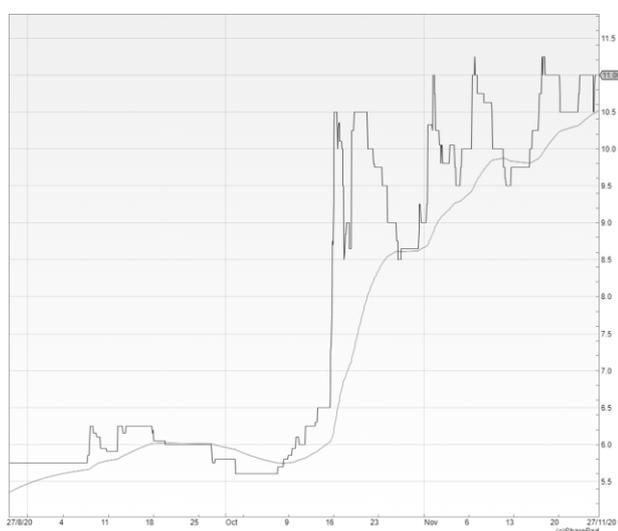


# MKANGO RESOURCES LTD

## TRADE NOTE

Trade type:	Long-Term Trade	27 November 2020
Rationale:	Company's value not recognised; Material shift underway within Company's market; Momentum trade.	
Buy-in price (p):	9.5	Min. target price (p): 27.5
Market cap (£m):	12.6	Min. target gain: 189%

3-month chart:



12-month chart:



### The Trade: Executive Summary

*This Trade Note should be read in conjunction with our commentary on the rare earth elements industry and global market, viewable [here](https://aimchaos.com/category/misc-commentary/):*

<https://aimchaos.com/category/misc-commentary/>

We have opened a Long-Term Trade in Mkango Resources Ltd ('Mkango') at an average price of 9.5p. This equates to a market capitalisation of £12.6m, at our average by-in price.

Our minimum target price over our initial six-month investment horizon is 27.5p, which equates to a market capitalisation of £36.6m. Our rationale for this minimum target price is set out on pp.8-9.

The Trade is based on three primary factors, as detailed on pp.8-11. In summary, these are:

- The wider market has failed to recognise the underlying value of Mkango's assets.

- There has been a material shift within the rare earth elements ('REE') market – notably rapidly growing demand – owing to the accelerated rollout worldwide of green technologies that utilise REEs.
- Positive sentiment within the global investment community towards all things 'Green' is building rapidly.

We have classed this position as a Long-Term Trade as there remains material uncertainty as to the final investment decision for Songwe Hill, due in H2 next year following the publication of the bankable feasibility study. Critically, prices of REEs remain at levels at which the majority of pre-production projects worldwide would struggle to achieve profitability. As such, we intend to monitor the REE industry closely over the next six months, during which time we will remain open to upgrading the position to an Investment holding.

This note provides an introduction to Mkango's assets, operations and structure, as well as some basic valuation analysis, in order to support our Trade rationale. Were we to upgrade the position to an Investment, we would at a later date provide much more in-depth analysis of the Company.

## Company Overview

### **Overview**

Mkango is a development-stage mining company with a primary focus on rare earth elements ('REE'). Its primary asset is its flagship REE deposit, named Songwe Hill, in Malawi, Southeast Africa. The Company has been progressing the project, in which it has a 51% equity stake, since 2011 and is now carrying out a bankable feasibility study ('BFS'). This is due to complete in the second half of next year. The BFS has been funded by Talaxis, a technology metals business, which has injected £12m cash at project level for a 49% stake.

In addition to the 51% owned Songwe Hill, Mkango also holds 100% interests in three other exploration licences in Malawi, namely Thambani, Mchinji and Chimimbe Hill. These are all at much earlier stages of development, but nevertheless hold significant potential value, and moreover offer diversity to Mkango's mineral asset base.

Finally, Mkango has a 75.5% owned subsidiary named Maginito, which was established as an investment vehicle to pursue downstream green technology opportunities in the rare earths supply chain. Maginito has a 25% stake in HypProMag, a UK company focussed on REE magnet recycling.

### **Assets and operations**

#### **- Songwe Hill (51% owned)**

Mkango has been developing the Songwe Hill project since it listed on the TSE Venture Exchange in 2011 via a reverse takeover transaction. Following a 6,852m drill programme, the Company completed a pre-feasibility study ('PFS') in late 2014, and an updated PFS in late 2015. The base case operation in the PFS assumed an 18 year mine-life that would extract a total of 8.5 million tonnes ('Mt') of ore at an average grade of 1.62%, which equated to an average of 2,841 tonnes of concentrate per annum. The project economics were highly compelling: total initial capex amounted to \$216m, a modest amount relative to the project NPV of \$345m. The IRR was calculated at 37%. Importantly, only ~27% of the deposit's total indicated and inferred resource of 31.8 Mt was utilised in the mine plan.

In late 2017, Mkango entered into a transformational deal with Talaxis, a wholly owned subsidiary of Asian commodities trading house, Noble Group. Talaxis committed to taking a 49% equity stake in Songwe Hill at the subsidiary level, for a cash investment of £12m (paid in two tranches, in January 2018 (£5m) and March 2019 (£7m)). The investment is being used to fully fund a BFS over the project.

The funds were used to complete a 10,900m drilling programme in 2018, which resulted in a material upgrade to the mineral resource. The total measured and indicated resource increased by 60%, to 21 Mt; whilst the inferred resource increased by 48%, to 27.5 Mt. Overall, Songwe Hill's resource base has increased by 53%, to 48.6 Mt, containing an estimated 663,400 tonnes of total rare earth oxides. Management's comment on the upgrade was:

*"This provides a solid platform for completion of a revised mine plan to be incorporated into the feasibility study. Based on the larger Measured and Indicated Resource, the feasibility study will evaluate opportunities to include more tonnes into the mine plan, expand operations, extend the mine life, reduce the strip ratio and therefore reduce mining costs."*

There are two additional prospects for enhancing the BFS, namely i) optimising the flowsheet, and ii) establishing a separation plant. Work on the former has been steadily underway for the past four years, and is focussed on flotation, hydrometallurgy and acid regeneration. In short, the former would aim to reduce operating costs, whilst the latter (although we estimate that it could increase project capex by as much as \$40m) would aim to increase revenues through the sale of more refined, higher value REE products. Management has stated that it has identified potential sites for a separation plant outside Malawi (countries as yet undisclosed), with site visits undertaken and scoping studies and due diligence underway.

Due to the global pandemic, Mkango has pushed its target completion date for the BFS to H2 2021 (originally envisaged to be completed before the end of 2019).

- ***Thambani (100% owned)***

Thambani is a greenfield uranium-niobium-tantalum project over which Mkango holds an exploration licence. Over the past six years, the Company has carried out three exploration programmes (in 2014/15, 2017 and 2019). Assay results from a combination of soil, rock chip and rock grab samples have yielded values ranging up to 4.7% uranium, 6.0% niobium and 1.9% tantalum.

There are also significant amounts of zircon, columbite and blue corundum to be found at surface within the Thambani licence area (indeed, the author of this note visited the licence in 2017, and saw significant quantities of these minerals scattered on the land). Management has alluded to the possibility of establishing a collecting operation (at very modest cost) in order to commence generating early cash flows via direct sales of these ores. We believe that a near-term, cash generative operation of this nature would be warmly received by the investment community.

Mkango is currently evaluating strategic options for Thambani, including opportunities for joint venture.

- ***Mchinji (100% owned)***

Mkango was granted an exploration over Mchinji in July 2019 for an initial three-year term. This year, the Company carried out a reconnaissance shallow soil sampling and auger programme (comprising 12 shallow vertical auger drill holes) on the licence. The programme was a success: the results demonstrated the presence of rutile and anatase (both naturally occurring mineral forms of titanium dioxide), as well as of ilmenite (an iron-titanium oxide mineral). TiO<sub>2</sub> grades were as high as 4.09%, and total heavy minerals, as high as 9.01%. The main uses of rutile, anatase and ilmenite are for pigments (~90%), production of titanium metal (~5%), and welding (~5%).

Management's comments on the discovery were:

*“These early stage results... suggest the potential for discovering high-grade rutile deposits within Mkango's large licence area, in what could potentially be a new province of rutile mineralisation.”*

This month, Mkango commenced a more extensive hand-auger drilling and soil sampling programme, specifically focussed on identifying rutile prospects within the Mchinji licence. We expect results from this programme to be announced within the next two months.

- ***Chimimbe Hill (100% owned)***

The Chimimbe Hill exploration licence was granted in November 2017. Work carried out on the deposits back in 2007 to 2009 by a previous owner resulted in a JORC compliant resource for the project of 8.55 Mt at 0.36% nickel, 0.52% chromium and 0.03% cobalt. At current prices, the total in-situ value of the three metals equates to approximately \$1bn.

Mkango has carried out little work on the asset since being granted it, and we would not be surprised to see the licence surrendered.

- ***Maginito (75.5% owned)***

Maginito was incorporated at the start of 2018. It focuses on downstream opportunities in the rare earths supply chain, in particular rare earth alloy, magnet and other technologies geared to accelerating growth in the electric

vehicle ('EV') market. Shortly after its incorporation, Talaxis injected £1m into Maginito for a 24.5% equity stake.

Maginito's primary asset is its 25% equity stake in HyProMag. Founded in 2018, HyProMag's aim is to develop a full recycling supply chain for rare earth magnets based upon neodymium iron boron ('NdFeB'). HyProMag has licensed a patented technology called Hydrogen Processing of Magnet Scrap ('HPMS'), which was developed by the Magnetic Materials Group at the University of Birmingham. HPMS is a hydrogen-based process which is used to extract NdFeB magnets from electrical products such as hard disk drives. The extracted NdFeB powder is in the form of an alloy which can be re-processed into different forms. This can then be sold back into the supply chain for rare earth magnets.

HyProMag's intends to establish a recycling facility for NdFeB magnets at Tyseley, Birmingham, to provide a sustainable solution for the supply of NdFeB magnets and alloy powders for a wide range of markets including, for example, automotive and electronics. First sales are projected within three years.

In May, Mkango announced the launch of an Innovate UK grant funded project, named Rare-Earth Recycling for E-Machines ('RaRE'). RaRE will for the first time establish an end-to-end supply chain to incorporate recycled rare earth magnets into electric vehicles, whereby recycled magnets will be built into an ancillary electric motor to ultimately support the development of a commercial ancillary motor suite. The RaRE partners include HyProMag, Bentley Motors, Advanced Electric Machines Research, Intelligent Lifecycle Solutions, Unipart Powertrain Applications and the University of Birmingham. The total budget for RaRE is £2.6m, of which Innovate UK will fund £1.9m, and the six project partners will fund the £0.7m balance.

Maginito acquired its 25% interest in HyProMag by investing £0.3m cash in January this year. Simultaneously, it also provided a £0.2m convertible loan to HyProMag. Maginito has the option to increase its equity stake to 49% by investing a further £1m cash (we assume that the £0.2m convertible loan already provided will be deducted from the £1m payable).

Maginito has a second collaboration that it entered into in 2017, namely a joint venture with UK company, Metalysis. Metalysis has the exclusive rights to a solid-state process that can produce metal alloys directly from oxide feedstock without the need for melting. This reduces processing steps – thus offering the potential for a high margin operation – and moreover enables optimised control of metal powder characteristics. The collaboration between Maginito and Metalysis was to focus on the research and development, and subsequently the commercialisation of, rare earth metal alloys for use in 3D printed permanent magnets.

The collaboration completed a Phase I work programme in 2017, in which proof of concept tests at R&D scale successfully demonstrated that a NdFeB alloy could be generated using Metalysis' process from a mixed feedstock containing oxides of neodymium, iron and boron. Phase II was to include product quality optimisation, test work scale-up, and further analyses of the alloy. It was also to incorporate customer appraisal of the product and further investigation of opportunities in relation to 3D printing of magnets.

However, Metalysis fell into administration in June 2019, before Phase II had been completed. Metalysis was bought out of administration soon after by Power Resources Group ('PRG'), a private mining company, and has recommenced operations. However, the collaboration between Maginito and Metalysis has seemingly been put on hold. As Mkango's management has stated:

*"The Company is in contact with PRG to determine if there is a mutually beneficial way forward for the collaboration. However, there is no guarantee that a new agreement, superseding the Metalysis Joint Venture, can be arranged."*

As such, we conservatively assume the circa \$0.41m that Maginito has invested in the collaboration to date, to be written off (although we note that Mkango itself has not done so).

## ***Partnerships***

Mkango's key commercial partner is Talaxis. Talaxis has already invested £12m cash at project level for a 49% equity stake in Songwe Hill. A crucial addendum to this deal is the option clause that Talaxis has. This stipulates that upon completion of the BFS, Talaxis has the option of increasing its equity stake in Songwe Hill from 49% to 75% by securing all of the project finance (estimated at \$216m in the PFS – or £162m at current exchange rates) – both the equity and the debt components, whichever way they are ultimately structured.

As a prominent trading house, Talaxis' parent company Noble Group is well placed to source project finance for the construction of the mine at Songwe Hill. Its extensive contact network in Asia will prove particularly useful given that China and Japan (the latter as a downstream processor and consumer) are cornerstone markets in the global REE industry.

Talaxis is also a 24.5% shareholder in Mkango's subsidiary, Maginito, which it acquired at Maginito's inception for a cash injection of £1m. The two companies are currently in discussion over restructuring an additional £1m investment by Talaxis into Maginito (initially, the agreement stipulated that this would have increased Talaxis' equity interest to 49%; but this second cash injection appears to have been put on hold, owing to Maginito's first investee company / joint venture partner, Metalysis, having fallen into administration). We expect that this additional £1m investment by Talaxis will be completed in due course, given that Maginito must find a further £0.8m if it wishes to increase its interest in HyProMag to 49% (assuming the £0.2m convertible loan note already provided to HyProMag will be converted and be deducted from the £1m total investment requirement).

## ***Target markets***

For the REE industry, please see our accompanying research notes.

If we opt to convert the position from a Long-Term Trade into an Investment, we will write on the uranium market (on account of Mkango's Thambani licence) and on the rutile market (Mchinji licence) in extensive detail.

## ***Competitive landscape***

As we explain in our sector-specific research notes, we believe that a structural deficit looms over the global REE market. China is reluctant to expand domestic production, and indeed is beginning to curb exports; whilst on the other hand, the global adoption of electric vehicles and offshore wind turbines is accelerating at breakneck speed. These green technologies are major consumers of the 'magnet REEs' ('MREE'), namely neodymium, praseodymium, terbium and dysprosium. Accordingly, we believe that *numerous* ex-China REE mines must come online across the rest of the world over the next five years, simply so that supply can keep pace with demand.

As a result, assuming that a REE project demonstrates sound economics, has an ore body that is comprised of a high percentage of MREEs, is located in a favourable jurisdiction, and has the support of national government – we believe that such a deposit will have a good chance of securing project financing in the coming years.

We firmly believe that Mkango's Songwe Hill fits this bill.

## ***Financials***

Given its pre-producer status, Mkango is lossmaking. As at 30 September 2020, the Company's consolidated cash balance was \$5.78m, down from \$6.44m as at 30 June 2020.

We note that the Company has 13.2m warrants outstanding, all with an exercise price of 6.6p, that expire on 31 December 2020. If exercised in the next five weeks, these would raise a further £0.87m cash for the Company. 12.0m of the warrants are held by Talaxis, and 1.2m by non-executive director, Shaun Treacy. As such, we are unconcerned by the prospect of the exercise causing any share overhang in the market.

We believe Mkango's balance sheet is suitably cashed up to see it through to publication of the Songwe Hill BFS, and final investment decision. We also consider there to be sufficient cash for the Company to carry out further, modest exploration campaigns on one or two of its other licences in 2021.

### ***Management***

The two executive directors, CEO Will Dawes and President Alexander Lemon, are the co-founders of Mkango, and have a 12-year track record of operating in Malawi. They have extensive experience in mineral exploration (both also hold MScs in Mineral Exploration) and business development. Although their shareholdings in Mkango have been diluted considerably by multiple equity placings over the past decade to 1.1% each (held indirectly via Leomenix), there are 11.8m management options outstanding, all of which are now in the money. If exercised in full, these would amount to a further 8.1% of the enlarged share capital.

Besides the two executive directors, the Company has four non-executive directors, who each brings a particular skill set to the board (being legal; investor relations; strategic and financial advice; and natural resources experience). To note, chairman Derek Linfield hold a 3.9% stake in Mkango.

## Investment Rationale

We have opened a Long-Term Trade in Mkango for three primary reasons:

- 1) The wider market has failed to recognise the underlying value of Mkango's assets.
- 2) There has been a material shift within the REE market – notably rapidly growing demand – owing to the accelerated rollout worldwide of green technologies that utilise REEs.
- 3) Positive sentiment within the global investment community towards all things 'Green' is building rapidly.

### **1) *Mkango's underlying value not recognised by wider market***

The core rationale for the position is that we believe Mkango to be fundamentally undervalued at 9.5p. *If* we decide to convert this position from a Long-Term Trade into an Investment, we will conduct and publish much more extensive valuation analyses on Mkango; but for now, we provide a basic sum-of-the-parts valuation.

#### **- *Songwe Hill***

In November 2017, Mkango and Talaxis entered into the agreement under which Talaxis would fully fund the BFS for Songwe Hill with a £12m cash injection at project level. £5m was received in January 2018, and the remaining £7m in March 2019.

Purely on a transactional basis, the agreement values Mkango's remaining 51% equity stake in Songwe Hill at £12.5m, or 9.39p per share.

However, it is important to bear in mind that the transaction was not simply a share purchase by Talaxis of a 49% share of Mkango's existing holding in Songwe Hill; but rather, a farm-in. The £12m cash has been sunk into the ground in a 10 km+ drilling campaign to drastically expand the resource base, and invested in dozens of various workstreams over the past three years that should ultimately improve the economics of the 2015 PFS, in the final BFS due to complete next year.

As such, we would argue that the value of Songwe Hill has increased – perhaps materially – since the investment agreement commenced. For the sake of simplicity, we assume that the value of the asset has doubled over the past three years, from November 2017.

<b>Songwe Hill (£m) (100% basis)</b>	<b>Mkango's 51% share (£m)</b>	<b>Value per share (p)</b>
49.0	25.0	18.80

Preliminary relative valuation analysis that we have carried out based on size of mineral resource, suggests that our 2x uplift in valuation for Songwe Hill at this time is conservative. We shall provide this if / when we publish more detailed research on Mkango as a whole.

Moreover, we are not attributing any value whatsoever to Talaxis' option to increase its equity stake in Songwe Hill to 75%, by sourcing and/or providing the entirety of the required project finance (detailed on p.6). Naturally, the economics of the BFS will differ materially from the 2015 PFS: the BFS-proposed mine is likely to have double the nameplate capacity of the PFS-proposed mine, and be a lower cost operation; but on the other hand, BFS capex will be higher, and assumed REE prices will be lower in the BFS than those that were used in the PFS. However, for illustrative purposes only, it is worth reiterating that the PFS suggested capex of \$216m, NPV of \$345m, and circa \$100m EBITDA per annum over 18 years.

Using the PFS mine plan and the assumed REE prices in it: were Talaxis to exercise its option and source / provide the \$216m capex required to build the mine at Songwe Hill, then Mkango would effectively have an attributable share of ~\$25m EBITDA pa for almost two decades. After payback of project finance, even

a relatively conservative dividend pay-out ratio of 30% would result in an extremely healthy yield against Mkango's current market capitalisation of £14.5m. And – critically – it would require only modest equity dilution at the TopCo level (to cover corporate overheads in the interim) to reach that goal.

Another point to consider: were Talaxis to fund the \$216m capex entirely in the form of equity, that would take its total investment in Songwe Hill to £174m. Based on this transaction, that would value Songwe Hill at £232m – and Mkango's 25% remaining equity stake at £58m, or 43.61p per share using the current issued share capital of 133m.

- ***Maginito***

Given that HyProMag is Maginito's only 'active' investment (with the fate of the collaboration with Metalysis still uncertain), and given that the HyProMag investment was only made this year (with HyProMag having not carried out any further equity funding rounds), we value Maginito as at its last funding round. This was the £1.0m that Talaxis invested in it for a 24.5% equity stake.

<b>Maginito (£m) (100% basis)</b>	<b>Mkango's 75.5% share (£m)</b>	<b>Value per share (p)</b>
4.1	3.1	2.32

It should be apparent that the HyProMag investment alone offers material upside to our valuation for Maginito in the medium- to long-term. As EV adoption gathers pace, the attractiveness of its offering to the automotive industry – and consequently, its valuation – is likely to increase rapidly. The high calibre of HyProMag's partners in its first collaborative project, RaRE, and the government's financial backing of the project (through Innovate UK), already provide evidence of this.

We highlight a business with a competing technology to HyProMag in the US, named Urban Mining Company. Founded only in 2014, the company raised \$25m in a Series A round at an undisclosed valuation in 2016, which has funded the build of its recycling facility in Texas. In July this year, the Pentagon provided UMC with a \$29m grant. Evidently, the potential of this technology is valued extremely highly by key players.

- ***Thambani, Mchinji and Chimimbe Hill***

These three exploration licences are very early stage, greenfield assets. As such, it is extremely difficult to place a fair value upon any of them. Given that Mkango has run multiple explorations on each of the first two licences in the past few years, we believe that they hold greater upside in the near- to medium-term. For now, we have placed nominal valuations on each of the licences as follows:

<b>Licence</b>	<b>Licence's value (£m)</b>	<b>Value per share (p)</b>
Thambani	2.0	1.50
Mchinji	2.0	1.50
Chimimbe Hill	1.0	0.75

- ***Sum-of-the-parts valuation: summary***

<b>Asset</b>	<b>Value attributable to Mkango (£m)</b>	<b>Value per share (p)</b>
Songwe Hill (51%)	25.0	18.80
Maginito (75.5%)	3.1	2.32
Thambani	2.0	1.50
Mchinji	2.0	1.50
Chimimbe Hill	1.0	0.75
Net cash (our end-2020 estimate)	3.5	2.63
<b>TOTAL</b>	<b>36.6</b>	<b>27.50</b>

- ***Why the undervaluation?***

It is important to consider *why* such an undervaluation has come about in the first place:

- Firstly, the REE industry itself is small and relatively opaque: the plethora of use cases of REEs is not particularly well known to the wider investment community – at least, not to the same extent as the battery metals such as lithium. Those who *do* have knowledge of the industry will be aware of China’s position of quasi-monopolist, and of the control it exerted over the global market (via flooding it with supply) in 2011-12. However, with the global rollout of EVs and wind turbines snowballing, it is our belief that the REE market will very shortly become of much greater interest to the wider investment community.
- Secondly, Talaxis’ parent company, Noble Group, had been in severe financial stress in the period leading to Talaxis striking its deal with Mkango, and indeed for over a year afterwards. The market evidently had lacked faith that Talaxis would deliver on its funding commitments to Mkango: the latter traded at a discount to the committed £12m cash injection for almost the entire ~17 months prior to the second instalment (£7m) was received in March 2019. Given that there were no ‘share price catalysts’ on the near-term horizon for investors, Mkango’s drastically undervalued share price became considered the norm for the market. Ever since, it has struggled to break back above the value of Talaxis’ cash injection.
- Finally, the price of REEs have been hammered down relentlessly for almost a decade, owing to China having regularly flooded the market with cheap supply since 2011. As we detail extensively in our separate research notes on the REE market, China’s exceptionally low cost base has permitted it to maintain this strategy – effectively keeping almost all Rest of World (‘RoW’) producers out of business, as well as keeping new RoW projects from coming online. Mkango has been one of many victims in this latter bracket, and in fact has done remarkably well to have survived throughout the entire downturn. However, with prices of the Magnet REEs (especially neodymium and praseodymium (‘NdPr’)) having responded aggressively to increased demand – particularly from within China itself, which has resulted in the nation dramatically curbing its exports – RoW pre-production projects are beginning to look like they could become economically feasible once more. Mkango’s Songwe Hill is one such project.

***2) An ongoing material shift within the REE market enhances the investment proposition***

*To be read in conjunction with our second research note on the rare earth elements industry and global market, viewable here:*

<https://aimchaos.com/category/misc-commentary/>

Our second key reason for opening a Long-Term Trade in Mkango is that there has been a material shift within the REE market (as we detail in our above note). In short, as China has curbed its exports and as demand continues to rapidly increase with the global rollout of EVs and wind turbines, NdPr prices have been climbing rapidly throughout 2020. We believe that this will make RoW pre-producers – especially those with a clear path through to production – highly attractive investment opportunities. Mkango, through its Songwe Hill asset and its option agreement with Talaxis, is high up on the list of such opportunities worldwide.

***3) Momentum trade, as positive sentiment towards Green technology builds***

As an addendum to the second Trade rationale explained above, we believe that a fundamental, irreversible shift is now in full swing across the global investment community. This relates to a desire for a rapid transition from fossil fuel-driven economies and societies, to ones powered by green and sustainable energy sources.

Larry Fink, CEO of BlackRock, the world’s largest fund manager with assets under management of circa \$8 trillion, vowed in January this year to steadily divest from fossil fuel holdings. Since then, the transition throughout the investment world has noticeably gathered pace. On the political spectrum, Joe Biden’s recent

Presidential victory over Donald Trump is set to accelerate the energy transition within the US, whilst at a grassroots level the iconic Greta Thunberg has catalysed one of the greatest international movements in history.

On the public markets, green energy stocks have rocketed in recent months. *The* flagship company, EV manufacturer Tesla, this week surpassed a valuation of half a trillion dollars, putting it on a price earnings ratio of in excess of 1,000x.

We feel that this positive sentiment towards green technologies could generate increased interest in Mkango going forward. Its green technology subsidiary, Maginito, provides Mkango with an interesting differentiator over its peer group. Of particular interest to us is its investment in HyProMag, which is a direct play on the EV industry. It is highly significant that Bentley, one of HyProMag's partners in the RaRE project, has recently committed to go fully electric by 2030. The very purpose of the RaRE project is to use HyProMag's technology to ultimately lead to the manufacturing of EV motors *from recycled products*. Such an operation should be extremely appealing to an investing community that is becoming ever more attuned and sensitive to ESG-centric businesses.

## Risks to the Trade

We believe there are two major risks to the Trade within the initial investment horizon of six months:

- **Jurisdiction risk**

All four of Mkango's exploration licences are located in Malawi. This clearly brings significant jurisdiction risk to the investment case. However, it is a comfort that the executive directors of Mkango have a 12-year track record of operating in Malawi, and have built longstanding relationships with the government and local communities. Moreover, it is our understanding that Songwe Hill is a nationally significant project for the government, and is thus very likely to receive government support as it progresses through to final investment decision – and thereafter through the construction phase, to production.

- **NdPr price recovery fading over the next year**

The major cause of concern is that China significantly increases its exports going forward, in order to stem rapidly increasing REE prices. Furthermore, it may be that the ramping up of production this year at MP Materials' Mountain Pass mine in California, and at Lynas Corp's Mt Weld mine in Western Australia, also begins to weigh on REE prices.

Were this to occur, and by mid-next year REE prices were significantly below current levels, then Talaxis may well not be interested in exercising its option to finance mine construction at Songwe Hill.

## Disclosure

*The author of this paper, Myles McNulty, is a private investor. He and his family hold 2.98% of the ordinary shares of Mkango Resources.*

*This paper is non-independent research. It has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of the investment research.*

*This paper is designed for information purposes only and does not constitute a personal recommendation, offer or invitation to buy or sell any investment referred to within it. Investors should form their own conclusions and/or seek their own advice to determine whether any particular transaction is suitable for them in the light of their investment objectives, the benefits and risks associated with the transaction and all other relevant circumstances.*

*The views expressed in this paper are those of Myles McNulty. They are based on information sourced entirely from the public domain, which is believed to be reliable. However, no warranty or representation, express or implied, is made about the accuracy or completeness of this information, which may be subject to change without notice. Any opinion given reflects Myles McNulty's judgement as at the date of this paper's publication. Any or all statements about the future may turn out to be incorrect.*

*Myles McNulty has no business relationship with Mkango Resources or with any other company mentioned in this paper, and has received no compensation from any party for writing it.*

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