CRADLE TO CRADLE



Christopher Muoio Director, Research and Strategy Madison International Realty

Katie Cappola ESG Manager Madison International Realty A cradle-to-cradle ESG risk management approach, including analyses of climate and governance risks, and potential financial impacts, can help future-proof strategies and processes.

Madison believes well-established ESG policies are a key part of mitigating investment risk in seeking to drive real estate investment returns.

Green buildings and assets not only avoid penalties from energy usage regulations but have also shown fundamentals outperformance for years and traded for increasingly large premiums in capital markets.

In other words: ESG is not just useful for future-proofing assets, but for future-proofing portfolios as well.

ESG initiatives and programs have become a major force in the world of commercial real estate, with Preqin data showing that 51% of real estate AUM, totaling \$660 billion of capital, is managed by firms that have a stated ESG commitment.¹ The perception though, is that ESG programs are not a way of driving investment outperformance through proactive risk management, but instead merely a tool for raising capital. A survey conducted by Preqin² showed just 14% of investors believed fund managers establish ESG programs with the goal of outperformance, and only 19% believed they were established to mitigate investment risk. This stands in stark contrast to the 72% of respondents who believed that these programs were established due to investor desires for compliance with ESG and not due to a focus on profits and returns.

Madison has observed that penalty systems targeting carbon intensity and energy usage are gaining popularity across markets. London's Minimum Energy Efficiency Standards (MEES)³ could mean 8% of the commercial stock in the city will be barred from new leases starting in April 2023, according to a BNP Paribas study.⁴ The MEES will likely get increasingly stringent over the ensuing years, potentially barring up to 43% of buildings from new leases by 2027 if measures are not taken.⁵

In the US, New York City, Boston, Washington DC, Denver and Washington state have enacted similarly spirited regulations that instead impose penalties on the owners of assets that are not meeting their carbon intensity or energy performance targets. It is currently estimated that 34% of buildings in Boston are noncompliant with the 2030 standards.⁶ The inability to operate an asset or the possibility of facing stiff penalties are massive risks to the performance of an investment's operating income that can be potentially mitigated by incorporation of ESG principles during the investment and asset management life cycle.

ESG principles also factor into investment outperformance through top-line revenue growth. Tenants have shown a preference for newer green space with lower energy and operating costs, resulting in stronger demand and fundamentals for these assets. A JLL study on office buildings in London noted that buildings with BREEAM certificates saw rents on average 11.6% higher than their peers, with a single step improvement in the Energy Performance Certificate resulting in a 4.2% increase in rents.⁷

93

A similar phenomenon can be observed in the US, where office buildings with LEED certifications command rents 24-42% higher than those without, depending on their submarket type.8 Green buildings are also achieving these with less downtime, as a CoStar study has shown⁹ that UK offices with Excellent and Outstanding certifications see two months shorter void periods than those with lower ratings. Fundamentals outperformance has also been observed in the industrial sector, where assets with BREEAM Excellent. Outstanding and Very Good Certifications seeing annual rent growth of 10.8%, outpacing the sector wide average by 170BPS and those with lower ratings by even more.10

Unsurprisingly, with stronger revenue growth, lower energy usage, lower operating costs, and the avoidance of penalties, green buildings are fetching premiums in global capital markets. Data from Real Capital Analytics shows that green office buildings trade at a premium of 35% to nongreen office buildings in Paris and Sydney. This premium did not exist in 2016, which underscores the nascence of the trend.¹¹ In a May 2021 study, CoStar found that, in London, higher BREEAM rated buildings trade for £1,120 per square foot; a 173% premium to lowerrated buildings when, as recently as 2010, no such premium existed.¹² Similar premiums exist in the US as well, with LEED-rated office buildings averaging 31% higher pricing than those that are not rated.13

Given that green assets are outperforming on the growth of fundamentals, avoiding stringent penalties, and fetching premiums in capital markets, ESG programs and principles are a captivating component of an investment and asset management strategy seeking to drive sustained investment returns in commercial real estate.

CLIMATE RISK AND GOVERNANCE RIGHTS

Madison believes ESG factors, and more specifically climate risk and governance rights, can have an impact on investment performance, and managing ESG risks effectively has the potential to add value. For example, ESG team at Madison works cross departmentally to incorporate ESG considerations with the organization's operational practices and procedures.

Since January 2020, Madison has included ESG considerations as a part of the risk management profile for potential investments to help understand climate risks, and the governance rights necessary to address risks. However, Madison does not pursue an ESG-based investment strategy or limit its investments to those that meet specific ESG criteria or standards.

Madison does not only invest in "green" assets, as this limits the investment opportunity and does not support the global objective to prepare assets for the transition to a carbon free economy. Madison aims to support the transition of assets from "brown" to "green" through identifying ESG risks early, and engaging with sponsors to advance their ESG program and initiatives.

CURRENT STATE OF ESG INITIATIVES

Since 2019, Madison has worked across each department to integrate material ESG initiatives with operations. When beginning due diligence on a potential transaction, the investment team coordinates our initial ESG review, which consists of a third-party climate risk assessment and an ESG questionnaire. The earlier this information is collected, the less difficult it may be to adjust the deal to account for any relevant findings. The climate risk assessment identifies both physical and transition risks. The ESG questionnaire covers a wide breadth of ESG topics meant to benchmark the program against Madison's existing investments, and provide more information on the sponsors ESG initiatives and priorities.

When the investment team transitions investment information to the asset management team, any identified risks are subsequently reviewed. Throughout the asset hold period, the ESG team will engage with the sponsor to annually review development of their ESG program and initiatives year over year. The ESG team also collects energy and water asset-level consumption data, as well as green building certification and energy rating information.

The current level of engagement aligns with our approach to consider ESG risk. However, Madison believes there are further opportunities to proactively manage and seek to mitigate risk through enhanced integration of ESG with our investment and asset management processes to the point of value creation. Madison intends to evaluate and mitigate ESG risks while the asset is within Madison's purview in order to act as a responsible business partner.

FUTURE STATE OF ESG RISK MANAGEMENT

Madison looks to address ESG risk not just from deal inception to close (cradle to grave), but deal inception-to-deal inception, or "cradle to cradle," to help ensure decisions made within the hold period support the long-term operation of the asset. Priorities have been identified as:

- The early identification of potential risk factors
- Quantifying risk impact and underwriting mitigation measures,
- Ongoing management of risk through integration of ESG considerations when exercising applicable control rights.

Madison intends to build out its ESG risk management strategy in seeking to not only manage the short-term deal risk, but also consider the long-term asset level risk that may be identified by a potential buyer at sale.

The ESG team has met with each department to better understand their considerations, drivers, and decision-making processes to help ensure effective integration of ESG at key inflection points. The below initiatives are in the development phase. Madison intends to implement these initiatives in the next 12 months, and track and report out on their impact.¹⁴

Identifying Risk Early

In seeking to identify risk early, the ESG and data and strategy teams have partnered to identify data sets to inform an initial physical and transition risk review prior to the third-party assessment. An ESG risk overview slide will be added to any initial investment meeting presentation, summarizing the risk exposure per relevant market. This will provide an opportunity for discussion of potential risk factors early in the investment process, prior to the onset of formal due diligence, and customization of our ESG due diligence scope.

Quantifying and Underwriting Risk

Madison's existing ESG due diligence review requires that third parties identify risk, though moving forward, the team will request that any identified risk has a quantified financial impact. This information can then be reviewed by the investment team and inform underwriting as applicable.

Prioritizing Control Rights for Sustainable Asset Management

The asset management and ESG teams have partnered in seeking to better integrate ESG principles as a part of the asset management strategy. The team will aim to identify applicable control rights and corresponding sustainability initiatives. This could include green leasing and tracking of spend on ESG/ sustainability projects.



Data shows that green office buildings trade at a premium of 35% to non-green office buildings in Paris and Sydney.¹¹

BROWN DISCOUNT

In the last year Madison has experienced firsthand the impact of a "brown discount," which describes the depreciation of an assets value due to its lack of alignment with sustainability best practices and/or lack of energy efficiency and potential obsolescence. At the time of disposition, a European buyer completed an extensive due diligence process which included a net zero energy audit and development of a decarbonization pathway and corresponding capex plan. The buyer then requested the capex plan (required to decarbonize the asset and avoid "stranding") be embedded into their valuation model, implicitly reducing the price on a present value basis. This was the first instance in which Madison has received such a request. This experience has only further increased Madison's monitoring of ESG related risks and priorities at the asset and market level.

FUTURE PROOFING INVESTMENT STRATEGIES

When whittling down the alignment of opportunities between ESG and investment strategies, we believe the primary drivers become evident: climate risk and governance rights.

The numerous data points above provide additional clarity and support for the potential financial advantages of prioritizing sustainability at an asset level from reduced vacancy rates to meeting tenant demand and complying with regulatory requirements.

As the latest IPCC report issued March 2023 stresses, the decisions made now to manage and mitigate climate risk will shape the world and financial returns long into the future. As the rest of the market starts to understand these financial risks, a history of proactive integration of ESG considerations as a part of investment processes will provide investors with increased confidence in a managers' abilities.

A cradle-to-cradle ESG risk management approach, including analyses of climate and governance risks, and potential financial impacts can future proof strategies and processes, and increase the accuracy, validity, and confidence of projected returns in an ever-changing market environment.

ABOUT THE AUTHORS

Christopher Muoio is Director, Research and Strategy and Katie Cappola is ESG Manager for Madison International Realty.

NOTES

* Madison takes a disciplined, comprehensive approach to underwriting prospective investment opportunities, employing a systematic due diligence process conducted in-house by Madison and assisted, when appropriate, by industry specialists. Madison does not pursue an ESG-based investment strategy or limit its investments to those that meet specific ESG criteria or standards. Please also see the Endnotes at the end of this presentation for further ESG information. Any reference herein to environmental or social considerations is not intended to qualify our duty to maximize risk-adjusted returns. During the investment underwriting process, Madison may, however, consider long-term ESG factors through in-depth asset, deal sponsor and company research and engagement. Madison seeks to understand material ESG risks and opportunities in the assets, sponsors, funds and companies we analyze and consider them in a way that Madison believes is suitable and consistent with its investors' mandates. Where material. Madison is committed to evaluating the impact of a company's or an asset's ESG policies in the investment process. Where consistent with Madison's duties to its clients, Madison considers ESG factors as part of its investment and asset management processes[and works with the companies in which Madison invests to promote environmental, social, and governance change]. ESG related information may be difficult to obtain in connection with real estate investing, and ESG-related factors may have little to no impact on an investment's profitability or value.

This presentation has been prepared by Madison International Realty ("Madison") exclusively for informational and discussion purposes only and is not, and may not be relied upon in any manner as, legal, tax or investment advice or as an offer to sell or a solicitation of an offer to buy an interest in any potential future investment vehicle sponsored by Madison (a "Fund"). A private offering of interests in a Fund will only be made pursuant to a confidential private placement memorandum (the "Offering Memorandum") and the Fund's subscription documents, which will be furnished to qualified investors on a confidential basis at their request for their consideration in connection with such offering.

² See Footnote 1

⁴ CoStar News, Up to 8% of Inner London Commercial Stock 'Unlettable' as Tighter Energy Standards Loom, February 2023

⁵ See Footnote 4

- ⁶ Reshape Strategies, "BERDO 2.0 Boston's Bold Move to Regulate Existing Building Emissions", 03/18/2022
- 7 JLL, Sustainability and Value London Offices, January 2023
- ⁸ CoStar, Green Office Buildings Report Even Bigger Rent, Sale Premiums During Pandemic, May 2021
- ⁹ CoStar Analytics, Three Charts to Show Greener Commercial Properties Are Outperforming, December 2022 https://bregroup.com/products/breeam/howbreeam-works/

¹⁰ See 8

¹¹ Real Capital Analytics, www.rcanalytics.com, Climate Risk: Abstract Concept to Financial Reality, January 2023

¹² See 8

13 See 8

¹⁴ There is no guarantee forward looking initiatives will be made within the next 12 months or at all.

REVIEWER RESPONSE

Our industry is at an inflection point in the way we think about ESG – moving beyond a myopic alignment with social good or one-off capital investments, to a multi-layered and direct linkage to stronger investment performance. We are just beginning to collect the data needed to quantify the degree to which buildings further along the path to net zero command higher rents, lower cap rates and stronger overall returns.

The authors do an excellent job looking to Europe to put forth early empirical support. In particular, the JLL data from the London office market demonstrating the positive link between BREEAM Energy Performance and certificates and higher rental rates is compelling and should be considered as an indicator of where the US is headed. The 35% premium for green office buildings in Paris and Sydney that was nonexistent in 2016, shows just how quickly the market can move and the steepness of the trajectory.

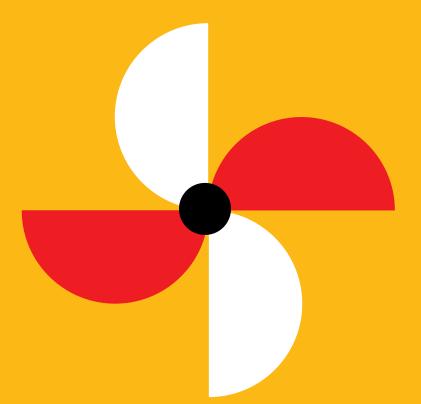
But investors cannot sit back and wait for backwardlooking data to prove the case. As noted in the article, the major US office markets have recently enacted regulations to penalize owners of buildings that do not meet minimum energy efficiency or carbon reduction targets. This is an urgent call to action and investors who do not have a plan in place to meet the new requirements have a material risk to investment performance.

While it may be the threat of penalties that initially drives action, it's the promise of outperformance investment that will ultimately set the pace of change. Those investors, like Madison, who are forward-looking and "skate to where the puck is going" have an opportunity to lead the market and capitalize on outsized investment returns while others catch up.

 Amy Price President, BentallGreenOak Member, Summit Journal Editorial Board

¹ Preqin, ESG in Alternatives 2022, February 2023

³ https://www.gov.uk/guidance/domestic-private-rented-property-minimum-energy-efficiency-standard-landlord-guidance



AFIRE

The numerous data points provide additional clarity and support for the potential financial advantages of prioritizing sustainability at an asset level from reduced vacancy rates to meeting tenant demand and complying with regulatory requirements.