflecting the weakening of the US dollar against both the pound and the euro during the period. Operating expenses were broadly consistent with Q1 2025, with movements reflecting the timing of project-related activity. Operating expenses were broadly consistent with Q1 2025, although higher than the comparable period in 2024 due to increased activity and development costs associated with Mkango's HyProMag projects.

In Q1 2025, Mkango recorded a net loss before tax of £2.5 million, largely due to a significant fair value adjustment of £1.1 million relating to the derivative liability associated with investor warrants. A foreign exchange gain of £8,000 was recognised in the quarter. Operating expenses also increased modestly compared to Q4 2024 due to the timing of project costs and remained elevated compared to early 2024 as HyProMag projects in both the UK and Germany continued development.

Mkango 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 Mkango 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 Mkango's results following the HyProMag acquisition.

Given the early-stage nature of the Mkango'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 30 June 2025, Leo Mining owed the Company an amount of $14,053 (31 December 2024: Company owed Leo Mining $2,055). The amount is unsecured and due on demand.

CoTec is considered related as they have a 20.6% interest in Maginito.

As of 30 June 2025, CoTec/HyProMag USA LLC owed the Company $204,427 (31 December 2024: $57,781) relating to an outstanding cash call from CoTec to Maginito and 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:

	30 June 2025	31 December 2024
Due to key management and directors	52,630	298,508
Due to related parties with common directors (Leo Mining)	-	2,055
Total due to related parties	**52,630**	**300,563**

The amounts due from related parties were as follows:

	30 June 2025	31 December 2024
CoTec/HyProMag USA	204,427	57,781
Due from related parties with common directors (Leo Mining)	14,053	
Total due from related parties	**218,480**	**57,781**

EXPENDITURES

Total expenses attributable to common shareholders and non-controlling interest	Quarter ended 30 June 2025	Quarter ended 31 March 2025	Quarter ended 30 June 2024
General and administrative			
Audit and tax management	(73,984)	(46,659)	(81,371)
Legal fees	(31,996)	(27,882)	22,896
Salaries and consulting fees	(282,231)	(488,486)	(202,803)
Rent, storage, telephone and insurance	(193,512)	36,875	(28,414)
Travel	(63,149)	(18,157)	(10,298)
AIM listing expense	(53,022)	(19,034)	(39,415)
Share-based payments	(152,827)	(88,047)	(54,933)
Depreciation	(81,297)	(73,274)	(60,730)
Amortisation	(132,733)	(131,274)	(132,733)
Investor relations and marketing	(38,649)	(19,300)	(37,454)
Expected credit losses	(682)	-	-
SPAC related costs	(171,288)	(204,111)	-
HyProMag UK	(2,075)	(49,676)	(45,822)
HyProMag Germany	85,890	(53,016)	33,443
Mkango UK	(44,118)	(146,634)	275
Sub total - General and administrative	(1,235,674)	(1,328,675)	(637,359)
Mineral project expenditures			
Songwe Hill Project			
Metallurgy expenses	-	(4,579)	(14,016)
Government fees	(356)	(350)	(793)
ESHIA	(1,661)	-	-
Technical studies	-	-	-
Consulting fees	(2,572)	-	-
Malawi office and camp expenses	(31,984)	(11,584)	(9,426)
REE Separation Plant Pre-feasibility Study	-	-	-
Thambani, Mchinji and Chimimbe projects	-	-	(441)
Sub total - Mineral projects	(36,573)	(16,513)	(24,676)
Total expenses	(1,272,247)	(1,345,188)	(662,035)
Interest income	2	4	-
Finance Expense	(11,683)	(11,165)	(35,571)
Share of associated company's losses	-	-	-
Fair value losses	-	-	-
Fair value adjustment – derivative liability	(701,438)	(1,136,344)	-
Foreign exchange gain/(loss)	739,796	8,043	2,672
Sub total – Other items	26,677	(1,139,462)	(32,899)
Net profit before tax	**(1,245,570)**	**(2,484,650)**	**(694,934)**

Three months ended 30 June 2025 compared to the three months ended 31 March 2025

Total expenses decreased by $72,941 from $1,345,188 in Q1 2025 to $1,272,247 in Q2 2025, primarily as a result of the following:

a) General and administrative: General and administrative expenses decreased by $93,001 compared to the prior quarter. The decrease was mainly attributable to lower salaries and consulting fees, which declined by $206,255 as executive management reverted to 100% cash salaries in April and external consulting arrangements were adjusted. In Q1, management were issued shares in the current period in lieu of salaries forfeited in earlier periods, which accounts for the higher reported expense in Q1 (Refer Note 16 in Financial Statements). SPAC-related costs also fell by $64,925 as transaction-related professional fees moderated during the quarter. These decreases were partly offset

by higher rent, storage, telephone and insurance costs of $230,387 due to timing of payments and new lease charges, as well as increased share-based payment charges of $64,780 as equity incentive programs continued to vest. Travel expenses were also higher by $44,992 reflecting greater project-related activity.

b) Mineral Projects: Mineral project expenditures increased by $20,060 quarter-over-quarter, primarily due to higher Malawi office and camp costs and modest spending on ESHIA and consulting fees at the Songwe Hill Project.

The Company recorded a fair value adjustment of $701,438 on the derivative liability related to investor warrants in Q2 2025, compared to $1,136,344 in Q1 2025. The smaller adjustment reflects more moderate share price movements during the quarter. In addition, a foreign exchange gain of $739,796 was recognised in Q2 2025 versus $8,043 in Q1 2025, driven by US dollar weakness relative to both Sterling and the Euro.

Three months ended 30 June 2025 compared to the three months ended 30 June 2024

Total expenses increased by $610,212 from $662,035 in Q2 2024 to $1,272,247 in Q2 2025, primarily as a result of the following:

a) General and administrative: General and administrative expenses increased by $598,315 year-over-year. The increase was driven by salaries and consulting fees, which rose by $79,428 compared to Q2 2024, reflecting the reversion of non-executive directors (from January 2025) and executive management (from April 2025) to 100% of contractual salaries and fees. Additional increases included higher share-based payment charges of $97,894 as equity incentive programs continued to vest, higher rent, storage, telephone and insurance costs of $165,098 due to new lease and operating charges, and SPAC-related costs of $171,288 which were not incurred in the prior-year quarter. Legal fees were also $54,892 higher compared to Q2 2024, reflecting increased corporate and transaction-related activity.

b) Mineral Projects: Mineral project expenditures increased by $11,897 year-over-year, largely due to higher Malawi office and camp costs, partly offset by lower metallurgical test work at Songwe Hill.

   In Q2 2025, the Company recorded a fair value adjustment of $701,438 on the derivative liability associated with investor warrants, compared to no such adjustment in Q2 2024. The Company also recognised a foreign exchange gain of $739,796 in Q2 2025, significantly higher than the $2,672 gain in the prior-year quarter, reflecting US dollar weakness relative to both Sterling and the Euro.

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 six months ended 30 June 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 30 June 2025, the Company had outstanding commitments related to the purchase of specialised equipment for use in its German operations. Contracts for this equipment have been signed, and progress payments have been made to date. The remaining committed payments, which fall due within the next 12 months, total approximately $1,302,662 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 335,992,907 Shares, 2,500,000 broker warrants, 16,660,000 investor warrants, 19,823,267 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.

Completion of SPAC Transaction

Completion of the Proposed Business Combination is subject to a number of conditions, including but not limited to, the approval of a Nasdaq listing application, approval by Mkango as shareholder of MKAR, approval by the shareholders of CPTK, approval by the TSX-V, and the satisfaction or waiver of other closing conditions. There can be no assurance that the Proposed Business Combination will be completed as proposed or at all.

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 30 June 2025 and 31 December 2024, is most significantly influenced by the following cash amounts held in foreign currencies (amounts shown in US dollars):

	30 June 2025	31 December 2024
Cash:		
Canadian Dollar	297	390
United States Dollar	18,068	14,934
Pound Sterling	709,265	752,905
Euro	474,869	386,865
Malawian Kwacha	3,470	2,918
Australian Dollar	77	73
Polish Zloty	1,959	1,722
	1,208,005	**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 $59,497 (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 30 June 2025:

	Contractual Cash Flows	Less than 1 Year	Greater than 1 Year
Accounts payable and accrued liabilities	2,043,540	2,043,540	-
Due to related parties	52,630	52,630	-

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	
	30 June 2025	**31 December 2024**	**30 June 2025**	**31 December 2024**
Cash	-	-	1,208,005	1,159,807
Receivables	-	-	367,314	30,401
Due from related parties	-	-	218,480	57,781
Total financial assets	**-**	**-**	**1,802,799**	**1,247,989**
Financial liabilities				
Accounts payable and accrued liabilities	-	-	2,043,540	648,389
Due to related parties	-	-	52,630	300,563
Finance lease liability	-	-	1,258,045	1,185,259
Derivative liability	3,123,988	1,286,206	-	-
Total financial liabilities	**3,123,988**	**1,286,206**	**3,354,215**	**2,134,211**

LIQUIDITY AND CAPITAL RESOURCES

As at 30 June 2025, the Company reported net current liabilities of $3,170,259, compared to $2,559,844 at 31 December 2024. The position is largely driven by the derivative liability of $3,123,988 relating to 25,000,000 investor warrants issued in connection with the September 2024 equity raise. Under IFRS, these warrants are classified as a derivative liability because the exercise price is denominated in pence while the Company's functional currency is US dollars. The liability is re-measured at fair value each reporting period, with changes recognised through profit or loss, and is classified as current given the warrants are exercisable at any time. This is a non-cash accounting treatment that can create the appearance of negative working capital but does not represent a funding requirement. In practice, increases in the Company's share price increase the reported liability, while decreases reduce it, and the eventual exercise of warrants would generate cash inflows rather than outflows. Excluding the impact of this derivative liability, working capital movements in the quarter primarily reflect ongoing expenditures on the Company's HyProMag project developments and related corporate costs.

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