

Insights**GREENING REAL ESTATE – WHERE ARE WE NOW?**

ENERGY EFFICIENCY SERIES – PART 1

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SUMMARY

Against the ambitious backdrop set by the Paris Climate Agreement to reach net-0 by 2050, there is a clear drive by corporations to move forward on their environmental, social and governance (ESG) or sustainability agendas. As approximately 40 percent of all global emissions are contributed by buildings and construction, the importance of how real estate (both construction of new developments and, perhaps more critically, existing buildings) can be greened is key to meeting these goals. Coupled with the current global energy crisis, greening real estate and renewable energy options have never been more relevant. This article will look at where the market is in relation to the push for greener real estate and what opportunities or risks are likely to arise. Over the next few articles, we will share our insights about M&A in the green space; green financing and green retrofits in key jurisdictions such as the United Kingdom and Asia with a particular focus on green energy and energy efficiency solutions.

INTRODUCTION

In 2016, the Paris Climate Agreement came into force and set the ambitious goals of reducing emissions by 45 percent by 2030 and reach carbon neutrality (net-0) by 2050 in order to keep global warming to no more 1.5 degrees celsius^[1]. As approximately 40 percent of all global emissions are contributed by buildings and construction, the importance of how real estate (both construction of new developments and, perhaps more critically, existing buildings) can be greened is key to meeting these goals.

Since 2016, companies are also more keenly aware of the impact of climate change with 80 percent of the world's largest companies reporting exposure to climate change related physical or market transition risks^[2]. There is a clear drive by corporations to move forward on their environmental, social and governance (ESG) or sustainability agendas. Coupled with the current global energy crisis, greening real estate and renewable energy options have never been more relevant.

As we enter 2023, ESG is one of the most pressing topics in the real estate sector that is here to stay. This article will look at where the market is in relation to the push for greener real estate and what opportunities or risks are likely to arise. Over the next few articles, we will share our insights about M&A in the green space; green financing and green retrofits in key jurisdictions such as the United Kingdom and Asia with a particular focus on green energy and energy efficiency solutions.

PUSH BY GOVERNMENT

In line with the Paris Climate Agreement, the UK government plans to reduce business and industrial energy consumption by at least 20 percent by 2030 and has targeted net-0 emissions by 2050^[3]. Under the Minimum Energy Efficiency Standards legislation, all rental properties in England and Wales require an Energy Performance Certificate (EPC) - this is also relevant where a new property is being built or significant alteration works are being carried out. The EPC is a rating system from A to G (A being the most efficient) which measures the energy efficiency of a property. Simply put, being energy efficient means using less energy to perform the same task thereby reducing energy wastage.

The UK government appears to be keen to put further pressure on owners of real estate as additional EPC rating goals of C by 1 April 2027 and A or B by 1 April 2030 for commercial properties are anticipated. This is a significant increase from the current minimum F or G EPC ratings required by 1 April 2023. Without the requisite minimum EPC rating, it will be unlawful for commercial property owners to let their property out and owners face potential fines of up to £150,000.

CURRENT MARKET

Markets are seeing increasing demand for green buildings driven by both occupiers and investors. Occupiers want the buildings they occupy to be in alignment with their ESG policies whilst reaping the energy cost savings of green buildings. Investors want certainty that their assets are able to comply with the minimum energy standards to ensure that they are not “stranded” with 63 percent of leading investors strongly agreeing that green strategies can drive higher occupancy, higher rents, higher tenant retention and overall higher value^[4].

RICS Sustainability report confirmed that 50 percent of their respondents found that green leases (i.e. leases which include obligations on both landlord and tenant to undertake specific obligations in relation to the sustainable operation and occupation of leased premises^[5]) command premium rents, and 30 percent stated that brown buildings (those without sustainability features) offer reduced rents to compensate tenants (commonly referred to as the “brown discount”)^[6]. This green lease premium can already be seen in the U.S. and U.K. U.S. office rents for LEED-certified office buildings are 5.6 percent higher than those for non-certified office buildings^[7] while prime central London office buildings with U.K. BREEAM Very Good, Excellent and Outstanding ratings have a rental premium of 3.7 percent to 12.3 percent^[8].

This upward demand for green buildings is also reflected in the expanding variety of green certifications available. Today, there is an estimated total of 600 green certifications worldwide. The three most well-known and internationally recognised certification systems which can be used for most types of building in many mature real estate markets are Leadership in Energy and Environmental Design (LEED), Building Research Establishment Global Environmental Assessment Method (BREEAM) and WELL Building Standards. There are additional green certifications available in other jurisdictions, for example NABERS in Australia (which was recently launched in the UK in 2020) and Energy Star Building Certification in the U.S.

At an institutional level, the Global Real Estate Sustainability Benchmark (GRESB) enables real estate investors to gain insight into their ESG policies by measuring real estate and infrastructure sustainability measures. Despite the global pandemic, participation in GRESB assessments in 2021 grew by 26 percent to 2,227 real estate and infrastructure entities and covering US\$5.7 trillion worth of assets under management^[9].

It is our view that the market (i.e. landlords, tenants, real estate investors, developers etc.) is a key driver in the green revolution in real estate. This trend is here to stay and is likely to increase in the coming years.

IMPACT ON PROPERTY VALUES

The RICS Sustainability Report confirms that green leases benefit from a rent premium. Clearly, buildings which can attract higher rents have a higher value in the market. The link between sustainability and profit is increasingly clear as owners of green buildings enjoy a sales premium driven by rent and yield.

Research by Knight Frank has shown the following^[10]:

- in London (biggest pool of green buildings and longest history of green building ratings globally): prime central London office with a BREEAM Excellent rating and BREEAM Very Good rating enjoy a 10.5 percent and 10.1 percent sales premium respectively compared to equivalent unrated buildings.
- in Australia: prime office buildings in Melbourne and Sydney with a NABERS rating of 5+ and a NABERS rating lower than 5 enjoy a 17.9 percent and 8.3 percent sales premium respectively compared to the equivalent unrated

buildings.

OPPORTUNITIES

Today, 97 percent of commercial buildings do not support the transition to net-0 by 2050^[11] and 80 percent of the buildings that will be standing in 2050 have already been built. McKinsey research estimates approximately US\$9.2 trillion in annual investment will be required globally to support the net-zero transition^[12]. This poses many opportunities as the 2050 net-0 and EPC deadlines loom over markets.

For example:

For Real Estate Investors (e.g. REITS, funds, family offices etc)

In the UK, Savills has estimated that (i) for residential, £330 billion is needed to implement all potential energy efficiency improvements required in order to meet 2035 targets and (ii) the UK retail sector has 1.4 billion sq ft (83 percent of stock) currently below an EPC B rating, theoretically making it unlettable by 2030^[13].

Inevitably, there will be buildings which are not green retrofitted in time and become stranded due to a variety of reasons. For example, the relevant owners may simply not have the finance needed to upgrade or inability to obtain requisite planning permissions. Investors with liquidity or access to external finance and green know-how can capitalise on such opportunities and enjoy brown discounts on such buildings.

For Renewable Energy Providers and Energy Efficiency Service Providers

Renewables are the fastest-growing energy source for buildings worldwide with the usage increasing by approximately 4 percent annually between 2009 and 2019^[14]. Integrating on-site renewable projects like solar photovoltaic panels or hydrogen fuel cells are another great way to reduce building emissions and operational costs.

In light of record energy prices and in order to achieve the 0-net goal, now appears to be the perfect time for renewable energy providers to help real estate investors identify assets with the best business cases by looking at each asset's building suitability, occupier interest, local policies and incentives and providing solutions accordingly. In the same vein, energy efficiency service providers are poised to help real estate investors assess the energy efficiency of their assets in order to provide guidance as to the green retrofits and energy efficiency solutions needed to ensure that assets are up to government standards by the requisite deadlines.

For Property Technology ("Proptech") Firms

Data and information are crucial for companies to measure their ESG practices and buildings to accurately track carbon waste and energy usage. This is where new technologies for real estate or proptech comes into play – proptech strategies can help buildings be more cost and energy efficient and more responsive to tenants. The potential for growth in green technology and sustainability services is significant with its market size expected to grow from US\$13.76 billion in 2022 to US\$51.09 billion by 2029^[15].

Proptech firms could target owners looking to retrofit their brown buildings and demonstrate how their technologies reduce operating costs or increase rental returns. Real estate firms can consider win-win partnerships with proptech companies by allowing such companies to beta-test their proptech at buildings or providing capital and connecting such companies to the real estate industry.

TIME HORIZON

With the clock ticking towards EPC deadlines and the 2050 net-0 deadline, the push for green real estate is not going anywhere. More mature real estate markets like the UK and US are already experiencing green lease and sale premiums (albeit the US is still behind Europe generally in this regard). Buildings that are not able to measure up to either mandatory

energy certifications or market demand will be subject to a brown discount likely due to lower occupancy rates, high operational costs and capital depreciation.

We predict that this green real estate wave will only gain more momentum in markets in Asia as governments introduce legislation to tackle the effects of climate change and investors become more invested in their ESG practices. In Singapore, the Building and Construction Authority (BCA) and Singapore Green Building Council has set a "80-80-80" target for 2030: i) 80 percent of buildings by Gross Floor Area to be green by 2030, (ii) 80 percent of new developments to be Super Low Energy buildings from 2030, and (iii) 80 percent improvement in energy efficiency (compared to 2005 baseline levels) for best-in-class buildings by 2030. The adoption of green leases has become increasingly popular in Hong Kong SAR. Sustainability is a key global trend in all real estate asset classes^[16]. Where Asian governments have started the clock, it is only a matter of time before occupiers and investors take over the green agenda and push standards higher as per European markets.

CONCLUSION

Time is of the essence for building owners to examine and evaluate which of their assets are not up to par. With market demand from real estate investors and occupiers for more green spaces increasing and the lack of supply, there is a risk that brown buildings will become stranded earlier than government EPC deadlines or 2050. This provides a truly unique opportunity for traditional real estate and energy and infrastructure professionals to come together to find new and creative solutions. Property investors, proptech companies, financiers and energy efficiency service providers who are able to spot the gaps will find a host of opportunities in this current climate. Over the next few articles, we will examine more closely how such parties can capitalise on the green revolution sweeping through the real estate sector.

[1] <https://www.un.org/en/climatechange/net-zero-coalition>

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[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785850/helping-businesses-improve-way-use-energy-govt-response.pdf

[4] JLL's report on Decarbonising the Built Environment, <https://www.jll.com.sg/en/trends-and-insights/research/decarbonizing-the-built-environment>

[5] <https://content.knightfrank.com/resources/knightfrank.co.uk/commercial/energy/green-leases-brochure.pdf>

[6] Deloitte 2022 Real Estate Predictions, <https://www2.deloitte.com/ce/en/pages/real-estate/articles/real-estate-predictions-2022.html>

[7] <https://www.cbre.com/insights/reports/esg-and-real-estate-the-top-10-things-investors-need-to-know#introduction>

[8] <https://www.knightfrank.com/research/article/2021-09-02-the-sustainability-series>

[9] <https://www.gresb.com/nl-en/insights/the-gresb-esg-benchmarks-expand-in-2021-to-cover-6-4-trillion-of-assets-under-management-despite-global-challenges-from-covid-19/>

[10] <https://www.knightfrank.com/research/article/2021-09-29-green-building-value-do-green-rated-buildings-add-a-premium-to-sales-price>

[11] <https://www.fidelityinternational.com/editorial/blog/how-big-a-threat-is-the-brown-discount-447270-en/5/>

[12] <https://www.mckinsey.com/industries/real-estate/our-insights/climate-risk-and-the-opportunity-for-real-estate>

[13] <https://www.savills.co.uk/insight-and-opinion/savills-news/320953-0/savills-unveils-the-scale-of-the-sustainability-challenge-for-the-real-estate-sector>

[14] ULI Greenprint's 2022 report on Renewable Energy Strategies for Real Estate, https://knowledge.uli.org/-/media/files/research-reports/2022/uli-renewableenergy_v9.pdf?rev=ea01cd38109c41668620c074fcf13c36

[15] <https://www.globenewswire.com/en/news-release/2022/08/24/2503585/0/en/Green-Technology-and-Sustainability->

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[16] ULI Europe and PwC Emerging Trends@ 2023 Report, <https://knowledge.uli.org/en/webinars/2022/uli-europe-and-pwc-emerging-trends-2023-report-launch>

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