Overview of real estate companies’ environmental performance

kpmg.ie

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Table of contents

Foreword 5

Introduction: challenges and regulations 7

Study overview 13

Appendices 27
Foreword

EPRA has been recognizing the critical significance of transparent, accurate and comparable ESG data for the listed real estate sector since 2011 with the launch of the EPRA Sustainability Best Practices Recommendations (sBPR) reporting standards. To celebrate its 10th anniversary, we are very pleased to partner with KPMG to deliver the first survey dedicated to the progression of the sector’s sustainability disclosure and its performance over the years.

The research builds on the EPRA sBPR Database, which covers publicly available ESG data from European listed real estate companies. The number of companies publicly reporting their data has increased significantly over the years, mainly due to a new surge of interest from the investment community. The Covid-19 crisis has further accelerated this trend by putting ESG on the top of everyone’s agenda.

As the EU is gearing towards imposing a mandatory sustainability standard for all listed property companies as of 2026 to ensure the 55% greenhouse gas emissions cut is reached by 2030, our sector is on the right track and has all the right tools to continue leading by example.

I hope this report is only the first of many, and that it will constitute a reference point towards a better understanding of the listed real estate sector’s commitment to sustainability reporting.
Introduction: challenges and regulations
Introduction: challenges and regulations

Climate change is happening everywhere in the world as we could read on the news this summer (fires in Greece, floods in Belgium and Germany, heatwaves in Seattle, water shortage in Brazil in relation to hydro-based electricity production, etc.).

Today, two key objectives are at the heart of environmental concerns:

- Reach a net-zero emission by 2050
- Limit global temperature increase below 2 degrees Celsius

It is a major stake for the real estate industry considering its global greenhouse gas emissions contribution in global greenhouse gas emissions: 39%.

In this context, the green transition for the real estate sector is both a complex and expensive transformation as it could require a deep restructuration of existing assets.

The ESG transition has not only a material impact on the buildings but also an impact on the financial and non-financial performance of real estate companies.
How does environmental performance impact the financial performance of real estate companies?

**Attract capital flows in the real estate sector**

Today’s investors are paying increased attention to the environmental aspects of the projects they invest in. This trend will grow with the new European Reporting Directive. It means that environmental performance can help real estate companies to become more attractive to investors.

Also, green finance has been introduced in recent years in order to speed up the sustainability shift and we observed that financial institutions are more and more inclined to finance green projects offering more attractive financial conditions.

**Reducing running costs and increasing revenue**

Integrating an environmental dimension into the strategy of real estate companies is also about impact on their financial and operational performance. Indeed, buildings showing stronger environmental credentials should generate lower operational costs through, for example, the use of energy-efficient equipment. Furthermore, staying ahead of regulatory requirements reduces the risk of falling foul of more stringent regulations and potential financial penalties.

An effective environmental strategy help to increase real estate companies’ revenue through increased tenant attractiveness and premium in rental income.

**Environmental impact on asset valuation**

Although environmental criteria are not yet taken into account as such in the valuation of today’s assets, buildings that meet environmental criteria will maintain their value over time, unlike other assets subject to a decrease in value and compelled to incur significant costs to comply with sustainability requirements. Apparently, external appraisers agree on what is described as the “Brown discount.”

In addition, due diligence for asset acquisitions now systematically includes an environmental performance audit which may include the potential financial impact of environmental risks.

Beyond financial performance, regulatory pressure on non-financial communication, and more particularly on environmental indicators, is growing. This is part of the market’s expectation for greater transparency and comparable performance.
Overview of EU sustainable regulation

The European Commission’s Sustainable Finance Action Plan is intended to help direct capital toward sustainable activities and make ESG an essential part of the investment workflow.

ESG strategies already serve as competitive differentiators and they are about to also become a regulatory imperative. Below is a summary of the major events and regulations on the climate agenda affecting the real estate industry.

The following trends can be observed:

- ESG performance is of growing interest and concern for investors, corporates and their stakeholders. It is driving most regulation changes at EU/national level (CSRD, Taxonomy...);
- non-financial matters are becoming increasingly critical in the regulated communication of companies;
- companies’ reporting and communication is evolving toward greater integration of financial and non-financial information.
The EU Taxonomy

The main goals of the EU taxonomy are twofold:
- massively redirect capital flows from the financial sector to finance long-term needs such as innovation and infrastructure, and accelerate the transition to a carbon neutral economy;
- standardize the language used by investors and companies to define what is green and pinpoint the metrics used to measure and value a company’s contribution to the low-carbon transition (the green share in a turnover or investments).

The financial aggregates addressed here represent three essential metrics for the REITs: Net turnover, Capex and Opex.

The Taxonomy Regulation establishes six environmental objectives:
- climate change mitigation;
- climate change adaptation;
- sustainable use and protection of water and marine resources;
- transition to a circular economy;
- pollution prevention and control;
- protection and restoration of biodiversity and ecosystems.

Under the EU taxonomy the commission came up with environmental technological screening criteria used to define an activity as contributing to one of the 6 above-mentioned objectives. The list of those technical criteria is displayed in the Delegated Acts while the first Delegated Act on sustainable activities for climate change adaptation and mitigation was adopted on June 4, 2021. A second delegated act for the remaining objectives will be published in 2022.

The Corporate Sustainability Reporting Directive (CSRD)

The CSRD adopted in April 2021 will amend the NFRD existing reporting requirements. This new Directive will extend the scope to all large companies and all companies listed on regulated markets (outside listed micro-enterprises).

Thus the CSRD aims to:
- strengthen the requirements for CSR transparency;
- contribute to Europe’s commitment to achieve carbon neutrality by 2050;
- move towards comparable CSR communication obligations from one European company to another;
- align communication practices;
- improve the comparability of ESG performance between companies.

Compared to NFRD, the new Directive will require more information on climate strategy, companies’ CSR governance and quantitative forward-looking information.

CSR reporting standards are being developed by EFRAG. The reporting standards will be at the core of delegated acts planned to be published by the European Commission between 2022 and 2023.

The European Commission is also analyzing the opportunity to use the new European Single Electronic Format (ESEF) for corporate sustainability reporting.

“Fit for 55”

An ambitious set of proposals, known as “Fit for 55,” has been conveyed by the European Commission in July 2021 in order to make the EU’s climate policies fit for reducing by at least 55% of greenhouse emissions by 2030. Among the proposals, for example, lies the establishment of a new emission trading system for buildings to reduce their emissions and the requirement for companies to allocate part of their revenue for environmental projects. The Fit for 55 action plan also includes the amendment of the Renewable Energy Directive to accelerate the transition to a greener energy system including specific targets for renewable energy use.

We note that the demand by stakeholders for transparency on environmental impacts has only increased in recent years. Indeed, defining environmental objectives and actions to achieve these objectives requires uniform and standardized measurement indicators for the purposes of steering the strategy and also for the purposes of comparability. The quality of the data on which these indicators are based is thus crucial and provides the foundation for a common language among stakeholders.
Study overview
**Scope**

Market capitalization by country

The country is represented by the stock exchange where the company is listed.

<table>
<thead>
<tr>
<th>Country</th>
<th>Market cap at 12/31/2020</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Germany</strong></td>
<td>85bn€</td>
<td>12</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td>60bn€</td>
<td>31</td>
</tr>
<tr>
<td><strong>France</strong></td>
<td>33bn€</td>
<td>9</td>
</tr>
<tr>
<td><strong>Belgium</strong></td>
<td>20bn€</td>
<td>9</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td>19bn€</td>
<td>7</td>
</tr>
<tr>
<td><strong>Netherlands</strong></td>
<td>11bn€</td>
<td>5</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>9bn€</td>
<td>4</td>
</tr>
<tr>
<td><strong>Switzerland</strong></td>
<td>7bn€</td>
<td>2</td>
</tr>
<tr>
<td><strong>Finland</strong></td>
<td>6bn€</td>
<td>2</td>
</tr>
<tr>
<td><strong>Austria</strong></td>
<td>5bn€</td>
<td>2</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td>3bn€</td>
<td>1</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>2bn€</td>
<td>1</td>
</tr>
<tr>
<td><strong>Ireland</strong></td>
<td>1bn€</td>
<td>1</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
<td>1bn€</td>
<td>2</td>
</tr>
</tbody>
</table>

*N° of companies in the scope : 88*  
Representing a market capitalization of € 262 billion as of 12/31/2020

* EPRA Members + FTSE EPRA Nareit Index Constituents as of 12/31/2020
## Overview of real estate companies’ environmental performance

### Market capitalization by property sector

<table>
<thead>
<tr>
<th>Property Sector</th>
<th>Market cap at 12/31/2020</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>80bn€</td>
<td>12</td>
</tr>
<tr>
<td>Diversified</td>
<td>67bn€</td>
<td>28</td>
</tr>
<tr>
<td>Office</td>
<td>42bn€</td>
<td>17</td>
</tr>
<tr>
<td>Retail</td>
<td>24bn€</td>
<td>14</td>
</tr>
<tr>
<td>Industrial</td>
<td>24bn€</td>
<td>5</td>
</tr>
<tr>
<td>Industrial/Office Mixed</td>
<td>9bn€</td>
<td>5</td>
</tr>
<tr>
<td>Self Storage</td>
<td>7bn€</td>
<td>3</td>
</tr>
<tr>
<td>Healthcare</td>
<td>6bn€</td>
<td>3</td>
</tr>
<tr>
<td>Lodging/Resorts</td>
<td>3bn€</td>
<td>1</td>
</tr>
</tbody>
</table>
Methodology

Scope

This study is based on EPRA sustainability Best Practices Recommendations (sBPR) datasets disclosed by EPRA members and available via the EPRA sBPR database.

It includes 88 European real estate listed companies, members of EPRA as of 12/31/2020 and complying with the EPRA Sustainability Best Practices Recommendations Guidelines.

The data span over the period from 2018 to 2020. 2020 is yet to be analyzed considering the potential impact of the sanitary crisis on the indicators.

Companies have been classified and grouped according to the following criteria:

• by country. In this case the corresponding country is represented by the stock exchange where the company is listed (and not by the location of the assets owned);
• by FTSE EPRA Nareit index classification and associated property sector.

Indicators selected for the survey

EPRA indicators have been selected in order to ensure comparability across peers regardless of their portfolio size.

For this reason, we chose the following indicators presented by square meters for each company’s entire portfolio:

• energy intensity;
• water intensity;
• GHG intensity (for scope 1 + scope 2).

These indicators represent the most frequently published data by EPRA members.

The definition of each indicator is available in appendix 1.

Data processing

The percentage of coverage “% coverage market cap” represents the ratio between the market cap of companies that have disclosed the indicator and the overall market cap of all the companies included in the scope. Changes in market cap coverage from one year to the next may have an impact on the indicators reported.

When there is no company listed under a given property sector disclosing a specific indicator, we indicated: “Data not disclosed.”
**Indicators**

The following indicators represent the average consumption of the companies that disclosed the indicator, regardless of sector property and country.

### Energy intensity (MWh/m²/year)

- **2018**: Intensity 0.136
  - % coverage market cap: 69%
  - Corresponding n° of companies: 47
- **2019**: Intensity 0.134
  - % coverage market cap: 81%
  - Corresponding n° of companies: 62
- **2020**: Intensity 0.121
  - % coverage market cap: 47%
  - Corresponding n° of companies: 48

### Water intensity (m³/m²/year)

- **2018**: Intensity 0.580
  - % coverage market cap: 65%
  - Corresponding n° of companies: 44
- **2019**: Intensity 0.554
  - % coverage market cap: 79%
  - Corresponding n° of companies: 62
- **2020**: Intensity 0.448
  - % coverage market cap: 47%
  - Corresponding n° of companies: 46

### GHG intensity (Scope 1+scope 2) (KCO₂/m²/year)

- **2018**: Intensity 27.131
  - % coverage market cap: 44%
  - Corresponding n° of companies: 42
- **2019**: Intensity 24.089
  - % coverage market cap: 68%
  - Corresponding n° of companies: 58
- **2020**: Intensity 19.503
  - % coverage market cap: 40%
  - Corresponding n° of companies: 42
## Energy intensity

### Breakdown by property sector

<table>
<thead>
<tr>
<th>Property Sector</th>
<th>2020 Average Consumption</th>
<th>% of Coverage Market Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>0.116</td>
<td>43.5%</td>
</tr>
<tr>
<td>Retail</td>
<td>0.120</td>
<td>39.5%</td>
</tr>
<tr>
<td>Self Storage</td>
<td>0.025</td>
<td>74.3%</td>
</tr>
<tr>
<td>Diversified</td>
<td>0.140</td>
<td>49.4%</td>
</tr>
<tr>
<td>Industrial</td>
<td>0.075</td>
<td>33.2%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>0.145</td>
<td>61.4%</td>
</tr>
<tr>
<td>Lodging/Resorts</td>
<td>Data not disclosed</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>0.141</td>
<td>46.1%</td>
</tr>
<tr>
<td>Industrial/Office Mixed</td>
<td>0.092</td>
<td>100%</td>
</tr>
</tbody>
</table>

(MWh/m²/year)
## Water intensity

### Breakdown by property sector

<table>
<thead>
<tr>
<th>Property Sector</th>
<th>2020 Average Consumption</th>
<th>% of coverage market cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>0.844</td>
<td>41.5%</td>
</tr>
<tr>
<td>Retail</td>
<td>0.758</td>
<td>6.1%</td>
</tr>
<tr>
<td>Self Storage</td>
<td>0.038</td>
<td>74.3%</td>
</tr>
<tr>
<td>Diversified</td>
<td>0.440</td>
<td>58.3%</td>
</tr>
<tr>
<td>Industrial</td>
<td>0.075</td>
<td>33.2%</td>
</tr>
<tr>
<td>Industrial/Office Mixed</td>
<td>0.280</td>
<td>94.9%</td>
</tr>
<tr>
<td>Office</td>
<td>0.339</td>
<td>52.7%</td>
</tr>
<tr>
<td>Lodging/Resorts</td>
<td>Data not disclosed</td>
<td></td>
</tr>
</tbody>
</table>

### Data not disclosed

- Self Storage: 2018
- Office: 2018
- Industrial/Office Mixed: 2018

### Additional Data

- Self Storage: 2019 - 0.050, 2018 - Data not disclosed
- Office: 2019 - 0.472, 2018 - 0.478
- Industrial/Office Mixed: 2018 - 0.337

### Percentage of Coverage

- Residential: 2020 - 41.5%, 2019 - 93.5%, 2018 - 71.7%
- Retail: 2020 - 6.1%, 2019 - 17.8%, 2018 - 13.1%
- Industrial: 2020 - 33.2%, 2019 - 86.4%, 2018 - 74.0%
- Industrial/Office Mixed: 2020 - 94.9%, 2019 - 100%

### Consumption Units

- (m³/m²/year)
## GHG intensity (scope 1 + scope 2)

### Breakdown by property sector

(KCO₂/m²/year)

<table>
<thead>
<tr>
<th>Property Sector</th>
<th>Average Consumption</th>
<th>% of Coverage Market Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>27.046</td>
<td>38.8%</td>
</tr>
<tr>
<td>2019</td>
<td>30.622</td>
<td>91.2%</td>
</tr>
<tr>
<td>2018</td>
<td>34.400</td>
<td>34.5%</td>
</tr>
<tr>
<td><strong>Diversified</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>22.141</td>
<td>39.3%</td>
</tr>
<tr>
<td>2019</td>
<td>24.656</td>
<td>59.5%</td>
</tr>
<tr>
<td>2018</td>
<td>32.333</td>
<td>49.7%</td>
</tr>
<tr>
<td><strong>Office</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>20.182</td>
<td>41.1%</td>
</tr>
<tr>
<td>2019</td>
<td>23.291</td>
<td>59.7%</td>
</tr>
<tr>
<td>2018</td>
<td>25.250</td>
<td>60.0%</td>
</tr>
<tr>
<td><strong>Retail</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>19.160</td>
<td>33.6%</td>
</tr>
<tr>
<td>2019</td>
<td>26.560</td>
<td>50.7%</td>
</tr>
<tr>
<td>2018</td>
<td>28.143</td>
<td>41.6%</td>
</tr>
<tr>
<td><strong>Industrial</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>6.550</td>
<td>12.4%</td>
</tr>
<tr>
<td>2019</td>
<td>14.000</td>
<td>27.1%</td>
</tr>
<tr>
<td>2018</td>
<td>6.000</td>
<td>20.8%</td>
</tr>
<tr>
<td><strong>Industrial/Office Mixed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>11.800</td>
<td>100%</td>
</tr>
<tr>
<td>2019</td>
<td>15.000</td>
<td>100%</td>
</tr>
<tr>
<td>2018</td>
<td>13.500</td>
<td>90.6%</td>
</tr>
<tr>
<td><strong>Self Storage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>5.750</td>
<td>74.3%</td>
</tr>
<tr>
<td>2019</td>
<td>6.500</td>
<td>74.3%</td>
</tr>
<tr>
<td>2018</td>
<td>5.000</td>
<td>30.1%</td>
</tr>
<tr>
<td><strong>Healthcare</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>38.000</td>
<td>54.9%</td>
</tr>
<tr>
<td>2019</td>
<td>38.000</td>
<td>54.9%</td>
</tr>
<tr>
<td>2018</td>
<td>28.000</td>
<td>54.9%</td>
</tr>
<tr>
<td><strong>Lodging/Resorts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>Data not disclosed</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>28.000</td>
<td>100%</td>
</tr>
<tr>
<td>2018</td>
<td>Data not disclosed</td>
<td></td>
</tr>
</tbody>
</table>
Overview of real estate companies’ environmental performance
Main environmental measures disclosed in the annual reports

Based on the information published in the annual reports of a sample of companies, we have highlighted below the main disclosures describing the environmental measures implemented to improve non-financial performance.

These main disclosures have been summarized under 3 themes: strategy and governance / reduction and optimization / communicating and joining the collective effort.

**Strategy and governance**

The ESG strategy and governance disclosures mainly cover the following topics:

**Governance**

As ESG is becoming a priority for Boards, companies have integrated a sustainability strategy into corporate governance in order to allow in-depth transformation of the organization and guarantee the robustness of the overall extra-financial strategy.

Some REITs have implemented specific ESG committees including the C-levels of the REITs or they are requesting from their Audit Committee that these topics be added to their agenda. They also indicate that ESG criteria are taken into account in the variable compensation of executives.

**ESG roadmap**

Most companies in the sample have described in their annual reports a roadmap targeting reducing emissions through long-term goals for a more sustainable future, tailored for each type of assets and following a dedicated budget. In the last few years, the roadmap has been directed towards energy efficiency, but we observe a growing tendency to integrate carbon data into the overall strategy, particularly in companies involved in building activities.
Green finance

Over the last few years, green financing has grown within the real estate sector and REITs are now communicating about their strategy and objectives in terms of green loans and bonds.

This type of financing shows multiple benefits:

- maintain a high level of extra-financial performance;
- benefit from a new way of financing with favorable financial conditions;
- attract different financial partners than usual;
- give access to alternative sources of funds such as green bonds.

Assets’ certification

The companies examined in the survey are disclosing the proportion of their assets certified by established organizations (such as BREEAM, HQE, LEED, etc.). Those certifications include growth KPIs to measure and implement threshold on carbon emissions during the whole life cycle of the assets.

Data collection process

Companies have implemented effective data collection processes to ensure reliable and standardized environmental KPIs.

Data quality is essential in the management of these KPIs and allows specifically to:

- control, compare and follow-up separate buildings’ consumption;
- identify peak consumption times;
- identify energy-saving renovations.

Collecting relevant data will help set up reduction strategies for carbon emissions and energy/water consumption.
Reduction and optimization

We have identified the following reduction and optimization measures disclosed in the sampled annual reports.

**Alternative energy source**

The use of renewable energies such as hydrogen, wind, solar, geothermal, etc., or other energies generated from bio-waste is presented as a core source for reducing both energy consumption and CO2 emissions.

These alternative sources can be provided by green energy contractors, but we observe that more and more companies in our panel are starting to develop self-generated renewable energies (through their own solar panels, for example).

To foster the use of renewable energy, we note that some real estate companies have started to manage energy supply directly for their tenants in order to reduce their carbon footprints.

**Energy and carbon efficiency**

In Europe, more than 40% of buildings were built before 1960 and 50% between 1960 and 1990. Most of the efforts to reduce energy consumption and associated emissions must therefore focus on the existing building stock. REITs are already aware of the necessity to operate a transition strategy and progressively replace their existing equipment with lower energy-consuming solutions (for example, replacing conventional lighting by LED or improving air conditioning systems).

Introducing biodiversity areas into existing buildings through the creation of vegetated surfaces (murals or rooftops or terraces) is also described as being an effective way of combating the urban heat island phenomenon and air pollution.

In the new buildings, we observed that real estate companies from our sample use a growing quantity of sustainable and recycled materials and low energy consumption materials. In particular, REITs have implemented responsible supply chains (choice of suppliers, transportation of materials, environmental qualities of procurement). The architecture and design are also indicated as good ways to reduce the buildings’ carbon footprint.

Beyond buildings, in order to reduce carbon emission, alternative transportation offered to users is also pinpointed as a point of focus by REITs, including:

- carpooling and car-sharing through dedicated app;
- bicycle rack;
- charging stations for electric cars;
- new buildings at proximity of proper commutation networks.

Facilitating the use of green mobility solutions is particularly significant for shopping centers located in the outskirts of larger cities.
**Water efficiency**

Our analysis of disclosures in terms of water efficiency reveals that the main following systems are used to reduce consumptions:

- recovery system for grey water or rain/storm water (using rainwater recovery tanks);
- water-saving devices in washrooms (pressure reducers, dual-flow flushes, infrared sensors, etc.);
- scan sensors to detect leaks at an early stage and automatically shut off the tap if required;
- smart irrigation systems (drip irrigation, automatic timers etc.);
- removing all air-cooling towers or shutting-off solenoid valves in order to cut off the water supply outside predefined hours.

The real estate sector is using the best of innovation to improve their environmental impact, such as new technologies in terms of materials, heating, appliances… and Internet of Things (IoT) to better control, prevent and maintain their buildings.

Finally, communication is also described as a significant lever to change behaviors from employees, visitors, suppliers and users.

**Communicating and joining the collective effort**

A sustained dialogue between owner, manager and tenants in order to encourage responsible environmental practices and raise awareness is included in the daily actions disclosed by REITs.

Such communication effort can take different formats:

- environmental awareness campaigns;
- green leases (environmental clauses included in leases for example);
- recommendations and rules shared with tenants;
- reporting consumption data to tenants.

Internal communication aimed for employees on CSR policies, as well as staff surveys are also considered by the REITs as good ways to achieve this common goal. CSR champion roles have been created to help share best practices within the groups.

Beyond purely financial considerations, non-financial performance and the CSR policies are described as a challenge to retain and attract talent.

Finally, climate challenges are tackled by different stake players, including NGOs, local and national bodies and corporations. We observe that many companies chose to team up with such organizations to have a greater impact.
3.
Appendices
Definitions of the different metrics
(EPRA definitions)

Energy-Int Building energy intensity
(kWh/person/year or MWh/m²/year or kWh/revenue/year)

Definition
Energy-Int refers to the total amount of direct and indirect energy used by renewable and non-renewable sources in a building over a full reporting year, normalised by an appropriate denominator.

Issue
Intensity indicators are widely used to report performance. However, the variety of approaches used by companies to calculate intensity indicators represents a challenge for stakeholders when understanding how to interpret data provided by reporters.

Rationale
Building energy intensity is one of the most effective measures of a building's overall energy efficiency during the occupation and operational phase of the building's lifecycle and enables analysis of performance over time without the need to exclude acquired or sold properties.

This performance measure can be used for the energy intensity for both those buildings occupied by the reporter and those held in investment portfolios. Building energy intensity is primarily intended to track changes over time for the reporter’s assets.

Water-Int Building water intensity
(litres or m³)/person/day; or m³/m²/year; or (litres or m³)/revenue/year

Definition
Water-Int refers to the total amount of water consumption within a building over a full reporting year, normalised by an appropriate denominator.

Issue
Intensity indicators have become widespread measures of performance (alongside the absolute consumption and like-for-like indicators). However, the variety of approaches used by companies to calculate intensity indicators represents a challenge for stakeholders when understanding how to interpret these indicators.

Rationale
Water-Int is one of the most effective measures of a building’s overall water efficiency during the occupation and operational phase of the building lifecycle and allows analysis of performance over time without the need to exclude acquired or sold properties. This performance measure provides reporters with the opportunity to disclose water intensity for both those buildings occupied by the reporter and those held in investment portfolios. Water intensity is primarily intended to track changes over time for the reporters’ assets.

GHG-Int Greenhouse gas (GHG) emissions intensity from building energy consumption
(kg CO₂e/m²/year; kg CO₂e/person/year; kg CO₂e/revenue/year)

Definition
GHG-Int refers to the total amount of direct and indirect GHG emissions generated from energy consumption in a building over a full reporting year, normalised by an appropriate denominator.

Issue
Intensity indicators have become widespread measures of performance (alongside the absolute consumption and like-for-like indicators). However, the variety of approaches used by companies to calculate intensity indicators represents a challenge for stakeholders when understanding how to interpret these indicators.

Rationale
GHG-Int is an effective measure of efficiency during the occupation and operational phase of the building lifecycle and allows analysis of performance over time without the need to exclude acquired or sold properties. This performance measure provides reporters with the opportunity to disclose GHG intensity for both those buildings occupied by the reporter and investment properties. GHG intensity from building energy is primarily intended to track changes over time for the reporters’ assets.
Overview of real estate companies’ environmental performance

2 Definitions FTSE EPRA Nareit Developed and Emerging Property Sector Index Series used in the study

FTSE EPRA Nareit Developed and Emerging Property Sector Index Series.

a) The underlying universe for the Property Sector Index Series is the FTSE EPRA Nareit Developed Real Estate Index and the FTSE EPRA Nareit Emerging Real Estate Index. The idea behind the Property Sectors Index Series is to distinguish the cohorts of listed real estate equities by separating the existing constituents into distinct Property Sectors based on gross invested book assets. The purpose is to provide investors with a mechanism to manage their exposure to different risk-reward profiles in relation to the different aspects of the real estate business, including office buildings, retail centres, industrial facilities, lodging/resorts, residential buildings and other types of properties.

b) The classification by Property Sector is based on the gross invested book assets as disclosed in the latest published financial statement. Each constituent of the FTSE EPRA Nareit Developed Real Estate Index and the FTSE EPRA Nareit Emerging Real Estate Index will be classified in one of the Property Sectors listed below.

c) Under index roles, companies are classified according to the following Property Sectors (only sectors that are presented in the study are listed below).

Health Care
Real estate investment trusts or corporations (REITs) or listed property trusts (LPTs) where 75% or more of their gross invested book assets are invested in health care properties.

Self-Storage
Real estate investment trusts or corporations (REITs) or listed property trusts (LPTs) where 75% or more of their gross invested book assets are invested in self-storage properties.

Industrial
Real estate investment trusts or corporations (REITs) or listed property trusts (LPTs) where 75% or more of their gross invested book assets are invested in industrial warehouses and distribution facilities.

Office
Real estate investment trusts or corporations (REITs) or listed property trusts (LPTs) where 75% or more of their gross invested book assets are invested in offices.

Industrial/Office Mixed
Real estate investment trusts or corporations (REITs) or listed property trusts (LPTs) that are not members of property sectors Industrial (N741) or Office (N742) but have a combined total of 75% or more of their gross invested book assets invested in industrial warehouses, distribution facilities and offices.

Residential
Real estate investment trusts or corporations (REITs) or listed property trusts (LPTs) where 75% or more of their gross invested book assets are invested in residential home properties. That includes apartment buildings and residential communities.

Retail
Real estate investment trusts or corporations (REITs) or listed property trusts (LPTs) where 75% or more of their gross invested book assets are invested in retail properties. That includes malls, neighborhood and community shopping centers and factory outlets.

Lodging/Resorts
Real estate investment trusts or corporations (REITs) or listed property trusts (LPTs) where 75% or more of their gross invested book assets are invested in lodging & resort properties.

Diversified
Real estate investment trusts or corporations (REITs) or listed property trusts (LPTs) which own, manage and lease substantial assets across two or more property sectors where none meet the 75% gross invested book assets threshold for any single property sector.

1 FTSE EPRA Nareit Global Real Estate Index Series
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