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# The Future Of Real Estate Development

## Introduction

**“There must be a better way to make the things we want, a way that doesn’t spoil the sky, or the rain or the land.”**

### **Sir Paul McCartney**

The growing demand for greener, more efficient, and higher quality buildings is one of the most important drivers of the global property market. Amid continuing climate uncertainty, the real estate industry is becoming increasingly conscious of the impact which today’s choices are having on tomorrow’s world. In this respect, addressing sustainability is highly eminent and of major importance. This essay will consider the extent to which environmental sustainability influences real estate marketability. Firstly, reference will be made to the future of real estate development and the increasing demand for more efficient, carbon-neutral buildings. Secondly, emphasis will be placed on the tangible benefits associated with greener building and sustainability. Finally, the risks arising from extreme weather events will be considered briefly as an element of the broader sustainability theme. In conclusion, it is submitted that buildings with relatively better sustainability credentials enjoy increased marketability.

## The Future Of Real Estate Development

The real estate industry has a critical role and increasing responsibility to achieve climate and environmental sustainability targets. The built sector uses more energy than any other industry and is a growing contributor to CO<sub>2</sub> emissions (see appendix 1 for environmental impacts). In practice, the construction and use of buildings accounts for 40 per cent of overall power consumption and over 20 per cent of global greenhouse gas emissions (RICS, 2019). This is a staggering carbon footprint; and with global energy demand growing faster than current production capacity, there is most-certainly a compelling reason to act with force. If projections are correct, global energy demand is expected to double by 2050 in order to keep pace with economic, demographic and industrial growth (IEA, 2017). Hence, improving the energy efficiency of buildings will make a substantial contribution towards achieving both national and global targets to combat global warming.

With this in mind, there has been a significant shift in the property market towards the production of more environmentally sustainable building structures. According to the CBRE 2018 International Green Building Index, 19 percent of the 11 global property markets monitored are now considered ‘green’ (equating to an impressive 21 million square metres). This marks a notable 12 per cent increase since 2007. Not only that, the global green buildings market is expected to enjoy an outstanding 10.26 percent compound annual growth rate between 2018 and 2023 (Market Watch, 2019). These figures reflect a significant shift in investment practices towards sustainability and delivering the ‘Triple Bottom Line’ (see appendix 2 for ‘Triple Bottom Line’ incentive).

Furthermore, supportive government policies coupled with sustainable certification schemes are

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anticipated to fuel market demand for 'greener property' (BNP, 2018). The UK Government has recently set an ambitious and legally binding target to reduce national greenhouse emissions by at least 80 percent by 2050 (Climate Change Act 2008). At the same time, the Government has introduced the EU Energy Performance of Buildings Directive (EPBD) requiring buildings to have regular Air Conditioning Energy Assessments (ACEAs), Energy Performance Certificates (EPCs) and Display Energy Certificates (DECs) (Council Directive 2018/844/EU). Collectively, these legal instruments impose minimum standards of energy efficiency in an attempt to revolutionise the building sector towards a carbon neutral future. As these certification schemes become more familiar, and sustainability performance statistics more accessible, 'market participants will be better equipped to integrate sustainability considerations into their decision making' (NBIM, 2015). That being said, in England and Wales, approximately 10 percent of residential property stock (worth £570 billion) and 18 percent of commercial stock (worth £157 billion) does not meet these 'minimum standards' (CityMetric, 2019). Thus, if these properties are not adequately retrofitted with alternative, more energy efficient measures, there is a real risk they will be rendered obsolete and hence lose significant market value. This is poignant illustration of how important sustainable thinking is becoming in real estate.

## **Sustainability As A Value Driver**

Moreover, there is growing market evidence of a positive correlation between green building characteristics and investment performance (An and Pivo, 2015). Investments in 'green buildings' can generate measurable financial value, reduced risk of depreciation, as well as increased liquidity and lettability (see appendix 3 for further drivers of sustainable change). Not only does this impact positively on property valuations; it also influences portfolio strategy as investors evaluate whether to dispose, renovate or acquire properties in lieu of an effort to produce higher returns on investment (Moxie Future, 2019). According to a 2019 Ramboll study, sustainable buildings have had a huge influence on market value in the real estate sector: '...30% of the investors reported an increased property value of 0-3%, 25% reported an increased property value of 4-10% and 9% reported an increased property value of more than 10%'. Comparably, the average green building is said to be worth 7 percent more than its conventional counterpart (Landreneau, 2017). On account of this, it is clear that investment in sustainable assets can enhance the medium to long-term value of property portfolios.

Further, commercial tenants appear increasingly willing to pay a premium for rental units that contain green attributes (this is referred to in the literature as the 'green premium'). Recent market analysis indicates that commercial buildings with greater levels of energy efficiency indeed secure higher rental growth, occupancy rates and yield premiums (Devine and Kok, 2015). For example, according to a recent report published by M&G Real Estate (2018), certified green buildings achieve a much higher rental income (+53bps), thus resulting in a greater distributable income to investors overall (+19bps). From a tenant's perspective there is a clear interest in comprehending the savings during the rental period. In fact, approximately 61% of commercial entities consider reduced operating costs/service charges to be the most important added value connected to sustainable buildings (see appendix 4). Other benefits include increased employee productivity, healthier environmental quality, as well as enhanced brand image and related marketing positions (World Economic Forum, 2018). Collectively, these factors make sustainable green buildings especially attractive to prospective tenants in the property market. Prime commercial and residential buildings which do not showcase these

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qualities, may instead suffer from a 'brown discount' as opposed to a 'green premium', thereby leading to a shorter operational life as a result (Barton Willmore, 2018). Accordingly, it is evident that rental growth is correlative to enhanced asset-level performance in sustainable buildings.

## **Extreme Weather Events**

Finally, real estate values are being increasingly threatened by extreme weather events. Amid rising average global temperatures, severe weather events such as flooding, wildfires and hurricanes have resulted in severe economic losses over the past decade, and these events are only increasing in frequency (see appendix 5). For example, the number of floods has quadrupled since 1980 and doubled since 2004 (MSCI, 2019). The subsequent impact for real assets investors can be catastrophic; ranging from increased operational costs, higher insurance costs, property devaluation and in some extreme cases, the complete loss of the property itself (Financial Times, 2020). This leads to a competitive disadvantage for buildings in high risk areas. For example, residential property in the US exposed to sea level rise (SLR) sell for approximately 7 percent less than observable equivalent unexposed properties nearby (PGGM, 2019). In this respect, climate change is increasingly a risk that investors cannot afford to ignore.

## **Conclusion**

To conclude, it is proven that sustainability is a fundamental real estate concern affecting a wide plethora of issues. The combined demand from investors, occupiers and regulators are such that tangible benefits can be obtained from integrating sustainable principles into the full investment process. Property value fundamentals including operational costs, client demand, obsolescence, rate of depreciation and liquidity are inter alia becoming increasingly sensitive to sustainability factors. Accordingly, it is submitted that the market demand for 'greener' properties - both residential and commercial - will continue to grow in an exponential manner in the coming years. In addition, the repercussions of climate change, including extreme weather events and natural disasters, are frequently emerging as formidable challenges for the built environment. Investors who have clearer models on their asset's exposure to varying 'climatologic conditions' will be in a much better position to increase market value and thus avoid the risk of asset stranding in future investments. Besides this, as the environmental impacts of climate change becomes more apparent, and government regulation of carbon emissions expands, there needs to be a deeper focus on reducing greenhouse gas emissions. It's time for investors to wake up and save the planet. The future is green.