# Maginito to Acquire Pioneering Rare Earth Magnet Recycler HyProMag

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#### HIGHLIGHTS:

- Maginito (Mkango 90%; CoTec 10%) to increase ownership in HyProMag from 42% to 100% for £1 million (C\$1.69 million) in cash and £1 million (C\$1.69 million) in Mkango shares, and a further £3 million (C\$5.07 million) payable in four tranches of Mkango common shares subject to production and other milestones in the UK, Germany and US
- Cash component to be funded from the recent £1.5 million (C\$2.54 million) investment by CoTec into Maginito as announced on 16 March 2023
- Maginito to hold a 100% interest in HyProMag and 90% interest in HyProMag GmbH, post-acquisition and conversion of previously announced convertible loan, respectively
- Targeting first production from the UK in 2023 and Germany in 2024, with parallel technology roll-out into the US
- Major competitive advantages in rare earths magnet recycling sector, underpinned by approximately US\$100m (C\$135m) of research and development ("R&D") expenditure at the University of Birmingham ("UoB") and with associated project partners:
  - Access to highly energy efficient, patented Hydrogen Processing of Magnet Scrap ("HPMS") technology
  - Ability to manufacture rare earth magnets with significantly reduced carbon footprint
- Maginito and CoTec have launched the roll-out of HPMS into the US:
  - Evaluating the development of recycling, chemical processing, alloy and magnet manufacturing
  - Scoping studies and site selection underway ahead of feasibility studies
  - CoTec and Maginito to form 50/50 joint venture for US developments, with CoTec to fund feasibility study and project development costs
  - Ongoing discussions with US Government, potential customers and recycling partners

LONDON and VANCOUVER, British Columbia, May 16, 2023 -- Mkango Resources Ltd. (AIM/TSX-V: MKA) (the "Company" or "Mkango") is pleased to announce that it has entered into an agreement to increase its ownership in HyProMag Limited ("HyProMag") from 42% to 100% for a cash and share consideration (the "Transaction"). The Transaction is conditional upon the approval of the TSX Venture Exchange and approval pursuant to the UK's National Security and Investment (NSI) Act. Approval of the latter is expected no later than the third quarter of 2023.

The consideration payable to the selling HyProMag shareholders (the "Vendors") on completion of the Transaction will comprise £1m (C\$1.69m) in cash and the issue of 9,742,031 Mkango common shares equivalent to £1m (C\$1.69m) at a price equal to 10.2648 pence based on the volume weighted average price of a Mkango common share on the AIM Market of the London Stock Exchange ("AIM") for the 10 business days ended on the date prior to the date of the share purchase agreement. In addition, up to a further £3m (C\$2.54m) may be payable to the Vendors in four tranches, either in cash or in Mkango common shares (at Mkango's option), conditional upon the achievement by HyProMag of certain production milestones in the period to 30 June 2026. The shares issued on completion will have a one-year lock up and the shares issued on milestones will have a six-month lock up.

William Dawes, CEO of Mkango, commented: "Since acquiring our initial interest in HyProMag in 2020, we have seen the company go from strength to strength, de-risking and further scaling-up the patented HPMS rare earth magnet recycling technology, building the team and developing further industry partnerships, all against the backdrop of growing interest in recycling and sustainable rare earth supply chains. We look forward to working closely with the HyProMag team as we continue to support the growth of the business."

David Kennedy, Director of HyProMag, commented: "Building on the legacy of innovation in rare earth permanent magnets and hydrogen technologies pioneered by the late Prof. Rex Harris at the University of Birmingham, we founded HyProMag in 2018 with Rex as a founding shareholder. Our aim was to accelerate the commercialisation of the HPMS process, and our collaboration with Mkango has supported the

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company's growth and enabled the participation in major collaborative projects on rare earth magnet recycling. We look forward to the next phase of growth at Tyseley Energy Park, scaling up the technology and showcasing rejuvenation of Birmingham's industrial heritage, in parallel with the international roll-out."

Julian Treger, CEO of CoTec, commented: "This transaction is a major step forward for Maginito as it seeks to move into production over the short to medium term in the United Kingdom, Germany and the United States. We look forward to supporting and working with Mkango, Maginito and the HyProMag team to roll out this innovative and highly energy efficient recycling technology, both as a Maginito shareholder and as a partner in the United States."

Rare earth magnets play a key role in clean energy technologies including electric vehicles and wind turbine generators, and they are also a key component in electronic devices including mobile phones, hard disk drives and loudspeakers. The development of domestic sources of recycled rare earths in UK, Germany, United States and other jurisdictions via HPMS is a significant opportunity to fast-track the development of sustainable and competitive recycled rare earth magnet production.

Mkango CEO, William Dawes, together with CoTec President and CEO, Julian Treger, will be hosting a webinar tomorrow, Wednesday 17 May 2023, at 16:00 pm BST (8 AM PT) to discuss the acquisition of HyProMag as well as an update on the collaboration between Mkango Resources and CoTec. To register for the event, please follow the link https://my.6ix.com/yl6r87uh.

#### Maginito

Maginito is focused on developing green technology opportunities in the rare earths supply chain, encompassing neodymium (NdFeB) magnet recycling as well as innovative rare earth alloy, magnet, and separation technologies.

Following the Transaction, Maginito will hold a 100% interest in HyProMag Limited focused on short loop rare earth magnet recycling in the UK, a 90% direct and indirect interest (assuming conversion of Maginito's recently announced convertible loan) in HyProMag GmbH, a company focused on short loop rare earth magnet recycling in Germany, and a 100% interest in Mkango Rare Earths UK Ltd ("Mkango UK"), a company focused on long loop rare earth magnet recycling in the UK via a chemical route. A new US subsidiary, to be jointly owned by Maginito and CoTec, is expected to be formed to develop rare earth recycling opportunities in the United States.

In March 2023, CoTec invested £1.5 million (C\$2.54 million) into Maginito, and Maginito and CoTec agreed to collaborate on the commercialisation of downstream rare earth technologies in the United States. Mkango UK was at the same time transferred to become a subsidiary of Maginito. In connection with CoTec's investment, John Singleton, Chief Operating Officer of CoTec, was appointed to the Board of Maginito.

### **HyProMag**

HyProMag was founded in 2018 by the late Professor Emeritus Rex Harris, former Head of The Magnetic Materials Group ("MMG") within the School of Metallurgy and Materials at the University of Birmingham, 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. 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 Emeritus Rex Harris, the hydrogen decrepitation method, which is used to reduce NdFeB alloys to a powder, is now ubiquitously employed in worldwide magnet processing.

Under the terms of the Transaction, the founding Directors and management of HyProMag will continue to provide support and work closely with Mkango and Maginito to further scale-up and roll-out the HPMS technology.

HyProMag is establishing short loop recycling facilities for NdFeB magnets at Tyseley Energy Park in

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Birmingham, UK and other locations using the patented HPMS process to provide a sustainable solution for the supply of NdFeB magnets and alloys for a wide range of markets including, for example, automotive and electronics. Short loop magnet recycling is expected to have a significant environmental benefit, requiring an estimated 88% less energy versus primary mining to separation to metal alloy to magnet production. The plant at Tyseley Energy Park is being developed together with the UoB, with a minimum capacity of 100tpa NdFeB (neodymium, iron, boron). This £4.3 million (C\$7.27 million) project is being funded by Driving the Electric Revolution, an Industrial Strategy Challenge Fund challenge delivered by UK Research and Innovation ("UKRI"). HyProMag is the primary industrial user and operator of the plant. First production is targeted for late 2023, which follows successful piloting at the UoB in 2022 as featured on BBC Midlands News: https://youtu.be/9P-dsNCffWw.

HyProMag's loss for the year ended 31 December 2022 was £151,411 (C\$155,855) as a result of R&D expenditures on its recycling projects.

#### HyProMag GmbH

In November 2021, HyProMag established an 80%-owned subsidiary in Germany, HyProMag GmbH, to roll out commercialisation of HPMS technology into Germany and Europe. HyProMag GmbH is 20% owned (10% following conversion of the HyProMag GmbH convertible loan) by Professor Carlo Burkhardt of Pforzheim University, co-ordinator of the â,¬14m (C\$20.58m) SusMagPro (www.susmagpro.eu) and â,¬13m (C\$19.11m) REEsilience (www.reesilience.eu) EU funded recycling projects, with approximately 40 partners across the European supply chain.

HyProMag GmbH is developing a similar sized plant to that at Tyseley Energy Park. Initial capacity is expected to be a minimum of 100tpa NdFeB, comprising recycled rare earth sintered magnets and alloys and will be the first in Germany using the patented HPMS process, with first production targeted for 2024. Maginito has entered into a convertible loan agreement (the "HyProMag GmbH Convertible Loan") with HyProMag GmbH. Under the terms of the HyProMag GmbH Convertible Loan, Maginito has granted HyProMag GmbH a loan facility for â,¬2.5 million (C\$3.68 million) available to be drawn down in accordance with an agreed investment plan and convertible into a 50% equity interest in HyProMag GmbH.

This investment by Maginito will contribute to the matched funding requirements to unlock the â,¬3.7 million (C\$5.44 million) grants announced by Mkango on November 23, 2022, for development of the production facility in Baden-Württemberg State.

#### Mkango UK

Mkango UK is establishing a pilot plant at Tyseley Energy Park (the "Mkango UK Pilot Plant") to chemically process recycled HPMS NdFeB powder and magnet swarf (i.e. the powder produced from grinding and finishing magnets) from a range of scrap sources including electronic waste, electric motors and wind turbines, complementing the short loop magnet recycling routes being developed in parallel by HyProMag. The £1.1 million (C\$1.86 million) pilot plant programme is being developed as part of the SCREAM Project (https://scream-uk.com/), for which 70% of the costs are being funded by UK Research and Innovation (UKRI) as part of the Driving the Electric Revolution challenge.

#### About Mkango

Mkango's corporate strategy is to develop new sustainable primary and secondary sources of neodymium, praseodymium, dysprosium and terbium to supply accelerating demand from electric vehicles, wind turbines and other clean technologies. This integrated Mine, Refine, Recycle strategy differentiates Mkango from its peers, uniquely positioning the Company in the rare earths sector. Mkango is listed on the AIM and the TSX-V.

Mkango is developing its flagship Songwe Hill rare earths project ("Songwe") in Malawi with a Definitive Feasibility Study completed in July 2022 and an Environmental, Social and Health Impact Assessment approved by the Government of Malawi in January 2023. Malawi is known as "The Warm Heart of Africa", a stable democracy with existing road, rail and power infrastructure, and new infrastructure developments underway.

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In parallel, Mkango and Grupa Azoty PULAWY, Poland's leading chemical company and the second largest manufacturer of nitrogen and compound fertilizers in the European Union, have agreed to work together towards development of a rare earth Separation Plant at Pulawy in Poland (the "Pulawy Separation Plant"). The Pulawy Separation Plant will process the purified mixed rare earth carbonate produced at Songwe Hill.

Through its ownership of Maginito (www.maginito.com), Mkango is also developing green technology opportunities in the rare earths supply chain, encompassing neodymium (NdFeB) magnet recycling as well as innovative rare earth alloy, magnet, and separation technologies.

Mkango also has an extensive exploration portfolio in Malawi, including the Mchinji rutile exploration project, the Thambani uranium-tantalum-niobium-zircon project and Chimimbe nickel-cobalt project.

For more information, please visit www.mkango.ca

About CoTec Holdings Corp.

CoTec is a publicly traded investment issuer listed on the TSX-V under the ticker CTH, and the OTCQB under the ticker CTHCF. The company is an ESG-focused company investing in innovative technologies that have the potential to fundamentally change the way metals and minerals can be extracted and processed for the purpose of applying those technologies to undervalued operating assets and recycling opportunities, in rare earths, low carbon iron ore (green steel) and copper as the company seeks to transition into a mid-tier mineral resource producer. CoTec is committed to supporting the transition to a lower carbon future for the extraction industry, a sector on the cusp of a green revolution as it embraces technology and innovation.

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

Market Abuse Regulation (MAR) Disclosure

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 ('MAR') which has been incorporated into UK law by the European Union (Withdrawal) Act 2018. Upon the publication of this announcement via Regulatory Information Service, this inside information is now considered to be in the public domain.

Cautionary Note Regarding Forward-Looking Statements

This news release contains forward-looking statements (within the meaning of that term under applicable securities laws) with respect to Mkango and CoTec. Generally, forward looking statements can be identified by the use of words such as "plans", "expects" or "is expected to", "scheduled", "estimates" "intends", "anticipates", "believes", or variations of such words and phrases, or statements that certain actions, events or results "can", "may", "could", "would", "should", "might" or "will", occur or be achieved, or the negative connotations thereof. Readers are cautioned not to place undue reliance on forward-looking statements, as there can be no assurance that the plans, intentions or expectations upon which they are based will occur. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will not occur, which may cause actual performance and results in future periods to differ materially from any estimates or projections of future performance or results expressed or implied by such forward-looking statements. Such factors and risks include, without limiting the foregoing, the availability of (or delays in obtaining) financing to develop Songwe Hill, the Tyseley Recycling Plant, the HyProMag GmbH Recycling Plant, the Mkango UK Pilot Plant, the Pulawy Separation Plant, governmental action and other market effects on global demand and pricing for the metals and associated downstream products for which Mkango is exploring, researching and developing, geological, technical and regulatory matters relating to the development of Songwe Hill, the ability to scale the HPMS and chemical recycling technologies to commercial scale, competitors having greater financial capability and effective competing technologies in the recycling and separation business of Maginito and Mkango, availability of scrap supplies for Maginito's recycling activities, government regulation (including the impact of environmental and other regulations) on and the economics in relation to recycling and the development of

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the Tyseley Recycling Plant, the HyProMag GmbH Recycling Plant, the Mkango UK Pilot Plant, the Pulawy Separation Plant and future investments in the United States pursuant to the proposed cooperation agreement between Maginito and CoTec, the outcome and timing of the completion of the feasibility studies, cost overruns, complexities in building and operating the plants, and the positive results of feasibility studies on the various proposed aspects of Mkango's, Maginito's and CoTec's activities. The forward-looking statements contained in this news release are made as of the date of this news release. Except as required by law, the Company and CoTec disclaim any intention and assume no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law. Additionally, the Company and CoTec undertake no obligation to comment on the expectations of, or statements made by, third parties in respect of the matters discussed above.

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