



Real Estate Whitepaper

Sponsored by



EDMOND
DE ROTHSCHILD



Clear and Independent Institutional Investment Analysis

We provide institutional investors, including pension funds, insurance companies and consultants, with data and analysis to assess, research and report on their investments. We are committed to fostering and nurturing strong, productive relationships across the institutional investment sector and are continually innovating new solutions to meet the industry's complex needs.

We enable institutional investors, including pension funds, insurance companies and consultants, to conduct rigorous, evidence-based assessments of more than 5,000 investment products offered by over 700 asset managers.

Additionally, our software solutions enable insurance companies to produce consistent accounting, regulatory and audit-ready reports.

To discuss your requirements

+44 (0)20 3327 5600

info@camradata.com

Find us at camradata.com



Join us on LinkedIn



Follow us on Twitter @camradata

Contents

03	Introduction
04	Real Estate Roundtable
10	Roundtable Participants
14	Edmond de Rothschild
16	M&G Investments



Welcome to CAMRADATA's Real Estate Whitepaper

Property's status as the original alternative to a portfolio of securities has become blurred over the last decade. Pension funds and insurers have been drawn to an increasing number of real assets, from communication towers to gas pipelines to toll roads. Many of these compete to offer the same kind of reliable income streams with inflation-linkage that property does. UK pension funds especially have preferred lower-yielding, lower risk contractual infrastructure investments.

Property therefore has some rivals. It also has socio-economic trends shaping its future. Both the high street and shopping centres are having to adapt to the threat of the internet and the strength of the 'evening economy'. Both residential and office complexes now have to acknowledge that working from home is not a temporary phenomenon. And between all this, investors have to mull what price they are willing to pay for the logistics facilities that house more goods than ever.

Sustainability adds a final twist of complexity. Hitherto, real estate was looked upon as a stable source of revenue. Now every extant asset's energy performance is an issue and every new-build's social purpose a consideration. Investors are being asked to make society better with their capital. This is an extra demand that would be made easier with government policy on side.

Real Estate Roundtable

The CAMRADATA Real Estate Roundtable took place in London on 27th April 2022.



Property is often described as the original alternative to equities and bonds in a portfolio. But the last decade has witnessed a far wider array of real assets come into the hands of pension funds and insurers. So the first question at the CAMRADATA Real Estate roundtable 2022 was whether property has been holding its own versus other asset types. Jaspal Phull, head of real assets research at pension fund consultancy, Redington, said that at the start of the pandemic in 2020 there were concerns about how real estate would hold up in terms of valuations and collection of rents. The last 12 months' returns have been very good, according to Phull, but he noted the much wider dispersion than normal. "We would expect a range of 2-3% for UK property funds whereas it was upwards of 11% in 2021-2," he said. Strong performers included industrials, notably logistics, and residential.

The latter is on more and more institutional investors' buy-lists, and Phull noted how core residential fared well in terms of rental collection during the pandemic. Phull noted that now everyone was looking at the alternatives sector

"Within alternative sectors, he mentioned residential and social housing as areas of interest in the UK and life-sciences as a developing area more generally."

and particularly residential – the challenge was getting hold of assets.

For Quilter Cheviot, Oli Creasey, head of real estate research, agreed that over the last 12-18 months property had held its own. Volatility had been relatively low; income had been reasonable. One caveat was that by sector, industrials not retail, had delivered. His second caveat was that the summary fits if you held property throughout the pandemic. "April 2020 was a sticky situation if you were attempting to sell," said Creasey. "We have to put our hands up and say even in fund form, property is not a liquid asset."

For MJ Hudson, an asset management consultancy and adviser to asset owners including UK pension funds, William Martinez, team leader in the research team covering alternatives and private markets, said that property retained a fundamental attraction versus

most publicly traded securities in that investors gain an amount of control over a single asset to a greater degree compared to other asset classes such as listed equities.

In view of favourable forward-looking drivers and given the outperformance of equities over real estate in the past decade, he predicted an element of catch-up in the relative property returns. Martinez said that MJ Hudson sees interest in core/core-plus and increasingly value-add strategies, which can be implemented directly or indirectly via fund of funds approaches depending on the characteristics of the mandate. Within alternative sectors, he mentioned residential and social housing as areas of interest in the UK and life-sciences as a developing area more generally.

In the main he agreed with the other panellists that real estate had overall been resilient during the



“Creasey pondered what paradigm shift could come about because of changing needs, wants and legislation to tackle global warming.”

pandemic, albeit with differentiated dynamics by sector, singling out last-mile logistics and data centres as strong performers. He noted that real estate is not a unified asset class and that different drivers for different types of assets should be borne in mind, citing the example of a London prime office asset versus a brownfield asset in another region. Additionally, the implementation of real estate is an important consideration, with different factors to consider depending on the investment route, whether via direct real estate, fund of funds or REITs.

The ABC of EPCs

The CAMRADATA panel then discussed investing for the future. Creasey pondered what paradigm shift could come about because of changing needs, wants and legislation to tackle global warming. For example, from 2023 office buildings in the UK with an Energy Performance Certificate (EPC) of F or G – the lowest scores – cannot be re-leased. Lee McDowell, portfolio manager for M&G's UK and European Long Income strategies, added that he anticipated the ban being extended from 2027 to buildings with an EPC rating of E and D. From 2030, the standard will be ratcheted up to B.

He said: “Due to the long lease terms and tenants' own carbon commitments, we have seen a willingness of tenants to work with M&G to improve existing buildings’

ESG metrics. James Whidborne, manager of EdR REIM's Build-to-Rent and Affordable housing strategies, noted the danger of stranded assets. EdR REIM has a corporate target of being net-zero by 2030. That relates to its own operations. But Whidborne noted that EdR REIM's Build-to-Rent strategy already has a minimum EPC target for new buildings of 'B'. This helps create a virtuous circle where energy efficiency means lower bills and hence lower living costs for tenants. He added that the B-or-above target was relatively easy to achieve in the UK because building regulations, the planning framework and national policy on decarbonisation all promoted sustainable developments. “Because this kind of residential is an all-inclusive rental model, it also means that EdR REIM uses its heft as the landlord to negotiate with utilities,” said Whidborne.

He added that new was not necessarily best in every situation. He reckoned there were many cases where the destruction and reconstruction processes were so carbon-intensive that energy-

efficient refurbishments were a more sustainable option. McDowell said that M&G had done such refurbishments for a number of buildings in Long Income strategies. He said that pressure from legislation such as on EPCs meant a disparity would emerge between good and bad ESG assets: “Asset managers and owners have to think now about the investment case for bringing a building up to standard.”

Phull said that more and more funds were looking for impact Real Estate and Redington had met with new Value-Add strategies that were deliberately acquiring poorly-rated buildings with a view to transforming them into eco-efficient properties. On ESG, Martinez noted that relative to other asset classes real estate lends itself more naturally to the application of standards and quantifiable measurements such as BREEAM certification. He asked other panellists whether in their view investors in impact funds were accepting a lower return and noted the different views that exist on the matter. Phull replied that for these types of funds there is an expectation of higher returns and over the long term you would expect to benefit from a “greenium”. McDowell then described a kind of long-term arrangement



where residual value was not a driver for the investor. This was in regenerating regional town centres with an anchor tenant such as the local authority. He said this allows an efficient cost of financing for the regeneration, with potential for a halo effect, encouraging wider regeneration of the locale. M&G would receive inflation-linked income over a very long period such as 50 years, at the end of which the property would revert to the local authority. McDowell warned that the biggest risk in such deals was not the tenant failing but the risks associated with the development itself.

This brought the conversation onto the current delays in construction. As part of rising inflation, the CAMRADATA panel noted that both wages and materials had been going up. Whidborne said that for some lower-yielding projects, it has been difficult to get tenders from developers.

Two causes of inflation are the loss of foreign labour post-Brexit and supply bottlenecks developing because of lockdowns to combat the pandemic. McDowell said he nevertheless expected the market to normalise. In the meantime, he noted that there was a risk of development cost assumptions increasing in response to rising inflation before ground was even broken.

McDowell said there were standard means of controlling

"There is a lot of education still to be done about what exactly investing in Affordable and Social Housing really means. You can go down a lot of rabbit holes when it comes to the nuances of each sub-sector."

costs such as penalties for overrun and back-ended performance payments. But to help control for inflation during the initial stages, he said M&G tended to work with the biggest names in construction who had the reach to source materials in difficult times and absorb costs.

EdR REIM has its own development team so as to keep a grip on costs. Whidborne added that he has a preference for mid-sized construction companies where the asset manager could negotiate more evenly. "The blue-chip constructors know how to manage costs but that does not necessarily mean they pass those savings on," he said. Regarding project insurance, Whidborne said that you had to suffer the project failing before you could claim, so comfort there was limited.

Against the global macro backdrop of rising rates and inflation, Martinez said that the characteristics available within Real Estate such as stable, reliable income and inflation linkages mattered, at a time when investors must contend with challenges in other asset classes such as low real yields in fixed income and whether a value reversal has longer to run in

equities. McDowell pointed out that the M&G Long Income strategies have contractual income with inflation-linkage, typically to RPI, baked in. He contrasted investment strategies that rely on forecasting economic environments to come. "We focus on high-quality tenants in high-quality properties," he said. He said that the pandemic had caused some temporary disruptions in cashflows but tenants have now caught up.

Martinez asked the managers on their views as to whether they foresaw a noticeable impact on capital valuations of real estate assets should these supply and

cost disruptions persist longer than expected. Whidborne responded that in the most needy parts of the market, such as Social Housing, delays should help capital values go up.

Fiduciary reputation

Phull then introduced the 'Daily Mail test'. "Clients think about risk to their reputation if there is a story about where they have invested on the front page of a tabloid," he said. "There is a lot of education still to be done about what exactly investing in Affordable and Social Housing really means. You can go down a lot of rabbit holes when it comes to the nuances of each sub-sector."

He added an extra twist, which was that if some strands of Affordable Housing offer rents discounted to the average market rate, then trustees worry that they could be failing their fiduciary responsibility of seeking the best possible returns for pension scheme members. This has been a longstanding counter-argument to all kinds of social investing.

Whidborne said that the Daily Mail test could be applied to many types of investing. He gave ground rents

as one example of a very popular diversifier that recently have had a bad press. He said that whether you invest in public or private rentals, the returns will end up being similar because the government subsidises the former but in such a way as to make sure that neither gets too far away, or too close, in pricing from the other. "They won't want Affordable Housing, for example, to catch up with open-market private rentals," he said.

Phull said part of the dilemma was how asset managers (and asset owners) measure social impact.

Whidborne responded that EdR REIM uses the Sustainability Reporting Standard for Social Housing, as championed by Big Society Capital and developed by The Good Economy. He added that clients could also see real-life examples such as the YMCA hostel for the homeless in Luton that EdR REIM advises via its own housing association. In the YMCA, residents can progress towards greater self-sufficiency as the floors of the building are arranged to support gradually more independent living.

"Everyone is trying to work towards a standard so that it becomes a benchmark," said Phull. "Unlike some standards or associations like GRESB, investors don't yet understand how to fully measure the 'S' in social investing."

Whidborne agreed. "A lot of people ask: 'What hit on my returns am I willing to take in social housing?' My answer is that you get the same as other residential sub-sectors."

He then gave the example of a Swiss institutional investor that invested in EdR REIM's Affordable Housing strategy as a way in to the UK residential sector, not to fulfil an Impact allocation. Whidborne noted that residential can be up to 70% of property portfolios in Switzerland because the whole market, from development to rental, is under greater control of local authorities and hence a much more predictable investment.

Phull noted that in the UK the appeal of residential for institutional investors has been absent since investors were frightened off by



rent controls in the 1970s. The lack of institutional investment means that currently there is little purpose-built stock for Build-to-Rent investors and long-term fund track records, so little comfort to be drawn from relevant historical data and a secondary market.

Logistics keep on running

Creasey then posed another question to the CAMRADATA panel: how much further can the logistics bull run travel? He noted that the cost to the tenants of these buildings was not particularly high. So paying to own would not be easily recompensed by higher rents. McDowell noted that debt is also getting more expensive.

Multi-storey warehouses have already been built for Amazon. The panel discussed whether anyone but Amazon needed so much storage space; but also the anomaly that 'sheds' are generally sold on groundfloor area, not volume. Creasey said Amazon was one of the few vertical integration businesses. Its competitors as tenants of warehouses are DHL and Fedex. There are companies like NEXT that do their own deliveries but none as broad or

global as Amazon. So if a landlord was pushing for higher rents, who would replace these giant logistic suppliers? McDowell said that there was a lot of money chasing this sector but fundamentals would eventually reassert themselves. He noted that rental growth is more likely to be limited when new supply can be added in the immediate area.

Having said that, both McDowell and Whidborne saw reasonable opportunities away from multi-storey, prime warehouses. Whidborne said EdR REIM's industrials strategy was based on smaller, 'grittier' units. "They are harder to put together as a portfolio but produce better returns because there is less risk," he said.

McDowell noted that M&G is positive on the logistics sector in Ireland, where supply chains have been disrupted by Brexit. "The UK is the land bridge between Ireland and the rest of the EU. Brexit, alongside other factors, has introduced the risk of delays making just-in-time delivery more difficult," he observed. And so, demand for warehouses in Ireland may increase to accommodate piecemeal delivery.

"The panel discussed whether anyone but Amazon needed so much storage space; but also the anomaly that 'sheds' are generally sold on groundfloor area, not volume."



Retail parking

Creasey's next question was how far the retail sector will recover. He noted the resilience of retail warehouses, less glamorous than destination shopping centres but offering functionality over fashion. "You can drive in and pick up a click-and-collect parcel in a couple of minutes," Creasey said. Values in the sector came down by as much as 50% since 2016 but are more than halfway recovered. McDowell agreed that footfall levels at retail warehouse parks was strong.

"Not all retail is the same" observed Martinez. "Discount and convenience stores have done very well recently for example." He added that in the hierarchy of needs, rent and food were basics that provide a strong underpinning for discount supermarkets or proximity stores but less so for outdated shopping centres or discretionary spending such as restaurants.

The CAMRADATA roundtable's final talking-point was the office sector, coming full circle back to what the office building will look like in 2025 and beyond. Creasey said that the interesting thing about this sector was that it tended to behave more rationally than others,

"Not all retail is the same" observed Martinez. "Discount and convenience stores have done very well recently for example." He added that in the hierarchy of needs, rent and food were basics that provide a strong underpinning for discount supermarkets or proximity stores but less so for outdated shopping centres or discretionary spending such as restaurants."

and tended to respond to demand. There had been oversupply in the late 1990s but that had been an exception.

McDowell said there were currently headwinds but that, nevertheless, corporates will still want a headquarters as a place to meet and collaborate. He said ESG was important and that fundamentals would come back to the fore. "There was a flight to quality last year and we expect that to continue," concluded McDowell.

IN FOCUS

CAMRADATA ROUNDTABLES

CAMRADATA BRINGS TOGETHER
EXPERT FUND MANAGERS
WITH CAREFULLY SELECTED
INVESTORS IN A STREAMLINED
VIRTUAL FORMAT



 “I have taken part in several roundtables over the last 18 months and this was the best orchestrated by far”

Investment Director, UK Consulting firm

 “Just a note to say thank you for organising the panel and having me on it. I found the full group discussion super informative.”

Portfolio Manager, Global Asset Manager

 “The CAMRADATA virtual roundtable went really well, as well as the live events, which was quite surprising! It was informative and interesting, and I know our Fund manager enjoyed being a part of it.”

Business Development Manager, UK Asset Manager



CAMRADATA

Interactive and dynamic debate • A wide array of asset classes covered • Branding, editorial and advertising opportunities as part of all roundtables • Expert investor panels • Ability to connect and network with key stakeholders

To find out more - Natasha Silva (Natasha.silva@camradata.com) would be delighted to speak to you.

Roundtable Participants



James Whidborne

*Head of Fund Management
Residential UK*

Personal Profile

James is responsible for UK residential fund management at Edmond de Rothschild REIM with a focus on both the private rented sector and social impact. He has more than 17 years experience in UK residential and European commercial property fund management.

Previously James worked for Savills Investment Management, responsible for two residential funds as well as a strategic land fund. He was also involved in the establishment, management and ultimately winding up of a PBSA fund along with a number of commercial mandates. James began his career at Savills where he worked as a surveyor in the affordable housing consultancy and land agency teams.

James holds a BSc (Hons) in Environmental Geoscience and an MSc in Real Estate and Investment Finance from Reading University.



**EDMOND
DE ROTHSCHILD**

Edmond de Rothschild

Company Profile

Edmond de Rothschild is a conviction driven investment house founded on the idea that wealth should be used to build the future. Family-based, independent and specialist, the Group favours bold strategies and investments rooted in the real economy, combining long-term performance and impact.

The Group specialises in Private Banking and Asset Management and is also active in corporate finance and fund services. Founded in 1953, the Group manages CHF 168 billion in assets, with more than 2,500 employees and 33 offices worldwide.

Our Asset Management business invests with conviction across public and private markets and serves a client base of institutional, wholesale and private investors across Europe and in selected international markets.



Lee McDowell

Fund Manager

Personal Profile

Lee joined M&G in 2014 and works as a Fund Manager for the M&G Secured Property Income Fund (SPIF) and European Secured Property Income Fund (EuroSPIF) within the Real Estate Income business.

Lee has over 20 years experience, focussing on Real Estate and Real Estate structured finance across a number of institutions after qualifying as a chartered accountant. Prior experience includes both principal and advisory deals across the UK and continental Europe, including large structured deals, event driven transactions and workouts of principal positions. Before joining M&G, Lee was head of Real Estate Structured Finance at ING.

Lee qualified as a chartered accountant with Deloitte and obtained an MENG in Chemical Engineering from UMIST prior to joining the real estate industry.



M&G Investments

Company Profile

M&G Investments is a global asset manager with a long history investing and innovating across both public and private markets.

As an active manager we build solutions around what matters most to our clients whether it be investing for growth or income, to meet future liabilities, protect capital or invest responsibly.

We offer access to a broad range of capabilities that span both public and private assets including fixed income, equities, multi-asset, real estate, infrastructure and private equity.

Globally we manage over £324.5 billion (as at 31 December 2021) on behalf of individual and institutional investors including pension funds, endowments and foundations, insurers, sovereign wealth funds, banks and family offices.

Roundtable Participants



William Martinez

*Senior Vice President and Team Leader,
Research team*

William is a Senior Vice President and Team Leader in the Research team. His role includes investment research, manager selection, investment and operational due diligence of alternative investments and private markets including real estate.

In his previous role as Investment Specialist at Aberdeen Standard Investments, William covered multi-asset investment solutions across a broad range of asset classes and strategies including public markets and listed alternatives, discretionary and quantitative portfolio components. There he contributed to the design of proposals and bespoke investment mandates for institutional clients. Prior to that William worked as an Investment Analyst at IV Capital Limited, focusing on hedge fund and global asset allocation strategies.

His previous roles included working at Goldman Sachs International and BNY Mellon. William is a CFA and CAIA charterholder and a member of the CFA Society of the UK. He has a BSc in Economics from the University of Lausanne, Switzerland and an MSc in Theory and History of International Relations from the London School of Economics. William also holds the CFA Certificate in ESG Investing.



Oli Creasey

Head of Property Research

Oli joined Quilter Cheviot in 2017. He previously spent two and a half years working for Green Street Advisors, a property company research firm, where he covered UK stocks. Prior to that he worked for Telereal Trillium, a UK property private equity firm, as a new business analyst assessing potential investment opportunities.

Oli graduated from the University of Manchester with a degree in Chemical Engineering and he is a Chartered Financial Analyst (CFA) charter holder. He also holds the Investment Management Certificate (IMC).

Moderator



Jaspal Phull

Senior Vice President, Manager Research

Jaspal sits within the illiquid markets segment. He is responsible for manager research across Real Estate and Infrastructure strategies.

Jaspal joined Redington in August 2019 from Riverside Capital, a Commercial Real Estate fund manager, where he was Head of research and strategy and was directly involved in over £500m of transactions across the UK.

Prior to Riverside, Jaspal spent 10 years in manager research at Stenham Advisors (FoHFs) where he was a PM responsible for covering equity L/S managers and Real Asset strategies.



Brendan Maton

Freelance Journalist

A highly experienced financial journalist with an expansive network of contacts in the UK and across Europe. Brendan has written about pension schemes and national welfare systems from Finland to Greece for 18 years and understands the retirement savings industry in each European country.

Brendan has interviewed EU commissioners and national ministers; central bankers; pension scheme heads; insurance chief executives; chief investment officers; actuaries; union officials; professional and lay trustees. He worked at Financial Times Business for eight years, finally as editor-in-chief of all international pensions titles.

Brendan has spent the last ten years as a freelancer for a number of publications, including Financial Times, Responsible Investor, Nordic region pensions news and IPE. He is also Chief webcast host for IPE. Brendan has acted as conference chair for Financial News, the UK National Association of Pension Funds, Dutch Investment Professionals Association (VBA), Corestone, Insight Investment, Marcus Evans, Robeco Asset Management, Sustainable Asset Management (SAM), Towers Watson.



EDMOND
DE ROTHSCHILD

UK RESIDENTIAL REAL ESTATE

Concrete impact
on the world
of tomorrow

Edmond de Rothschild's UK Residential Real Estate platform invests across the private rental sector (PRS) and affordable housing

PRIVATE RENTAL SECTOR

- ▶ **Vertically integrated structure; In-house leasing, property & construction management**
- ▶ **Proven track record with 2,500 apartments under management and strong pipeline**
- ▶ **Natural wage inflation tracking**



Merlin Wharf, Leicester, 384 units

AFFORDABLE HOUSING

- ▶ **Subsidiary Housing Association to offer better market access**
- ▶ **Projects have a measurable social impact**
- ▶ **Inflation-linked rent reviews**



Harwich, Extra Care, 70 homes

ABOUT EDR REAL ESTATE INVESTMENT MANAGEMENT



~£10.7
billion total
AUM/AUA



~740
assets



115+
employees



9
offices

▶ Pan-European platform with local presence and local knowledge across 9 offices throughout Europe

▶ Experienced teams who combine local market knowledge with technical, financial, legal and strategic skills

▶ High conviction, specialist manager focusing on sustainability and making a lasting impact

For professional investors only : This document is issued by Edmond de Rothschild REIM (UK) Ltd and approved by Edmond de Rothschild Asset Management (UK) Ltd - 4 Carlton Gardens - London SW1Y AA. Information as of 31/12/2021. The information provided in this document should not be considered as an offer, an inducement, or a solicitation to deal, by anyone in any jurisdiction where it would be unlawful or where the person providing it is not qualified to do so. It is not intended to constitute, and should not be construed as investment, legal, or tax advice, nor as a recommendation to buy, sell or continue to hold any investment. Edmond de Rothschild Asset Management (UK) shall incur no liability for any investment decisions based on this document. Any investment involves specific risks, including the loss of capital. Please note that direct investment in real estate is not regulated.



CAMRADATA

The Knowledge Bank

UNLOCKING THE DOOR TO THOUGHT LEADERS

The newest addition to
CAMRADATA Live...

We're unlocking the door to thought leaders, providing a home
to the all-new and exclusive forum, The Knowledge Bank.

This new tab will allow users of CAMRADATA Live to share and
access all the latest news, insights and thought leadership within
the institutional investment industry - all within one platform.

find out more >

P: +44 (0)20 3327 5600
E: info@camradata.com
A: 11 Strand, London,
WC2N 5HR

WWW.CAMRADATA.COM





M&G Investments Building a positive future

As an active manager we build solutions around what matters most to our clients whether it be investing for growth or income, to meet future liabilities, protect capital or invest responsibly. Together, through a strong sense of partnership and collaboration, we support a culture of continued innovation to build long-term relationships as needs evolve over time.

The value of investments will fluctuate, which will cause prices to fall as well as rise and investors may not get back the original amount they invested.

Meet the Team!



Sean Thompson

Managing Director



Natasha Silva

*Managing Director,
Client Relations*



Amy Richardson

*Managing Director,
Business Development*



Sam Buttress

Associate, Business Development



Mithursha Kesavan

*Database and Publication Support
Associate*



Sarah Northwood

*Marketing and Events
Coordinator*



CAMRADATA

CAMRADATA

5th Floor, 11 Strand,
Charing Cross, WC2N 5HR

+44 (0)20 3327 5600
camradata.com



Join us on LinkedIn

Important Notice

This document is produced by CAMRADATA Analytical Services Ltd ('CAMRADATA'), a company registered in England & Wales with registration number 06651543. CAMRADATA is neither authorised nor regulated by the Financial Conduct Authority in the United Kingdom nor the Securities and Exchange Commission in the United States of America.

This document is a marketing documentation and is not intended to constitute an invitation or an inducement to engage in any investment activity. It is not intended to constitute investment advice and should not be relied upon as such. It is not intended and none of CAMRADATA, its holding companies or any of its or their associates ('CAMRADATA Group') shall have any liability whatsoever for (a) investment advice; (b) a recommendation to enter into any transaction or strategy; (c) advice that a transaction or strategy is suitable or appropriate; (d) the primary basis for any investment decision; (e) a representation, warranty, guarantee with respect to the legal, accounting, tax or other implications of any transaction or strategy; or (f) to cause the CAMRADATA Group to be an advisor or fiduciary of any recipient of this report or other third party.

The content and graphical illustrations contained in this document are provided for information purposes and should not be relied upon to form any investment

decisions or to predict future performance. CAMRADATA recommends that recipients seek appropriate professional advice before making any investment decision.

Although the information expressed is provided in good faith, the CAMRADATA Group does not represent, warrant or guarantee that such information is accurate, complete or appropriate for your purposes and none of them shall be responsible for or have any liability to you for losses or damages (whether consequential, incidental or otherwise) arising in any way for errors or omissions in, or the use of or reliance upon the information contained in this document. To the greatest extent permitted by law, we exclude all conditions and warranties that might otherwise be implied by law with respect to the document, whether by operation of law, statute or otherwise, including as to their accuracy, completeness or fitness for purpose.

CAMRADATA Analytical Services and its logo are proprietary trademarks of CAMRADATA and are registered in the United Kingdom.

Unauthorised copying of this document is prohibited.

© Copyright CAMRADATA Analytical Service May 2022.