Executive Summary

Sustainability Metrics
TRANSLATION AND IMPACT ON PROPERTY INVESTMENT AND MANAGEMENT

A report by the Property Working Group of the United Nations Environment Programme Finance Initiative
May 2014
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This Executive Summary provides an overview of a framework for a corporate real estate sustainability management (CRESM) system for property investment and management organisations. A detailed description and analysis of the framework and recommendations is available in the Main Report:

www.unepfi.org/work_streams/property

Recommendations for best practices are made for different levels: corporate, portfolio and single building. The framework can be used by property investment and management organisations as a means:

- to meet their environmental, social and governance responsibilities whilst addressing the financial risks of sustainability
- to provide an overall quality assurance tool and mechanism of their corporate processes.

Although relevant information and data required for sustainability performance assessment and management are already being collected, this is not yet performed in a systematic and well-organised manner. The various interactions of property market players and interrelated functions within investment and management organisations create a complex web of interconnected information flows and requirements. This complex web needs to be understood and systematically managed. This will enable building-related information and data to be integrated within business processes as a basis for informed decision-making.

Key challenges are identified for property investment and management firms: to organise information flows more efficiently, to ensure data accessibility and comparability across different corporate departments and between business partners and service providers, and to develop and implement appropriate decision-support instruments.

The purpose of this report is to help property investors and managers understand the value they can create from a change in their behaviour and processes:

- buildings’ sustainability performance will impact on asset and portfolio value, corporate reputation and financial performance
- existing tools and systems can be fine-tuned
- sustainability considerations can be embedded within business and decision-making processes at different corporate levels.

Although the main audience is commercial property investment and management firms, this report is also useful for other property professionals and decision-makers in related sectors (e.g. banking and insurance). The ideas, concepts and arguments presented in the report can also be applied to residential buildings and portfolios.
“This is an insightful report that should be of interest to any organisation, irrespective of their stage of maturity in managing sustainability metrics. [...] This is an excellent example of where academia meets commerce.”

Andy Szyman
Head of Sustainability
F&C REIT Asset Management
“The most thorough, yet clear-thinking, papers I have read on the practical implementation of sustainability metrics. […] I can foresee corporations seizing upon many of your ideas as a road map for firmly embedding sustainable development objectives into their strategy-setting.”

Steve Williams
Executive Managing Director
Real Capital Analytics
Past President RICS
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With approximately 70% of the world’s wealth bound up in land and real estate, this sector is vital to economic development, helping to underpin stable, sustainable investment and growth around the globe. Buildings account for approximately a third of the world’s energy consumption; they contribute to global greenhouse gas emissions and are thus considered a sector requiring urgent action to mitigate climate change.

There is encouraging momentum in the real estate investment industry towards understanding and acting on the risks and opportunities that arise from climate change and sustainability. Sustainability Metrics: Translation and Impact on Property Investment and Management builds on the body of existing evidence including the recently published UNEP FI Investor Briefing Commercial Real Estate - Unlocking the Energy Efficiency Retrofit Investment Opportunity. It is aimed at enabling the wider uptake of sustainability risk management practices across the industry and amongst its stakeholders and service providers.

This Sustainability Metrics report proposes a framework for a Corporate Real Estate Sustainability Management (CRESM) system. The framework provides a useful tool for mitigating risks and creating opportunities across the investment process at corporate, portfolio and single building levels. It ensures that sustainability information is translated into a valuable resource for boards and key decision makers. The framework also helps investors to both protect the value of real estate funds and comply with their fiduciary duties.

Finally, this report offers an opportunity for policy makers to better understand the complexity of sustainability management in the real estate sector. It aims to assist them in developing sustainability-related policies which maximise environmental and social benefits and provide appropriate incentives and instruments to investors.

We are glad to present this report that represents a joint venture between leading stakeholders in the field of property investment, advice and management. Our common goals are to encourage sustainability in property finance and promote property investment and management practices that achieve the best possible financial, environmental and social outcomes.
1. UNDERSTANDING THE PROBLEM AND RESULTING CHALLENGES

Today, a growing portion of the property sector has acknowledged there is a need to act on sustainability issues. However, property organisations are currently struggling to integrate sustainability considerations into decision-making processes.

The property investment community faces an information management problem. The complex interactions between property market players as well as within individual property organisations create a web of interconnected information flows and requirements. Some confusion resides within the investment community on how to approach and manage this complexity. This Executive Summary and its underpinning detailed Main Report show there is a deficit in understanding how decisions at portfolio and building levels are affected by sustainability performance. Nor is it clear to many within the property sector how sustainability decisions and actions impact building, portfolio and corporate value.

A framework is proposed to address this problem. It provides a coherent approach for using sustainability data/information to identify and understand impacts on building and portfolio financial performance. Importantly, the harnessing of this information is an overall quality assurance tool and mechanism that supports all corporate processes. A clear benefit is the ability to assess the impact of sustainability-related activities on corporate value.

Until recently the property investment community perceived the collection and analysis of sustainability-related data/information as a burden due to an uncertainty about what relevance these data have for investment and asset management decisions (UNEP FI, 2011). This perception had consequences for data collection and analysis processes within the industry.

A survey of property investors and managers was undertaken to ascertain what type of sustainability-related data is currently being collected and for what purpose. (The survey and the results are described in detail in the Main Report).

The survey revealed that (1) a relatively sound understanding of sustainability exists in relation to single buildings and investment vehicles, but (2) the respective data/information are not yet systematically captured and processed. Some of this information is already gathered within data collection processes and taken into account to support decision-making. Some information may be labelled with a different name. Some data collection takes place without systematic coordination. Some data are lurking in a range of different corporate departments without the facility to share data (the silo effect). This not only hinders the exploitation of the added value of sustainability-related information but also impedes a more profound understanding of the relevance of these data/information for investment and management processes. So there is a potential stalemate situation.

More than two-thirds of the responding organisations (81%) currently have some form of “sustainability check” in place in order to assess new and/or existing buildings. However, very few organisations (16%) are actually able to utilize this information for sustainability reporting functions. This is because the sustainability checks for buildings are mostly performed in isolation, i.e. they are outside of the standard data gathering processes with little or no connectivity to wider corporate frameworks. In addition, there is reliance on analytical tools from third-party service providers (i.e. facility management functions are often outsourced), as well as sustainability assessment results that are already processed (i.e. often highly aggregated). Above all, there is an absence of centralized information databases for building-related data/information. 58% of survey participants responded that they do not have any form of internal information management system in place.
To address the problem at a practical level, it is necessary to consider that information flows need to be structured and managed in relation to three different domains (see Figure 1):

- **Organisational**: the sharing and aggregation of information and data occurs across different hierarchical functions and levels within the organisation (corporate, portfolio and single building).
- **External**: relevant data/information need to flow efficiently between an organisation and its contractors, third-party service providers, stakeholders; as well as between the parties involved in property transactions.
- **Cross-over**: a property organisation takes the role of an information-sharing platform between its business partners and service providers. It can be a valuable information source, for example for valuation professionals.

**Figure 1**
Simplified representation of information management domains
The key challenges that arise for property investment and management organisations are: modifying analytical methods (such as integrating sustainability into investment and portfolio analysis); re-organising data formats, data collection processes and information flows; ensuring data accessibility and comparability not only across different corporate departments but also in relation to external partners and service providers; and in developing and implementing appropriate ICT-based decision support instruments.

Expressed another way, the key challenge is:

*to collect, organize, aggregate and interpret valuable (but often underrated) data/information so that it can be integrated into core business and decision making processes. This will significantly support more responsible property investment and management practices and help organisations protect the value of their assets and comply with their fiduciary duties.*

“The challenge that our industry faces is developing consistent and robust, yet efficient, frameworks that combine information from various sources and processes in order to inform investment decisions.”

**Ari Frankel**

Head of ESG Strategy, Real Estate

Deutsche Asset & Wealth Management
2. THE WAY AHEAD: CORPORATE REAL ESTATE SUSTAINABILITY MANAGEMENT (CRESM)

From a boardroom perspective, it is critical to harness the relationships between sustainability issues, related data/information, and property investment and asset management operations. The successful integration of decisions at the corporate level ("boardroom") with the performance-related characteristics of single buildings ("boiler-room") requires a clear understanding of ‘impact chains’.

The notion of ‘impact chains’ is used to demonstrate the mutual interrelationships between various levels of building performance and investment level performance. Impact chains can, for example, reveal how technical data on physical and performance aspects can be used to generate valuable information that is relevant for decision-making.

Mapping impact chains by corporate information flows requires a systematic and holistic approach to data/information across the whole organisation. Such an approach is an integral part of corporate sustainability management.

A 2006 UNEP FI report refers to corporate sustainability as: “a business approach that creates long-term shareholder value by embracing opportunities and managing risks derived from economic, environmental and social developments.” (UNEP FI, 2006, p.3)

Sustainability management is defined as: "a generic term for environmental and social management and corporate governance. It refers to the processes or structures that an organisation uses to meet its sustainability goals and objectives while transforming inputs into a product or service.” (UNEP FI, 2006, p.3)

Building on these definitions, Corporate Real Estate Sustainability Management (CRESM) thus refers to the integrated management of all economic, environmental and social aspects of an organisation’s property (real estate) activities and associated investment decision-making. It involves all relevant strategies, processes and organisational structures that support corporate governance and sustainable business and product development.

The starting point for understanding the impact chains is the physical property characteristics (see Appendix 1 and Figure 4 in the Main Report). These physical aspects influence a property’s performance characteristics (see Figure 2).
### Figure 2

Property performance / quality characteristics

<table>
<thead>
<tr>
<th>Technical quality</th>
<th>Cultural and social quality</th>
<th>Environmental quality</th>
<th>Economic quality</th>
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<tbody>
<tr>
<td>Structural safety</td>
<td>Aesthetic quality</td>
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<tr>
<td>Maintainability</td>
<td>Indoor air quality</td>
<td>global &amp; local</td>
<td></td>
</tr>
<tr>
<td>Flexibility and adaptability</td>
<td>Comfort (thermal, visual, acoustic, olfactory)</td>
<td>environment incl. risks to the local environment</td>
<td></td>
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<tr>
<td>Ease of cleaning</td>
<td>User safety</td>
<td>Land use change &amp; sealing</td>
<td></td>
</tr>
<tr>
<td>Durability</td>
<td>User participation and control</td>
<td>Water consumption</td>
<td></td>
</tr>
<tr>
<td>Resilience against natural and man-made hazards</td>
<td>Accessibility (to and inside the building)</td>
<td>Wastewater</td>
<td></td>
</tr>
<tr>
<td>Design for deconstruction and recyclability</td>
<td></td>
<td>Waste (construction &amp; user related)</td>
<td></td>
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</tbody>
</table>

**Notes:**

- GHG = greenhouse gases
- GWP = global warming potential
Indeed, property performance and quality characteristics (in addition to the influences from the market environment, location and site) impact on a property’s cash flow, risk profile and market value as well as investment value. Obviously, single buildings contribute to the goals at portfolio level. For organisations that hold property portfolios, the portfolio’s performance significantly links through to corporate success and corporate value.

These impact chains need to be mapped and validated with corporate information flows. These flows can be aggregated from bottom to top and interpreted at different levels (building, portfolio, and corporation). Figure 3 depicts a simplified representation of impact chains as well as the mutual interrelationships between data/information demand and data/information gathering and processing. The figure can be read by either starting at the bottom or top of the diagram.

When read from the top, Figure 3 shows that several requirements regarding the performance and characteristics of buildings/portfolios emerge. These are based on the corporate vision, investment strategy and economic success factors. Or expressed another way: in order to comply with a defined corporate vision and investment strategy, an organisation’s investment properties (and its owner-occupied properties) need to meet (amongst others) environmental and social performance requirements. In order to determine the degree of compliance as well as resulting corrective actions, property performance (as described in Figure 2) needs to be measured, monitored and reported.

When Figure 3 is read from the bottom, it shows that physical property characteristics influence the performance characteristics of single buildings (and portfolios). These impact on economic parameters (e.g. rent and operating cost) and affect market value and other economic success factors. Certain physical and performance characteristics directly affect economic factors while other physical and performance characteristics indirectly impact economic factors through image/reputational gains.
Figure 3
Information demand and impact chains
(simplified version¹)

As an individual asset’s sustainability performance can impact on portfolio value, corporate reputation and corporate success in many ways, the adoption of CRESM is a vital element of a responsible corporate policy. It requires implementation into standard investment and asset management processes.

¹ For a detailed version of this figure see Figure 6 of the Main Report.
3. **KEY BENEFITS OF INTEGRATED DECISION-MAKING PROCESSES**

“Your recommendations provide a toolbox not only for compliance but, more importantly, for capturing the economic advantage of sustainability that has too often proven difficult, if not impossible, to measure in terms of a financial bottom line.”

**Steve Williams**  
Executive Managing Director  
Real Capital Analytics  
Past President RICS

Various benefits arise from a more systematic and holistic approach to the management of sustainability-related data/information across the whole organisation. The most obvious benefit is an improved understanding of the impact of sustainability performance on asset and portfolio value. It also enables organisations to understand and assess the impact of sustainability-related activities at the building level on corporate value.

“We believe that sustainability risks are integral to both functional and physical depreciation of buildings. [...] We see this as a key risk factor that should be incorporated in the real estate industry’s existing dividend discount models in assessing value. Only in this manner will we be able to manage our portfolio as a responsible investor on behalf of our clients.”

**Chris Taylor**  
Chief Executive Officer  
Hermes Real Estate
Sustainability impacts are indeed increasingly being recognized, acknowledged and built into value estimates by property valuation professionals. Such practices have become explicit obligations by those responsible for setting valuation standards. The recent alterations to the RICS’ Red Book (RICS, 2014) and the accompanying Guidance Note (RICS, 2013) are by far the strongest endorsement of sustainability as a potential value driver and risk factor contained in any professional valuation standard, nationally or globally.

The result is that valuation practitioners now must (1) explicitly recognize the importance of sustainability considerations within valuation assignments and (2) extend their data collection and inspection processes accordingly. An important implication arises for clients: whenever a client / owner organisation needs a property valuation performed to RICS standards (e.g. for their accounts), there will be a demand for extended information. This entails the establishment of a properly managed internal information flow and an organised information system. The provision of data/information will avoid additional risk premiums in the valuation process.

As more sustainability-related information becomes available in the market place, then more sophisticated analyses can be undertaken. This will result in better-informed investment decision-making and management and improve the future estimates of value. This helps to create a mutually reinforcing process between property investors and the property valuers, eventually leading to virtuous loops of feedback and adaptation (see: RICS, 2008).

Further benefits arise when several corporate functions and methods of property investment and management organisations rely on similar data/information. The additionally gathered (or now accessible) building-related data/information can be utilized several times and in many situations to support business processes and corporate functions (see Figure 4). This multiplicity of use suggests that the benefits of adopting CRESM far outweigh the required implementation efforts.
Figure 4
The added value of (structured and up-to-date) information as a basis for a series of property-related functions, methods and purposes.

Source: Lützkendorf, T. and Lorenz, D. Karlsruhe Institute of Technology (KIT)
4. HOW TO GET THERE: 24 RECOMMENDATIONS FOR BEST PRACTICE

Sustainability is also an implementation issue. If it is performed systematically and consistently, then implementation will lead to a mutually beneficial situation for the environment, society and business (i.e. a ‘win-win-win’ situation). The mutual benefits of more sustainable property investment, development and management practices have been demonstrated by leading firms and through various project case studies. Good sources for examples of best practices are two previous UNEP FI PWG publications entitled “Responsible Property Investing – What the leaders are doing” (UNEP FI, 2008 and 2012) as well as the research library of the Green Building Finance Consortium. However, while such examples naturally shine, many organisations have yet to reach the practical implementation level.

Therefore, the following 24 best practice recommendations provide a practical approach for the implementation of a Corporate Real Estate Sustainability Management (CRESM) system for property investment and management firms. Overall, the successful implementation of a CRESM system requires dealing with extended data/information at all corporate levels. This is highlighted in Figure 5 and the corresponding recommended actions are listed below.

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Figure 5
Extended decision-making basis at all corporate levels

See: www.greenbuildingfinance.com/Home/ResearchLibrary.aspx
Best Practice recommendations at the corporate level

- Integrate sustainability into the corporate mission and value system. At the minimum, consider the avoidance of negative consequences for society and the environment resulting from corporate activities as a business constraint.

- Adjust the investment strategy by adding an environmental, social and corporate governance (ESG) dimension to the classical triangle of investment targets (security, liquidity, return).

- Treat sustainability as an integral part of business processes along with the traditional decision-making factors and parameters, rather than as an add-on or separate category.

- Build structures for corporate sustainability management. Treat this as an overall quality assurance tool and mechanism.

- Whenever property services are outsourced, create a framework of requirements (that have to be applied at all corporate levels) for type, extent, format and frequency of data/information exchange with third-party service providers. Amend the contractual arrangements with these counterparts accordingly.

- Challenge your advisors to provide holistic advice.

- Set targets for portfolio level performance and monitor their compliance.

- Produce meaningful sustainability reports.

- Consider that performance at the building and portfolio level might impact not only on corporate reputation and leadership profile, but also on employee costs, productivity, promotional and marketing costs, etc. Therefore, undertake efforts to capture the value of property level sustainability investment at the company level.

- Support the adoption of building documentations (building files, building passports) within the industry.

- As a large organisation, use your influence to set and enforce industry conventions, cooperate with initiatives like UNEP FI, UN Global Compact (GC), the Principles for Responsible Investment (PRI), and endorse existing standards such as those of the Global Reporting Initiative.
Best Practice recommendations at the portfolio level

- Integrate sustainability considerations into portfolio management and adopt a three-dimensional approach to portfolio analysis whereby financial success factors are depicted in relation to the quality characteristics of the individual building as well as its location and market environment.
- Integrate sustainability considerations into existing decision-making instruments; notably within DCF (discounted cash flow) methodologies.
- Set sustainability performance targets for property and facility management and monitor compliance.
- Ensure that your external service-providers report continuously, consistently and in a pre-defined format.
- Ensure that the basic information and data on physical property characteristics are available for all buildings within the portfolio. Then add consumption values and CO₂-emissions. Information on comfort levels and user satisfaction is vital.
- Exploit synergies when collecting and processing building-related information.
Best Practice recommendations at the single building level

- Set sustainability performance targets and measure progress within individual assets business plans.
- Extend facility management processes by adopting energy consumption monitoring, operating cost controlling, post-occupancy evaluations in combination with complaint management, and tenant satisfaction surveys.
- Make sustainability a requirement for new and refurbishment projects.
- Actively request building-related information and documentation. Treat its absence as a potential deal-breaker.
- Ensure that building documentations (building files / passports) are issued within project development and refurbishment projects and that these are continuously updated during the management phase.
- Exploit the full potential of green leases.
- Actively communicate the sustainability credentials of individual buildings/projects towards third parties such as banks and insurance companies.
Not all organisations will reach the same level of implementation, or stage of maturity, in their management of sustainability metrics. Some organisations may not be in a position to implement all of these best practice recommendations at once. An incremental approach is recommended in these cases. This would involve agreeing to strategic mid- to long-term plans for the implementation of the above recommendations.

While these 24 best practice recommendations will challenge individual firms, there are also several steps/actions that can be undertaken by industry initiatives and professional bodies in order to assist the CRESM implementation process (e.g. to establish building files and to discuss possibilities of an industry convention for an appropriate data exchange format). These topics as well as policy implications are discussed in more detail in the Main Report.
5. Changing Perspective

This Executive Summary and the evidence in the accompanying Main Report show that it is actually possible to align corporate goals with sustainable development objectives. This positively impacts on an organisation’s ability to attract prospective tenants and buyers as well as protects the value of a company’s property assets. The management of sustainability metrics also improves the appeal to existing and prospective shareholders who are increasingly conscious of sustainability as they recognize the financial risk implications. The reduction of financial risk and other positive economic advantages gained through the exercise of managing sustainability metrics are explored in detail within the Main Report. These financial advantages need to be understood as an opportunity for the property (real estate) industry which requires taking action – the sooner the better.

The recommended actions do not require systemic change, but a change in perspective by key actors (policy and standards makers, corporate investors, property managers, property professionals):

“the same combination of people, organisations, and physical structures can behave completely differently, if the system’s actors can see a good reason for doing so, and if they have the freedom, perhaps even the incentive, to change.”

Meadows et al., 2004, p. 237

Key corporate actions have been identified for the strategic management of information links and feedback loops within the system (i.e. the property market). Their implementation will make visible the financial incentives to change behaviour. The accompanying Main Report provides more detail on how to overcome remaining barriers to change individual and corporate behaviours within the property industry.

The presented evidence has shown the viability and advantages that arise to corporate investors and property managers from harnessing the relationships between sustainability metrics, property investment and asset management operations.

The Sustainability Metrics report might also have been titled Quality Metrics report. It contributes to changing the perspective on the management of sustainability-related data/information. It shifts the viewpoint from another duty within ESG and PRI commitments towards what it actually is: an overall quality assurance tool and mechanism that supports all corporate processes.
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ABOUT THE UNEP FI PROPERTY WORKING GROUP

Property investing is a multitrillion-dollar worldwide industry that can have profound positive or negative effects on environmental, social and cultural goals. Issues as diverse as urban poverty, global warming and indigenous people’s rights are affected by decisions about the development, refurbishment and management of properties. Investors can have a positive influence on these decisions.

The UNEP FI Property Working Group (PWG) was created in 2006 with the aim to encourage property investment and management practices worldwide that achieve the best possible environmental, social and financial results.

The members of the PWG are:

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- Aviva Investors (Aviva plc), UK
- Axa Real Estate Managers (Axa – Group Management Services), France
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- Caisse des Dépôts et Consignations, France
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- Lend Lease, Australia
- The Link REIT, Hong Kong
- M&G Real Estate, UK
- Mitsubishi UFJ Trust & Banking Corporation, Japan
- Portigon, Germany
- RobecoSAM, Switzerland
- Sumitomo Mitsui Trust Bank Limited, Japan
- Sustainable Development Capital LLP, UK
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ACKNOWLEDGMENTS

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Special thanks to the editor

The authors and the UNEP FI Secretariat wish to express their gratitude to Richard Lorch for his constructive critique, insightful comments and intellectual rigour which significantly contributed to the quality of this publication.
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The United Nations Environment Programme Finance Initiative (UNEP FI) was established in 1992 as a partnership between policymakers and financial intermediaries. With over 200 members representing banks, insurers and investors from around the world, UNEP FI contributes the perspectives of financial institutions to the United Nations and global activities on sustainable finance. UNEP FI’s mission is to bring about systemic change in finance to support a sustainable world by “changing finance, financing change.”