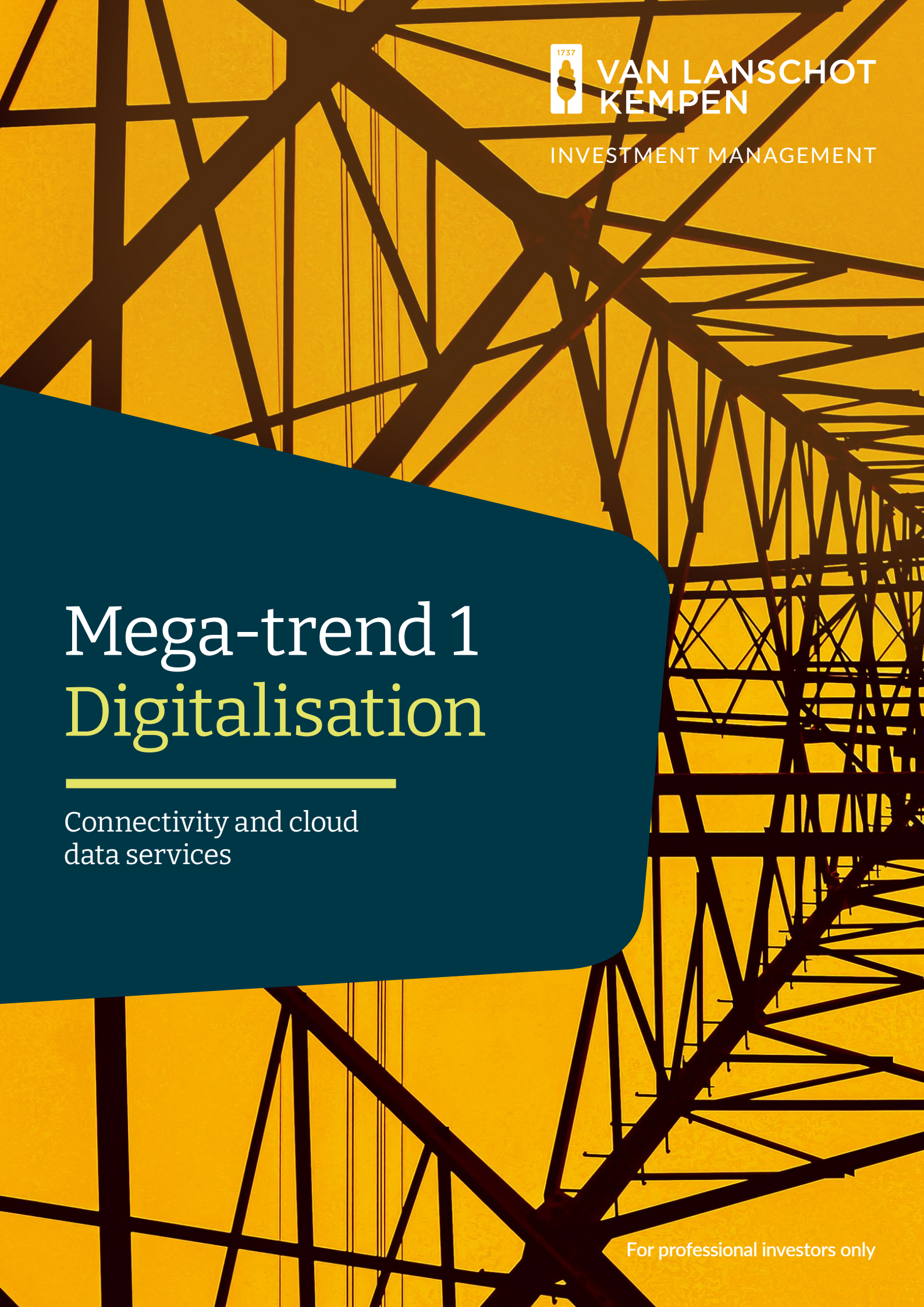


VAN LANSCHOT KEMPEN

INVESTMENT MANAGEMENT

Mega-trend 1
Digitalisation

Connectivity and cloud data services

For professional investors only

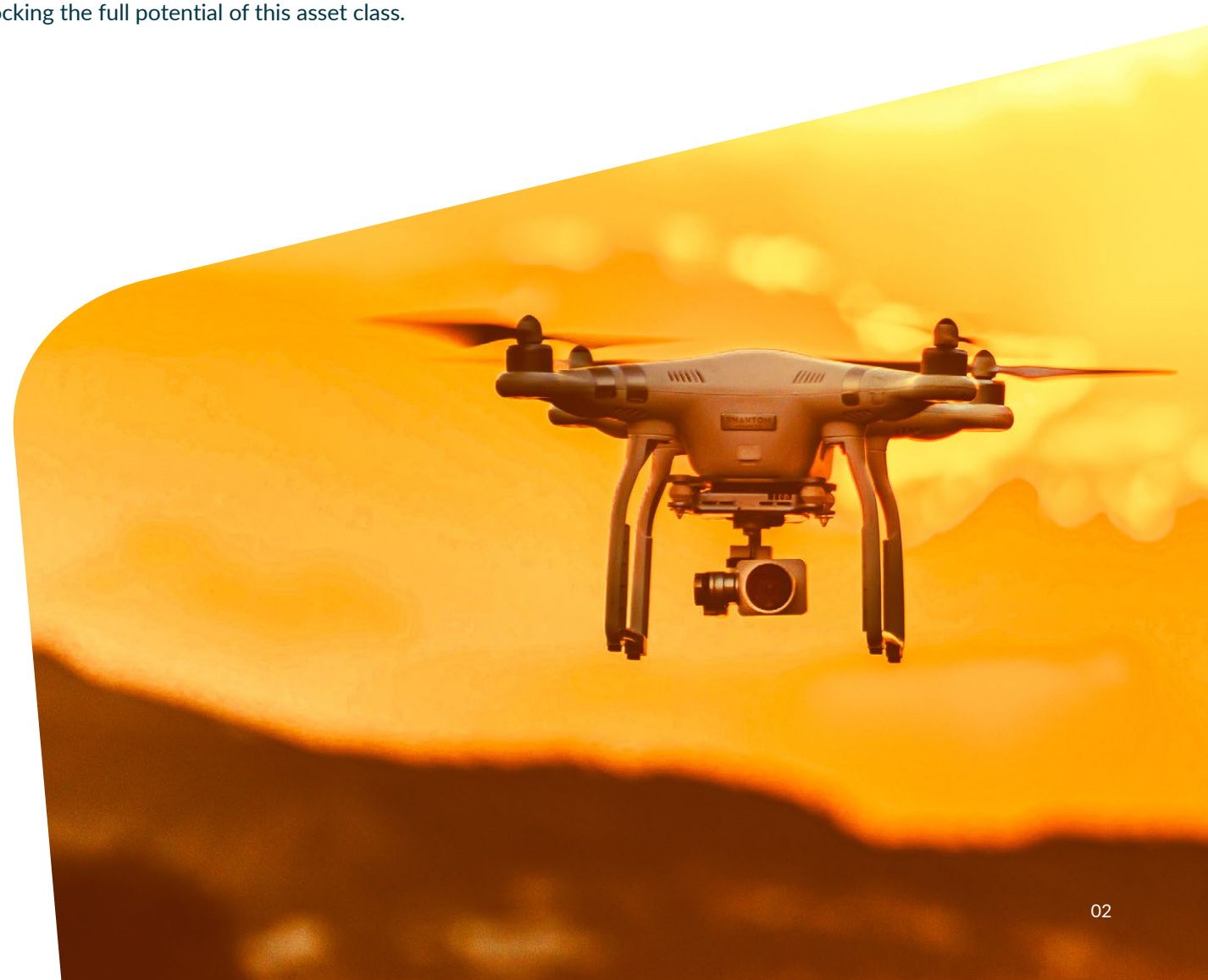
Executive Summary

The world and the global economy are being reshaped by digitalisation. Driving innovation, productivity, and creating new markets. This trend offers significant investment opportunities in infrastructure, particularly in data centres and telecommunication towers.

Due to the ever increasing global demand for high-performance computing and data storage, the number of data centres being built and expanded is growing rapidly to meet this demand, while telecommunication towers are essential for expanding the necessary network coverage and capacity.

Investing in these areas can potentially provide stable cash flows, inflation protection, diversification, and alignment with sustainability trends. However, addressing challenges such as power availability, skilled labour shortages, supply chain constraints, and regulatory risks will be crucial for unlocking the full potential of this asset class.

Lampros Smailis
Portfolio Manager
Global Listed Infrastructure



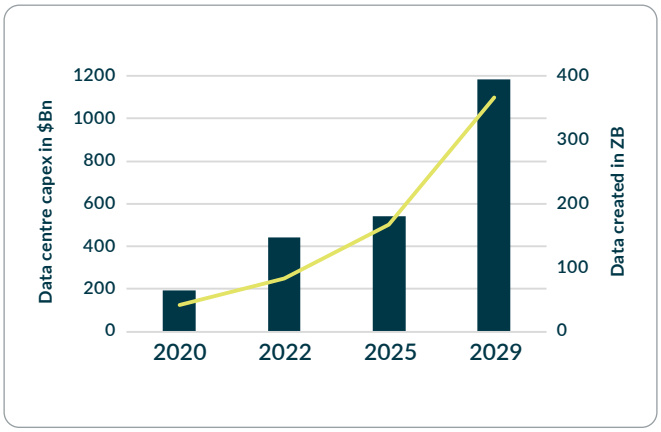
Digitalisation and infrastructure: paving the path to tomorrow's economy

Digitalisation is a multi-decade mega-trend which continues to reshape the global economic landscape, driving innovation, enhancing productivity, and creating new markets, all while offering substantial investment opportunities within the infrastructure asset class. As the demand for digital connectivity and data processing capabilities surges, the need for robust and scalable infrastructure becomes paramount. Data centres, as the backbone of digital ecosystems, are experiencing unprecedented growth, while telecommunication towers are essential for expanding network coverage and capacity, providing investors with opportunities to capitalise on the increasing global digitalisation.

Data centres: early pillars of the AI-driven digital transformation

As artificial intelligence becomes integral to business operations, the demand for high-performance computing and vast data storage capabilities will continue to surge. Data centres provide the essential infrastructure to support AI workloads, offering the computational power and scalability required for machine learning models and data-intensive applications. Companies are investing heavily in upgrading and expanding their data centre facilities to accommodate the growing needs of AI, ensuring they can process large datasets efficiently and deliver real-time insights. This trend underscores the strategic importance of data centres in enabling the next wave of technological innovation and maintaining a competitive edge in the digital economy.

Figure 1. Data centre capex



Sources: Data Market Size and Forecast: 11 Insightful Statistics, Dell'Oro Group, Financial Times

The growth of investments in data centres has been remarkable over the last two years, driven by the building of infrastructure to support the training of data and subsequent development of AI applications. Global investment in data centres has nearly doubled since 2022 and has amounted to half a trillion dollars in 2024[2], with Microsoft, Alphabet, Amazon and Meta spending $250bn in 2024, with these figures expected to reach $320bn in 2025[1].

At the recent Nvidia GTC conference, dubbed as the 'godfather of AI', Jensen Huang, CEO of Nvidia, expects combined capex on data centres to exceed $1T by 2030[6].

As artificial intelligence becomes integral to business operations, the demand for high-performance computing and vast data storage capabilities will continue to surge.

AI inference: powering real-time decisions

Inference, in the context of artificial intelligence, refers to the process of deploying trained machine learning models to make predictions or decisions based on new data. For investors, inference represents a significant opportunity, as it is the phase where AI models are applied in real-world scenarios, driving tangible business value across various industries. Unlike the training phase, which is computationally intensive but occurs less frequently, inference is a continuous process that requires efficient and scalable infrastructure to handle real-time data processing and decision-making (e.g. robotaxis).

This ongoing demand makes inference a much larger opportunity, as it necessitates sustained investment in infrastructure to support a more widespread AI deployment. Companies are already recognising this potential, building out dedicated infrastructure specifically designed for inference tasks, such as specialised hardware and optimised data centre configurations.

This trend highlights the growing importance of inference in the AI value chain, and presents a compelling investment opportunity for those looking to capitalise on the expanding role of AI in the digital economy.

Data centre market growth and underlying drivers

Figure 2. Growth in value per data centre type (in $bn)

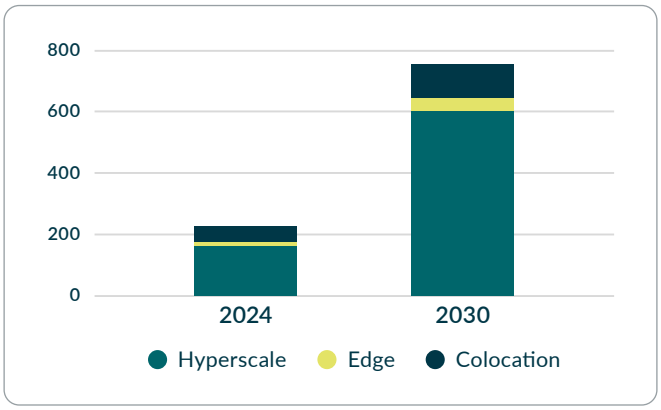
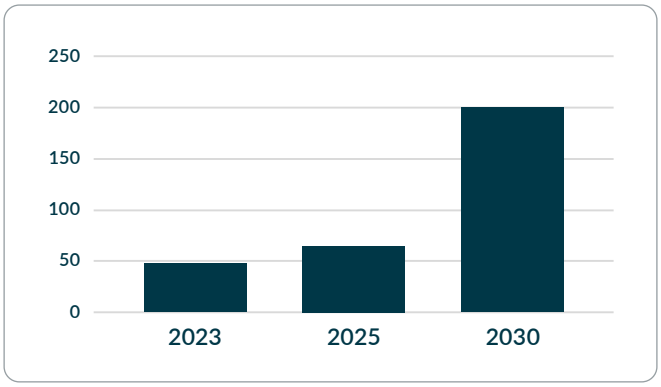


Figure 3. Global data center capacity (in GW)



Sources: Edge Data Center Market Size & Share | Global Report [2030]
Data Center Colocation Market Report, 2020-2025
Assessment of the $608+ Billion Hyperscale Data Center
2025 Global Data Center Outlook
AI data center growth: Meeting the demand | McKinsey

> The overall data centre market is expected to grow massively in the next decade, driven by the growth of hyperscale facilities, the growth of edge computing, and increasing reliance on colocation services.

Hyperscale data centres are expected to grow by a CAGR of 25% to around $600bn by 2030 (3,4). This growth is due to the widespread adoption of AI and the demand for scalability and machine learning applications. Meanwhile, edge data centres are forecast to grow over $40bn (from just $11bn in 2023) within the same timeframe. The demand drivers for edge data centres include the growth of low-latency processing needs and real time applications.

Colocation data centres, which allow businesses to rent out space for their own servers and equipment, are expected to double through 2030.

Hyperscale: large size (MW) deployments designed for large-scale workloads (e.g. development of a Chat-gpt model).

Edge: small decentralised facilities which act as a connection between multiple networks.

Key drivers include:

Cloud adoption

The surge in cloud computing by enterprises seeking scalability and cost efficiency.

AI and machine learning

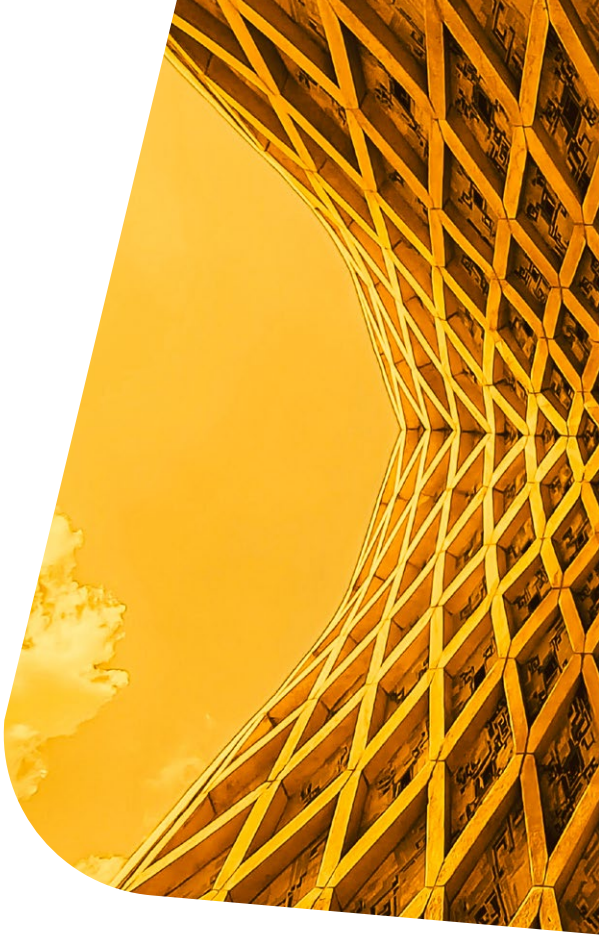
The increasing use of AI and machine learning for business processes requires significant computational power, further driving data centre demand.

Edge computing

The rise of edge computing to support real-time data processing for applications like autonomous vehicles and IoT (internet of things).

Agentic AI and robotics

Advancement of agentic AI and robotics will necessitate significant computational power and energy resources, thereby driving the need for expanded data centre infrastructure to support these high-performance applications.



Tariffs can't stop progress

Despite the tariffs and current uncertainties surrounding capital expenditure (capex) due to policies from the Trump administration, the AI buildout and the broader digitalisation of the world remain an enduring mega-trend which will span multiple decades. While these geopolitical factors may cause a temporary slowdown in investment over the next 1-2 years, companies are likely to continue investing, driven by strategic visions which extend far beyond the tenure of any single administration.

The competitive landscape compels businesses to persist in their digital transformation efforts; halting investments would risk falling behind rivals who continue to advance. Moreover, recent investor concerns about potential overbuilding in the data centre sector suggest that a modest slowdown in spending could be beneficial. It would provide a necessary period for the market to absorb existing capacity, ensuring a smoother transition and mitigating the risk of a bubble burst. This strategic pause could ultimately strengthen the foundation for sustainable growth in the digital infrastructure landscape.

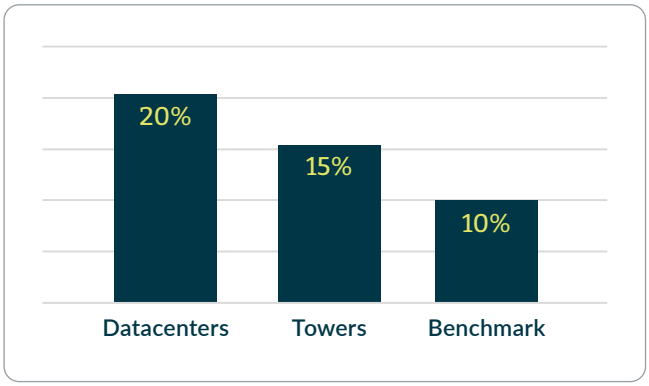
Towers in transition: capitalising on data growth with 6G on the horizon

As AI adoption accelerates, the telecommunications tower sector stands to benefit significantly from the increased volume and density of data traffic. AI applications, which often require real-time data processing and high-speed connectivity, are driving a surge in network demand. This trend compels telecommunications companies to invest heavily in expanding and upgrading their network infrastructure to ensure seamless service delivery.

Towers, as critical components of this infrastructure, are expected to see heightened demand as telecommunications operators enhance their capacity and coverage to support burgeoning data needs. Furthermore, the anticipated rollout of 6G technology within the next couple of years – noting that T-Mobile recently received FCC approval for Nokia 6G equipment tests in Washington – promises to further amplify these requirements, offering structural tailwinds for the sector. 6G is expected to deliver unprecedented speeds and connectivity, necessitating even more extensive tower networks to facilitate its deployment. This evolution presents a robust opportunity for organic growth within the tower industry.

Attribution of returns

Figure 4. Annualised shareholder returns by category in FTSE Global Core Infrastructure 50/50 Index January 2019 – March 2024



Note: Data centres are not included in the benchmark.
Source: Factset. Past performance provides no guarantee for the future.

Benefits for infrastructure investors

✓ Stable cash flows

Data centres often operate under long-term contracts with high credit-quality tenants, such as technology firms and cloud service providers, ensuring predictable revenue streams.

✓ Inflation protection

The continuous demand for data services, and the strategic location of data centres in urban hubs, often lead to significant capital appreciation, while contracts have increasingly inflation-linked terms.

✓ Diversification

Investing in data centres provides portfolio diversification by adding exposure to a high-growth sector that is less correlated with traditional infrastructure assets such as transportation or utilities.

✓ Sustainability trends

Data centre operators increasingly are adopting renewable energy and energy-efficient technologies, aligning with Environmental, Social, and Governance (ESG) investment strategies, making them more attractive to a broader base of investors.

Challenges and risks for infrastructure investors

Power availability

Data centres are highly energy-intensive. According to the International Energy Agency (IEA), data centres and data transmission networks accounted for 1.5% of global electricity use in 2024, with consumption expected to double by 2030. To put this into perspective, a typical AI-focused data centre consumes as much electricity as 100,000 households, but the largest ones under construction today will consume 20 times as much[2].

Ensuring a stable and sustainable power supply is critical, especially in regions with already constrained grids or a reliance on fossil fuels. However, we note here that while this poses a challenge for digitalisation, it provides an opportunity for the energy component of infrastructure (utilities, midstream, power generators).

Skilled labour shortages

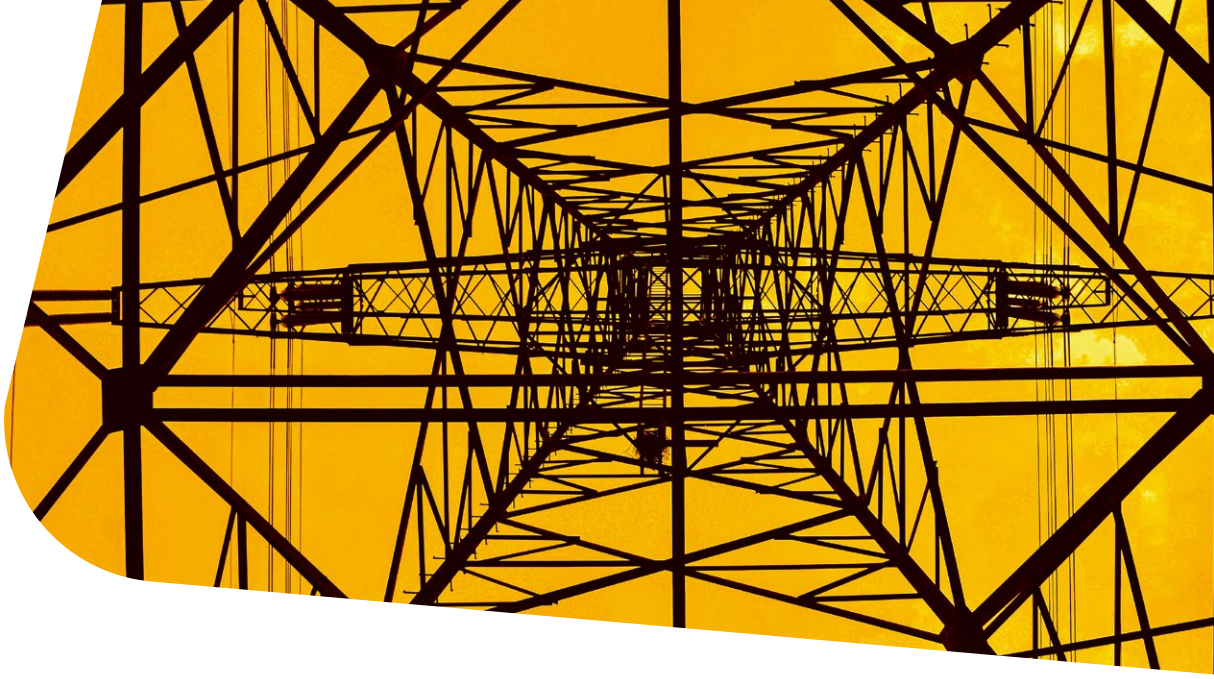
The industry faces a significant shortage of skilled labour, particularly in technical roles such as data centre management, electrical engineering, and cybersecurity. This skills gap could impede the rapid deployment of new facilities and increase operational costs.

Supply chain constraints

The construction of data centres relies on specialised equipment and materials, which are subject to global supply chain disruptions. For instance, semiconductor shortages and delays in electrical equipment procurement can lead to project delays and cost overruns.

Regulatory and environmental risks

Regulatory challenges, such as land use restrictions and environmental regulations, can increase project complexity and costs. Additionally, community opposition to large facilities can delay project approvals.



Conclusion

The digitalisation wave presents unparalleled opportunities for infrastructure investors, with data centres poised to be a cornerstone of this transformation. The sector offers stable returns, growth potential, and alignment with ESG principles. However, addressing risks such as power availability, labour shortages, and supply chain constraints will be critical to unlocking the full potential of this asset class. As digitalisation progresses, proactive strategies and investments in innovation will be essential for capitalising on this mega-trend.

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References

1 Big Tech lines up over $300bn in AI spending for 2025

2 IEA, Energy and AI

3 Data Centre Market Size And Share | Industry Report, 2030

4 Hyperscale Data Centre Market Estimate to Hit USD 585.0 Billion by 2030

5 Edge Data Centre Market Size & Share | Global Report [2030]

6 Keynote by NVIDIA CEO Jensen Huang | NVIDIA GTC 2025

This is the first of a series of three reports into the impact of the mega-trends on infrastructure investing. Visit our website to receive the follow-up reports straight to your inbox at: Infrastructure opportunities | Van Lanschot Kempen IM

Mega-trend 2 – Decarbonisation
Mega-trend 3 – Deglobalisation

Listed Infrastructure: general risks to take into account when investing in Listed Infrastructure strategies

Please note that all investments are subject to market fluctuations. Investing in a Listed Infrastructure strategy may be subject to country risk and equity market risks and risks specific to the infrastructure market, which could negatively affect the performance. Under unusual market conditions the specific risks can increase significantly. Historic data for similar investment vehicles indicates that the strategy can carry an aggressive level of risk. Potential Investors should be aware that changes in the actual and perceived fundamentals of a company may result in changes for the market value of the shares of such company. The strategy is allowed to invest in financial derivatives and (short-term) money market instruments. Currency exposures may be hedged.

Profile of the typical investor in Listed Infrastructure strategies:

The strategy may be suitable as a core or supplemental investment for those: interested in a convenient way of gaining exposure to global listed infrastructure companies (international equity markets); seeking long-term growth of their investment (5 years or longer); who can bear the possibility of significant losses, especially in the short term.

The value of your investment may fluctuate, past performance is no guarantee for the future. Do not take unnecessary risks. Before you invest, it is important that you are aware of and are informed about the characteristics and risks of investing. This information can be found in the available documents of the strategy and/or in the agreements that are part of the service you choose or have chosen.

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{moving·forward·together}

There's a saying in Dutch, Kom verder, which has many meanings including 'moving forward together'. But it's more than a phrase to us. It's our company philosophy and how we work with clients to deliver the right investment solutions for them.

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