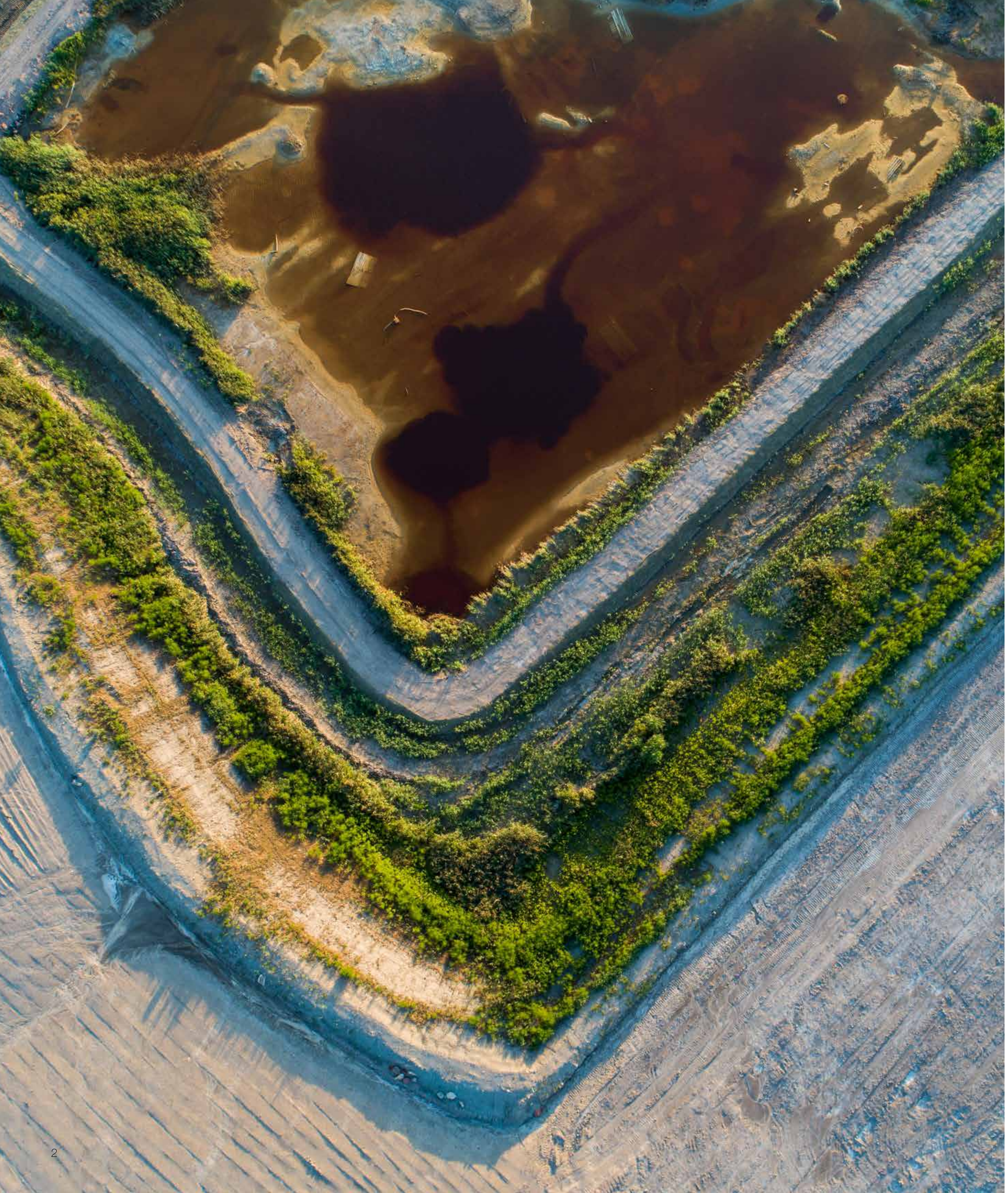
PKF

A catch up with...

An expert view of the Natural Resources sector



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A catch up with...

The aim of the series: **"A catch up with…"**, is to promote a greater understanding of the current market through a series of interviews with respected industry leaders to find out more about them, their company, their views on the market and the challenges they might face in the next phase of their business journey. Each publication will examine a single industry from the viewpoints of different business directors and founders operating within the sector to provide a rare and insightful overview.

Foreword

Natural resources companies operate in a fast-moving and increasingly regulated market.

There are many opportunities but the sector is undergoing change and facing challenging times. Established business models are changing, disruptive new players are entering the market and obtaining the right funding is becoming increasingly complex.

However, natural resources, from rare metals like gold, oil and even coal, or indeed anything that comes out of the ground, are in high demand.

To better understand the sector, PKF spoke to four leaders from four different-facing natural resources businesses to bring you their perspectives and insight on the industry, taking an inside look at the market.

In view of the global move towards de-carbonisation, the shift in business ethos to embrace ESG standards, and the current re-focus in manufacturing to obtain critical metals from ethical sources, we speak to **Richard Elmer, Regional Manager at Knight Piésold** who explains how Knight Piésold is cleaning up mining in more ways than one.

As one of the only vertically integrated graphite production companies in the world listed on a major stock exchange, **Kien Huynh, CFO at Tirupati Graphite plc**, tells us what sets Tirupati apart from other companies operating in the graphite space.

After decades of dedicated exploration work in Greenland, Bluejay is on the cusp of becoming an overnight success. **Rod McIlree, Chairman at Bluejay Mining Plc** explains why.

The collection of experiences gathered by **Paul Johnson, CEO at Power Metal Resources Plc**, has not only given him the tools to build a promising portfolio, but also to appreciate the value of proper business discipline for increasing the odds of success in a risky industry. Paul explains.

Thank you to our contributors for sharing their individual experiences in this edition. We would welcome your suggestions for industries to profile in future issues.

> While we aren't the only player in the mine waste business, others do it as part and parcel of their other mining work, but we are the only company that has sought to become specialists in the field."

Richard Elmer
Regional Manager, Knight Piésold

Cleaning-up from mining.

A catch-up with…
Richard Elmer

Knight Piésold's decision to re-establish a London office in 2013 after a 10 year absence seems prescient in view of the global move towards de-carbonisation, the shift in business ethos to embrace Environmental, Social and Governance (ESG) standards, and the current re-focus in manufacturing to obtain critical metals from ethical sources.

Richard joined Knight Piésold, a global firm of consulting engineers working in the mining, power, water resources, infrastructure, and oil and gas industries, in September 2013, to set up the new UK business to drive opportunities in the mining and energy industries in Europe and Central Asia, in particular. Since then, the London office has undertaken over 250 assignments in 41 countries, mainly mine waste management projects, the company's core strength.

Although consulting engineering in mining is a sizeable industry, Knight Piésold is a niche company. "While we aren't the only player in the mine waste business, others do it as part and parcel of their other mining work, but we are the only company that has sought to become specialists in the field," explains Richard. "Rather than focusing on how much gold or iron ore there is in the ground and how to process it, we focus on how to clean-up afterwards. For example, every few grams of gold mined creates a tonne of waste that needs to be stored safely and in an environmentally responsible way."

Not only is the specialist service the company offers exceptional in the market, so is Knight Piésold's business structure. The private limited company is unique in that it is entirely employee owned. "There has been a lot of consolidation between consultancy firms in the industry in recent years and many are now shareholder driven," says Richard. "We, on the other hand, are completely independent. We work with the clients that we like working with, and make money for ourselves not anonymous shareholders. Our independence is a key differentiator," he adds.

The employee-ownership model has developed into a very strong culture in the company. "It's our own business which means that our staff are much more engaged. They know that the profits the company makes don't go to a faceless shareholder, but come direct to them," says Richard. "We have a very generous profit share scheme and over the past few years in the UK, we've been able to pay a significant year-end bonus based on our profits."

> The employee-ownership model has developed into a very strong culture in the company.

According to Richard, the unusual business model really improves employee retention and commitment to the business. "In an industry where skills matter, retention of highly qualified and experienced employees is fundamental to the success of the business," explains Richard. "Because of the highly technical nature of the work, the majority of the London team hold master's degrees, many from the Camborne School of Mines which is affiliated to the University of Exeter."

In 2021, the company celebrated its 100th birthday, "This longevity speaks to the quality of the company," says Richard. But the last two years have been a particular challenge.

"We moved to a working from home model because of the pandemic, but we continued to travel to do field work because in mining you have to be able to visit the sites that you're working on, particularly for audits of tailings dams (where the waste products of mining ore processing operations are stored) to check that they are safe and secure," Richard explains. In addition to quarantines and covid-testing, travelling involved, in some circumstances, seeking special permission from the Government to enter certain countries such as, Kazakhstan. "It was a challenging time, but 2020 saw our largest revenue since we started back-up in London in 2013 – we just got on with what we had to do!" he adds.

That success was consolidated in 2021, and although 2022 started out as extremely promising, the Russian invasion of Ukraine has caused Richard to re-evaluate the business strategy. "We usually do a lot of work in both Russia and Ukraine which has understandably halted, but for different reasons, so we are re-focussing our attention to alternative markets such as The Balkans, Bosnia, North Macedonia, Serbia and Bulgaria, as well as nearer to home in the UK, where there is growing demand," he explained. "We are also doing an increasing amount of work on lithium and battery metals generally - an area of huge importance for the electric vehicle industry. These mines tend to be in more stable jurisdictions and European countries, such as in the UK, Czech Republic and Portugal."

Knight Piésold is an employee-owned, global consulting firm providing specialist services to businesses operating in the mining, power, water resources, infrastructure, and oil and gas industries.

Founded in 1921, they have an 850-strong team operating from 27 offices across 15 countries.

> It's all part of the drive towards ethical investment, ensuring that mining companies that often get included in a pension fund's portfolio of investments, are engaging with their local communities and doing the right thing with their waste, rather than putting profits before people."

In fact, the growth in the market for these commodities, vital to global efforts to hit net zero targets and combat climate change, was a development that the company identified a long time ago and was one of the determining factors behind the strategic decision to re-open an office in London.

"The move to de-carbonise economies is having a positive impact on us. As well as needing raw materials to make electric batteries and vehicles, there is also a massive focus on ESG factors, to ensure that those raw materials are obtained sustainably or at least with a minimal environmental impact," says Richard. "There is a stick and carrot encouragement from governments and investors globally. Mining companies would find it very difficult to secure investment without complying with new ESG requirements, as well as wanting to do the right thing. That's where we come in. We are able to help them," he says.

A key driver of the demand for Knight Piésold's clean-up work is a new Global Industry Standard on Tailings Management introduced in August 2019, in the wake of Brumadinho dam collapse in January 2019 and Mariana dam collapse in 2015, in which hundreds of people died. "We help our mining clients by auditing their performance against these new standards, advise them what action to take to meet them and monitor their progress as they improve their handling of the mine tailings," says Richard.

Instrumental to the development of these new standards was the Church of England Pensions Board and the Swedish Council on Ethics: a coalition of over 100 investors with around £17 trillion of investments. "They have been central to driving mining companies to disclose the tailings facilities they have, how they're managed, who monitors them and a whole series of other requirements, to the point that they have declared their intention to vote out any board members or vote against any boards that choose not to comply with the global industry standards," explains Richard. "It's all part of the drive towards ethical investment, ensuring that mining companies that often get included in a pension fund's portfolio of investments, are engaging with their local communities and doing the right thing with their waste, rather than putting profits before people.

"Traceability is a big thing now," he adds. "Whether its vehicle, or microchip manufacture, knowing where the raw materials that make your components come from is increasingly important. Big manufacturing companies need certification that their raw materials have come from sustainable, responsible and more local sources.

> We want to grow organically to around 25 engineers over next five years.

This is causing the industry to re-focus on new geographies, and is making smaller European deposits, that may have been dismissed in the past, more attractive compared to larger, more developed, deposits located in challenging parts of the world."

But Positioning itself to take advantage of a burgeoning Western-hemisphere battery metals market, was not the only reason for opening an office in London. "We have very well developed businesses in North America, South America, Africa, and Australia. The London office was opened to plug the gap in Europe, Scandinavia, North Africa, The Balkans, and Central Asia," says Richard.

The London team is small, currently 15-strong, but with ambitious plans to grow on the back of rising ESG concerns and a shift in focus away from large mines in ideologically difficult regimes to smaller critical metal mines closer to home. "We want to grow organically to around 25 engineers over the next five years," says Richard. "If we see an opportunity, we may acquire a complimentary business and we are looking to open a second office in Europe, in The Balkans or possibly in the EU following Brexit," he adds.

Mining may be an unavoidably dirty business, but Knight Piésold is cleaning it up in more ways than one.

"It promises to be a game changer in the world of advanced materials, because of its outstanding properties of conductivity and strength. The world will start to see much more of it in the years to come."

Kien Huynh
CFO, Tirupati Graphite plc

Regulating run-away growth

A catch-up with… Kien Huynh

Growth and profitability go hand in hand when it comes to business success. Companies strive to achieve growth – the more ambitious the better, to attract and satisfy investors. Tirupati Graphite has the opposite problem. Growth in demand is guaranteed because of the emerging markets for its products which are essential to global decarbonisation goals and the opening of new markets driven by the development of advanced new technologies.

Tirupati Graphite is one of the only vertically integrated graphite production companies in the world listed on a major stock exchange. Its Madagascar operations mine and process graphite which is converted into products that it markets to industrial users, but it also, unusually, has the down-stream processing ability to produce higher purity graphite products for high-tech applications such as, lithium ion batteries and expandable graphite.

Uniquely, it is also developing into the burgeoning graphene - a derivative of graphite – business. "Coined the 'wonder material', it was discovered by two scientists at the University of Manchester in 2004," explains Kien. "It promises to be a game changer in the world of advanced materials, because of its outstanding properties of conductivity and strength. The world will start to see much more of it in the years to come," he predicts.

It is the company's ability to process graphite into highly-refined, specialised products to meet developing market needs that sets Tirupati Graphite apart. "Most listed graphite developers that own assets in Australia, Canada or Africa, which is where most of the un-tapped graphite resources are located outside of China, started life as pure mining companies," says Kien. "Most are developing basic processing capabilities, but there's a limit to how much high-end refined processing work can be done in some jurisdictions because the technological requirements are quite high. We do our basic processing and beneficiation in Madagascar but we have our downstream value-added processing in India where we have access to higher technological capabilities, compared to what we would be able to achieve with similar downstream facilities in a country like Madagascar. Our USP is that we have the technology to go downstream which can be located closer to the supply chains of end-users such as battery and anode material manufacturers," he adds.

Tirupati Graphite is a relatively young company, first registered in the UK in 2017 and listed on the standard list of the main market of the London Stock Exchange in December 2020, but the founders' group has been in the graphite business for decades. "We have experienced heads with proven capabilities developing new high-quality graphite assets. Our success in producing graphite in a relatively short period of time comes from the many years of experience. Graphite is not like other base or bulk commodities," says Kien. "Our team knows how to work graphite and how to get it into the forms that are being demanded by the markets, whereas most other graphite mining companies are only just starting to realise where the money is in graphite - it's not in the basic mined and processed product, but the high-end applications of graphite, such as lithium ion batteries, expandable graphite markets and other specialised applications such as in electronics, autos and aerospace."

"We stand out because we work across the entire value chain of graphite as one of the few true vertically integrated companies operating in the graphite space."

"You will find other graphite developers listed, but they are primarily mining companies focused on developing their primary mines, many now with aspirations to move downstream. With the Chinese currently holding virtually all of the downstream processing capabilities, it is rare to find a listed company that is effectively a one-stop-shop for graphite through to graphene," says Kien.

The drive to diversify supply chains, brought home to roost during the Covid-19 pandemic, is one of the driving forces behind Tirupati Graphite's successes to-date, and it expects to see that continue going forward. "The US, in particular, has shifted its focus to ensure that its supply chains are solid, reliable, traceable, and also sustainable; now the whole world is following suit," says Kien.

"US trade relations with China suffered under the Trump administration and things haven't improved under the current Biden administration."

> Our success in producing graphite in a relatively short period of time comes from the many years of experience.

"But the USA is not alone; there are many countries around the world that have trade relations difficulties with China at the moment, including Australia. But China supplies over 70 per cent of the world's natural flake graphite, and around 90 per cent of the downstream, specialty graphite products for high-tech applications; basically they have a monopoly over these markets," explains Kien. "The world is crying out for new, alternative graphite sources and we've been one of the first to develop actual production from our assets in Madagascar to provide the world with access to an ex-Chinese source of high-quality graphite, which is in high demand.

> “Listing was a means of giving us greater access to capital markets. The investment community and institutional funds that have invested in us to date allowed us to do what we have done and achieve what we set out to achieve.”

“Right now the company is focused on expanding our production capacity to meet the forecast huge increase in demand,” says Kien. “The company is set-up to grow. We plan to expand our production capacity over the next three years to become a globally significant supplier. As a pre-listed company, we raised capital in the London markets which was invested into developing production capacity. We went from zero to 3,000 tonnes per annum in 2019, and then during the Q3 of 2021 we commissioned an additional 9,000 tonnes, taking us up to 12,000 tonnes per annum. By Q3 this year we will take that capacity up to 30,000 tonnes, and then by end 2024 we intend to be producing over 80,000 tonnes of annual capacity.

“It’s a considerable increase, but the other factor that distinguishes us from the market is that we’re doing it in steps,” explains Kien. “We are building modular plants designed to expand our capacity alongside the growth in the graphite market in a controlled way. Many competitors looking to develop assets in the past ignored real graphite demand and attempted to bring on large capacities of 100,000 tonnes or even larger capacities in one go, which required huge amounts of capital expenditure and creates a lot of financing and execution risks as well as significant market and supply risks.”

Clearly Tirupati Graphite’s plans required capital. “Listing was a means of giving us greater access to capital markets. The investment community and institutional funds that have invested in us to date allowed us to do what we have done and achieve what we set out to achieve. We considered different capital markets and stock exchanges and London was chosen because it has good depth, understanding and appetite for mining and industrial sector focused companies, as well as growth stories like ours,” says Kien.

One of the biggest challenges to achieving listing was undoubtedly Covid-19. “The rigmarole of the capital markets and the commodities markets was made even more challenging due to the pandemic. We wanted to be listed earlier, but the pandemic disrupted markets and slowed the whole process and negatively impacted appetite for new IPO’s. When people’s attention is elsewhere, accessing new capital for a new venture is difficult,” says Kien. “In addition, during our time of preparing for listing we experienced a number of volatile shocks as a result of external forces, be it in commodities or equity markets, that caused delays, not just to the listing, but because we were also looking to raise some money at our IPO, and capital tends to dry-up when markets are too volatile.”

The next challenge is managing growth. The graphite sector is an essential element in the electrification of the world, alongside lithium, cobalt, nickel, and copper: some of the core commodities that are required to achieve the world’s net zero emissions targets.

“We’re very optimistic about operating in this environment in the next years and decades,” says Kien. “The transition is not going to be quick, although it seems quick on the uptick. Adapting everything to how it needs to be in an electric world is a progressive investment cycle. While there’s already a shortage in supply for what we’re producing and rising demand, there’s a need to manage our resources as well as practical limitations on growth. There’s a tension between growing in a modular, controlled way and the racing global demand. Businesses can fail by trying to grow too fast. Our challenge is to keep on growing as fast as we can, but to do it in a sustainable and prudent manner which means exercising strong financial discipline and planning.”

Tirupati Graphite PLC is a fully integrated specialist graphite and graphene producer, with operations in Madagascar and India.

Its global multi-location operations include primary mining and processing in Madagascar, hi-tech graphite processing in India to produce specialty graphite, and a state-of-art graphene and technology R&D center to be established in India.

> After decades of dedicated exploration work in Greenland, Bluejay is on the cusp of becoming an overnight success."

Rod McIllree
Chairman, Bluejay Mining Plc

Surfing ahead of the wave

A catch-up with… Rod McIllree

Christopher Isaac "Biz" Stone, co-founder of Twitter, said: "Timing, perseverance, and ten years trying will eventually make you look like an overnight success". After decades of dedicated exploration work in Greenland, Bluejay is on the cusp of becoming an overnight success.

Rod McIllree is a founding director of Bluejay Mining Plc, the company which emerged from a merger with AIM listed FinnAust Mining Plc, a subsidiary of Western Areas Ltd, an Australian nickel mining group, in 2017. The company currently has four projects that it is actively developing, one of which will enter production this year.

"The company's near-term production asset is the Dundas Ilmenite Project in Greenland, which Bluejay has been working since 2014," says Rod. "Not only does the project have a very substantial titanium resource - recognised has the highest grade ilmenite sand project globally, but the Nordics, including Greenland, are stable sovereign jurisdictions which is an important consideration right now." Dundas will enter production at a time when the Russian invasion of Ukraine has sparked a global re-evaluation of raw material sources and supply lines.

Also causing excitement is Bluejay's Disko-Nuussuaq ("Disko") project – a nickel, copper, platinum and cobalt project approximately the size of Luxembourg, which potentially hosts mineralisation similar to the world's largest nickel/copper sulphide mine in Siberia. "It's probably the most significant asset in the entire BlueJay portfolio," says Rod.

This project entered into a joint-venture with KoBold Metals in August last year. "This group of high-profile Americans: its main shareholders are high-profile Silicon Valley investors, saw the issue of raw materials security and supply, and recognised the importance of getting and maintaining access to critical materials used in the manufacture of batteries for electric vehicles and the technology we use everyday in society.

Bluejay Mining plc is a Greenland centric multi-commodity, multi-project exploration and development resource company.

Bluejay currently has four projects in Greenland, which it is actively developing.

The Company's strategy is focused on the development of high-grade, large-scale resource projects from resource delineation into production.

Bluejay Mining is dual listed on the London AIM Market and Frankfurt Stock Exchange.

The relationship is effectively a tie-up with Silicon Valley in its quest to ensure that their industries and the whole decarbonisation movement is well-supplied with nickel, colbalt, copper and platinum group metals from stable and ethical sources. We're hoping for big things from Disko this year," Rod adds.

BlueJay's team of geologists and technicians have been working in Greenland for close to 20 years. The same team has seen the company through it's evolution from Greenland Minerals and Energy, to Greenland Minerals, to Bluejay. "Together we have about 140 years of Greenland exploration experience!" says Rod. "Greenland gets in your blood and the opportunities for profound mineral discoveries are amazing."

> Bluejay overcame this challenge through sheer persistence and doggedness.

Greenland is one of the last underexplored mineral regions in the world. "It still has almost all of its mineral endowment available for extraction," says Rob. "There are two reasons for this," he explains. "The first is that the Danish State for the last 100-odd years, as part of its management of Greenland, has provided several assistance programmes one of which is environmental and geological. The Geological Survey of Denmark and Greenland has been very active and has essentially mapped what was easily mapped and available for extraction.

"The second part of the story is that Greenland's landscape is changing almost year by year as a result of climate change and the resulting melting ice-caps and receding glaciers means you are now able to look at rocks that have never been looked at before.

There is a frontier aspect to it, and because Bluejay has been in Greenland for so long, we've been able to identify and secure what are effectively Greenlands best mineral occurences and that's reflected in the multi-project portfolio that we have at present."

Bluejay is on the cusp of something very exciting, but it hasn't been easy getting to this point.

"The biggest hurdle was overcoming people's perceptions of Greenland," says Rod. "When we first started this process back in 2004, Greenland was like Mars to most people. Nobody knew much about it, it wasn't a big tourist destination, and there wasn't much in the news about climate change. It was 'foreign' on every level.

"As geologists and explorers, we are prepared to go to the ends of the earth to find the next deposit of metal, so the concept of going to Greenland to us wasn't that strange, but it was a challenge trying to get investors interested and to understand the potential," he explains. "On the one hand we were trying to raise money to undertake all these programmes and developments, and on the other hand we almost had to act as the tourist information bureau for the country at an international level."

Bluejay overcame this challenge through sheer persistence and doggedness: "We just wouldn't give up," says Rod. Getting investment required a long lead time to allow banks, funding and export credit agencies to get their heads around the regulatory environment, and the environment in Greenland in general. "The most frustrating thing about the process is that it's taken longer than we all thought that it would for reasons that are both in and out of our control. But, there is now a growing recognition that Greenland is a pretty good place to be doing business and we're seeing a lot more activity, whether that be other exploratory companies, or investors," he adds.

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The big breakthrough in changing the awareness and understanding of Greenland came from climate change, says Rod. "The melting ice was really starting to get mainstream attention."

But the biggest break came in 2019 when then U.S. President, Donald Trump floated the idea of buying Greenland to secure access to its natural resources. "At the time we were all shaking our heads," says Rod, "but with hindsight what that did was validate the country, the jurisdiction, and the strategy that we'd been implementing for years. We saw massive interest in the country after that. It's entirely possible that the American investors in Disko are a consequence of that brash statement – you never know! It certainly made people realise that Greenland is full of everything that the Western world needs, and that it is a safe, stable jurisdiction which falls beautifully between Europe and America."

Thanks to the team's work to consistently maintain a high profile in Greenland over the last 15 years, and lay the groundwork with the media, when people Googled to see what Trump was talking about they found Bluejay, Dundas and Disko: a solid mining foundation. "It's crazy to think that all it took to crystallize the understanding we'd been building towards for years, was one tweet from Trump!" Rod exclaims.

Another significant hurdle was getting full and final sign-off on the development and mining licence for Dundas, considering the complicated process to gain permits in this highly-regulated environment. Greenland probably has one of the most rigid environmental standards globally.

"The Danes are amazing people, but they are fastidious and that comes through in their environmental work. Greenland is not some sub-Saharan jurisdiction with a compliance regime that changes as frequently as the political junta in power at the time – this is a stable, democratic government backed by the crown of Denmark.

It takes a substantial amount of work to secure an exploration licence and there are no shortcuts. Exploration takes longer, it's more expensive, but it's rock solid," Rod says. "Because of our long history and experience in Greenland, we have first mover advantage and have been able to licence six globally significant projects, and each one of them could be a company making asset in its own right," explains Rod. Over the next two years Bluejay will be systematically working through these projects, starting with Disko this year.

"All the geological information gathered since its first discovery over 140 years ago, indicates that this could be the second largest occurence of nickel in the world," says Rod. "If that thesis is proven, and it's only going to take one drill hole, then the opportunity for manifold returns on investment is there. But its not just one project, we've got several on the go. That's what separates us from our competitors."

A combination of factors is creating a perfect storm environment and Bluejay finds itself at the front of a very big wave.

"The commodities sector is very cyclical, when prices are depressed and there's a complete lack of interest there is little point in pushing projects that can't be pushed. We've spent the last 5-6 years not progressing anything at any great speed or on any front, but holding it all together," explains Rod. "Partly that was Covid-19, but also because investor interest was in other areas, like tech and bit-coin - that's now changing.

People are beginning to realise that the entire world as we know it is based on the very concentrated supply of what are effectively very rare metals.

"The zeitgeist now in the investment community is recognising that these commodities are in short supply - the lack of investment over the last ten years because of the lack of interest and the lack of price movements, means that there are no new mines coming online, and that is being exacerbated by increasing sovereign risk.

"If ever there was a time to bring an alternative supply of nickel online to the Western world, that's now. The only other source is the Norilsk mine in Siberia. As a result of sanctions, the price of nickel went from 20,000$USD a tonne to 100,000$USD and now the exchange has been turned-off so you can't even price nickel to buy!" says Rod. "We find ourselves with several of the best rare metal assets globally, located in safe jurisdictions, and that's a really good place to be. Success is all about timing and our time is now. The next 12–24 months will be the delivery of our multi-year strategy across all of our projects. All the hard works been done and now we're just set for results."

> In 2019 we raised £1m to get what was African Battery Metals, which became Power Metal Resources in July 2019, back on its feet and back on the market with a new management team with a new kind of ethos.”

Paul Johnson
CEO, Power Metal Resources Plc

From famine to feast

A catch-up with… Paul Johnson

They say a rolling stone gathers no moss, but the collection of experiences gathered by Paul Johnson, in a varied career, has not only given him the tools to build a promising portfolio of mining project ‘packages’, but also to appreciate the value of proper business discipline for increasing the odds of success in a risky industry.

“I trained as an accountant because I didn’t really know what else to do,” jokes Paul. From qualifying as a Chartered Accountant in Dudley in 1995, he spent a year in a ‘Big 6’ firm in Birmingham then quickly moved to qualify as a Chartered Loss Adjuster handling major-loss commercial insurance claims. That forensic accountancy work in insurance saw Paul recruited by a large American property insurance company helping to assess large scale commercial loss risk for their leading global clients.

All this set the backdrop to Paul establishing his own risk management business in 2008. Timing was not great, however. “It was just before the global financial crisis which was a disastrous move,” says Paul.

“I was at a cross-roads. I could go back into the world of forensic accountancy work and make a reasonable salary, but I wouldn’t be able to achieve anything significant, so I decided to focus on investing. I used the skills I had learnt to look at the stockmarket and AIM in particular, to identify undervalued companies.”

Paul started in December 2008 with a small portfolio and by 2010 had secured a +150x return on his original portfolio.

“I focused mainly on cash burn business models including small biotech companies, some early stage technology businesses and principally junior resources (a small company that is developing or seeking to find and develop a natural resource deposit) - what you would call super high risk,” explains Paul.

He discovered that there was very poor quality information in the mining and exploration sector for private investors. “There were lots of analysts producing reports that used big words: jurassic, proterozoic, just trying to impress,” says Paul. “So with a fellow investor we created MiningMaven, an investor relations website, and introduced value propositions, effectively business model analyses, for junior resource companies. We analysed management capability and experience, financial and operational strategies and their implementation, marketing and communications, and use of technology. The idea was to make the exploration sector accessible to all investors by looking at these companies from multi-disciplinary perspectives.”

Ten years ago Paul joined the board of one of MiningMaven’s clients, ECR Minerals plc. It was the first of many such moves. He has now been on the board of eight UK companies: Greatland Gold Plc, Thor Mining Plc, Metal Tiger plc, Metal NRG plc, China Africa Resources plc, Rockfire Resources plc and Power Metal Resources. “Recently, I managed to pass my longest ever service period in any one plc,” he laughed. He is also a director of Value Generation Ltd, a family investment and advisory company formerly focused on risk management services generally and now focused on the natural resource sector.

That’s some journey. “I’ve moved around quite a bit in the last ten years, restructuring and refinancing many plc businesses. I’ve put in new projects, new management teams and new finance to restart them. Over the years, I have probably been involved in corporate work and financings raising close to +£75m,” he says. He initially used his private company, Value Generation, as the vehicle for restructuring and related work, but has now brought the work into a public company, Power Metal Resources, which is listed on AIM.

“In 2019 we raised £1m to get what was African Battery Metals, which became Power Metal Resources in July 2019, back on its feet and back on the market with a new management team with a new kind of ethos,” explains Paul. “We started in February 2019 with three legacy exploration projects looking for gold and base metals in West & Central Africa. Then we started to build-on additional projects. Some were acquired outright for shares and cash, some we created ourselves by going to certain parts of the world and staking ‘our own ground’ - where we put in applications for resource ground to explore. We’ve built the company up to a 14-15 project package business spread across North America, Africa and Australia: safe jurisdictions where there’s still plenty to go at, and we currently target ten metals working in six different countries,” he adds.

The metal mining industry is feast or famine, according to Paul. “People can make vast amounts of money from very little, but the opposite is also true. For much of the last 3 years there has been little interest in the junior resource sector - it’s a very niche world, but given world events I expect that will change. There will be buy recommendations for all sorts of junior resource shares in the mainstream press soon,” he predicts.

Why is it going to change? “In the morning, when you make a cup of tea, the kettle you use to boil the water depends on metal in the element and copper in the wiring. The cars we drive or the public transport we use depends on metals and that dependency increases significantly with electric vehicles. The same applies to our phones and to our IT equipment generally.” Paul explains. “Everything you do in life requires metal. Traditional western nations are continuously demanding more and there are huge parts of the world that are now seeing dramatic growth in metal demand as they develop at pace. We often hear of progress being achieved in China, India, South America and Africa – and they’re consuming huge amounts of metal.”

> "If you're going to do deals, you've got to do them when nobody else wants to do them."

"But for the last 20 years, there's been a massive under-investment in development of the next major discoveries or adequate funding for the junior exploration companies that often find them," says Paul. "Larger firms have often developed the projects they have, but not necessarily sought to secure a pipeline of new projects for when their existing resources run out. We now have a world where world leaders at COP 26 are making environmental promises – to move to electric vehicles, invest in wind farms, etcetera, but there's very little supply of the metals to execute on the plans and very few new projects or big new discoveries to meet the burgeoning massive demand."

"The demand for metals will be enormous and money will come into our space," he says. "The world now knows it needs nuclear energy which needs uranium, and Power Metal has considerable uranium interests. China has traditionally been the world's largest supplier of tungsten which is used for various industrial applications including hardening for tooling – and ironically there's going to be a lot of demand for industrial equipment as the world grows in line with its aspirations. Through Power Metal's subsidiary, Golden Metal Resources we have the largest established tungsten resource in the USA. Military action and geopolitical instability have rocked the security of supply of many of the world's commodities including nickel, as well as platinum and palladium, rare earths, etcetera," he adds. "We've not seen this dynamic in the world, at this magnitude of significance, ever before in the metals space."

Paul has built up Power Metal Resources' project portfolio in a period of general sector famine. "That's when you get the best projects at the most reasonable prices," he says.

"If you're going to do deals, you've got to do them when nobody else wants to do them. Then you hold on to those projects. We have stretched ourselves to build this portfolio – juniors generally don't take on 14-15 project packages!"

The term 'Package' is used because within many of the project packages are multiple individual projects. For example, in the Athabasca Basin uranium package in Saskatchewan, Canada, there are actually 7 projects under one umbrella. "If I said we had effectively 45 projects, people may think we were completely barmy, but that's effectively what we've got, and that is what you can do in times of sector famine" he adds.

"The idea was to deal with the pain and the work of keeping the projects in good standing and move each one forward up the first valuation curve – from an interesting project that might have metal in the ground, to confirmation of metal in the ground. At that point we ask ourselves if we want to develop the project internally, with our own exploration, or do we put the project package into a separate vehicle to list it on an exchange, or dispose of it, to create a value crystalisation event for the company," explains Paul. "The reality is we want to find the most expeditious and corporately viable way to the metal discoveries. Because if we get a discovery then the valuation of the project will go up exponentially. It's looking as if about 50% of our projects will go into value crystallisation after stage one exploration, and the rest into internal development. That figure can change."

It's an unusual structure for the exploration industry which is usually a cash burn business like biotechnology or fintech companies, which raise capital from investors to spend on operations in the hope of finding something that has real value that can be developed into a product and be sold to a big company for a large sum.

"The chances of doing that in exploration is remote," says Paul. "Mark Twain is quoted as saying: 'A mine is a hole in the ground with a liar on top' and from what I have seen as an investor it feels difficult to argue with that theory sometimes. Most of the companies that you see in the junior resource space will never find a major discovery. Most of the people that work in those companies will not find a major discovery in their careers. It doesn't mean that investors can't make money in those shares along the way or indeed, that the managers of those companies don't make a lot of money for themselves, but the chance of transformative success through discovery is low."

According to Paul, you can increase the odds of success even in such a risky business environment. "You deal with each project as a proper business, that has to wash its own face," he says. "You diversify; you invest in new projects at difficult times when you can acquire the best projects on reasonable commercial terms; and you ensure that each project is well funded, has management attention, a good operational plan with strategic objectives, and then you start to hack away at the odds."

Out of the project universe, many will be legacy projects that keep doing the rounds, says Paul: "Weed out those 'journeyman'-type projects and you reduce the odds. Most projects fail because they don't have enough capital deployed, so deploy it and reduce the odds dramatically. If you have enough working capital in your business you can deploy the right technical expertise, focused on capital gains rather than salary. You've got to put proper operational planning in place; we have a fundamental commercial ethos about doing the business properly in a disciplined way – and that drops the odds again.

> "I'm not a great believer in luck, or good fortune. I think success is about discipline."

Power Metal Resources plc is an AIM listed metals exploration company which finances and manages global resource projects and is seeking large scale metal discoveries.

The Company has a principal focus on opportunities offering district scale potential across a global portfolio including precious and base metal exploration in North America, Africa and Australia.

Project interests range from early-stage greenfield exploration to later-stage prospects currently subject to drill programmes.

> “We’re also going to see big inflation which will drive the sensible money towards hard assets and commodities – gold, silver, copper, nickel, zinc. We are already seeing historic price rises in these metals.”

Then it’s about whether you can sell your story to the market and get people to invest in you. If you attract capital and the right people, with the right projects and approach, then you end up with a dramatically better chance of success,” he explains.

“I’m not a great believer in luck, or good fortune. I think success is about discipline. As golfer, Gary Player, said: ‘The harder I practice, the luckier I get’. People say that the exploration sector is gambling. It’s not. In gambling you know the odds, in speculation you don’t know the odds. But you can narrow the chance of success down by having a disciplined approach.”

The financial markets themselves make exploration a risky business, according to Paul.

“Most of the people that invest in our space lose money,” says Paul. “That’s because we have a situation in the stock markets where companies fail, but they don’t usually go bust. Their share price grinds down and they raise money at ever lower prices issuing shares at discounted levels and the share dilution kills the earlier shareholders in at higher prices.”

“I would like to see all investors and possibly regulators asking how much management teams are paying themselves, what performance metrics are in place to make sure they’re actually delivering, how the share price is performing, how many announcements they are releasing, whether they are getting qualifications in their audit reports, how many projects have they taken on and when they dropped them, and how much they are writing off from their investments – because that’s people’s money! That’s what, as a lapsed auditor, I would call substantive testing of a business,” Paul says.

Paul predicts that soon there will be a lot more junior resource companies listed on the stock markets. “At the moment there are thousands of metal exploration companies listed in Canada, hundreds in Australia, and about one hundred in London, possibly less,” he says. “London will see a dramatic increase in that number and we want to be part of that new business creation process. But the vehicles we create and the people/ management within them will have our same disciplined business ethos and focus on building value.”

“At the moment, because there’s only a hundred companies, investors through London only have a couple of choices in each type of opportunity such as gold in Australia, or graphite in Africa or uranium in North America. The number of companies listed in London will swell when the size of investment capital deployed into the metal space increases, so there will be more capital to support more companies,” explains Paul.

Where will the money come from? “A lot of cheap money has been printed over recent years. A huge proportion of all the US dollars ever printed have been printed since January 2020, for example. That money filters out” says Paul. “We’re also going to see big inflation which will drive the sensible money towards hard assets and commodities – gold, silver, copper, nickel, zinc. We are already seeing historic price rises in these metals. It hasn’t yet filtered out fully to the big companies that are producing these metals, but it’s starting to. It will then filter out to the smaller companies producing these metals, and then it will filter out to the juniors - that’s where we are. I think we’ll see billion dollar valuations on some of these juniors (micro-caps) in due course,” he predicts. “We are the umbrella salesmen in our business - we tend to outperform when things get tricky.”

About PKF
Simplifying complexity for our clients

PKF is one of the UK's largest and most successful accountancy brands.

We have a strong reputation with publicly listed companies, and understanding these highly regulated, technically complex businesses has become a specialism of ours. We focus on delivering consistent quality and making all our clients feel valued.

Our specialist capital markets team has vast experience working with companies listed, or looking to list, on a range of international markets including the London Stock Exchange Main Market (Premium and Standard), AIM, AQUIS, NASDAQ & OTC, ASX and TSX & TSX-V.

PKF in the UK...

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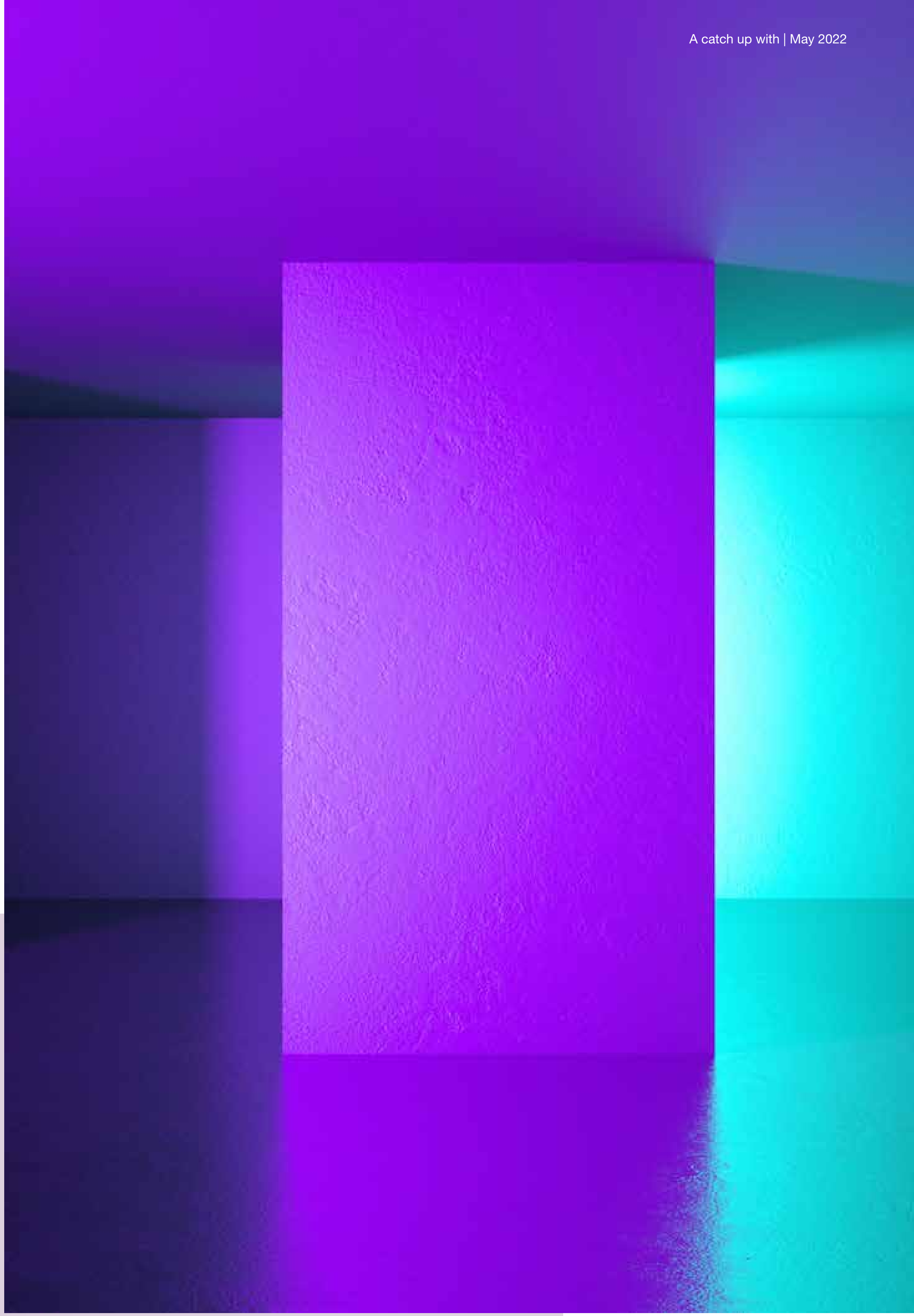

Our Capital Markets credentials

Our auditor rankings from ARL

2 Total AIM listed clients

6 Total UK stock market clients

1 Basic materials sector

5 Energy sector

6 Technology sector

6 Financials and Real Estate sector

How we can help

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- IPO →
- Specialist transactions →
- Audit & assurance →
- Tax →
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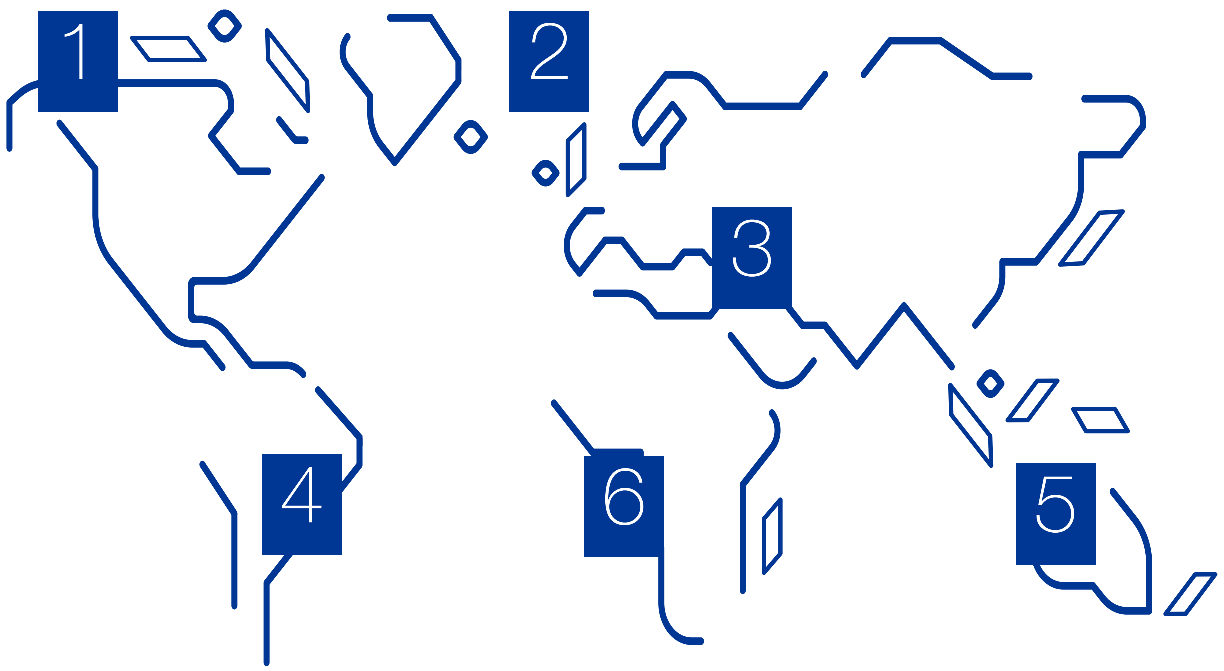
PKF UK in numbers	Capital Markets in numbers	PKF International in numbers
9th Largest Audit practice in the UK	**160** Listed audit clients	**Part of the 14th** Largest global accounting network
35 Offices across the UK	**£2.7bn** Value of transactions advised on in last 10 years	**480** Offices in 150 countries
2,035+ Employees and 167 partners	**100+** Transactions advised on in last 5 years	**$1bn+** In aggregate fee income
£182.5m Fee income and growing rapidly	**26** International businesses brought to the UK in last 10 years	**20,000** Employees



Our International Natural Resources Credentials

1. N. America

Canada
Pembridge Resources Plc
Solo Oil Plc
i3 Energy Plc

USA
Bens Creek Plc
Thor Mining Plc
Richland Resources Plc

2. UK, Channel Islands, Ireland

Ireland
Erris Resources Plc
Predator Oil & Gas Holdings Plc

Channel Islands
SigmaRoc Plc

United Kingdom
i3 Energy Plc
Trident Resources Plc
Hurricane Energy Plc

3. Europe & Middle East

Cyprus
Chesterfield Resources Plc
Caerus Minerals PLC

Finland
Bluejay Mining Plc
SigmaRoc PLC

Germany
Panthera Resources Plc

Greenland
Bluejay Mining Plc
Greenroc Mining Plc

Kazakhstan
East Star Resources Plc

Italy
Coro Energy Plc

Macedonia
Fox Marble PLC

Romania
Serinus Energy plc

Slovakia
ARC Minerals Ltd

Sweden
Erris Resources Plc

Turkey
Arianna Resources Plc

4. Central & S. America

Argentina
ECR Minerals Plc

Brazil
Cadence Minerals Plc

Chile
Great Southern Copper plc
Altus Strategies Plc

Nicaragua
Condor Gold Plc

Peru
Minera IRL Ltd

Trinidad
Columbus Energy Resources plc
Predator Oil & Gas Holdings Plc

5. Asia & Australia

Australia
Altus Strategies Plc
Consolidated Minerals Ltd
Cadence Minerals Plc
ECR Minerals Plc
Empire Metals Ltd Greatland Gold plc
Keras Resources Plc
Mila Resources Plc
Red Rock Resources Plc
Rockfire Resources Plc
Tectonic Gold Plc
Thor Mining Plc

India
Lionsgold Ltd
Panthera Resources Plc

Indonesia
ECR Minerals Plc
Coro Energy Plc

Tajikistan
China Nonferrous Gold Ltd

6. Africa

Botswana
Kavango Resources Plc

Cameroon
Oriole Resources Plc

Democratic Republic of the Congo
Red Rock Resources Plc

Djibouti
Oriole Resources Plc
Thani Stratex Resources Ltd

Egypt
Thani Stratex Resources Ltd
Altus Strategies Plc

Ethiopia
Altus Strategies Plc
Thani Stratex Resources Ltd

Ghana
Consolidated Minerals Ltd

Ivory Coast
Altus Strategies Plc

Kenya
Red Rock Resources Plc

Liberia
Altus Strategies Plc

Madagascar
Tirupati Graphite Plc

Mali
Altus Strategies Plc
Cora Gold Ltd

Morocco
Altus Strategies Plc
Emmerson Plc
Predator Oil and Gas Holdings Plc

Mozambique
Pathfinder Minerals plc
Xtract Resources Plc

Nambia
Kazera Global Plc

Senegal
Oriole Resources Plc

South Africa
Clean Invest Africa Plc
Kazera Global Plc

Tanzania
Helium One Ltd
Solo Oil Plc

Togo
Keras Resources Plc

Tunisia
Serinus Energy plc

West Africa
Panthera Resources Plc

Zambia
Galileo Resources Plc
ARC Minerals Ltd

Get in touch today
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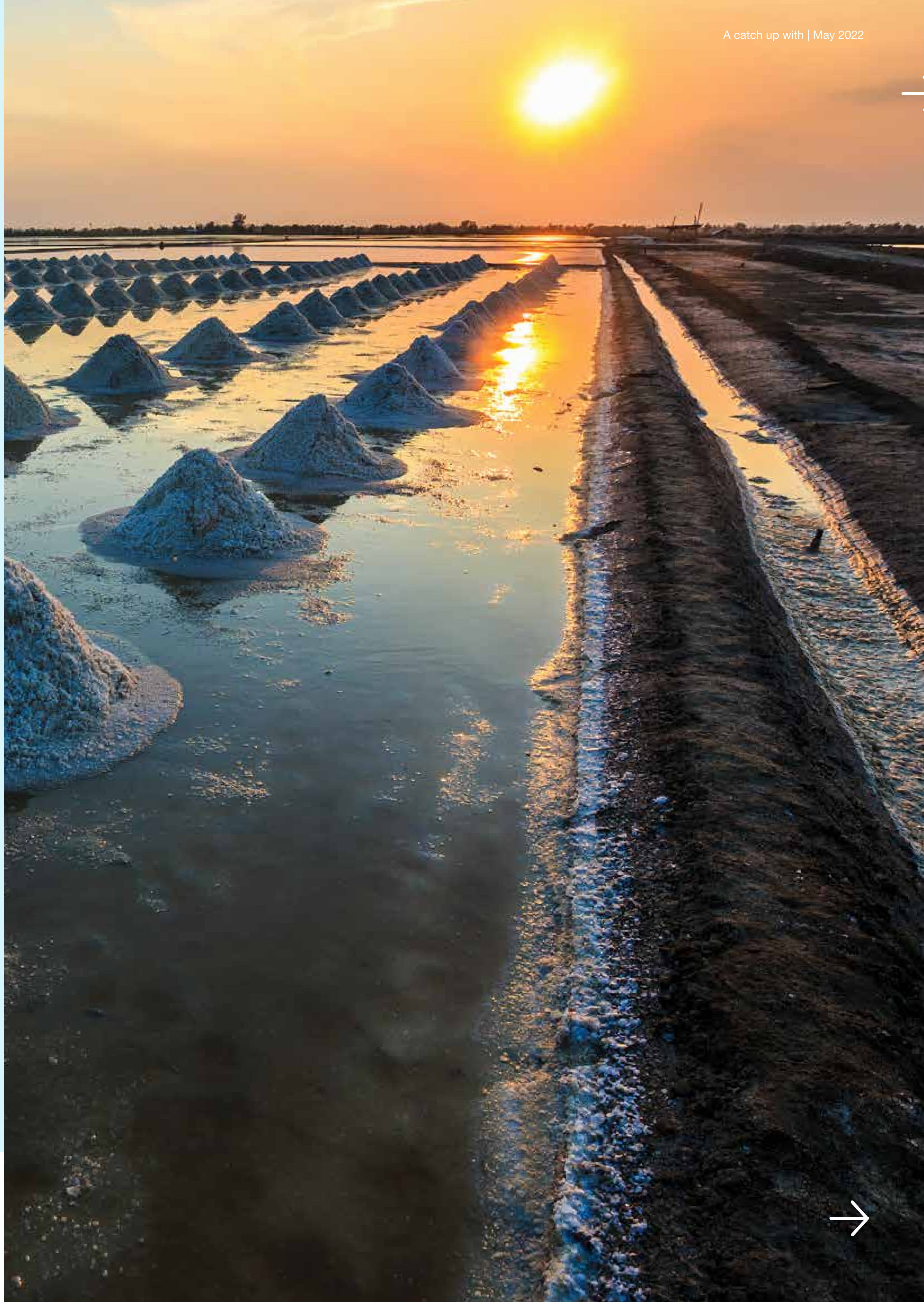

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