

## SPECIAL BULLETIN #4 | DATA CENTRES

# THE GROWING IMPORTANCE OF ESG



Author: **Jennifer McConkey**,  
Senior Director, Operations & Sustainability at Principal Real Estate Investors

Environmental, social, and governance (ESG) considerations have grown increasingly important in real estate investing. In addition to prioritising environmental sustainability, real estate investors are using metrics on governance, community impact, and many related factors to evaluate properties.

The shift toward ESG comes as recognition that these considerations improve investment outcomes by helping maximise operational efficiencies, align stakeholder interests, and reduce overall risks. As ESG rises in importance, these measures can also add value by helping create portfolios of assets suitable for sale in the future.

An increasing set of real estate investors understand that incorporating ESG factors into decision-making is more than just a check-the-box exercise. Rather, there is an emerging appreciation that ESG is a highly important component when evaluating long-term real estate investments.

For data centres, ESG considerations have proven to be particularly vital. These facilities account for an estimated 1% of worldwide electricity use, so the impact to global energy demand is significant.<sup>1</sup> And data demand will only increase—from consumers, businesses, and emerging technologies such as artificial intelligence, driverless car technology, and 5G networks.

We expect the rate of demand to grow exponentially. This is a key driving factor why data centre landlords and tenants are taking important steps to ensure that ESG considerations are a priority.

### Data centres evolving to address ESG

While data centres are energy-intensive, much has been done to help these facilities operate in an energy efficient way. In

#### At a glance – Data centres and ESG:

- **Improving efficiency:** Data centres have reduced energy consumption over the last five years
- **Active landlords:** A productive landlord-tenant relationship is key to improving ESG outcomes
- **Tenant-driven standards:** Data centre tenants place a high priority on sustainable business practices
- **Aligned incentives:** ESG practices are good business for tenants and landlords, as they typically reduce costs, lower risks, and help achieve corporate goals

the last decade, even as data use skyrocketed, technological enhancements such as processor efficiency improvements and reductions in idle power significantly reduced the electricity requirements of data centre servers.<sup>2</sup>

In addition, the growth in the number of servers needed to process this massive amount of data has slowed significantly, as technological advancements have allowed each individual server to process increasingly more data. In fact, despite the overall increase in power usage, the energy intensity of data centres has actually reduced. What this means is that the amount of energy required to process a terabyte of data has fallen. Some research has estimated a 20% fall in energy intensity over the last five years - more than other energy intensive industries.<sup>3</sup>

Beyond steps to reduce energy use, data centre landlords and tenants are constantly seeking new and innovative ways to improve energy efficiencies and promote ESG. Microsoft recently used hydrogen fuel cells to back up some of its data centre servers, which could help replace diesel-powered backup generators.<sup>4</sup>

Utilising the excess heat produced by data centre cooling equipment is another emerging area of energy efficiency, particularly in Scandinavia, Netherlands and Germany. For example, an initiative in Stockholm aims to have waste heat from data centres heat 10% of the city by 2035.<sup>5</sup> Solar power and other renewable energy sources are also being explored by landlords and other stakeholders to supplement, or in some cases replace, the standard power supply for data centres.

<sup>1</sup> <https://science.sciencemag.org/content/367/6481/984>

<sup>2</sup> B. Wagner, "Intergenerational efficiency of DellEMC PowerEdge servers" (DellEMC white paper 2018)

<sup>3</sup> <https://science.sciencemag.org/content/367/6481/984>

<sup>4</sup> <https://news.microsoft.com/innovation-stories/hydrogen-datacenters/>

<sup>5</sup> <https://datacenterfrontier.com/waste-heat-utilization-data-center-industry/>

## The importance of a landlord-tenant partnership

Landlords can help maximise data centre efficiencies by investing in system upgrades and providing grants to tenants targeting improved efficiency and sustainability. However, ESG initiatives are most impactful when landlords actively partner with their tenants.

Many tenants, particularly the largest cloud service providers known as “hyperscalers”, have led efforts to improve energy efficiency. Sustainability has been a high priority for these firms for some time, with several large tenants and technology companies setting significant carbon reduction goals. Reducing emissions through data centres will be a key effort. In 2018, Apple and Google generated enough renewable energy to run 100% of their data centres. Facebook, Microsoft, and Amazon have also made significant commitments, each setting goals to run their data centres on mostly renewable energy in the next few years.<sup>6</sup>

Beyond the largest hyperscalers, an increasing number of data centre companies and other enterprises have prioritised sustainability when selecting a data centre. These organisations are typically already tracking ESG-related metrics and they expect—or are required by customers and shareholders—to make ESG a priority when selecting real estate.

The data centre industry is also proactively addressing ESG via industry initiatives and organisations such as the European Data Centre Association and the Future of Internet Power.<sup>7</sup> Recently 25 companies and 17 associations across Europe announced an agreement to take specific measures to make data centres climate neutral by 2030.<sup>8</sup>

## Sustainability benefitting all stakeholders

Given the importance of ESG to customers and investors, sustainable data centre practices are also good business—for both the landlord and tenant. Often times, data centres built and managed with the most robust set of ESG practices in place will have a distinct competitive advantage over those with less focus on sustainability. This is because the cost

savings generated from lower energy consumption or the use of renewables can be directly passed on to customers through lower pricing. In addition, landlords appreciate that ESG standards are constantly increasing, so to preserve the investment value of their asset landlords want to be as proactive as possible in ensuring the facility will hold up to ESG standards in five or 10 years. And if landlords follow robust ESG policies and align with market standards, they will benefit from increased tenant attraction and retention as they demonstrate results from these partnerships.

Good ESG practices can also help project financing, as investors of all types favor the most efficient technologies. Many are becoming more willing to finance long-term projects focused on renewable energies. In some instances, data centre operators are securing financing with interest rates linked to sustainability targets, allowing borrowers to pay loans back at lower interest rates if certain sustainability-linked commitments are met.<sup>9</sup> These can include commitments to reporting requirements, zero-carbon renewable energy targets and workplace safety.

As an increasing share of global commerce and consumer activity moves online, the relationship of data centres to the digital economy will only grow stronger. More centres will be needed, and the importance of ESG as a top consideration in the building and management of these facilities will become increasingly critical.

Ultimately, forward-looking ESG practices matter because they are good for the environment and society. By taking a proactive role in promoting and implementing sustainability initiatives, the data centre industry will be best positioned to serve its essential role connecting the global economy.

<sup>6</sup> <https://www.usatoday.com/story/news/nation/2020/02/27/climate-change-internet-data-centers-harm-environment/4860598002/>

<sup>7</sup> <https://www.bsr.org/en/collaboration/groups/future-of-internet-power>

<sup>8</sup> <https://www.eudca.org/climate-neutral-data-centre-pact-commitsbreuropean-cloud-and-data-centre-industrybrto-ambitious-sustainability-action/>

<sup>9</sup> <https://www.businesswire.com/news/home/20200916005173/en/Aligned-Closes-1-Billion-Credit-Facility-and-First-Ever-U.S.-Data-Center-Sustainability-Linked-Financing>

## Risk Considerations

Investment involves risk including possible loss of principal. Past performance is no guarantee of future results. Potential investors should be aware of the risks inherent to owning and investing in real estate, including value fluctuations, capital market pricing volatility, liquidity risks, leverage, credit risk, occupancy risk and legal risk.

## Important information

This material covers general information only and does not take account of any investor's investment objectives or financial situation and should not be construed as specific investment advice, a recommendation, or be relied on in any way as a guarantee, promise, forecast or prediction of future events regarding an investment or the markets in general. The opinions and predictions expressed are subject to change without prior notice. The information presented has been derived from sources believed to be accurate; however, we do not independently verify or guarantee its accuracy or validity. Any reference to a specific investment or security does not constitute a recommendation to buy, sell, or hold such investment or security, nor an indication that the investment manager or its affiliates has recommended a specific security for any client account. Subject to any contrary provisions of applicable law, the investment manager and its affiliates, and their officers, directors, employees, agents, disclaim any express or implied warranty of reliability or accuracy and any responsibility arising in any way (including by reason of negligence) for errors or omissions in the information or data provided.

This material may contain 'forward-looking' information that is not purely historical in nature and may include, among other things, projections and forecasts. There is no guarantee that any forecasts made will come to pass. Reliance upon information in this material is at the sole discretion of the reader.

This material is not intended for distribution to or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

This document is intended for use in:

- **The United States** by Principal Global Investors, LLC, which is regulated by the U.S. Securities and Exchange Commission.
- **Europe** by Principal Global Investors (EU) Limited, Sobo Works, Windmill Lane, Dublin D02 K156, Ireland. Principal Global Investors (EU) Limited is regulated by the Central Bank of Ireland.
- **United Kingdom** by Principal Global Investors (Europe) Limited, Level 1, 1 Wood Street, London, EC2V 7 JB, registered in England, No. 03819986, which is authorised and regulated by the Financial Conduct Authority ("FCA").
- **In Europe**, this document is directed exclusively at Professional Clients and Eligible Counterparties and should not be relied upon by Retail Clients (all as defined by the MiFID). The contents of the document have been approved by the relevant entity. Clients that do not directly contract with Principal Global Investors (Europe) Limited ("PGIE") or Principal Global Investors (EU) Limited ("PGI EU") will not benefit from the protections offered by the rules and regulations of the Financial Conduct Authority or the Central Bank of Ireland, including those enacted under MiFID II. Further, where clients do contract with PGIE or PGI EU, PGIE or PGI EU may delegate management authority to affiliates that are not authorized and regulated within Europe and in any such case, the client may not benefit from all protections offered by the rules and regulations of the Financial Conduct Authority, or the Central Bank of Ireland.
- **In Dubai** by Principal Global Investors LLC, a branch registered in the Dubai International Financial Centre and authorized by the Dubai Financial Services Authority as a representative office and is delivered on an individual basis to the recipient and should not be passed on or otherwise distributed by the recipient to any other person or organization. This document is intended for sophisticated institutional and professional investors only.
- **Singapore** by Principal Global Investors (Singapore) Limited (ACRAREg.No.199603735H), which is regulated by the Monetary Authority of Singapore and is directed exclusively at institutional investors as defined by the Securities and Futures Act (Chapter 289). This advertisement or publication has not been reviewed by the Monetary Authority of Singapore.
- **Australia** by Principal Global Investors (Australia) Limited (ABN 45 102 488 068, AFS Licence No. 225385), which is regulated by the Australian Securities and Investments Commission. This document is intended for sophisticated institutional investors only.
- **Switzerland** by Principal Global Investors (Switzerland) GmbH.
- **Hong Kong SAR (China)** by Principal Global Investors (Hong Kong) Limited, which is regulated by the Securities and Futures Commission and is directed exclusively at professional investors as defined by the Securities and Futures Ordinance.
- **Other APAC Countries**, this material is issued for institutional investors only (or professional/sophisticated/qualified investors, as such term may apply in local jurisdictions) and is delivered on an individual basis to the recipient and should not be passed on, used by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

© 2021 Principal Financial Services, Inc. Principal, Principal and symbol design and Principal Financial Group are registered trademarks and service marks of Principal Financial Services, Inc., a member of the Principal Financial Group. Principal Global Investors is the asset management arm of the Principal Financial Group. Principal Real Estate Investors is a dedicated real estate investment management group within Principal Global Investors.