GRESB’s mission is to enhance and protect shareholder value by evaluating and improving sustainability practices in the global real estate sector.
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Investor, Manager and Company Members

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2013 GRESB Report
GRESB’s mission is to enhance and protect shareholder value by evaluating and improving sustainability practices in the global real estate sector.
Preface

The importance of issues falling under the umbrella of sustainability – including, for example energy efficiency, climate change resilience, and workplace health and safety – continues to grow, and the real estate sector will undoubtedly be the focus of scrutiny from national and regional regulators when it comes to these topics.

GRESB’s position as a leading benchmarking organization for real estate companies and funds gives it unparalleled insight into how the real estate sector is dealing with the challenges and opportunities in improving the sustainability performance of real estate investments. GRESB remains a valued partner in our Associations’ efforts to increase the real estate sector’s sustainable investment practices. We fully support GRESB’s mission to enhance and protect shareholder value in the real estate sector by aiming at better sustainability performance.

This year, a greater number of our collective members than before has participated in the annual GRESB benchmark and in 2013 its market coverage has, once again, grown substantially. The benchmark’s wide-ranging approach to sustainability, which includes environmental factors, policy and disclosure, risk management and building certifications, means that as in previous years, this GRESB Report provides a thorough overall picture of the real estate sector’s approach to sustainability. We found the following Report to be both relevant and informative in explaining current approaches to sustainability in the real estate sector and in forecasting the likely direction of future trends. We anticipate that you will also find it a valuable resource.

Sincerely,

Nicholas Loup
Chairman, ANREV

Lim Swe Guan
Chairman, APREA

David Atkins
Chairman, EPRA

Patrick Kanters
Chairman, INREV

W. Edward Walter
Chairman, NAREIT

Micolyn Magee
Chairman, PREA

Stephen Taylor
Chairman, REALpac
Executive Summary

In 2013, participation in GRESB’s annual benchmark once again increased substantially. 543 property companies and funds participated in the Survey, representing USD 1.6 trillion in gross asset value (GAV) and covering almost 49,000 assets in 46 countries. Building on trends in previous Survey years, the 2013 GRESB Survey results show an increase both in the level of sustainability disclosure and in the sustainability performance of private and listed real estate portfolios.

- **Importantly, the results** show an overall reduction in energy consumption of 4.8 percent over the 2011-2012 reporting period, based on like-for-like data from 319 property companies and funds. GHG emissions decreased by 2.5 percent and water consumption decreased by 1.2 percent.

- **There are** strong regional differences in reductions: in Europe, the 2011 to 2012 like-for-like change in energy consumption and GHG emissions was only marginal, with a decrease of 49,600 MWh (-0.7 percent) and 19,300 metric tonnes (-0.2 percent), respectively. In North America, reductions in energy consumption are the largest globally, with a decrease of 1,235 GWh for energy consumption (-6.6 percent). GHG emissions decreased by 317,600 metric tons (-4.8 percent).

- **Overall GRESB scores** demonstrate a clear and upward trend in the sustainability performance of property companies and funds, with 119 participants now designated as ‘Green Stars.’ Less than 30 percent of participants are now ‘Green Starters,’ down from 40 percent in 2012.

- **Australia and New Zealand** continue to demonstrate global leadership in sustainability performance as the top-performing region in the GRESB Survey. It is the only region that achieves, on average, Green Star status. In 2013, the US and Canada advanced significantly – the average overall GRESB score in North America is 39, a 12 percent improvement since 2012. In Asia, a growth region in the GRESB Survey, 22 percent of participants are Green Stars.

- **Sustainability is increasingly integrated** into day-to-day business decision-making, with over 80 percent of participants involving senior management in the reviewing and monitoring of sustainability processes. The adoption of risk management strategies related to sustainability is widespread: all participants now perform sustainability risk assessments, both for standing investments and for new acquisitions. This sharply contrasts with results for 2012, when only 60 percent of participants performed sustainability risk assessments.

- **Currently, 70 percent** of GRESB participants have an Environmental Management System in place, which on average covers 77 percent of their portfolio. The 2013 Survey results also demonstrate an increase in the amount of data collected by property companies and funds. Coverage has increased across all sectors, continuing an upward trend observed in the previous three reporting periods (2009-2011).

- **The use of on-site renewable energy sources** has been growing rapidly over the past year: 27 percent of participants with new construction and major renovation activities now generate energy using on-site renewables, as compared to 17 percent in 2012. The largest single type of renewable energy is solar/photovoltaic, deployed by 18 percent of participants, generating, on average, 7 percent of total energy use.

- **The use of green building certification schemes** is becoming more common. 55 percent of benchmark participants have certified office assets and 34 percent have certified retail shopping malls. Portfolio coverage is still fairly low, on average 28 percent. Globally, LEED certification remains the most widely adopted building scheme.
Introduction

Over the past few years, GRESB members and participating property companies and funds have served as catalysts for change in the real estate sector. By actively addressing market failures and inefficiencies related to environmental, social and governance issues and with constructive dialogue, they have made significant steps in improving the sustainability of the global real estate industry.

There are significant incentives for the investment community to prolong and extend this effort. For example, China is facing severe and acute air quality problems that require immediate action. More generally, CO₂ concentrations in the atmosphere have reached unprecedented levels, and extreme weather events are occurring more frequently across the globe. This translates into more stringent regulation at the national and local level, and corporations face increased demand from customers, employees and other stakeholders for transparency in sustainability issues.

There is substantive evidence that the material risks and opportunities related to these developments directly affect the valuation of companies. Information on firms’ environmental, social, and governance (ESG) performance can give decision-makers more insight into expected cash flows, the volatility of these cash flows, and the associated cost of capital. Collecting material sustainability information is especially important in the context of the real estate market. Buildings constitute a large part of the world’s resource consumption and are the focus of increased environmental regulation. Tenants and occupiers of these buildings increasingly search for space that is not only energy efficient, but which also adheres to a broader spectrum of material sustainability indicators, such as indoor environmental quality. In response to these trends, a growing number of real estate investors expect full disclosure on material sustainability information that may impact the valuation of their investments.

It is GRESB’s mission to foster transparency in the sustainability performance of property companies and funds. The information collected by GRESB discloses material sustainability performance at the portfolio level, such as energy and water consumption, but also green building and energy certification, sustainability risk assessments, as well as indicators related to governance and stakeholder engagement. More than 50 institutional investors, representing an aggregate USD 6.1 trillion of institutional capital, now use the GRESB benchmark results in the various stages of the investment management and engagement process, with a clear goal to optimize the risk/return profile of their real estate investments.

The results of the 2013 GRESB Survey show that the real estate industry has started to integrate sustainability more rigorously into day-to-day business practices. The Survey, which has been refined after a detailed consultation period with investors, investment managers, property companies, and the wider real estate investment industry, now includes 543 property companies and funds, representing USD 1.6 trillion and covering almost 49,000 assets in 46 countries. Overall, the benchmark results show a clear and upward trend in sustainability performance, with just over a quarter of the companies and funds designated as “Green Starters” as compared to 40 percent in 2012 and 55 percent in 2011. Importantly, the results also show a significant increase in the energy efficiency of real estate portfolios’ underlying assets.

The 2013 GRESB Report contains the highlights of the benchmark results. It outlines both global results and regional developments, and includes focused sections on the key sustainability aspects covered in the Survey. In addition, the Report identifies regional sector leaders and showcases best practices in sustainability performance. GRESB measures the sustainability performance of participating property companies and funds and compares this to carefully composed peer groups, taking into account different regions and property types. The graphic on the next page explains the GRESB process on data collection, verification and analysis, and the role of each stakeholder.

“The Townsend Group recognizes that Environmental, Social and Governance issues in commercial real estate are gaining traction with institutional investors and property owners worldwide”
— Jennifer Young, The Townsend Group

Each year between April and July, GRESB collects data from property companies and funds, on behalf of a large group of institutional investors. The 2013 GRESB Survey is supplemented by a guidance document, which provides specific information on the intent, terminology and scoring requirements for each question. In 2013, GRESB introduced a ‘Response Check’ service to ensure better data quality and to help participants minimize errors in their submission(s).

Once data has been submitted to GRESB, it is then verified and analyzed. GRESB also asks participants to provide additional evidence for selected Survey questions through hyperlinks and document uploads. Uploads are not disclosed outside GRESB. The documents do not directly impact GRESB scores, but are an increasingly important element of the data verification process and are used to increase understanding of participants’ actions and best practices. During the past few years, the data verification process has become a standardized quality control procedure, facilitated by an online Verification Portal, where each Survey response is checked for validity (quality and relevance) of responses to open-ended questions and uploads, and for outliers in numeric questions.

Scoring and methodology

The 42 questions in the GRESB Survey are divided into seven unique sustainability aspects. The score for each aspect generates the total GRESB score—from 1 to 100. The total GRESB score is also divided into two dimensions:

- **MP Management & Policy:** the means by which a property company or fund manages sustainability in its organization and portfolio, and the principles of action adopted by the company/fund; and
- **IM Implementation & Measurement:** the process of executing sustainability plans and policies, and/or the actual measurement and improvement of the sustainability performance of the portfolio.

Together, the two dimensions demonstrate how sustainability is embedded in an organization and within the property portfolio. GRESB rewards performance more than policies, and so a participant’s score for Implementation & Measurement comprises 70 percent of the total GRESB score.

Question types: For questions where participants can select more than one possible option, points are awarded cumulatively for each individual answer and are then aggregated to calculate the final score for the question. Open questions and questions where participants select ‘other (please specify)’ are manually verified – only accepted answers are awarded points. Scores for the Performance Indicators and Certification aspects are scored separately per property type. The total score for each aspect is a weighted average, with weights allocated to each property type based on gross asset value (GAV). GRESB also includes a separate aspect in the Survey for those companies and funds that undertake development activities. The New Construction & Major Renovations aspect is based on the same methodology as the remainder of the GRESB Survey. However, it is assessed and scored separately, and it is not included in the total GRESB score.

Reporting and data integrity: Work with PwC

In response to requests from the global real estate industry, GRESB is working with PwC, with the goal of enhancing data integrity. From July 1, 2013 onwards PwC has reviewed the GRESB Survey, GRESB’s data management and verification processes, the scoring methodology and data analysis process, and the reporting process. The outcomes from this review will be assessed by GRESB during the fourth quarter of 2013 with a view to incorporating PwC’s recommendations in the 2014 Survey year.

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2 PwC has not provided an audit, accounting or attest opinion, and PwC has not verified or audited any of the information in this Report. PwC shall not be responsible or liable for any advice given to third parties, any investment decisions or trading, or any other actions taken based on information contained in the Report.
GRESB stimulates transparency in the sustainability disclosure of the real estate investment market, evaluating the sustainability performance of both private and listed real estate portfolios. The response rate to the annual GRESB Survey is an important indicator of the global real estate industry’s uptake and acceptance of sustainability as part of general good management. In 2013, a total of 543 property companies and funds participated in the GRESB Survey, a 23 percent increase as compared to the response rate in 2012 (443 participants) and a 60 percent increase since 2011 (340 participants). GRESB now covers almost 49,000 assets, with an aggregate value of USD 1.6 trillion, a 36 percent and 13 percent increase as compared to 2012, respectively. On aggregate, South American, African and global participants (those with less than 60 percent of assets on one continent) represent 4 percent of the GRESB universe.

The response rate for listed companies increased by 25 percent and the response rate for non-listed entities increased by 22 percent. Specifically for listed property companies, GRESB covers 46 percent of the FTSE EPRA/NAREIT Developed Index and 23 percent of the TR/GPR APREA Composite Index (which includes Asia and Australia).

Regionally, the absolute response rate remains highest in Europe (292 participants, 54 percent of the total). However, there is a strong growth in the response rate in Asia (74 participants, a 48 percent increase) and North America (115 participants, an 22 percent increase). In Australia and New Zealand (NZ) response levels remain stable. Importantly, sustainability disclosure is not limited to established markets: in South America there are now eight participants and the benchmark also extends to Africa, where there are two Survey participants.

The GRESB Survey also differentiates between property types. Property type allocations in the benchmark are based on gross asset value (GAV). Comparable to last year, the largest groups of assets included in the benchmark are offices (31 percent) retail shopping malls (28 percent) and residential/multi-family assets (13 percent). Other property types that are frequently included are healthcare assets, hotels, industrial assets, retail high street, retail warehouse box and self-storage.

### Response rate 2013

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>North America</th>
<th>Europe</th>
<th>Asia</th>
<th>Australia/NZ</th>
<th>South America</th>
<th>Africa</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Listed no of participants</strong></td>
<td>119</td>
<td>31</td>
<td>47</td>
<td>28</td>
<td>10</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross asset value USD million</td>
<td>809,080</td>
<td>319,628</td>
<td>275,625</td>
<td>122,001</td>
<td>47,070</td>
<td>44,756</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average size based on GAV in USD million</td>
<td>6,799</td>
<td>10,311</td>
<td>5,864</td>
<td>4,357</td>
<td>4,707</td>
<td>14,919</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market coverage*</td>
<td>46%</td>
<td>49%</td>
<td>71%</td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Private no of participants</strong></td>
<td>424</td>
<td>84</td>
<td>245</td>
<td>46</td>
<td>32</td>
<td>8</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Gross asset value in USD million</td>
<td>768,241</td>
<td>267,044</td>
<td>376,507</td>
<td>35,322</td>
<td>63,881</td>
<td>2,531</td>
<td>5,817</td>
<td>17,140</td>
</tr>
<tr>
<td>Average size based on GAV in USD million</td>
<td>1,812</td>
<td>3,179</td>
<td>1,537</td>
<td>768</td>
<td>1,996</td>
<td>316</td>
<td>2,908</td>
<td>2,449</td>
</tr>
<tr>
<td><strong>Total no of participants</strong></td>
<td>543</td>
<td>115</td>
<td>292</td>
<td>74</td>
<td>42</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Gross asset value in USD million</td>
<td>1,577,321</td>
<td>586,672</td>
<td>652,132</td>
<td>157,323</td>
<td>110,951</td>
<td>2,531</td>
<td>5,817</td>
<td>61,897</td>
</tr>
<tr>
<td>Average size based on GAV in USD million</td>
<td>2,905</td>
<td>5,101</td>
<td>2,233</td>
<td>2,126</td>
<td>2,642</td>
<td>316</td>
<td>2,908</td>
<td>6,190</td>
</tr>
</tbody>
</table>

*based on the FTSE EPRA/NAREIT market index.
GRESB Quadrant Model

The GRESB Quadrant Model shows the score for all Survey participants based on their score for GRESB’s two dimensions: Management & Policy (horizontal axis) and Implementation & Measurement (vertical axis). Importantly, the core purpose of the GRESB benchmark is to create transparency on sustainability issues by measuring the relative performance of a property company or fund as compared to peers in the same country/region and property type. Absolute scores for each property company or fund (reflected by one of the four quadrants) complement the relative performance, but every analysis of scores should take into account performance compared to peers.

A property company or fund’s position in the GRESB Quadrant Model explains the extent of its sustainability focus and actions and illustrates how far it has progressed in integrating sustainability into the portfolio. A company or fund will move between each quadrant based on its performance on Management & Policy (30 percent weight) and Implementation & Measurement (70 percent weight).

Building on trends in previous Survey years, the 2013 benchmark shows a positive movement of companies and funds from ‘Green Starters’ to ‘Green Stars’ indicating that, on average, sustainability is becoming more embedded in individual portfolios and in participants’ organizations. In 2013, for the first time, less than 30 percent of participants are Green Starters, down from 55 percent in 2011. Half of all participants are in the ‘Green Talk’ part of the model (up from 25 percent in 2011 and 41 percent in 2012), and 22 percent of the companies and funds in the benchmark are now Green Stars (up from 19 percent in both 2011 and 2012). There are just 4 participants designated as Green Walk.

<table>
<thead>
<tr>
<th>Year</th>
<th>Green Starter</th>
<th>Green Talk</th>
<th>Green Walk</th>
<th>Green Star</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013*</td>
<td>28%</td>
<td>50%</td>
<td>1%</td>
<td>22%</td>
</tr>
<tr>
<td>2012*</td>
<td>40%</td>
<td>41%</td>
<td>1%</td>
<td>19%</td>
</tr>
<tr>
<td>2011*</td>
<td>55%</td>
<td>25%</td>
<td>2%</td>
<td>19%</td>
</tr>
</tbody>
</table>

*Numbers do not add up to 100 percent due to rounding
Regions

As in 2012, GRESB analyzes the Survey results per region for North America, Europe, Asia, and Australia/NZ. The Report also includes additional analysis for participating companies and funds in South America and Africa, as well as those companies and funds that are global in scope.
The number of North American property companies and funds participating in the GRESB Survey has increased by more than 22 percent in 2013, mainly due to growth in the number of private funds (up to 84 from 63 in 2012). The response rate for listed property companies remained stable this year. Within the region, there are now 110 participants from the US and 5 from Canada.

In 2013, the sustainability performance of property companies and funds in the US and Canada advanced significantly – the average overall GRESB score in North America is 39, a 12 percent improvement since 2012. Within the GRESB dimensions that make up the total score, performance in Management & Policy has remained similar. The overall improvement in sustainability performance is thus due to better performance in the Implementation & Measurement dimension. This is also reflected in the classification of participants: 18 percent are now Green Stars, with North America also contributing 18 percent of total Green Stars worldwide. Approximately 40 percent of North American participants are designated as Green Starters, and another 40 percent are Green Talk.

Analysis per sustainability aspect shows that while listed companies slightly outperform private funds for all but one aspect (Policy & Disclosure), overall the differences between listed property companies and non-listed funds are small. North America has the highest number of participants using building certifications, although the average per-

“In 2012, NAREIT migrated its Leader in the Light Program onto the GRESB platform, encouraging respondents to benchmark their organization’s sustainability achievements against those of real estate companies around the world.”

— Sheldon M Groner, Executive Vice President Finance & Operations, NAREIT
Energy consumption is often the most tangible element of sustainability, and steps taken to monitor consumption within property portfolios are important for improving the coverage and quality of data collection. The 2013 Survey shows that only 24 percent of North American participants use automatic meter readings, for an average of 50 percent of the portfolio. Within this group, monitoring is most prevalent in office and retail assets. However, most companies and funds retrieve information on energy consumption from invoices (67 percent), and 13 percent of participants use on-site manual-visual meter readings (companies and funds can use more than one monitoring method).

The outcomes of data collection are reflected in like-for-like changes between the 2011 and 2012 reporting periods. Importantly, these changes show a decrease of 1,235 GWh for energy consumption (-6.6 percent) and 317,600 metric tonnes for GHG emissions (-4.8 percent). These reductions are based on performance data from 50 and 44 participants, respectively. For energy consumption, the reduction is the largest globally. Total water consumption remained stable at 51 million cubic meters.

The average score for North American participants for Stakeholder Engagement is 41. When broken down for each type of stakeholder, over 50 percent of participants actively engage with their tenants, mostly by issuing sustainability guides, organizing events focused on increasing sustainability awareness and by providing feedback on energy and water consumption. Green leases or MoUs to further formalize the engagement process are now used by 36 percent of participants.

### Regional sector leaders

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Company Name</th>
<th>Fund Name</th>
<th>Legal Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>Simon Property Group, Inc.</td>
<td>Prologis North American Industrial Fund</td>
<td>Listed company</td>
</tr>
<tr>
<td>Office</td>
<td>Thomas Properties Group, Inc</td>
<td>Lion Gables Apartment Fund</td>
<td>Listed company</td>
</tr>
<tr>
<td>Industrial</td>
<td>Prologis</td>
<td></td>
<td>Private fund</td>
</tr>
<tr>
<td>Residential</td>
<td>Gables</td>
<td></td>
<td>Private fund</td>
</tr>
<tr>
<td>Healthcare</td>
<td>HCP, Inc.*</td>
<td></td>
<td>Listed company</td>
</tr>
<tr>
<td>Hotels</td>
<td>Hersha Hospitality Trust*</td>
<td></td>
<td>Listed company</td>
</tr>
<tr>
<td>Diversified</td>
<td>UBS Realty Investors LLC</td>
<td>UBS Trumbull Property Growth &amp; Income Fund</td>
<td>Private fund</td>
</tr>
<tr>
<td>Diversified - Office/Residential</td>
<td>Principal Real Estate Investors</td>
<td>The Principal Green Fund</td>
<td>Private fund</td>
</tr>
<tr>
<td>Diversified - Office/Retail</td>
<td>Oxford Properties Group</td>
<td></td>
<td>Private company</td>
</tr>
</tbody>
</table>

* Global Sector Leader

**Like for like refers to the part of the portfolio that remained stable over a period of 24 months.**
As in previous years, the response rate to the GRESB Survey is highest in Europe, with 292 participants in 2013, a 16 percent increase compared to 2012. This year, the benchmark includes 245 non-listed entities and 47 listed property companies, as compared to 211 non-listed entities and 40 companies respectively, in 2012. Most participants are based in the United Kingdom (101), the Netherlands (37), Germany (21), France (20) and Sweden (12).

In 2013, the average overall GRESB score in Europe is 43, a 13 percent improvement on 2012. Within the two dimensions that comprise the total score, there has been a 18 percent improvement in the European score for Management & Policy, and a 10 percent increase for Implementation & Measurement. In the GRESB Quadrant model, the 53 European property companies and funds with Green Star status make up almost half of the total Green Stars worldwide. 60 percent of European participants are in the Green Talk quadrant, which is considerably higher than the global average of 50 percent, and 21 percent are Green Starters.

At the aspect level, European participants score highest on sustainability Management. Interestingly, with a score of 74, the performance of private funds is higher for this aspect as compared to listed property companies (69), while both groups improved from a score of 60 in 2012. Further improvement is evident for all Survey aspects, in particular Building Certifications & Benchmarking and Performance Indicators. The use of green building certificates such as BREEAM, HQE (which originated in France) and DGNB (which originated in Germany), is still limited as compared to other regions, although 49 percent of European property companies and funds have at least one certified building in their portfolio. Quite a few European participants...
also use LEED, mainly in the office and residential sectors, suggesting it is the certification scheme with most global traction.

In Europe, the 2011 to 2012 like-for-like change in energy consumption and GHG emissions was only marginal, with a decrease of 49,600 MWh (-0.7 percent) and 19,300 metric tonnes (-0.2 percent) respectively. This demonstrates the need to further improve the efficiency of existing assets. Change in water consumption was more noticeable, with a like-for-like decrease of 583,000 cubic meters (-2.0 percent). Monitoring of resource consumption is important for improving building performance. Currently, over half of all European participants (59 percent) use automatic meter readings to monitor energy consumption for on average 50 percent of their portfolios, but many property companies and funds still collect data through manual-visual readings.

The average score for Stakeholder Engagement for the region is 45. More than half of participants actively engage with their tenants in different forms, particularly through tenant engagement meetings and by providing the tenant with feedback on energy and water consumption and waste generation. However, not all tenants are included – only 18 percent and 12 percent of participants achieve full portfolio coverage for these two programs, respectively. For more formalized alignment between landlord and tenant, 39 percent of participants have green leases or MoUs in place, for on average less than a third of their portfolio.

“The Global Real Estate Multi Manager team at Aviva Investors believes it is necessary for managers to be conscious of the “green” credentials of the property funds they manage, both as a part of risk management best practice, and to future proof their property portfolios.

We use the GRESB survey to highlight areas in which funds can potentially improve, and to target advances for the future. This information is then employed to help steer our existing engagement and asset management monitoring programs, as a due diligence tool for new real estate investments, and to provide the underlying data for bespoke ESG client reporting.”

— Kathleen Jowett, Fund Analyst, Aviva Investors Global Real Estate Multi Manager

| Regional sector leaders |  |  |
|-------------------------|-------------------------|
| Property Type | Company Name | Fund Name | Legal Structure |
| Retail | Unibail-Rodamco | CBRE Dutch Office Fund | Listed company |
| Office | CBRE Global Investors | Industrial Property Investment Fund | Private fund |
| Industrial | Legal & General Property* | CBRE Dutch Residential Fund | Private fund |
| Residential | CBRE Global Investors* | Legal & General Managed Fund | Private fund |
| Diversified | Legal & General Property | Standard Life Investments Property Income Trust | Listed fund |
| Diversified - Office/Industrial | Standard Life Investments* | Central Saint Giles Limited Partnership | Private fund |
| Diversified - Office/Residential | Legal & General Property* | Grosvenor Fund Management UK | Private fund |
| Diversified - Office/Retail | Grosvenor Fund Management | | Private fund |

* Global Sector Leader
The Asian real estate investment market is of growing interest and importance for institutional investors, and hence for the GRESB Survey. In 2013, the number of non-listed participants in Asia increased to 46 (up 28 percent) and the number of listed property companies doubled to 28. Most Asian participants are in Japan (27 participants), China and Hong Kong (16), Singapore (9), and India (6). Among these companies and funds are some large global companies and fund managers that participated in the Survey with their Asian portfolio(s). The 74 property companies and funds cover a total of 1,528 assets in the Asia region.

This year’s Survey results indicate that the Asian real estate sector is further developing the integration of sustainability into their portfolios: the overall GRESB score for the region is 37, which is almost on a par with North America and a 8 percent improvement compared to 2012. The scores for each dimension are also quite similar to North America (53 for Management & Policy, and 31 for Implementation & Measurement). 45 percent of Asian participants are Green Starters and 34 percent are in the Green Talk quadrant. 22 percent are Green Stars (16 in total), comprising 13 percent of total Green Stars worldwide.

On average, listed property companies perform better on all seven sustainability aspects. For Policy & Disclosure, the region progressed most both for listed (20 percent increase) and non-listed (62 percent increase) compared to 2012. The region scores are lowest for Building Certification & Benchmarking (less than 20). While there are nationally recognized building certification schemes in the region e.g. CASBEE (Japan), Three Star (China) and BCA Green Mark (Singapore), there is currently no widely adopted regional or global scheme. This could explain the lower score relative to the global average. For energy ratings, the situation is similar. Although markets such as Japan, China

GRESB Quadrant Model
and Singapore have local building energy rating schemes, whole-building energy labeling is relatively novel and still voluntary in most Asian markets. This explains why only 10 percent of participants with office and 6 percent with retail assets have obtained an energy rating (for a small fraction of their portfolio).

The results show evidence of increased focus on monitoring of consumption (energy, water, GHG emissions, and waste). 41 percent of Asian participants use automatic meter readings, more than in North America (24 percent), but less than in Europe and Australia/NZ (59 percent and 79 percent respectively). 58 percent monitor energy consumption based on invoices, a similar percentage to Europe (57 percent) and 57 percent of participants use invoices to monitor their water consumption. Consequently, reporting on performance indicators is improving in the Asian market, with 24 percent of participants providing like-for-like energy data. Importantly, for those participants, the change in energy consumption between the 2011 and 2012 reporting periods amounts to a decrease of 161 GWh (-5.3 percent), while the decrease in GHG emissions is 21,600 metric tonnes (-2.3 percent). Like-for-like water consumption decreased by 576,600 cubic meters (-2.9 percent).

The average score in Asia for Stakeholder Engagement is 40. When broken down for each type of stakeholder, less than 30 percent of participants engaged with their tenants by having a sustainability program in place, a sign of different market situations and views of sustainability. This is even clearer in the case of the development of green leases - only 15 percent of participants have green leases or MoUs for part of their portfolio.

“As an active partner of GRESB in the Asia Pacific region, we are delighted to see GRESB continue to strengthen its efforts to quantify the industry’s sustainability efforts. GRESB has a vital role in assessing, monitoring and improving the sustainability performance of real estate portfolios which, coupled with our members’ efforts, will ultimately enhance and protect property values.

We fully expect such an industry-wide focus to strengthen reporting standards and best practices in the coming years. This will help to achieve the goal of raising environmental standards both in the real estate industry but also in the wider community.”

— Jeremy Stewardson, Chief Executive, ANREV

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<th>Regional sector leaders</th>
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<td><strong>Property type</strong></td>
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<td>Diversified</td>
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* Global Sector Leader
Australia and New Zealand

In 2013, the GRESB Survey response rate remained stable with 10 listed property companies and 32 non-listed entities participating. 40 participants are from Australia and two are from New Zealand (NZ). In this region, the 2013 Survey covers 1,109 assets and USD 111 billion in GAV.

The region continues to demonstrate global leadership in sustainability performance as the top-performing region in the GRESB Survey. The average overall GRESB score for Australia/NZ in 2013 increased to 64, as compared to 62 in 2012. It is the only region that achieves Green Star status. 29 property companies and funds in the region are Green Stars, comprising 24 percent of the global total. Only 7 percent are Green Starters and 24 percent are in the Green Talk quadrant. The strong sustainability performance in the region may in part be attributed to transparency in sustainability performance at asset level, which is reinforced by sustainability regulations. For example, the Commercial Building Disclosure Program requires most sellers and landlords of large office spaces to provide energy efficiency information to prospective buyers and tenants.

The region’s overall strong performance is also evident in the regional results for each of the GRESB Survey aspects. Listed property companies score particularly highly for Policy & Disclosure (85 as compared to 67 for non-listed entities), a result that is in line with the stringent regulatory obligations imposed on listed companies. Listed property companies’ scores for Building Certification & Benchmarking are also higher (45 as compared to 35 for non-listed entities). When the region’s highest score is compared with the average overall GRESB score for each of the listed property companies and non-listed entities, it becomes clear that despite strong overall regional performance, there
is room for improvement among individual companies and funds. For example, there is still a strong focus on the office sector. 60 percent of participants with office assets have certifications, as compared to 36 percent for industrial and 21 percent for retail.

The continuous monitoring of resource consumption, and stakeholder engagement both make an important contribution to increasing data collection and improving building performance. Regarding Stakeholder Engagement, about 93 percent of the companies and funds in Australia/NZ actively engages with tenants, mostly by providing them with a tenant sustainability guide and by organizing tenant engagement meetings. Green leases are becoming more embedded in the regional real estate market, with 62 percent of participants having green leases or MoUs in place, for a significant share of their portfolios. 79 percent of participants use automatic meter readings to monitor energy consumption (compared to 24 percent in North America and 59 percent in Europe), covering on average 72 percent of their portfolio. 62 percent of companies and funds also use automatic meter readings to monitor water consumption (compared to 14 percent in North America and 33 percent in Europe), covering on average 82 percent of their portfolio.

The regional trend shows that, even after some years of significant reductions, during the 2011 and 2012 reporting periods there has been a like-for-like reduction in energy consumption of 5.8 percent – a total of 113 GWh in 2012. Like-for-like change in GHG emissions and water consumption was equally impressive, with a decrease of 5.7 and 5.6 percent respectively (equal to 71,200 metric tonnes of CO2 and 683,400 cubic meters of water).

“VFMC takes ESG risks into consideration in our investment decision making. The GRESB Survey complements the work we already undertake in monitoring our funds and has been a helpful tool to measure and compare the ESG performance (policies, implementation, and measurement of environmental practices) of those funds.”
— Ros McKay, Governance Manager VFMC

### Regional sector leaders

<table>
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<th>Property Type</th>
<th>Company Name</th>
<th>Fund Name</th>
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<td>GPT Wholesale Office Fund</td>
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<td>Mirvac</td>
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<td>Colonial First State Global Asset Management*</td>
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* Global Sector Leader
Additional Results

In addition to Asia, Australia/NZ, Europe, and North America, there are also Survey participants based in South America (8 participants) and Africa (2), and participants with a global scope that operate across multiple regions (10). Overall, this group includes 4 listed property companies and 16 non-listed entities.

In general, property companies and funds in this group are operating in less mature real estate markets. However, participants are both in the Green Starter and Green Talk quadrants. The average score for the Management & Policy dimension is relatively high (58) and the group’s average Implementation & Measurement score is 25, indicating that positive steps are being taken towards implementing policies related to sustainability within participants’ portfolios. Importantly, many participants in this group focus on development activities, and thus also complete the New Construction & Major Renovations aspect of the Survey.

Scores per Survey aspect show that listed property companies outperform private property entities except for Stakeholder Engagement, where performance for both non-listed and listed entities is on a par at 40. The high number of companies and funds in this group that are focused on development work explains the relatively low score for Performance Indicators, since these portfolios tend to include fewer operating assets. While a number of entities in this group do not perform strongly for building certifications for standing investments (again because they have fewer operating assets), the GRESB Survey also measures building certifications that are part of the construction or renovation process separately in the New Construction & Major Renovations aspect of the Survey. In the case of the latter, about 30 percent of participants in this group have sustainability certificates like LEED and BREEAM for over 30 percent of their new constructions and major renovations.

GRESB Quadrant Model
Aspects

Environmental performance is a core element of sustainability. However, the GRESB Survey is based on a broader view of sustainability, comprising seven aspects: Management, Policy & Disclosure, Risks & Opportunities, Monitoring & EMS, Performance Indicators, Building Certification & Benchmarking and Stakeholder Engagement. These aspects provide important contributions to strong sustainability performance, beyond efficient use of energy and water and the reduction of greenhouse gas emissions and waste. The GRESB Survey also contains an aspect for those property companies and funds that undertake development activities. The New Construction & Major Renovations aspect is benchmarked separately and thus does not contribute to participants’ overall GRESB score.
Management

Clear efforts towards integration of sustainability

Integration of sustainability in real estate portfolios begins with robust and well-structured management that includes both long and short-term objectives. Over 93 percent of participants in the GRESB benchmark now have a long-term vision (up from 85 percent in 2012) with nearly as many (80 percent) also communicating more detailed short-term objectives. Survey responses clearly demonstrate that some companies and funds are more advanced than others in articulating their vision and objectives. The high number of participants that not only make the effort to describe, but also publicize how they approach the integration of sustainability within the portfolio (73 percent of participants has a publicly available vision), demonstrates an industry-wide commitment to sustainability.

It is also encouraging to observe that when companies and funds integrate sustainability objectives into their management policy, the trend is to commit human resources. Responses show that over half of the Survey participants have a dedicated employee responsible for implementation of sustainability, and 80 percent of participants have employees whose role includes sustainability issues.

External consultants continue to play an important role in the implementation of sustainability, with approximately one-third of Survey participants engaging external advisors for implementing sustainability objectives (compared to 23 percent in 2012) and as members of a company taskforce. Other members of the increasingly popular sustainability taskforces (now in place for 84 percent of participants) include client/investor relationship managers, building engineers, and tenants. Externally, involvement in industry associations, research bodies and think tanks has also increased significantly, with 63 percent of Survey participants involved in committees and working groups outside their organization.

Importantly, over 80 percent of participants now involve their senior management board in the reviewing and monitoring of sustainability processes, as compared to 70 percent in 2012. 62 percent of the companies and funds in the benchmark provide formal updates to the Board on at least a quarterly basis. The integration of sustainability into decision-making processes is also evident from participants’ employee performance reviews, with 77 percent of property companies and funds now including sustainability factors in their review process.

“We believe that CSR helps us to truly connect with consumers, especially in the rapidly changing world we live in today. It helps us to work together with our retailers in an innovative way. It enables us to provide our employees a sound working environment, where they can get the best out of themselves. It makes our centers contribute to society by minimizing our impact on the environment and maximizing our social and economic impact. In other words, operating responsibly makes us a more attractive company.” — Respondent Quote, Corio
Policy & Disclosure

Improvement in quality of disclosure

Building on good management, a company or fund's sustainability policies and means of disclosing performance to investors and other stakeholders demonstrate transparency and commitment to effective scrutiny of performance. The fraction of benchmark participants disclosing their sustainability performance increased from 86 percent in 2012 to 88 percent in 2013, with most using more than one method of disclosure. The depth of disclosure varies from a dedicated section on the website (59 percent), to adopting an integrated reporting framework (increased from 5 percent in 2012 to 8 percent in 2013), which integrates sustainability disclosure with financial reporting. Among private property funds, 32 percent of Survey participants include sustainability in fund-specific reports for their investors.

The 2013 GRESB Survey includes several questions regarding the external assurance, verification and review of sustainability reporting and disclosure as these processes increase stakeholders’ confidence in the accuracy and completeness of the sustainability information provided. In 2013, 17 percent of listed company participants and 14 percent of private funds confirmed some level of assurance of sustainability performance, whereas the disclosure of sustainability performance was fully assured for 17 percent of listed and 11 percent of non-listed participants. These numbers have all increased markedly since 2012, when, for example, only 11 percent of listed companies had fully assured data.

In addition to external review and assurance, consistent frameworks and metrics also help companies and funds to clearly communicate their sustainability performance to their stakeholders. 63 percent of participants use an external, independent reporting framework. The Global Reporting Initiative (GRI) continues to be the most widely adopted framework for reporting sustainability performance in the real estate sector, with 37 percent of global participants using the framework, as compared to 31 percent in 2012. GRESB continues to work with GRI as a strategic partner on further developing, improving and harmonizing sustainability disclosure in the real estate sector.

Sustainability policies are now commonplace in the real estate sector: only 13 percent of the benchmark participants have no sustainability policy in place (as compared to 15 percent in 2012). However, the scope of these policies varies substantially across property companies and fund managers. As in 2012, approximately 80 percent of participants’ sustainability policies cover energy consumption. Water consumption and climate change adaptation are increasingly included as elements of sustainability policies (an absolute increase of 5 percent and 8 percent, respectively). The markets in Australia/NZ demonstrate a particularly strong focus in this area, with 69 percent of participants in the region including climate change adaptation in policies, as compared to 44 percent in Europe and 38 percent globally. Of course, sustainability is not limited to energy, water and climate change issues: health and safety issues are now included in policies of 63 percent of participants and other issues addressed are, for example, green cleaning, transport and biodiversity.
ASPECTS

Risks & Opportunities

Sustainability risk assessments now commonplace

The risks associated with the sustainability characteristics of assets may have direct implications for the investment performance of real estate portfolios. Sustainability risk assessment and the management of these risks are thus important elements of a company or fund manager’s approach to the integration of sustainability into operations. The spectrum of risks related to sustainability is broad, and includes asset-specific risks such as climate change (e.g. flooding, extreme weather conditions), as well as broader organizational risks, such as bribery and corruption.

The 2013 GRESB Survey results show that the adoption of risk management strategies is widespread. At the organizational level, nearly all benchmark participants (97 percent) have a bribery and corruption policy in place. At the portfolio level, all participants now perform sustainability risk assessments, both for standing investments and for new acquisitions. This sharply contrasts with results for 2012, when only 60 percent of participants performed sustainability risk assessments. The widespread adoption of sustainability risk assessments indicates that sustainability risks are becoming integrated into fund managers’ and companies’ risk management policies and procedures.

However, the scope of these assessments differs significantly across participants and regions. In Australia/NZ, 90 percent of participants’ risk assessments include the five most frequently included topics for sustainability risk assessments: flooding risks, materials used in construction, contaminated land, irremediable pollution, and extreme weather conditions. In North America, 50 percent of participants include these factors. In Europe and Asia the figure is slightly lower, both at 44 percent.

Other climate change risks that are frequently reported include: risks from presence of CFCs (a contributor to human-induced climate change), landslides, change in annual rainfall and sea-level rise. The most frequently mentioned non-climate change related sustainability risks include: earthquakes, the convertibility/ transformation of real estate assets, and requirements related to energy performance certificates (EPCs). Companies and funds typically include different issues when assessing acquisitions. For example, contaminated land and irremediable pollution are included in respectively 75 percent and 63 percent of sustainability risk assessments related to acquisition of assets.

Energy and water efficiency are among the most important opportunities in the sustainability performance of real estate assets and portfolios. Evaluating the intrinsic and/or operational energy and water performance and efficiency of assets can identify opportunities for direct cost savings. The point of acquisition offers the first opportunity for an assessment of energy and water performance. A large number of participants include both in their assessment (67 percent for energy efficiency and 50 percent for water efficiency). For standing investments, 58 percent of benchmark participants have assessed the energy performance of the complete portfolio during the last three...
years – only 7 percent performed an energy audit on the full portfolio, with most participants executing in-house assessments.

77 percent of Survey participants have energy programs to improve the portfolio’s efficiency. Some of the elements included in these programs focus on relatively low-cost activities, such as system commissioning (68 percent), building energy management systems (54 percent), and lighting programs (42 percent). These measures are often included in standard operational maintenance plans, indicating that most participants’ programs already identify efficient and cost-effective improvement measures. However, a large number of participants also include more extensive elements in energy efficiency programs, such as wall/roof insulation (78 percent), window replacements (72 percent), and HVAC upgrades (58 percent). Interestingly, smart grid/smart building technologies are becoming more prevalent among property companies and funds, with 50 percent of benchmark participants including these technologies in building efficiency programs.

In addition to energy and water conservation programs, 64 percent of participants also undertake indoor air quality (IAQ) assessments, with 19 percent using external assessments. Indoor environment quality is increasingly being recognized for the value that it brings, e.g. the ability to attract and retain tenants, thereby improving returns for the building owner. Elements included in IAQ assessments are, for example, HVAC inspection (60 percent), air sampling (49 percent) and legionella risk assessments (48 percent).

“Many of our clients have been implementing strong environmental management practices for several years at both a project and portfolio level. I believe that there is now a clear way to connect proactive best practices to environmentally committed capital.”

— Dave Pogue, Global Director of Corporate Responsibility, CBRE Advisors
Best Practices

Policy & Disclosure
Credit Suisse Real Estate Asset Management

Credit Suisse’s approach towards its corporate responsibility report is designed to provide readers with an insight into its diverse responsibilities and sustainability activities. We are convinced that a responsible approach to business is essential to achieve long-term success, while also considering sustainability issues in providing our clients with prime real estate investment solutions. At Credit Suisse Real Estate Asset Management we assign considerable importance to sustainability criteria when acquiring, constructing and managing properties.

In this regard we already offer a dedicated sustainable real estate fund totaling CHF 650 million (gross asset value as of June 30, 2013). It’s currently invested in 13 properties in Switzerland and will become listed and publicly available on the Swiss stock exchange later this year. In addition, all new properties acquired for any Swiss real estate fund need to meet the criteria of the “green property” quality seal – an initiative launched by Credit Suisse Real Estate Asset Management that considers social, economic, energy-related and environmental factors.

Leveraging on the results of our “Decarbonizing Swiss Real Estate” publication together with WWF in 2012, we currently implement our global strategy to monitor energy consumption and assess the carbon reduction potential across a broad set of levers. Starting with our Swiss portfolio of 1000 buildings in July 2012, the ultimate goal is reducing their carbon emissions by around 13,000 metric tonnes (at least 10%) versus 2010.

Risks & Opportunities
Legal & General Property

At Legal & General Property we believe that sustainability should be fully integrated across our portfolio and therefore embedded into every employee’s job role and all asset management processes. As a result we have developed a bespoke Asset Sustainability Plan (ASP) for each property across the platform, which provides a long term view of how sustainability measures will be embedded into the asset life cycle, from development or acquisition, through to tenant alterations and landlord plant maintenance. Our ASPs cover three main areas:

- ‘Good Housekeeping’ measures – to be undertaken by our managing agents and facility management teams;
- Capital cost measures – cost and savings initiatives to help reduce the environmental impact and improve the social sustainability aspects of each asset;
- Risk assessment – detailing different aspects around sustainability risks and how we are managing them.

This ASP is integrated with our Planned Maintenance Reports and other aspects of the property lifecycle, such as lease breaks, refurbishments, tenant licenses to alter and new leases, to ensure opportunities are embedded into our active asset management at the most appropriate point. This helps to minimise capital costs, on behalf of our investors, and reduce tenant running costs, but ultimately improves asset values.

Monitoring & EMS
Lend Lease

Lend Lease is committed to operating Incident & Injury Free and leaving a positive environmental legacy wherever it has a presence. With this in mind, Lend Lease and its managed funds operate an Environmental Management System. Integral to this are our Environmental Global Minimum Requirements and also our E-Smart system, which was implemented in 2011. E-Smart provides a consistent framework for measuring, monitoring, and managing environmental risks and opportunities. It requires the business to take a closer look at all areas where its activities have an environmental impact. It is a smart, easy and standardized way for the business to demonstrate its environmental responsibility, while also facilitating a cycle of continuous improvement. This strategic approach to environmental commitments has provided benefits such as reduced operating costs, improved reputation amongst stakeholders, and return on investment in environment-related measures. Through E-Smart, Lend Lease and its managed funds have moved beyond compliance to setting new benchmarks in environmental management.
Monitoring & EMS

Implementation of EMS poses a challenge

An Environmental Management System (EMS) refers to the management of an organization’s environmental programs in a comprehensive, systematic, planned and documented manner. Building on effective management and risk monitoring, an EMS helps an organization to improve its environmental performance and assists the business both in identifying more efficient operating practices and in complying with environmental laws and regulations. Crucially, an EMS is about more than energy efficiency and, as such, it is an effective tool for monitoring all the sustainability aspects included in the annual GRESB Survey.

In 2013, 43 percent of benchmark participants reported having an EMS in place at the corporate, organizational level and 51 percent at the asset level (there is overlap in these responses). 30 percent of participants currently do not have an EMS in place. This compares favorably to 2012, when 40 percent of participants had an EMS in place at the asset level. On average, participants’ Environmental Management Systems cover 77 percent of their portfolio, indicating that participants target resources on particular assets within the portfolio rather than having an asset level EMS that uniformly applies to all assets. 30 percent of all Systems in place have been externally certified and 5 percent have been verified by a third party.

Participants’ responses indicate that property companies and fund managers define an EMS in various ways, with some companies and funds focusing very strongly on energy management. Others take a more comprehensive approach, covering a full range of sustainability issues that include energy management (96 percent), but also water use (90 percent) and waste (84 percent). Business travel is included for 33 percent of the responses. Other topics covered (by 25 percent of participants) are mostly: biodiversity, EPCs and other certification or rating schemes, transport, materials, and health and safety.

Monitoring energy and water consumption is a critical sustainability aspect. In 2013, only 10 percent of benchmark participants are not able to monitor any consumption data. However, this masks significant variation in the method of measurement and the fraction of the portfolio that is covered by those that do measure. For example, 49 percent of participants now use automatic meter readings for energy data collection, covering 58 of their portfolio, on average. Invoices are used more frequently, at 62 percent, covering 74 percent of the portfolio, on average. There are also substantial differences in the method and scope of data measurement across property types. Automatic meter readings are most prevalent among retail and office portfolios, whereas residential portfolios mostly rely on invoices.

“The adoption of environmental standards enhances work practices and can create a virtuous circle of positive interactions between the organization and its employees”

— Prof. Magali Delmas, UCLA

GRESB participants have disclosed data (if available) for energy and water consumption, GHG emissions and waste management for the last two reporting periods. For this year’s Survey, the reporting period is either the calendar year ending 31 December 2012, or the fiscal year ending prior to 1 April 2013, the launch date of the 2013 Survey.

This year’s Survey results once again show an increase in the amount of data collected by property companies and funds. Both the number of participants and their portfolio coverage has increased across all sectors, continuing the upward trend observed in the previous three reporting periods (2009-2011). The results show there is a leading group, comprising property companies and funds in the retail shopping mall and office sectors that perform best on collecting data. Within these two sectors, data is available for on average 64 percent of participants with retail shopping mall assets in their portfolios and 76 for those with office assets. While data availability is lower, retail high street and retail warehouse box portfolios also show a strong year on year increase in data availability from 2009 to date. In the case of retail high street, data availability in the 2013 benchmark shows a 45 percent absolute increase from 2009, with data now available for 57 percent of all portfolios that include retail high street assets.

There is also a significant year-on-year increase in data coverage across property types. Once again, there are two distinct groups. The retail shopping mall and office sectors lead, with an average portfolio coverage of 56 percent and 54 percent, respectively. As these two sectors increase coverage, there continues to be room for improvement in the remaining property sectors. For example, the residential and distribution warehouse sectors have moved from nearly zero percent portfolio coverage in 2009 to 23 and 25 percent coverage in this year’s benchmark, respectively.

The outcomes of energy efficiency programs can be measured in the performance of assets. The 2013 GRESB results show an overall reduction of energy consumption of 4.8 percent over the last two reporting periods (based on data from 319 property companies and funds). There is some variation across sectors: the retail shopping mall and office sectors show an improvement of around 5 percent, whereas for hotels and healthcare, the observed like-for-like reduction in energy consumption is even larger (7.1 percent). Interestingly, over the same period there has been an increase in consumption for both distribution warehouses and for other industrial sectors with a 2.3 and 3.4 percent increase, respectively. The increase in consumption could, of course, be a sign of increased use intensity of those assets during the most recent reporting period.

264 property companies and funds report like-for-like information on GHG emissions whereas 263 participants report like-for-like data on water use. Over the 2011 to 2012 reporting periods, Green Stars strongly outperform non-Green Stars in like-for-like reductions in GHG emissions. Green Stars show a reduction of 4.6 percent, as compared to 1.5 percent for non-Green Stars. Green Stars also achieve larger
reductions in water consumption: a 3.3 percent like-for-like reduction in consumption compared to a 1.2 percent like-for-like increase for non-Green Stars.

Reduction targets help property companies and funds to measure the success of actions taken to reduce resource consumption. Globally, 45 percent of Survey participants set annual or long-term reduction targets. Energy reduction targets are the most frequently used targets (43 percent of participants). Water reduction targets are the second most prevalent (28 percent) and water consumption targets are almost as equally common (27 percent). Within specific sectors, 45 percent of participants with retail shopping mall assets in the portfolio set energy reduction targets and 28 percent set waste reduction targets. In the case of those with office assets, the figures are slightly lower at 39 percent for energy reduction and 23 percent for waste.

**Best practice**

**GPT Group**

GPT Group aspires to be an overall positive contributor to our communities, people and the environment. We aim to manage our sustainability performance in a way that invites our stakeholders to hold us to account.

With sustainability integrated into GPT’s strategy, we recognise the importance of underpinning our business objectives with an aligned organisational culture, effective stakeholder engagement, and good governance and business processes that embed sustainability practices into our day-to-day operations.

Reporting systems are in place to track the energy, water and waste performance of all sites at detailed levels on a frequent basis, enabling management reporting throughout the business and for regulatory and other external reporting purposes. Energy and water submeters provide detailed information to trained site operation teams allowing continuous commissioning to maintain and improve efficiency. LED lighting and variable speed drives are examples of technologies that further enhance efficiency.

Since 2005 GPT has reduced water intensity by 42%, energy intensity by 31%, carbon emission intensity by 40% and improved recycling rates from 29% to 44%. In addition to substantially reducing our environmental impact, in 2012 we avoided AUD 20.4 million in costs when compared to our 2005 baseline.
Building Certification & Benchmarking

Use of building certification schemes widespread

The use of building certifications, energy ratings and benchmarking schemes helps property companies and funds to monitor both the integration of broader sustainability best practices in their portfolios, and their portfolios’ energy efficiency. Certification can also help signal the sustainability performance of an asset to the marketplace.

The use of green building certification schemes is now widespread, although there are significant variations across sectors and regions. Globally, 55 percent of benchmark participants have certified office assets in their portfolio, whereas 34 percent have certified retail shopping malls. Certification is less common in the industrial and residential sectors: 25 percent of benchmark participants have certified assets in these sectors. While the use of certification schemes is becoming more common, coverage (i.e. the fraction of the total portfolio floor area that is covered by the certificates) is still fairly low. In the office sector, average coverage for participants that have certified assets in their portfolios is 35 percent, whereas for participants with shopping malls, an average of 30 percent of the portfolio is certified. Surprisingly, an average of 46 percent of the portfolios is covered for participants that have received green building certification for hotels. For residential and industrial assets, the coverage is less than 20 percent.

As in 2012, LEED is the most widely adopted certification scheme, followed by BREEAM. While it originated in North America, LEED is also frequently used in other regions – 43 percent of benchmark participants that use LEED for office buildings are based outside North America. In this respect, it differs quite substantially from the other schemes included in the GRESB Survey, for example BREEAM and Green Star, both of which are much more focused on specific regions. Globally, for residential, LEED is used more often than BREEAM (14 versus 4 percent), for industrial, the uptake is comparable (about 8 percent), while for shopping malls, the uptake of BREEAM is much higher (17 percent as compared to 6 percent for LEED).

Patterns in regional coverage show that use of certification schemes is highest in North America and Australia/NZ: 78 percent of North American participants and 60 percent of participants in Australia/NZ have certified office assets. Focusing on shopping centers, Asia has the largest number of participants with retail assets (45 percent) that are certified (with an average coverage of 29 percent). Almost 40 percent of European shopping center portfolios are also certified, with an average coverage of 31 percent.

In this year’s GRESB Survey, Energy Performance Certificates (EPCs) are the most widely used energy rating scheme. The introduction of an EPC scheme is a mandatory requirement for all member countries in the European Union, hence the strong uptake in their use. This is similar to Australia, where legislation requires the disclosure of a Building Energy Efficiency Certificate (BECC) during the sale, lease or sub-lease of commercial office space greater than 2,000 square meters.
As a result, 86 percent of the property companies and funds in this region have adopted a NABERS Energy rating for some or all of their portfolios, while in Europe 64 percent of benchmark participants have EPCs. In North America, which uses the Energy Star rating, adoption of energy ratings is increasing rapidly, from 41 percent of participants adopting energy ratings in 2012 to 51 percent in 2013. However, in Asia hardly any portfolio currently has a rating (only 4 percent of participants), which is in line with the absence of certification requirements in most countries.

Within the different regions, there is substantial variation in the uptake of energy ratings among different property types. This mostly holds for Australia/NZ and for North America, where the office sector has the largest uptake, as national schemes do not equally apply to some of the other property types. In Europe, EPCs can be used across a portfolio, which is reflected in the almost equal uptake per property type.

“I am pleased to see the growth in portfolio-level sustainability benchmarks such as GRESB. With almost 350,000 buildings using EPA’s ENERGY STAR Portfolio Manager, it is clear that commercial building owners value the ability to benchmark environmental performance, the first step to improvement and lower greenhouse gas emissions.”

— Jean Lupinacci, Director of the ENERGY STAR® Commercial and Industrial Branch, U.S. Environmental Protection Agency
Stakeholder Engagement

Untapped opportunities for tenant engagement

The 2013 GRESB Survey examines the relationships between Survey participants and four categories of stakeholders: employees, tenants/occupiers, external service providers, and the community.

By prioritizing employee satisfaction and by giving employees access to regular training, property companies and fund managers develop their employees’ understanding of their business. Employee satisfaction also encourages loyalty from employees and helps to reduce staff turnover rates. Effective management and policy setting related to remuneration terms and bonus structures are highly relevant to investors’ corporate governance requirements.

Overall, GRESB participants demonstrate a strong focus on employee engagement. 94 percent have an employee policy in place, most of which, as a minimum, focus on equal career opportunities for men and women, and the development and retention of qualified personnel. 89 percent of participants have a remuneration policy in place: those policies address long-term incentives for 81 percent of participants, and 64 percent address equal pay for men and women. Employee training is now offered by 91 percent (as compared to 81 percent in 2012), and Among those companies and funds that do offer training, 65 percent provide training specifically related to sustainability. At the organization level, health and safety is still largely left unaddressed: only 46 percent of participants undertake health and safety surveys and only 36 percent have recognized occupational health and safety management systems in place.

Tenant engagement

Tenant engagement is increasingly important for sustainable management of real estate portfolios. In addition to measuring energy, water, waste and GHG emissions, and obtaining certifications and ratings, well-managed portfolios also integrate monitoring of day-to-day use of assets in the management of their portfolio. Engagement can take place regardless of the level of landlord control over an asset. Indeed, good relations with tenants can mitigate limitations on a landlord’s ability to collect performance data. Property companies and funds participating in the benchmark increasingly engage with tenants: 73 percent now have a tenant engagement program in place, as compared to just 54 percent in 2012. Of those with programs, more than half (58 percent) hold regular tenant engagement meetings that address sustainability topics. Almost half of the participants with tenant engagement programs provide a tenant sustainability guide, which is almost double as compared to 2012. Nearly half of participants also undertake tenant satisfaction surveys, covering, on average, 68 percent of their tenants.

The landlord/tenant relationship is underpinned by the terms of the tenant’s lease. The lease terms thus offer an opportunity for both parties to document the agreement regarding sustainability issues. To record sustainability issues in a formal, but less prescribed way, a memorandum of understanding (MoU) offers an alternative means
of documenting sustainability objectives. The use of green leases is growing, but still limited: 29 percent of participants make use of green lease formats for an average of 40 percent of their leases. This was only 23 percent in 2012. 6 percent of benchmark participants have leases that include MoUs addressing sustainability issues, for 30 percent of their leases, on average. The content and scope of issues covered differs significantly between countries.

Many property companies and fund managers outsource some or all of their asset and property management functions to third parties and all have external suppliers. Therefore it is important that those external providers are compliant with a company or fund management organization’s sustainability policies and activities.

More than half (58 percent) of benchmark participants now have sustainability requirements in place for external property/asset managers. 50 percent of participants receive formal update reports from external property/asset managers, while 38 percent also use staff members to monitor compliance. Regarding external suppliers/service providers, 55 percent of participants integrate sustainability requirements into contracts, similar to 2012. Among those participants that have sustainability requirements for external suppliers/service providers, requirements are integrated into nearly 70 percent of their contracts. 17 percent of participants use certification requirements to direct external suppliers’ compliance with sustainability requirements.

Community engagement

Community engagement programs are in place for 69 percent of the 2013 GRESB participants. These programs most frequently include supporting charities and community groups (55 percent of participants). However, the tangible and site-specific nature of real estate assets also gives property companies and funds the opportunity to engage with the community directly. For example, 26 percent of participants include employment creation in local communities in their engagement program.

“The survey results will function as a starting point in conversations with fund managers to further improve sustainability across our portfolio, ultimately leading to properties that closely match tenants’ and investor’s preferences.”

— TKP Investments
New Construction & Major Renovations

Deployment of renewable energy technology still limited

In 2013, 276 property companies and funds completed the New Construction & Major Renovations section of the GRESB Survey. This represents an increase of 129 participants as compared to 2012. Of these 276 companies and funds, 9 percent are exclusively focused on construction activities. Development work varies per region and is strongly related to differences in the economic climate and property market dynamics. Regionally, 42 percent of participants that focus exclusively on construction activities are based in Asia. For those that combine construction activities with the management of standing investments, Europe is the single largest group, representing 44 percent of the total. Coverage has also increased since 2012. This year, companies and funds reported on 657 new construction projects and 1,114 major renovation projects.

In 2013, 43 percent of participants that have new development activities obtained green building certifications for their assets. When broken down per region, 46 percent of North American participants obtained certifications, 47 percent in Europe, 28 percent in Asia and 42 percent in Australia/NZ. As with standing investments, LEED and BREEAM are the most frequently used certification schemes, followed by Green Star and CASBEE.

Site selection, development and materials

For participants with site selection requirements, these most frequently include contaminated land (65 percent), flooding risks (59 percent) and irremediable pollution (55 percent). Where participants have minimum sustainable development requirements for their developments, the focus is most commonly on implementation of storm water management plans and the minimizing of site disruption. Policies on construction materials mostly include use of low-emitting materials (60 percent of participants); wood-based materials and products that are certified in accordance with Forest Stewardship Council (FSC) principles and criteria (52 percent), and rapidly renewable materials and recycled content materials (49 percent). There are some notable regional differences: in Europe 65 percent of participants has a blacklist of non-sustainable materials that should not be used in any projects, as compared to just 23 percent of participants in North America.

Resource efficiency and renewable energy

New construction offers an important opportunity to reduce future resource consumption and waste generation. However, only 38 percent of participants have minimum energy efficiency requirements in place, and 49 percent require verification of installations and system performance. A commissioning plan, which ensures proper optimization of installations, has been developed and implemented by 42 percent of participants. There are significant regional differences among com-
panies and funds: in Australia/NZ almost 65 percent of participants include an obligation to develop and implement a commissioning plan, as compared to 44 percent in Europe and 37 percent in Asia. Of those participants that have minimum water efficiency requirements, participants most frequently use high-efficiency fixtures (37 percent) and/or occupant sensors to reduce the potable water demand (25 percent) and re-use of storm water and grey water for non-potable applications (17 percent).

The use of on-site renewable energy sources has been growing: 27 percent of participants now generate energy from on-site renewables, as compared to 17 percent in 2012. The largest single type of renewable energy is solar/photovoltaic, deployed by 18 percent of participants, generating, on average, 7 percent of total energy use. Other renewable energy sources include geothermal, and co/tri-generation, although the fraction of total energy consumption covered by these sources is still small.

Nearly half (45 percent) of participants with new construction and/or major renovation activities have a waste policy in place at construction sites. Within this group, 39 percent have waste management plans, 26 percent have programs in place to educate employees about waste management techniques and 22 percent have project specific targets with regard to waste reduction, recycling or reuse.

### Third party contractors and health & safety

In 2013, 54 percent of participants undertaking development activities have sustainability guidelines for contractors specified in the contract, on average covering 90 percent of their contracts. Surprisingly, this is a significant decrease as compared to 2012, when 81 percent of participants had environmental guidelines/standards for contractors in place. To ensure that contractors are compliant with these guidelines, 42 percent of participants undertake either internal or external audits, while 31 percent undertake ad hoc site visits. On average, almost 90 percent of projects included in the Survey were covered by audits and site visits.

“At Arch Capital, sustainable development is defined not solely by our success in our business endeavor. It goes with the belief that it should be accompanied by alignment of benefits with all stakeholders over a long-term horizon. The challenge for Arch Capital is the regional or transnational context of its investments coupled with implementation done with partnerships at very local levels where regulations, conventions and practices vary. This could be addressed only by increasing the investment in time and attention to the further development and implementation of our Responsible Investment and Sustainability Management Policy.”

— ARCH Capital Management Co. Ltd.
Best Practices

Building Certification & Benchmarking
Prologis

Prologis first received a sustainable building certification in 2006. Since then the portfolio has grown to include 39 million square feet (3.6 million m²) of certified projects in 11 countries, certified in accordance with 6 different rating systems.

Certification provides third party verification of building design and performance. Prologis analyzes rating systems to understand how the certification requirements can be implemented in ways that deliver the greatest benefits for customers without higher costs. This is essential to keeping the certification standard relevant for Prologis and valued by customers.

For example, efforts to optimize energy consumption by reducing air infiltration at a building in Germany resulted in enhancements to the typical dock door design. This subtle change, which contributed to a 75 percent reduction in air infiltration, supported certification efforts in accordance with the DGNB rating system. This solution not only reduced heating costs for the customer, it improved the reliability of doorway equipment and thereby helped to ensure operational efficiency for the customer.

Stakeholder Engagement
The Crown Estate

Stakeholder engagement is an integral part of the way The Crown Estate does business. Commercialism, Integrity and Stewardship are the three values by which the organization operates. On the Regent Street Portfolio we have engaged with many of our stakeholders including the local community and occupiers. For example a workplace Co-coordinator scheme has been established, which brokered 118 permanent employment contracts in and around Regent Street in 2011/12.

We work very closely with our occupiers to ensure everyone is aware of and takes part in the sustainability vision for the area. A good example of this is the Swallow Street Recycling Facility, a Crown Estate initiative with a firm focus on the environment and occupiers. We looked at ways to introduce a waste removal provision for Le Meridien. This was then extended to the whole of Swallow Street, which is mainly occupied by restaurants. The launch of the recycling scheme was a positive step forward with all businesses signing up to the scheme. This reduced refuse collections on Swallow Street from 6 different contractors a day to just the one contractor reducing heavy traffic and the need for bags to be placed on the street awaiting collection. We have an on-going dialogue with our occupiers and are working with them to reduce their impact on the environment.

New Construction & Major Renovations
Land Securities

Land Securities believes that it is important to manage its business activities so as to minimize their environmental impacts and, when practicable, bring about enhancements to the environment. Promoting sustainable development in this way is not only the right way to behave, but it also makes good business sense.

The Land Securities Sustainable Development Brief is a single point of reference for project teams during design, any tendering process and post-award of contract, summarizing their requirements and expectations with regards to environmental sustainability. The Brief includes a series of checklists, procedures and aide-memoirs which act as prompts for identifying and managing environmental aspects to best practice standards at all stages of the development cycle from land acquisition to practical completion and handover.

The Brief is provided to all project teams, including designers, consultants and contractors, who are all required to work in accordance with the requirements, which reflect Land Securities’ corporate environmental targets and policies. It is updated on an annual basis in order to capture the latest guidance on environmental best practice and innovations in sustainable design, together with Land Securities’ corporate environmental targets encompassing a range of sustainable development indicators.
**Conclusion**

**Consolidation and development continues**

GRESB now covers six continents and is the leading global source of comprehensive portfolio level sustainability data, including information on energy, water, GHG emissions, and waste, as well as broader indicators such as disclosure, risk assessments, and stakeholder engagement.

The benchmark results demonstrate a clear and upward trend in sustainability performance of property companies and funds, with 119 participants now designated as ‘Green Stars’. Importantly, the results show an overall reduction in energy consumption of 4.8 percent over the 2011-2012 period, based on like-for-like data from 319 property companies and funds. GHG emissions decreased by 2.5 percent (based on like-for-like data from 264 companies and funds) and water consumption decreased by 1.2 percent.

More than 50 institutional investors, representing on aggregate USD 6.1 trillion of institutional capital, now use the GRESB benchmark results in the various stages of the investment management and engagement process, with a clear goal to optimize the risk/return profile of their real estate investments. The link between financial performance and sustainability performance remains the core focus of these investors, and is an important part of GRESB’s mission. A recent JP Morgan Australia report indicated that JP Morgan will consider “adding an ESG rating to its discount rate and hence valuation of REIT cost of equity capital.” In 2014, it is the aim to connect the data collected by GRESB to proprietary databases that provide detailed information on the income and capital returns to private property funds, allowing for a first correlation between sustainability performance and financial performance at the portfolio level.

Looking forward, GRESB will continue to focus on enhancing data integrity, with a view to incorporating PwC’s recommendations in the next Survey period. Current quality controls will be broadened and the verification process will continue to scrutinize the provided data in more detail. Data integrity starts with proper data collection, both at the asset level, and at the portfolio level. In 2014, GRESB will further improve its own data collection scheme, with the aim of connecting more directly to asset level data collected by property companies and funds. Also, as a plethora of metrics, benchmarks and rating schemes have emerged, following the continued growth in the importance of sustainability in the global real estate industry, GRESB endeavors to achieve harmonization in real estate sustainability reporting, by working with asset-level benchmarking schemes, with other global reporting frameworks and in close partnership with all leading industry associations around the globe.

The momentum in the uptake of sustainability integration in the global real estate industry offers an unprecedented opportunity to connect the conventional investment world and the responsible investment world. In the global real estate industry, improvements in sustainability performance are closely linked to the goal of enhancing and protecting shareholder value. GRESB looks forward to contributing to that goal over the years to come, by providing more transparency and standardization in reporting on sustainability performance.

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GRESB Products and Services

2013

The data from GRESB is available to Survey participants and to GRESB’s Investor, Manager and Company Members (for Investor Members, an investment in a fund is a prerequisite for data access). GRESB provides both standard and tailor-made reports that contain data output based on the questions included in the annual GRESB Survey.

GRESB has designed all reports to be flexible and user-friendly tools for engagement with investors and other stakeholders, due diligence, and the development of action/improvement plans. The reports are available online and can be downloaded, containing graphs which can be used for internal or external presentations and other reporting purposes.

Scorecard

• Highlights the key results of a company or fund’s sustainability performance
• Provides a summary of performance for each sustainability aspect
• Explains the benchmark composition including entity and peer group characteristics
• Free of charge for participants

Benchmark Report

• Deeper analysis of a company or fund’s GRESB data
• Includes question-by-question analysis for each aspect
• Provides additional peer group comparisons
• Part of GRESB Investor, Fund Manager and Company Members’ membership benefits
• Also available to Survey participants on payment of a fee

Member portal

• Online information on the sustainability performance of a portfolio of property companies and funds
• Ability to construct tailored Portfolio Analysis Reports
• Compare portfolio against a flexible benchmark as well as the global GRESB score
• Access to individual Benchmark Reports
• Exclusively for GRESB Investor, Fund Manager and Company Members

Other products and services

Response Tracker

• Online tool to track the progress of external investments or internal entities in submitting data to the GRESB benchmark
• Ability to directly contact investments by email to engage regarding participation in the GRESB Survey
• Exclusively for GRESB Investor, Fund Manager and Company Members

Networking and Knowledge Sharing

• GRESB Membership provides the opportunity to attend events and best practice webinars
• Membership provides access to user groups and committees, to get involved and become part of the GRESB global real estate community
Governance

Supervisory board

The Supervisory Board oversees the governance and strategic direction of GRESB. It includes both representatives from GRESB’s founders and an independent Board member with extensive knowledge and experience of the real estate sector. GRESB’s Supervisory Board administers strategic and governance issues, and approves GRESB B.V.’s annual budget and accounts.

Executive board

The Executive Board is responsible for the strategic management of GRESB.

GRESB staff

Advisory board and benchmark committee

The Advisory Board and Benchmark Committee include representatives of GRESB’s membership community. The GRESB Executive Board approves the appointment of Advisory Board and Benchmark Committee members. Individuals are appointed for a two-year term, extendable by a further two years with Executive Board approval.

Advisory Board

Benchmark Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Company/Role</th>
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<tbody>
<tr>
<td>Harald Walkate</td>
<td>AEGON</td>
<td>Aurelie Heyries</td>
<td>AXA Real Estate Investment Management</td>
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<td>Kelly Christodoulou</td>
<td>Australian Super</td>
<td>Bernardo Korenberg</td>
<td>Bouwinvest</td>
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<td>Juerg Burkhard</td>
<td>AXA Real Estate Investment Management</td>
<td>Dave Pogue</td>
<td>CBRE Advisors</td>
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<td>Kathleen Jowett</td>
<td>M-Viva Investments Global Real Estate Multi</td>
<td>Alberto R Fossati</td>
<td>CBRE Global Investors</td>
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<td>Pieter Hendrikse</td>
<td>CBRE Global Investors</td>
<td>Andries van der Walt</td>
<td>Cushman &amp; Wakefield</td>
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<td>Rogier Quirinjs</td>
<td>Cohen &amp; Steers</td>
<td>Matthew Tippett</td>
<td>Jones Lang LaSalle</td>
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<td>Claudine Blamey</td>
<td>The Crown Estate</td>
<td>Debbie Hobbs</td>
<td>Legal &amp; General Property</td>
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<td>Patrick Laureys</td>
<td>European Public Real Estate Association (EPPA)</td>
<td>Mychele Lord</td>
<td>Lord Green Real Estate Strategies</td>
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<td>Mervyn Howard</td>
<td>Grosvener Fund Management</td>
<td>Ibrahim al Zubi</td>
<td>Majid al Futaim</td>
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<td>Tatiana Bostee</td>
<td>Hermes Real Estate Investment Management</td>
<td>Jeroen Reijnoudt</td>
<td>MN</td>
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<td>Sheldon Groner</td>
<td>National Association of Real Estate Investment</td>
<td>Deborah Ng</td>
<td>Ontario Teachers Pension Plan (OTPP)</td>
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<td>Trusts (NAREIT)</td>
<td>Lauren Rouach</td>
<td>PwC Luxembourg</td>
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<td>Andrew McAllan</td>
<td>Oxford Properties</td>
<td>David Stanford</td>
<td>Real Foundations</td>
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<td>Jennifer Young</td>
<td>The Townsends Group</td>
<td>Ari Frankel</td>
<td>Deutsche Wealth and Asset Management</td>
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<td>Ros McKay</td>
<td>Victorian Funds Management Corporation (VFM)</td>
<td>Graham Baxter</td>
<td>Standard Life Investments Limited</td>
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<td>Roel Kalvisv</td>
<td>Syntrus Achmea Real Estate and Finance</td>
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<td>Jonathan Flaherty</td>
<td>Tishman Speyer (North America)</td>
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<td>Philippa Gill</td>
<td>Tishman Speyer (Europe)</td>
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<td>Chris Pyke</td>
<td>USGBC</td>
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Participants

**Listed**

- Activia Properties Inc.
- Aeon Mall Co. Ltd.
- Aims AMP Capital Industrial REIT
- alstria office REIT AG
- Allarea Cogedim
- Associated Estates Realty Corporation
- Australand Property Trust
- AvalonBay Communities Inc.
- Ayala Land Inc.
- Befimmo SA
- Big Yellow PLC
- Boston Properties
- Brandywine Realty Trust
- BRE Properties Inc.
- British Land Company PLC
- Brookfield Office Properties Inc.
- Camden Property Trust
- Campus Crest Communities Inc.
- CapitaCommercial Trust
- Capitaland Limited
- CapitaMall Trust
- Castellum AB
- CFS Retail Property Trust Group
- China Overseas Land & Investment Ltd.
- City Developments Limited
- Citycon Oyj
- CLS Holdings
- Cofinimmo
- Commonwealth Property Office Fund
- Convert Immobilien Invest SE
- Corio NV
- Credit Suisse Real Estate Fund SIAT
- Cromwell Property Group
- Daowa Office Investment Corporation
- DDR
- Derwent London PLC
- Deutsche EuroShop AG
- Deutsche Wohnen
- Dexus Property Group
- Equity One
- First Industrial Realty Trust Inc.
- Foncière des Régions
- GAGFAH SA
- Gecina
- General Growth Properties
- GLP J-REIT
- Godrej Properties
- Goodman Group
- GPT Group
- Grainger PLC
- Great Eagle Holdings Limited
- Great Portland Estates PLC
- GSW Immobilien AG
- Hammerson PLC
- HCP Inc.
- Health Care REIT Inc. Medical Facilities Portfolio
- Health Care REIT Inc. Senior Housing Portfolio
- Henderson UK Property Unit Trust
- Hershpa Hospitality Trust
- Host Hotels & Resorts Inc.
- Ichigo Real Estate Investment Corporation
- IGD SIK
- Industrial & Infrastructure Fund Investment Corporation
- Inland Real Estate Corporation
- Intu Properties PLC
- Investa Office Fund
- IVG Immobilien AG
- Japan Excellent Inc.
- Japan Logistics Fund Inc.
- Japan Prime Realty Investment Corporation
- Japan Retail Fund Investment Corporation
- Kenedix Realty Investment Corporation
- Keppel Land Limited
- Kilroy Realty Corporation
- Kimco Realty Corporation
- Kibi Income Property Trust
- Klépierre
- Land Securities Group PLC
- Leasinvest Real Estate
- Liberty Property Trust
- Metric Property Investments PLC
- Mirvac
- Mori Hills REIT Investment Corporation
- New Europe Property Investments PLC
- Nippon Prologis REIT Inc.
- NSI NV
- ORIX J-REIT Inc.
- Parkway Properties Inc.
- Post Properties Inc.
- Prologis
- PSP Swiss Property
- Regency Centers Corporation
- SEGRO PLC
- SFL
- Shaftesbury PLC
- Simon Property Group Inc.
- Société de la Tour Eiffel
- Sponda PLC
- Standard Life Investments Property Income Trust
- The Corycar Investment Company PLC
- The Link Real Estate Investment Trust
- The Macerich Company
- The UNITE Group PLC
- Thomas Properties Group Inc.
- TIER REIT
- Tokyo Tatemono Co. Ltd.
- Top Spring International
- Triodos Vastgoedfonds
- UDR Inc.
- Unibail-Rodano
- United Urban Investment Corporation
- Ventas Inc.
- Vornado Realty Trust
- Wereldhave NV
- Yatra Capital Limited
- Züblin Immobilien Holding AG

**Non-listed**

- ABC Capital Partners
- Aberdeen Asset Management
- AEW Asia Pte. Ltd.
- AEW Capital Management
- AEW Europe
- Alpha Investment Partners Limited
- AltaFund General Partner S.à r.l.
- Altera Vastgoed NV
- AMP Capital
- AmInvest
- Andersson Real Estate Investment Management
- Arch Capital Management Co. Ltd.
- Archstone
- Art-Invest Real Estate
- ASR Real Estate Investment Management
- ATP Ejendomme A/S
- AvalonBay Communities Inc.
- Aviva Investors
- AXA Investment Management
- Behringer Harvard
- Beni Stabili Gestioni
- Bentall Kennedy Group
- Bouwfonds Fondverwaltungs GmbH
- Bouwfonds International Real Estate Fund Services Luxembourg S.à r.l.
- Bouwfonds REIM
- Bouwinvest REIM
- British Land Company PLC
- Broadway Partners Fund Manager
- Brockton Capital LLP
- CapitaMalls China Fund
- Management Pte. Ltd.
- CapitaMalls India Fund
- Management Pte. Ltd.
- CBRE Global Investors
- Charter Hall
- China Resources Capital
- Management (Asia) Co. Ltd.
- CIM Group
- CITIC Capital
- CitizenM Asset Management
- Clarion Partners
- Climate Change Capital
- COLI ICBCI China Investment Management
- Colonial First State Global Asset Management
- Commercial Estates group
- Cordea Savills Fund Managers (Jersey) Limited
- Cordea Savills Investment Management
- Cornerstone Advisers
- CorVal
- Credit Suisse
- DDR
- Deutsche Alternative Asset Management UK Limited
- Dexus Funds Management
- Diamond Realty Management Inc.
- DiVcoWest
- Dividend Capital
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- Eurindustrial NV
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Local Government Super
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MacFarlane Partners Investment Management
Majid Al Futtaim Properties
MGP
Moorfield Investment Management Limited
Morgan Stanley
NBIM Antoine CHF
Neirinver SA
Niam
Nordic Real Estate Partners
Orion Partners
Oxford Properties Group
Palmer Capital
Pamfleet
Paramount Group Inc.
Pareto Ltd.
Perella Weinberg Real Estate UK LLP
Phillips Edison & Company
PNC Realty Investors
Pradera
Pramerica Real Estate Investors
Prelios SGR
Principal Real Estate Investors
Prologis
Prosperitas Investimentos
Prudential Real Estate Investors
Public Investment Corporation
QIC Global Real Estate
Q-Park NV
Redwood Group Asia Pte. Ltd.
Rikshem AB
Rockspring
Rockspring Property Investment Managers LLP
Royal London Asset Management
RREEF Americas LLC
RREEF Investment GmbH
RREEF Spezial Invest GmbH
RXR Realty
Savanna
Schroder Property Investment Management Limited
Scottish Widows Investment Partnership
Sentinel
SOCAM Development & TAN-EU Capital
Société de développement Angus Sonae Sierra
Standard Life Investments
Steen & Strom AS
Syntrus Achmea Real Estate & Finance
TA Realty LLC
The Carlyle Group
The Crown Estate
The Hampshire Companies LLC
The Laramar Group LLC
The UNITE Group PLC
Thor Equities
Threadneedle Property Investments Limited
TIAA-CREF
Tishman Speyer
Tokio Marine Property Investment Management Inc.
TRIF Investment Management Ltd.
Tristan Capital Partners
UBS Global Asset Management Ltd.
UBS Real Estate KAG mbH
UBS Realty Investors LLC
Union Investment Institutional Property GmbH
Union Investment Real Estate GmbH
Unitech Group
USAA Real Estate Company
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Valad Europe
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