



Towards a Sustainable Future: How ESG is Transforming Real Estate

Integrating comprehensive and considered ESG strategies across real estate portfolios poses significant challenges for investors, fund managers, and building operators. To realize a sustainable future for the built environment, over the majority of the UK's 2.1 million non-domestic building assets require a tailored strategy to enhance sustainable development performance. Successfully incorporating ESG in real estate requires a multifaceted approach spanning interconnected environmental, social, and governance themes.

On the environmental side, energy efficiency and decarbonization are essential to mitigate carbon emissions. This involves the careful consideration of interventions such as building optimization, lighting upgrades, strategic HVAC upgrades, the incorporation of onsite renewable energy generation, and building façade insulation retrofits. Incorporating nature-based solutions like green roofs, biodiversity net gain and ecology surveys can also help restore and safeguard the natural ecosystems that encompass the built environment. Additionally, adapting to intensifying climate change effects requires assessing acute and chronic risk exposures across portfolios and designing resilience strategies.

Social priorities centre on elevating occupant well-being through undertaking post-occupancy evaluation studies and the selection of human-oriented design. Circular economy principles enable waste minimization through flexibility in materials use, selective demolition, and upcycling.

The development of bespoke sustainability roadmaps that temper granular enhancements and portfolio-wide alignment of environmental, social, and governance goals enable real estate owners to drive sustainability despite the sector's complexities.

The New Sustainability Imperative: Forces Converging to Compel ESG Adoption in Real Estate

Several key factors are driving increased adoption of ESG strategies in the real estate sector.

Commercial drivers are encouraging the adoption of enhanced sustainability performance for buildings. For example, BREEAM, a leading green building certification system, is being integrated into regulations worldwide. Higher BREEAM, NABERS and FitWel are prominent green building, energy performance and social wellbeing certification frameworks. If appropriately implemented, they can translate into higher return on investment and valuation per GIA.

Building regulations and net zero carbon policy also play a significant role in enhancing ESG in real estate. The UK's Green Building Council (GBC) framework stipulates a clear path to net zero carbon for both operational and embodied carbon emissions. Moreover, the UK Government recently passed the Biodiversity Net Gain (BNG) regulation, which is a strategy to develop land and contribute to the recovery of nature – for building projects to leave the habitat and wildlife in a better state than it was before.



Market pressure is also mounting - tenants and operators are preferentially seeking out buildings that prioritize sustainability performance. Enhanced indoor air quality and features like access to nature and ample natural light are in hot demand post-pandemic.

Furthermore, climate change exacerbates physical and transitional risk exposures that threaten long-term building viability. Adaptation through resilience upgrades and mitigation via emissions reductions, help protect portfolios from the threat of stranded assets.

As regulations evolve, climate impacts intensify, and stakeholder expectations escalate, ESG integration becomes mission-critical for future-proofing real estate assets and becoming ever more linked to holistic and transparent investing. Proactive adoption of coherent ESG strategies prepares organizations to capitalize on opportunities while managing rising transition and physical risks.

ESG Reporting Decoded: Demystifying Regulations and Frameworks Impacting Real Estate

ESG reporting frameworks like EU SFDR and TCFD have distinct implications at the real estate fund and asset levels.

For real estate investment funds, EU SFDR requires disclosure of sustainability metrics like greenhouse gas emissions, energy usage, and physical asset climate risks across their portfolios. This portfolio-wide data is aggregated from individual properties and presented as consolidated fund-level disclosures.

Gathering consistent, high-quality data across multiple assets poses challenges, requiring standardized collection processes. Funds must also distill asset-specific complexities into simplified metrics for SFDR while still meeting strict regulatory requirements.

At the building level, real estate assets are subject to evolving regulations around decarbonization, energy efficiency, and materials. This makes on-the-ground implementation critical. Funds must enable interventions across assets that collectively achieve portfolio sustainability goals set by frameworks like TCFD and the upcoming UK Transition Plan Taskforce.

Juggling granular asset enhancements with consolidated fund reporting spanning diverse regulations is complicated. It demands a coordinated approach balancing top-down ESG strategy with bottom-up execution. Streamlining data flows and aligning standards enterprise-wide provides consistency and compliance.

Despite complex navigations, these frameworks ultimately encourage real estate investors to embed sustainability through mandated transparency and risk mitigation. The industry is only becoming more scrutinized - proactive management of incoming regulations provides a competitive edge.

Plot the Path from Dated to Decarbonized: Navigating Regulations for New and Existing Real Estate

New developments have inherent advantages over existing buildings when it comes to the potential for achieving high levels of sustainability performance and ESG compliance



New assets can leverage the latest energy-efficient building materials, thermal and electrical energy systems, and designs to minimize environmental footprints from the outset, assuming the appropriate specifications are developed and adhered to at the procurement and construction phases.

However, the vast majority of UK's real estate portfolios consist of older, inefficient building stock. In the UK, over 95% of non-domestic buildings use fossil fuels (typically gas and oil) for space and domestic hot water heating. As decarbonization policies accelerate, existing buildings face costly and disruptive engineering upgrade works to achieve net zero carbon status and ensure mandatory compliance.

The UK is set to reduce economy-wide greenhouse gas emissions by at least 68% by 2030, from 1990 levels, with the real estate sector accounting for almost 40% of emissions nationally.

The UK net zero Carbon policy is gathering traction, the Future Homes Standard will ensure that all new-built homes are zero carbon ready. Existing domestic dwellings are required to meet an Energy Performance Certificate (EPC) "C" rating by 2035, with all rented non-domestic buildings targeting an EPC "B" rating by 2030.

These decarbonization targets are essential if the UK is to meet the overarching goal of net zero emissions by 2050. The considered design and delivery of intervention strategies like electrification, insulation, and renewable energy systems, are essential to reducing carbon footprints at scale.

Navigating the Benefits and Barriers of Enhanced ESG.

Implementing sustainability and ESG initiatives across real estate portfolios provides multifaceted benefits, but also poses challenges:

For asset owners, interventions like electrification, renewable energy, and efficiency upgrades reduce operating costs through lower energy consumption. Enhanced reputation and marketability also come with sustainable buildings that align with global climate goals. This can attract investment from a broader array of limited partners and enhance fund's optics.

However, custom decarbonization roadmaps require upfront planning and costs. Compliance also demands specialized skills as regulations rapidly evolve. For example, the UK aims to drastically scale up heat pump deployment from 30 thousand per year to 600 thousand per year by 2028, which necessitates major investments in training to build an appropriately sized workforce.

Shortages of qualified labour alongside data limitations, budget constraints, and competing priorities can slow sustainability progress. However, strategic partners like Terra Real Estate offer holistic guidance combining asset-level engineering with portfolio optimization and disclosure support.



Staying Ahead of the Curve: Adopting Cutting-Edge Sustainability Practices in Real Estate

Several sustainability trends are emerging across the real estate sector:

- **Nature-positive design** - Strategies like biophilic elements, green space, and native landscaping are being incorporated to enhance biodiversity, earn certifications, and provide occupant benefits. Protecting local ecosystems is also gaining prominence through considerations like flood resilience and heat mitigation.
- **Embodied carbon** - While operational emissions from building use have been the primary focus, embodied carbon from materials manufacturing and transport is now also being assessed. Taking a whole lifecycle approach to quantify and reduce emissions across construction, use, and eventually demolition enables deeper decarbonization.
- **Technology integration** - AI and IoT technologies are enabling real-time energy optimization, predictive maintenance, and remote management. Occupant-centric technology like smart lighting and air quality monitoring also support wellness and productivity.
- **Taking a holistic approach** - Rather than looking at buildings in isolation, portfolios are taking connected approaches considering impacts and enhancement to decarbonization, nature-positive design, resource efficiency, climate adaptation and social value. This system-thinking approach enables building operators to achieve enhanced performance beyond cutting carbon by leveraging the interdependencies between environmental, social, and economic sustainability.

Futureproofing through Foresight: Unlocking Value Through Proactive Real Estate Sustainability Planning

Developing an effective and considered sustainability masterplan begins with thoroughly analyzing the existing conditions and operating energy and carbon performance of an asset, to establish and identify a benchmark and early opportunities for improvement. Setting ambitious yet feasible environmental, social, and governance (ESG) targets provides direction, and prioritizes high-impact initiatives aligned with incoming regulations.

Subsequently, capturing asset data via surveys and undertaking rigorous data-driven analysis and a clear net zero road map, capturing intervention carbon reduction potential capital cost vs operating costs reduction, and timelines are critical steps. Ongoing performance monitoring and reporting ensures regulatory compliance and asset performance tracking.

Proactive planning and assessment can bring transparency to the complexities of enhancing sustainable interventions for real estate. Partnering with experienced advisors, investors and operators can future-proof assets and maximize value.



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