

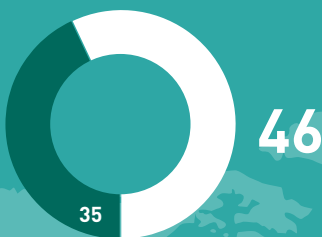


# 2014 GRESB Report

# Key Figures

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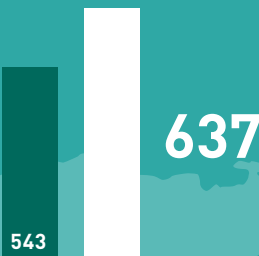
Investor Members



Institutional Capital



Survey Participants



Property value



Assets covered

\* Excluding single-family residential assets



Assets in new construction and major renovations



Fund Manager and Company Members



Associate Members



Partners



# Investor Members

Aberdeen

actiam  
THE RESPONSIBLE INVESTOR

AEGON  
Asset Management

FÖRSTA  
AP-FONDEN

Andra  
AP-fonden  
Second Swedish National Pension Fund - APF2

AP3 Third Swedish National Pension Fund

AP  
FJÄRDE AP-FONDEN

apg

AustralianSuper

AVIVA  
INVESTORS

ARCADIS PENSIOENFONDS

Blue Sky Group

BNP PARIBAS  
INVESTMENT PARTNERS

Bouwinvest

CATHOLIC  
Super

CBRE  
CLARION  
SECURITIES

CBRE  
GLOBAL  
INVESTORS

COHEN & STEERS

THE CROWN  
ESTATE

GEPF  
your investment, your future

HESTA  
An Industry SuperFund

HOOPP  
Healthcare of Ontario  
Pension Plan

KEMPEN & CO  
Merchant Bank

KAMES  
CAPITAL

LOCAL GOVERNMENT  
SUPERANNUATION SCHEME

MAJID AL FUTTAIM

MN

NN

NORGES BANK  
INVESTMENT MANAGEMENT

TEACHERS'  
PENSION PLAN • RÉGIME DE RETRAITE  
DES ENSEIGNANTES ET DES ENSEIGNANTS

AN CIBERSWORLDWIDE COMPANY

oix|fiorid

PGGM

PRESIMA

ROBECO  
The Investment Engineers

SEB  
TRYGG LIV

SNS Asset Management

Uitsluitend bedrijfslidkapitaal voor de detailhandel

TOWNSENDGROUP

TKP  
Investments

TRS

UAW RETIREE  
Medical Benefits Trust

USS

VFMC  
Victoria Funds  
Management Corporation

GRESB's mission is to enhance and protect shareholder value by evaluating and improving **sustainability best practices** in the global real estate sector.

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## How to read this report

The 2014 GRESB Report is in digital format, downloadable as a PDF. For the first time, in 2014, the Report also links with additional online materials. These online resources, accessible via the [GRESB website](#), contain additional analysis and data, together with topic-specific innovation case studies collected from 2014 benchmark participants and 2014 sector leaders. You can access these additional materials by clicking on the links in the Report.



Click to access Innovation Case Studies



Click graphs to see more analysis in the Portal

[...more](#)

Click to get more insights in the Portal

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# Introduction

## *Five years of GRESB: the past, the present, and the future of sustainability in the global real estate sector*

With increased societal focus on resource scarcity, the need for de-carbonization, and the effects of climate change, investors have become increasingly aware of the implications from these, generally longer term, megatrends. More than any other investment class, real assets are exposed to the direct, local consequences posed by these global risks: more stringent regulatory requirements, changing societal preferences for places to work, live, and play, and exposure to climate-related events, such as flooding and extreme weather conditions.

With these investment beliefs in mind, in 2009 three large pension funds joined forces to better understand their exposure to risks related to environmental, social and governance (ESG) issues in their global portfolios of investments in property companies and private equity real estate funds. The first assessment of the sustainability performance of the real estate industry, based on a selection of 43 material metrics, led to the inaugural GRESB benchmark, including 198 property companies and funds. The outcomes clearly showed that the real estate sector was just waking up to the reality of integrating sustainability in its investment and asset management strategies: for example, only 19 percent of benchmark participants had some information on energy consumption, and only 20 participants (10 percent) achieved a ranking in the highest category (Green Stars).

Five years later, GRESB reporting has become standard practice for most of the world's property companies and fund managers. In consultation with the real estate industry, GRESB has further developed the set of metrics that constitute the most important sustainability issues for its more than 130 members, of which 42 are pension funds and their fiduciaries, jointly representing some USD 8.9 trillion in assets under management. This year, 637 listed property companies and private equity real estate funds submitted data, covering 56,000<sup>1</sup> buildings with an aggregate value of USD 2.1 trillion. Not only has the coverage of sustainability reporting improved, but the sustainability performance of benchmark participants also shows significant progress. For example, 79 percent of property companies and funds now measure the energy consumption in their buildings. Collectively, between 2012 and 2013, the commercial real estate sector reduced its energy consumption by 0.8 percent, carbon emissions fell by 0.3, and water consumption by 2.3 percent.<sup>2</sup> Over a third of the benchmark participants are now ranked in the highest "Green Star" category.

Looking forward, there is no doubt that buildings will continue to be a focus of environmental legislation. In six years from now, all new construction in European Union countries will need to reach a "nearly zero-energy" standard. Following disclosure laws in Australia and the EU, ten US cities, two states and one county now require the benchmarking and disclosure of building energy performance for large commercial, institutional, and multifamily buildings. Green

building certification programs have become institutionalized in the real estate market, with over 34,000 commercial buildings certified across the globe<sup>3</sup>.

For investors, these trends of increasing transparency and enhanced sustainability performance at the asset level will likely affect the volatility and profitability of real estate investments in property companies and funds. The financial industry continues to seek ways to incorporate ESG metrics in financial decision-making, with new investment opportunities, such as green property bonds, recently added to the universe of investment vehicles. The need for reliable, investment grade data on ESG metrics continues to increase with the advent of capital market interest in the topic, and GRESB will be at the forefront of providing increasingly granular, high-quality data to the industry. This data will provide transparency, allowing pension funds, insurance companies, banks, and other institutional investors and lenders to incorporate non-financial information into their investment decision-making. For the global real estate industry, accurate benchmarking at the portfolio level will increase competition and the speed with which sustainability best practices diffuse into the market. This will enhance and protect the value of real estate investments, and ultimately contribute to a more efficient, more sustainable built environment.

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"PREA believes that sustainability should be at the forefront of business planning and analysis across all industries, but particularly within the institutional real estate community. The built environment accounts for a large proportion of carbon emissions and other environmental impacts, and our industry is poised to contribute significantly to global sustainability improvements."

—Gail Haynes,

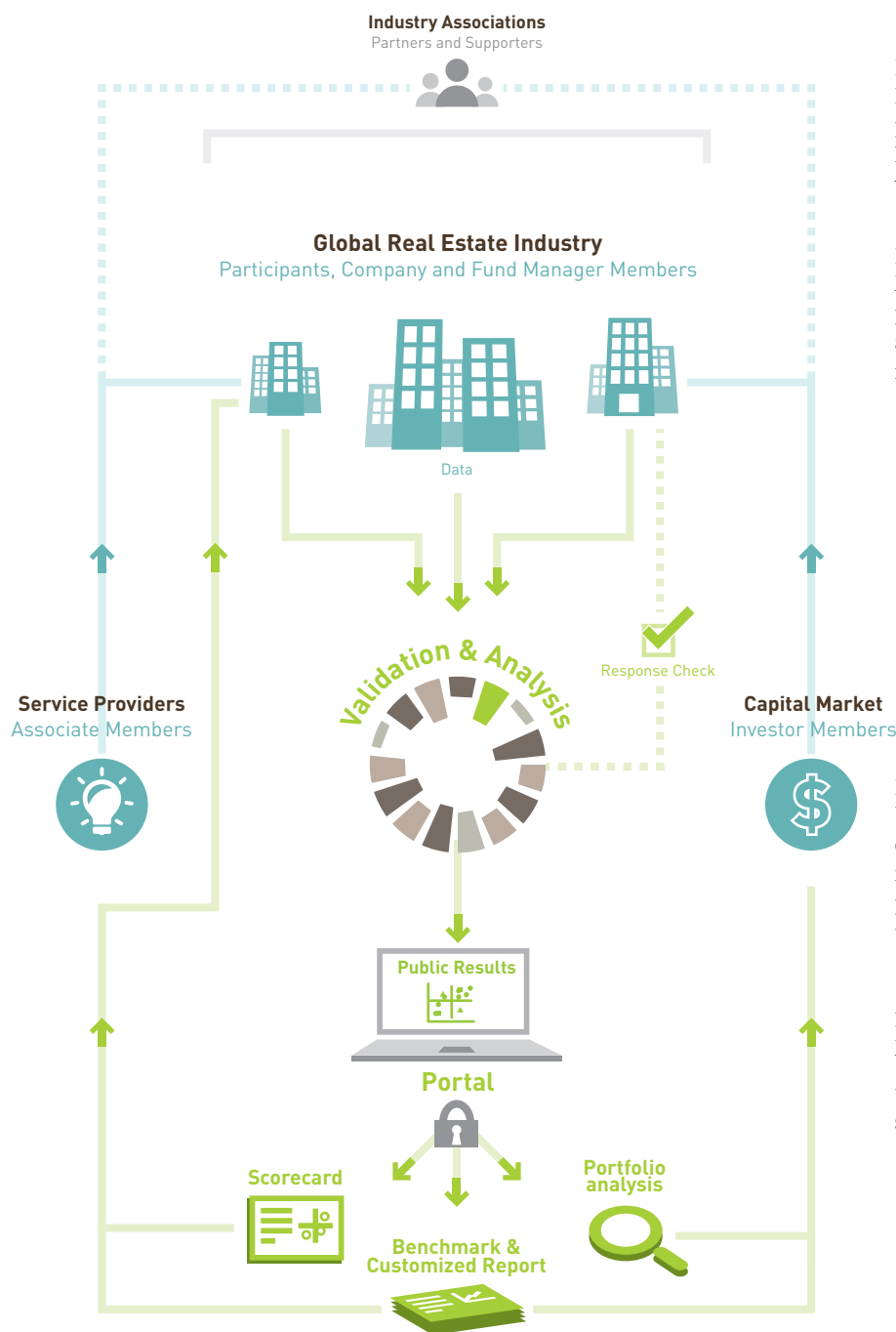
President Pension Real Estate Association

<sup>1</sup> Excluding single-family residential assets

<sup>2</sup> Based on like-for-like data from 508, 434, and 462 participants, respectively

<sup>3</sup> Source Green Building Information Gateway (GBIG)  
[www.gbigo.org](http://www.gbigo.org)

# The GRESB Process



## Partners:

Industry associations that support GRESB's mission to enhance and protect shareholder value in the real estate industry.

## Participants:

Measure the sustainability impact and risk of their portfolios and communicate their performance to the capital market.

## Investor Members:

Use the benchmark results to evaluate the sustainability performance of their investment portfolios and to engage with their investments.

## Associate Members:

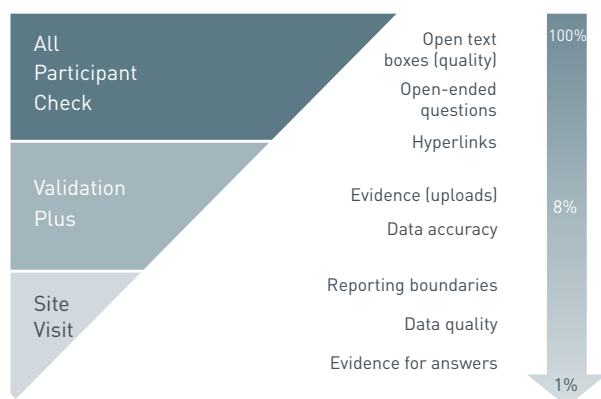
Provide essential added value by offering services and solutions to develop participants' sustainability performance.

GRESB collects information regarding the sustainability performance of property companies and funds via its annual online Survey. The Survey opens on April 1 and participants have a three-month period to complete the Survey. After the Survey closes, GRESB validates and analyzes all participants' Survey submissions. The benchmark results are then published in September of each year and distributed to all participants, Company and Fund Manager Members and Investor Members via a secure online Portal. In addition to this secure Portal, GRESB has developed additional online resources. These resources, accessible via the GRESB website, contain additional analysis and data, together with topic-specific innovation case studies collected from the benchmark participants.

# Data Collection and Validation

Data validation is an important part of GRESB's annual benchmarking process. Its purpose is to develop data quality. It is therefore the most critical component of GRESB's roadmap to investment grade data.

All data submitted by GRESB participants is included in an extensive validation procedure. However, in 2014, GRESB added two additional layers to its validation process. The new framework has been developed by GRESB,<sup>4</sup> and is managed and implemented by the GRESB team using an online system, developed specifically for GRESB, and tailored to its three-layer validation process. The validation process continued from the start of the Survey period until August 2014.



## All Participant Checks

- Checks on all Survey participants;
- 176 data point checks across all Survey Aspects;
- Validation is per question with a secondary review system;
- Focus on open text boxes and open fields, including green building certificates;
- Supplemental check to confirm the existence of supporting evidence for questions requiring documentary evidence (uploaded document or details of the name and date of the document);
- In total, the GRESB team validated over 16,000 open text boxes and open fields;
- In addition, GRESB completed automated outlier checks on Performance Indicator data. These checks were incorporated into the GRESB Portal.

## Validation Plus

- Validation of data for 50 participants;
- Automatic, random selection via the GRESB Portal, using a pre-defined algorithm;
- 99 data point checks per selected participant;

- Validation is per participant with a secondary review system;
- Document review of all uploaded documents provided to support a question response. Where no document was provided, the GRESB team contacted the participant to request the document;
- Combined with the All Participant Checks on documentary evidence, the GRESB team validated over 11,000 uploaded documents.

## Site Visits

- In-depth assessment of data for eight participants;
- Automatic, random selection within the regions with the most participants: Asia Pacific (three checks including Australia), Europe (three checks including the United Kingdom) and North America (two checks, both United States);
- 95 data point checks per selected participant;
- Focus on the mapping of the portfolio (Reporting and Entity Characteristics), and the Policy & Disclosure, Monitoring & EMS, and Performance Indicator Aspects;
- Validation is per participant.

## Outcomes of the validation process

This is the first year that GRESB operated its extended validation process. The process will be further developed in phases over the coming two-year period (2015-2016).

With the phased approach in mind, in 2014:

- Where possible, in the case of Reporting Characteristics and Performance Indicator data (energy, water consumption, GHG emissions and waste), GRESB gave participants the opportunity to correct errors in their submissions.
- For other data and where it was not possible to correct Performance data, an invalid answer or one for which insufficient supporting evidence was provided (where required) received no points. GRESB did not impose penalty points for invalid data.
- The validation level for the submission is disclosed in a participant's Scorecard and Benchmark Report. GRESB also discloses whether or not a question response received points. However, the detailed outcomes from the validation process are kept confidential and are only disclosed to the participant.
- Finally, those participants with significant errors in their data may automatically be included in the 2015 Validation Plus process, the purpose of which is to ensure that GRESB gives participants the tools they need to submit an accurate benchmark response. Participants will be kept informed of the 2015 validation process.

<sup>4</sup> GRESB worked with PwC to develop the data validation approach described above. 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.

# Scoring and Methodology

## Scoring model

The GRESB Survey is structured into seven unique sustainable Aspects, plus a separate Aspect for New Construction & Major Renovations. The weighted scores for each of the seven Aspects combined generate the overall GRESB score.

The scoring model is based on an automated system, which uses a technology platform designed for GRESB by a third party that specializes in data analysis software development. The scoring is completed without manual intervention after data validation has been completed.

The sum of the scores for each question adds up to a maximum of 137.5 points, and the overall GRESB score is then expressed as a percentage – from 0 to 100. The maximum score for each Aspect is a weighted element of the overall GRESB score. GRESB takes into account the unique characteristics of different property types, not only in benchmarking, but also in the scoring of a selection of questions. Where a portfolio contains multiple property types, a selection of questions is scored based on each of that portfolio's main property type – this holds specifically for the Performance Indicators and Building Certifications Aspects.

Survey Aspect	Absolute Points	Weight
Management	12	8.7%
Policy & Disclosure	14	10.2%
Risks & Opportunities	16	11.6%
Monitoring & EMS	13	9.5%
Performance Indicators	32.5	23.6%
Building Certifications	15	10.9%
Stakeholder Engagement	35	25.5%

Participants reporting on new construction and major renovation projects, can complete the additional New Construction & Major Renovations (NC&MR) Aspect, for which they receive a separate Aspect score that is not included in the overall GRESB score. Participants reporting on new construction and major renovation projects will also receive a “Development” score. This score is based on a subset of questions from Aspects 1 to 7, and includes the score for the NC&MR Aspect. Participants reporting on new construction and major renovation projects only (“developments only” participants) are excluded from the analysis for Aspects 1 to 7 in this Report.

## GRESB Quadrant Model

The overall GRESB score is divided into two dimensions: Management & Policy and Implementation & Measurement.

Management & Policy is defined as “the means by which a company or fund deals with or controls its portfolio and its stakeholders and/or a course or principle of action adopted by the company or fund.” The maximum score for Management & Policy is 41.5 points – this is 30 percent of the overall GRESB Score – and is expressed as a percentage.

Implementation & Measurement is defined as “the process of executing a decision or plan or of putting a decision or plan into effect and/or the action of measuring something related to the portfolio.” The maximum score for Implementation & Measurement is 96 points – this is 70 percent of the overall GRESB Score – and is expressed as a percentage.

The scores for Management & Policy (MP) and Implementation & Measurement (IM) are visualized using the GRESB Quadrant Model. In 2014, for the first time, MP appears on the vertical axis while IM appears on the horizontal axis. Each participant is allocated to one of the following quadrants:

- **Green Starters:** participants with a score of less than 50 on MP, and a score of less than 50 on IM;
- **Green Talk:** participants with a score that is equal or larger than 50 on MP, but a score of less than 50 on IM;
- **Green Walk:** participants with a score of less than 50 on MP, but a score that is equal or larger than 50 on IM;
- **Green Stars:** participants with a score that is equal or larger than 50 on MP, and a score that is equal or larger than 50 on IM.

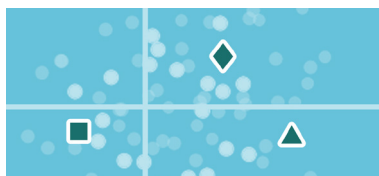
## Geographic location and property type

The geographic location and property type characterization of participants is determined by a pre-set allocation threshold. The threshold for determining allocation to a property type is set at 75 percent of the Gross Asset Value (GAV), while the threshold for determining the geographic location is set at 60 percent of the GAV. If a participant does not reach the threshold for allocation to a specific geography, it is allocated to “globally diversified.” Likewise, if a participant does not reach the threshold for allocation to a specific property type, it is allocated to “diversified.” Within the latter, three additional classifications are made: retail/office, residential/office, and industrial/office.

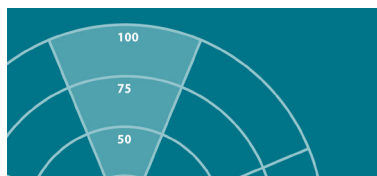


# Online Report, Products & Services

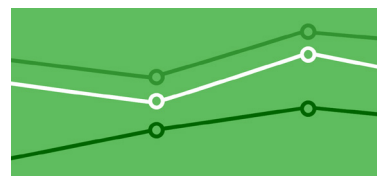
In addition to its digital 2014 Report, GRESB has also developed additional online materials containing further data and analysis from the 2014 benchmark, together with topic-specific innovation case studies collected from 2014 GRESB participants and 2014 Sector Leaders.



REPORT  
**2014 Overall Scores**



REPORT  
**Aspects**



REPORT  
**2014 Coverage**



REPORT  
**Global Leaders**



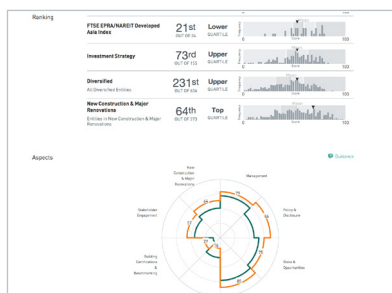
REPORT  
**Innovation Case Studies**



REPORT  
**Scoring & Validation**

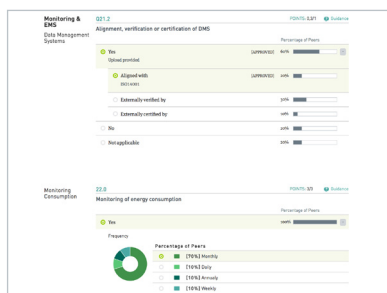
## Products & Services

The GRESB benchmark results allow participants to identify the areas in which they can improve their sustainability performance, both in absolute terms as well as relative to peers. The results can be used globally by both investors and managers of real estate investments to improve sustainability performance, by lowering operating costs and meeting regulatory requirements, and by satisfying the developing preferences of corporate tenants. Benchmark participants can also use the results as a toolkit for internal and external engagement.



### Scorecards

Participants' benchmark results are disclosed in a Scorecard that contains an overview of their GRESB performance. Using the GRESB Quadrant model, it highlights both absolute performance and performance relative to peers. The Scorecard also highlights areas for improvement and contains valuable information both for property companies and funds that are starting to implement sustainability practices into their portfolios, as well as industry leaders.



### Benchmark Reports and Customized Reports

GRESB's Benchmark Reports provide an in-depth analysis of a participant's sustainability performance. In addition to the information in the Scorecard, the Benchmark Report contains a detailed question-by-question comparison with peers, which helps participants to develop detailed improvement plans and to improve scores.

Participants can also request Customized Benchmark Reports, which provide an alternative comparison and ranking based on a customized peer group composition, selected by participants.



### Member Portal

Company and Fund Manager Members can view and download individual Benchmark Reports for each of their portfolios via GRESB's Member Portal. Additionally, using the online Portfolio Analysis tool, Company and Fund Manager Members are able to compare results per region or country, or per property type. They are also able to undertake portfolio analysis for self-selected groups of their portfolios.

# Global Results

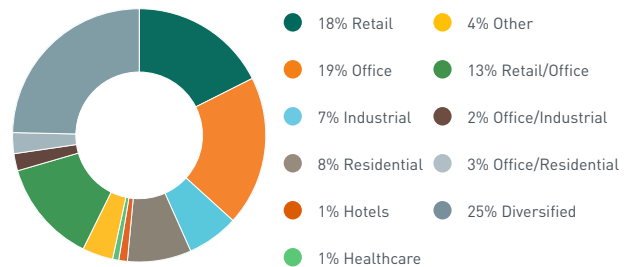
## Overall scores

GRESB's global benchmark uses a consistent methodology across different regions, investment vehicles and property types, evaluating the sustainability performance of both private and listed real estate portfolios. Over the past five years, participation in GRESB has continued to increase, a sign of the global real estate's industry's uptake and acceptance of sustainability as part of general real estate investment management practices. In 2014, a total of 637 property companies and funds participated in the GRESB Survey, an increase of 17 percent compared to 2013 (543 participants), an increase of 44 percent compared to 2012 (443 participants), and almost double the response rate of 340 in 2011. GRESB now covers about 56,000 assets, with an aggregate value of USD 2.1 trillion, a 31 percent and 62 percent increase as compared to 2013 and 2012, respectively.

For listed property companies (the majority of which are Real Estate Investment Trusts), the response rate increased by 31 percent to 156 participants, compared to an increase of 25 percent in 2013. GRESB now covers 52 percent of the FTSE EPRA/NAREIT Developed Index, with regional coverage of 38 percent in Asia Pacific, 76 percent in Europe, and 51 percent in North America. The response rate for private entities (including private equity real estate funds, non-listed property companies, developers, JVs, etc.) increased by 13 percent to a total of 481. Of these non-listed entities, 61 percent are characterized as Core, 26 percent as Value Added, and 13 percent as Opportunistic.

GRESB assesses both portfolios with standing investments and portfolios with new construction and major renovation projects. In 2014, 97 percent of participating entities had

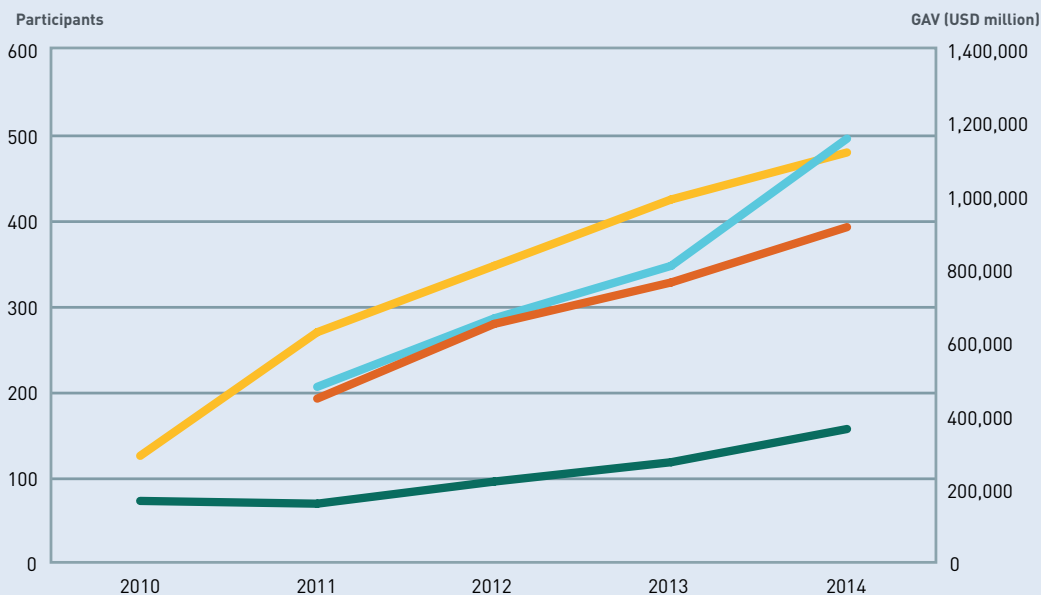
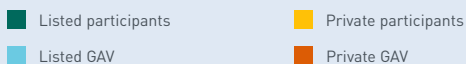
## Property types



operating buildings in their portfolio during the reporting period. 348 entities manage standing investments only, while 269 entities manage standing investments as well as new construction and major renovation projects. 3 percent (20 participants) are “development only” participants – these do not have any standing investments and merely focus on new construction and major renovation projects.

Property type allocations for each participating entity are based on gross asset value (GAV). Using a 60 percent threshold, GRESB classifies each property company and fund as a single property type, or as diversified. The main property types included in the benchmark are office (19 percent), retail (18 percent), a combination of office and retail (13 percent), residential (8 percent), and industrial (7 percent). Other increasingly frequent property types are, for example, hotels and healthcare.

## GRESB Response rate development



## GRESB Quadrant Model

The GRESB Quadrant Model shows the sustainability performance for all Survey participants, based on their score for each of GRESB's two dimensions: Management & Policy (MP, in 2014 on the vertical axis) and Implementation & Measurement (IM, in 2014 on the horizontal axis). A participant's position in the GRESB Quadrant Model explains how far it has progressed in integrating sustainability into its portfolio. A participant will move between each quadrant based on its performance on Implementation & Measurement (70 percent weight) and Management & Policy (30 percent weight).

The 2014 benchmark results show the progress both of the relative performance of individual participants (compared to peers) as well as absolute performance (reflected in the total GRESB score). The overall GRESB score for all participants combined has increased by 9 points and is now 47 (out of 100). This is mainly driven by an increase in the Implementation & Measurement score (+23 percent), which counteracts a decrease in the Management & Policy score (-11 percent).

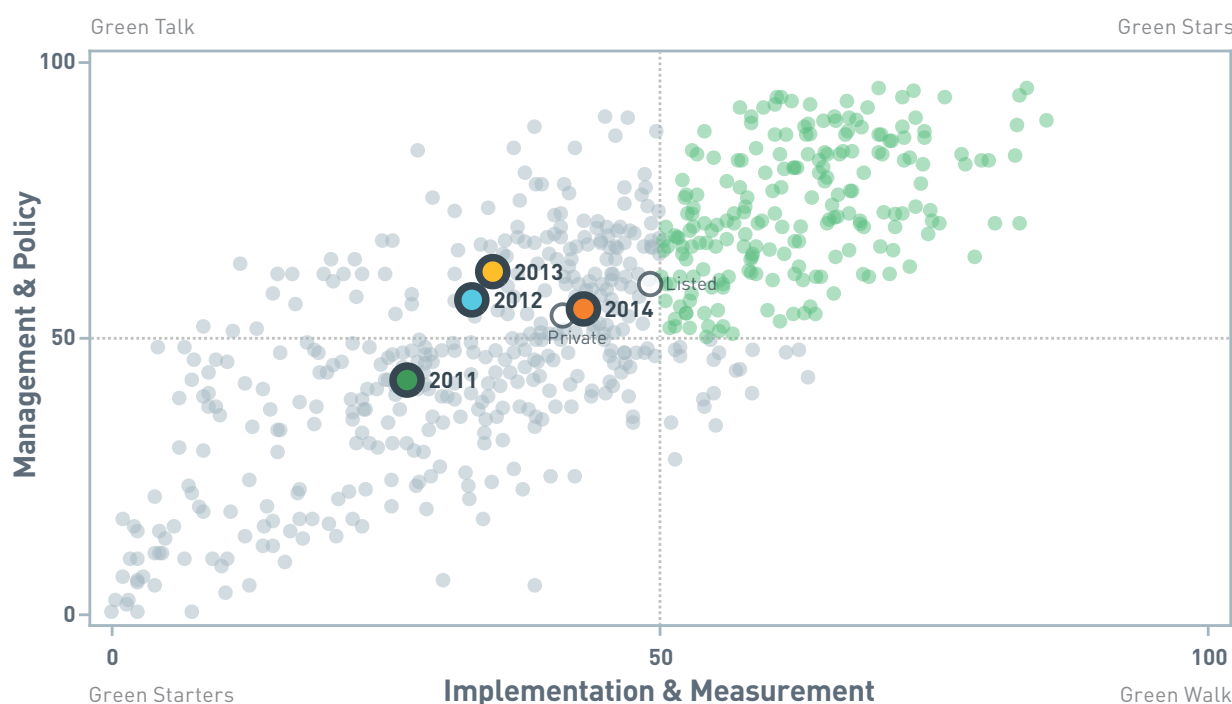
Of course, these changes reflect the combined effect of multiple developments in the benchmark. First, in 2014, GRESB had 156 first-time participants. As these participants have a score that is, on average, 11 points lower than the average for all participants combined, this has an effect on the overall development of the score. Second, GRESB has changed some of the Survey questions, introduced scoring of qualitative questions (i.e. narratives), and evaluated the presence of documentary evidence for a selection of questions. Third, and most important, many existing participants have started to implement sustainability programs and improvements, leading to a stronger GRESB performance.

Generally, the results show significant improvement of participants' individual scores; organizations seem to be more adept at dealing with sustainability issues and more aware of the importance both of implementing policies and of proper monitoring and reporting on ESG metrics. Overall this has resulted in a strong increase in the sustainability performance of the global real estate industry.

As GRESB participants have started to implement sustainability policies, and are improving their management of governance issues as well as their environmental and social impact, the proportion of participants in each quadrant changes. This year, 36 percent of participants are Green Stars, up from 22 percent in 2013, while the number of Green Walk participants increased from 1 percent to 3 percent. The proportion of Green Talk participants has decreased to 23 percent (compared to 50 percent last year). 38 percent of benchmark participants are Green Starters, up from 28 percent in 2013, something that is linked to the large number of new participants in 2014.

In 2014, listed companies obtained a 7 points higher score, on average, compared to private participants, and the overall listed participant's score in 2014 now stands at 52.

GRESB Global average scores (2011-2014)



# Response Rate per Region



... more about Global and Regional Leaders

# Regional Results

GRESB analyzes the Survey results separately per region, for North America, Europe, Asia, and Australia/New Zealand (NZ). This regional analysis excludes data for companies and funds that GRESB allocates to South America (8) and Africa (5), and globally diversified portfolios (7). See GRESB geographic location and property type allocation thresholds (Scoring & Methodology section).

## Regional response rate

The number of 2014 GRESB participants with the majority (at least 60 percent) of their portfolio allocated to North America now stands at 151, an increase of 31 percent as compared to 2013. This is mainly the result of a strong increase in participation by private entities (35 percent, to 131). Most portfolios are allocated to the United States (141 participants), the remainder to Canada (9 participants). The response rate in Europe increased by 12 percent to 328 participants, mainly driven by a strong increase in participation by listed companies (40 percent). Most European portfolios are allocated to the UK (111 participants), followed by the Netherlands (39 participants), France (22 participants) and Germany (20 participants). The response rate in Asia has increased by 24 percent to a total of 92 participants. This increase is evenly spread across listed companies and private entities. Most portfolios are allocated to Japan (31), followed by China (21), and Singapore (13). The response rate for Australia/NZ remains relatively stable, with an increase of 5 percent to 44 participants. 43 of these portfolios are allocated to Australia and 1 to New Zealand.

## Regional performance

In terms of overall performance, as in previous years, Australia/NZ is the leading region, with a score of 62, with an

increase of 9 percent compared to last year's score (57). Europe scores second highest, with a score of 47, an increase of 8 percent compared to last year (44). Overall performance in Asia has increased most significantly, by 23 percent from 37 to a score of 46 this year. Asia now slightly outperforms North America, even though the overall score for North America increased from 39 to 44, an improvement of 13 percent.

In 2014, the number of Green Stars increased in all regions. Australia/NZ performs strongest in terms of regional Green Stars. 70 percent of the total participants for Australia/NZ are Green Stars, compared to 32 percent of participants in North America and Asia. In Europe, 35 percent of property companies and funds are Green Stars. Europe also has a relatively large number of Green Talk participants: 29 percent of European participants have a Management & Policy score that is above 50 and an Implementation & Measurement score that is below 50. In Australia/NZ this percentage is 25 percent, while for North America and Asia it is about 12 percent.

## Strengths and opportunities

Overall, strengths and opportunities in each of GRESB's Survey Aspects are broadly similar across regions. North America performs strongly in the Risks & Opportunities Aspect (ranked second out of four regions), where GRESB examines steps being taken to address sustainability risks and to implement activities to improve performance. The region also performs well on Building Certifications (ranked second), where GRESB examines participants' use and monitoring of building certification and energy rating schemes within their portfolios. While overall Europe scores less well on Risks & Opportunities, the region performs solidly overall, and is ranked second or third for all other Aspects.

	Total	North America	Europe	Asia	Australia/NZ	South America	Africa	Globally diversified
<b>Listed</b> no of participants	<b>154</b>	<b>37</b>	<b>65</b>	<b>35</b>	<b>10</b>	<b>1</b>	<b>2</b>	<b>4</b>
Development only participants	3	0	1	2	0	0	0	0
Gross asset value USD million	1,159,754	481,553	354,922	218,627	59,792	952	8,013	35,894
Average size based on GAV in USD million	7,531	13,015	5,460	6,246	5,979	952	4,007	8,974
Market coverage*	52%	53%	76%	38%	82%			
<b>Private</b> no of participants	<b>483</b>	<b>114</b>	<b>263</b>	<b>57</b>	<b>34</b>	<b>9</b>	<b>3</b>	<b>3</b>
Development only participants	17	0	1	13	1	2	0	0
Gross asset value USD million	920,065	436,569	343,441	55,400	71,532	4,209	3,704	3,210
Average size based on GAV in USD million	1,905	3,847	1,306	972	2,104	468	1,235	1,070
<b>Total</b> no of participants	<b>637</b>	<b>151</b>	<b>328</b>	<b>92</b>	<b>44</b>	<b>10</b>	<b>5</b>	<b>7</b>
Development only participants	20	0	2	15	1	2	0	0
Gross asset value USD million	2,079,819	920,123	698,364	274,027	131,324	5,161	11,717	39,104
Average size based on GAV in USD million	3,265	6,094	2,129	2,979	2,985	516	2,343	5,586

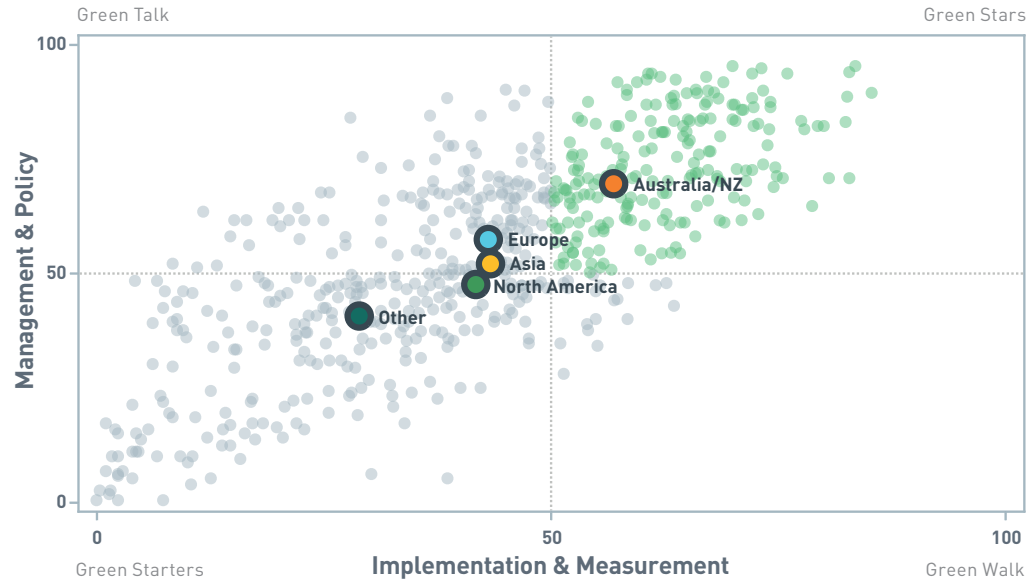
\* Based on the FTSE EPRA/NAREIT market index

Asia scores relatively well on the Monitoring & EMS Aspect, where GRESB examines steps taken to monitor compliance with sustainability policies, objectives and targets, but less well on Building Certifications compared to the other three regions.

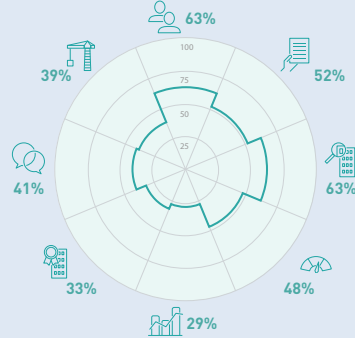
Australia/NZ outperforms the other three regions for all Aspects. The region scores relatively well on Performance Indicators, in which GRESB examines collection of resource consumption data and annual changes in energy, water,

waste and GHG emissions. GRESB’s weighting of this Aspect in its scoring methodology underlines its belief that management of performance data is the basis for improvement. Australia/NZ’s performance for this Aspect is reflected in its continued strong overall performance. However, in 2014 environmental performance data availability has increased across all four regions, indicating a commitment by participants globally to gather material information on their portfolios.

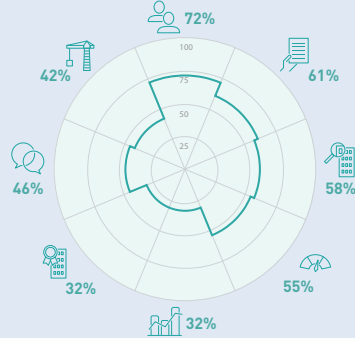
Average global GRESB scores per region



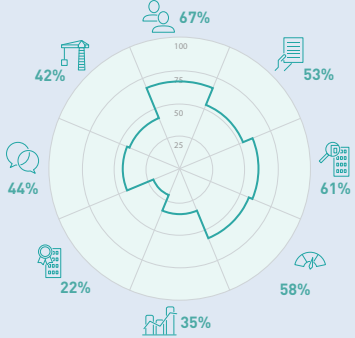
North America



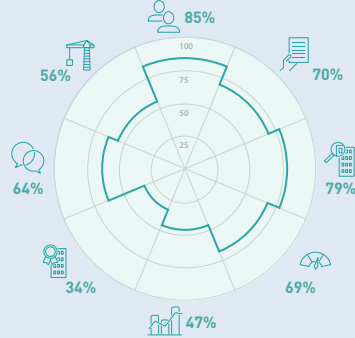
Europe



Asia

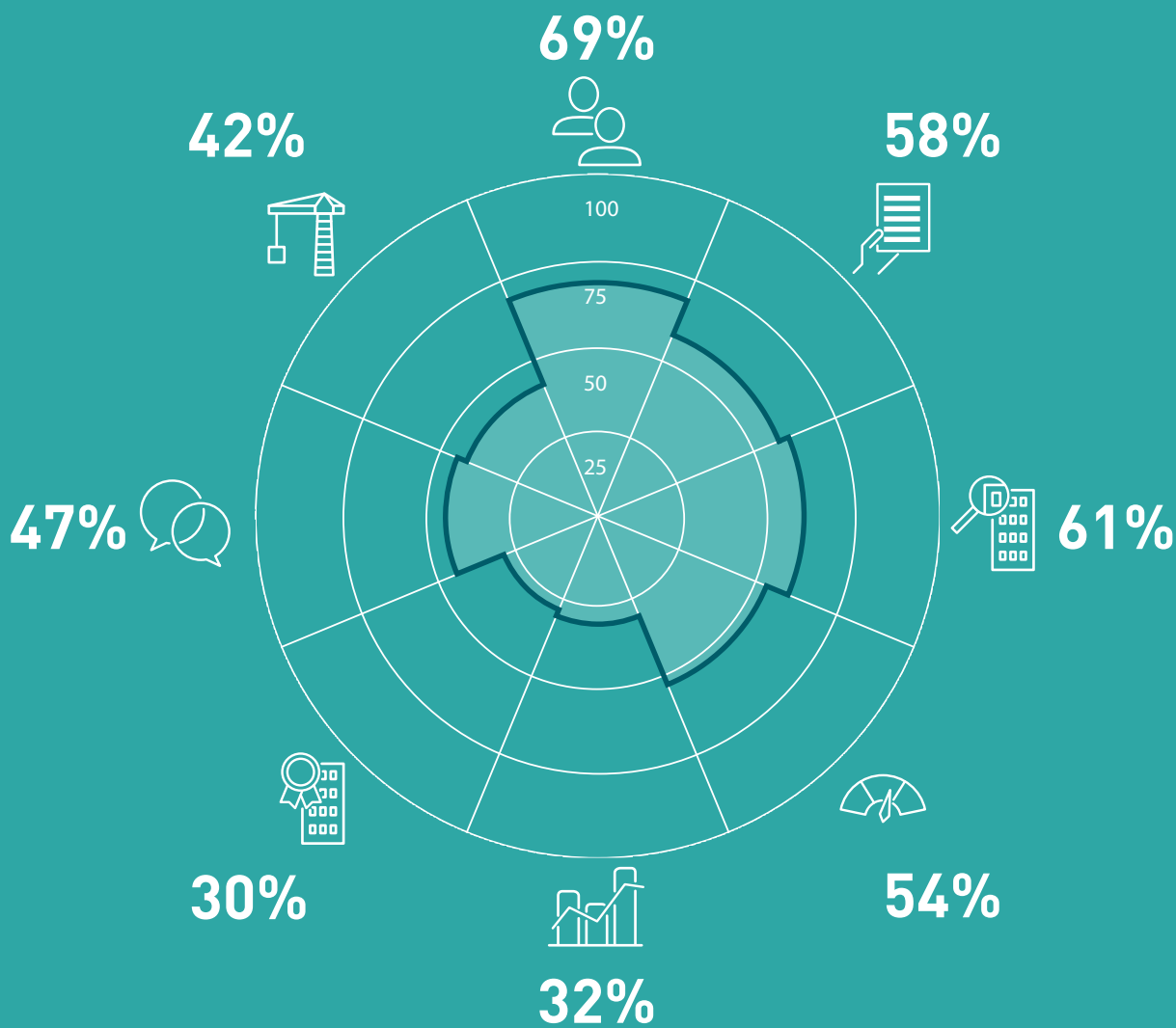


Australia/NZ



- Management
- Policy & Disclosure
- Risks & Opportunities
- Monitoring & EMS
- Performance Indicators
- Building Certifications
- Stakeholder Engagement
- New Construction & Major Renovations

# Global Aspect Scores



Management



Policy & Disclosure



Risks & Opportunities



Monitoring & EMS



Performance Indicators



Building Certifications



Stakeholder Engagement



New Construction & Major Renovations



# Aspect Overview

The GRESB Survey is structured into seven unique sustainability Aspects, together with a separate Aspect for New Construction & Major Renovations. Over the past two Survey years, GRESB has developed the Survey so that it provides property companies and funds, as well as their investors, with a comprehensive overview of the material elements of sustainability within real estate portfolios. The 2014 GRESB data shows that sustainability reporting in the sector is evolving rapidly – this holds for both the quantity as well as the quality of reporting.

The 2014 GRESB Survey results provide detailed insight into the way sustainability is embedded in participants' organizations and their core activities.

## Management

This section is focused on how an organization addresses sustainability implementation in the context of its overall business strategy. In 2014, 88 percent of participants reported that they had available sustainability objectives. Of these, 72 percent have made their objectives publicly available, compared to 44 percent in 2013. 80 percent of participants report that they integrate their sustainability objectives into their overall business strategy.

## Policy & Disclosure

Disclosure of sustainability performance allows participants to show how sustainability policies and management practices are being implemented and their impact on the business. 84 percent of participants now disclose their sustainability performance. 61 percent of this group discloses its performance in a stand-alone sustainability report (2013: 38 percent).

## Risks & Opportunities

Sustainability risk assessments help to reduce exposure to long-term risks. In the acquisition process, these assessments demonstrate a focus on mitigating risks that might impact returns, and a forward-looking approach to the development of the portfolio. 81 percent of participants now perform sustainability risk assessments as a standard part of their due diligence process for new acquisitions. Climate risks (55 percent of those undertaking assessments) and climate change-related risks (45 percent) are increasingly assessed.

## Monitoring & EMS

A data management system enables organizations to monitor environmental performance in an efficient and effective way. 76 percent of participants now have a data management system in place, on average covering 87 percent of their portfolio. 52 percent of participants use an external data management system. The most commonly monitored metrics included are energy consumption (95 percent), water consumption (84 percent), GHG emissions (75 percent), and waste (63 percent).

## Performance Indicators

Collecting and measuring key environmental performance data enables property companies and funds to assess their aggregate consumption and footprint, and to set clear targets for reducing the portfolio's operational cost and environmental impact. In 2014, the results show an overall reduction in energy consumption of 0.82 percent over the 2012-2013 reporting period (4.8 percent in 2013 for 319 participants), based on like-for-like data from 508 participants. GHG emissions decreased by 0.31 percent (2013: 2.5 percent) and water consumption decreased by 2.3 percent (2013: 1.2 percent).

## Building Certifications

Green building certificates are a measure of the intrinsic quality of the asset and its design to meet the requirements of environmental standards. In 2014, 22 percent of GRESB participants obtained green building certificates for building design, development and structure, at the time of construction. 14 percent of participants obtained green building certifications for operational buildings, based on actual operational data for a specific period. Globally, LEED and BREEAM are the most commonly used schemes.

## Stakeholder Engagement

Improving the sustainability performance of a real estate portfolio requires not only dedicated resources, a commitment from senior management and tools for measurement/management of resource consumption, but also requires the cooperation of other stakeholders, including tenants, suppliers, a participant's workforce and the local community.

Tenant satisfaction surveys identify occupiers' key issues and concerns, which can then be addressed in improvement measures and/or programs adopted by the landlord. Proper follow-up demonstrates commitment to the tenant engagement process, and to developing and maintaining tenant satisfaction. 52 percent of participants now undertake tenant satisfaction surveys (2013: 50 percent), on average covering 68 percent of tenants.

Effective implementation of sustainability strategies also includes integration of organizations' sustainability-specific requirements into their supply chain. 65 percent of participants include sustainability-specific requirements in their procurement processes.

## New Construction & Major Renovations

On-site renewable energy generation reduces environmental and economic impacts associated with fossil fuel energy use. 35 percent of participants have new construction and major renovation projects that are designed to generate energy from on-site renewable sources (2013: 27 percent). On average, 47 percent of participants' projects are covered, and 19 percent of the total projected energy use for these projects is expected to be produced on-site.





## Management

The Management Aspect is focused on how organizations address sustainability implementation in the context of their overall business strategies. The purpose of this Aspect is (1) to identify who in the participant organization is responsible for managing sustainability issues and has the authority for decision-making on sustainability matters, (2) to communicate to a participant's investors how it structures management of sustainability issues and (3) to determine how sustainability is embedded in the organization.

### Key outcomes

Having clear sustainability objectives helps to identify material issues and to integrate them into overall day-to-day management. This fosters alignment between management of sustainability issues and the organization's overall strategy. It also demonstrates commitment to monitoring sustainability objectives and to meeting targets. 88 percent of 2014 GRESB participants have specific sustainability objectives, similar to 2013 (87 percent). Of these participants, 72 percent have objectives that are publicly available. 91 percent of participants with sustainability objectives have incorporated those objectives into their overall business strategy.

### Staff resources

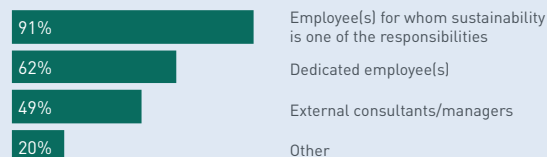
Allocating staff resources to the management of sustainability strategies contributes to the proper implementation and monitoring of sustainability objectives. 94 percent of participants have employees who are responsible for implementation of sustainability objectives. Of these, 91 percent of participants have employees who have sustainability as one of their responsibilities (2013: 84 percent), while 62 percent have dedicated employees for whom sustainability is a core responsibility (2013: 63 percent). Responsibility for the implementation of sustainability objectives can also be outsourced: about half (49 percent) of 2014's participants work with external consultants (2013: 50 percent). There are some interesting regional differences here: in Australia/NZ, 88 percent of participants have a dedicated sustainability employee, as compared to 43 percent in Asia, 51 percent in North America, and 68 percent in Europe.

The existence of a taskforce focused on sustainability issues demonstrates a structured approach towards integration of sustainability across the organization. 88 percent of participants now have a sustainability taskforce in place (2013: 84 percent) and 86 percent have the Senior Management Team represented in that taskforce (2013: 74 percent). Other common taskforce members are asset managers (77 percent) and fund/portfolio managers (76 percent). [...more](#)

### Performance targets

The inclusion of sustainability factors in performance targets demonstrates that an organization assesses employee performance based on sustainability issues. 75 percent of the 2014 GRESB participants include sustainability factors in the annual performance targets of employees responsible for the property company or fund. Where sustainability factors are included in performance targets, they apply to asset and property managers in respectively 68 and 60 percent of cases, while 63 percent of participants apply sustainability factors to the performance targets of members of the Senior Management Team. For one third (34 percent) they even apply to the Board of Directors.

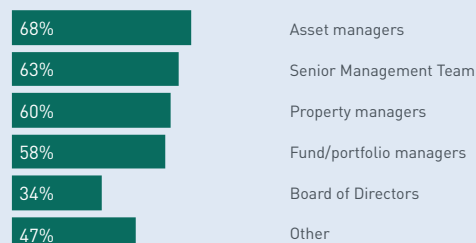
#### Implementation of sustainability objectives



#### Sustainability taskforce



#### Sustainability factors included in annual performance review



*"There is a growing market of environmentally conscious investors, and we found a Green Bond issuance was a good way to connect our commitment to sustainability with the socially responsible investing community while maintaining our overall goals and strategy."*

— Lisa Palmer, Chief Executive Officer  
Regency Centers Corporation



# Policy & Disclosure

Institutional investors and other shareholders are important drivers for increasing disclosure of environmental, social, and governance performance data of property companies and funds, while formal policies on sustainability issues help real estate investors understand what sustainability criteria organizations are incorporating into their business practices. This Aspect investigates how 2014 GRESB participants disclose their sustainability performance and the types of sustainability policies they have in place.

## Key outcomes

### Disclosure

Sustainability disclosure shows how policies and management practices are being implemented by organizations, while alignment of disclosure with recognized standards facilitates a greater and easier understanding of environmental impact on the business. Third-party reviews of sustainability disclosure give investors comfort regarding the integrity and reliability of reported information. 84 percent of participants disclose their sustainability performance to their stakeholders. 61 percent of this group now discloses performance in a stand-alone sustainability report (2013: 38 percent). In 74 percent of cases these stand-alone sustainability reports are aligned with leading best practice recommendations, guidelines, and frameworks for sustainability reporting.<sup>5</sup>

58 percent of participants include disclosure of their sustainability performance in their annual reports. Of this group, 61 percent align their reporting with recognized standards. 54 percent of participants that include sustainability performance in annual reports have the information externally reviewed. Of these participants, 46 percent have the data externally assured or verified. [...more](#)

### Policies

Policies on sustainability issues assist organizations with the formal and structural integration of sustainability criteria into their business. 87 percent of 2014 GRESB participants have an environmental policy in place. For 97 percent of these participants, this policy includes energy consumption and management (2013: 94 percent). [...more](#)

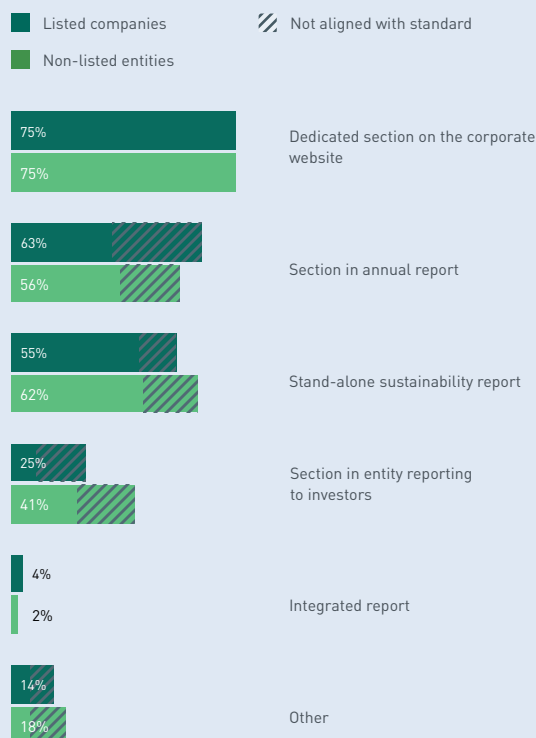
The existence and content of employee policies assist organizations with management of employee relationships and with ensuring the stability of the group of individuals responsible for managing the organization and the portfolio. 90 percent of all participants have an employee policy in place. These policies mainly include performance and career development (93 percent), health and safety (93 percent), diversity (91 percent) and remuneration (90 percent). Cyber security is now included by 73 percent of the participants that have an employee policy.

*"Sustainability management is part of our daily business as a real estate investment manager and we continue to see and meet a significant number of ESG related enquiries from our clients."*

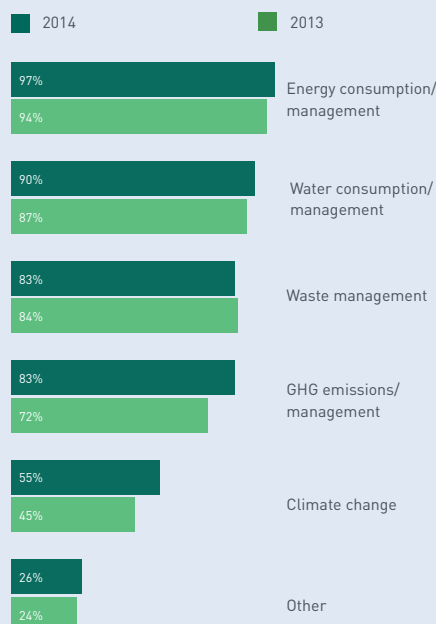
— Pieter Hendrikse, Chief Executive Officer EMEA  
CBRE Global Investors

<sup>5</sup> ANREV, APREA, EPRA and INREV's Best Practice Recommendations were included as options in the 2014 GRESB Survey, together with the GRI and PRI framework. Participants were also given the opportunity to specify alignment with other standards.

## Disclosure of sustainability performance



## Sustainability policies in place for





# Risks & Opportunities

The risks from environmental, social and governance issues can adversely impact property companies and funds, and the investment performance of their portfolios. The Risks & Opportunities Aspect investigates the steps taken by 2014 GRESB participants to stay abreast of sustainability-related risks at the organization and portfolio level. Besides looking at ways of identifying and managing risks such as bribery and corruption, climate change, environmental legislation and other material sustainability risks, this Aspect also looks at measures taken to identify and implement opportunities for sustainability improvements.

## Key outcomes

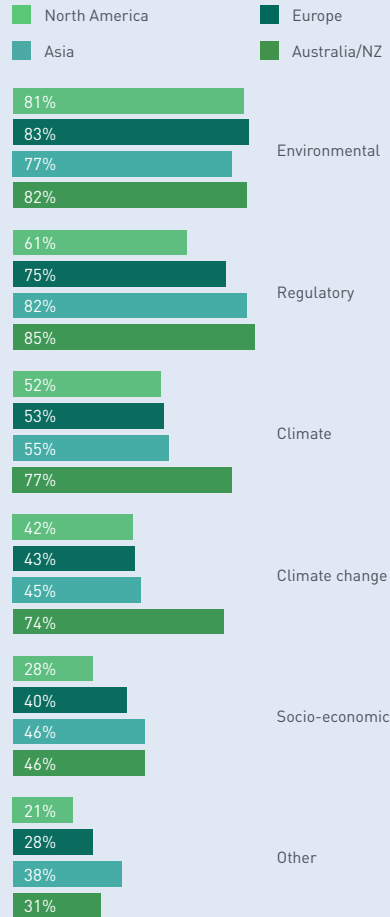
### Risk assessments

Sustainability risk assessments help to reduce exposure to long-term risks. In the acquisition process, these assessments demonstrate a forward-looking approach to the development of the portfolio and a focus on mitigating risks that might impact returns. Risk assessments of standing investments demonstrate an active approach to operational sustainability risk management. 81 percent of participants now perform sustainability risk assessments as a standard part of their due diligence process for new acquisitions, while 77 percent do so for standing investments. For the latter, environmental risks such as landslides and irremediable pollution are most commonly assessed (82 percent). Regulatory risks, including mandatory disclosure schemes, are assessed by 74 percent. Participants also increasingly assess climate risks (55 percent) and climate change-related risks (45 percent). Regional comparisons show that in Australia/NZ, 74 percent of the participants assess climate change-related risks for standing investments, as compared to 42 percent in North America, 43 percent in Europe, and 45 percent in Asia. [...more](#)

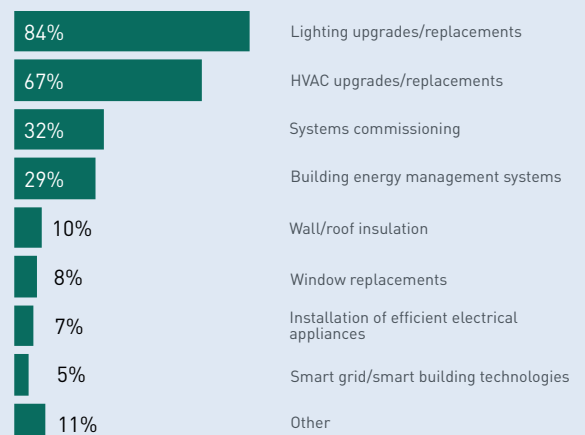
### Opportunities

Technical building assessments are important, both to understand the sustainability performance of the portfolio, and to assess opportunities for improving, among other issues, energy and water efficiency. 61 percent of 2014 GRESB participants perform technical building assessments to identify energy efficiency opportunities within the portfolio. In-house and external assessments are almost equally popular. On average, 61 percent of the portfolio is covered. 78 percent of participants have implemented measures to improve the energy efficiency of their portfolio, while 63 percent have done so to improve the portfolio's water efficiency. For energy efficiency, the most common measures are upgrades and replacements of lighting and HVAC systems (84 and 67 percent respectively). For water efficiency, the placement of high-efficiency fixtures is most common (66 percent). [...more](#)

### Sustainability risk assessment of standing investments



### Measures to improve energy efficiency



*"Participating in Demand Response is challenging for commercial real estate owners because of tenant comfort concerns. Kilroy has solved this problem and is very proud that its million square foot Long Beach campus is contributing to the reliability of the grid and reducing operating expenses via participating."*

— Sara Neff, VP of Sustainability  
Kilroy Realty Corporation



# Monitoring & EMS

Measuring and monitoring of resource consumption is an important basis for performance improvement. The purpose of the Monitoring & EMS Aspect is to investigate the steps taken by 2014 GRESB participants to monitor implementation of and compliance with their sustainability policies, objectives and targets. Distinction is made between Environmental Management Systems (EMS) and data management systems.

## Key outcomes

Monitoring key environmental performance data (energy and water consumption, GHG emissions and waste) is an important part of identifying and managing environmental issues and improving the portfolio's performance. 87 percent of participants now monitor the energy consumption of their portfolio, while 81 percent monitor water consumption (2013: 90 percent and 84 percent, respectively). 81 percent of participants that monitor energy consumption base monitoring on invoices. A similar percentage uses invoices to monitor water consumption. On average, portfolio coverage for consumption monitoring via invoices is 76 percent for energy and 79 percent for water. [...more](#)

A data management system enables organizations to monitor performance efficiently and effectively, for example by integrating building management systems for individual locations across a portfolio. 76 percent of 2014 GRESB participants have a data management system in place, on average covering 87 percent of the portfolio. About half (52 percent) of those participants use an external data management system. Aspects covered by the system include energy (95 percent), water (84 percent), GHG emissions (75 percent), and waste (63 percent). Other elements frequently covered by data management systems include health & safety indicators and corporate travel.

## Environmental Management System

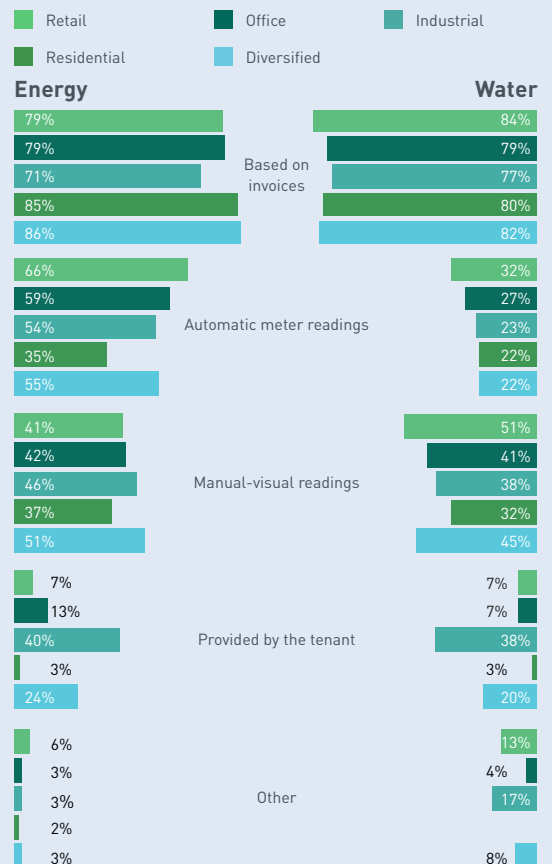
An EMS has a broader scope than a data management system. It assists an organization with managing and improving its environmental performance and helps the business to comply with environmental laws and regulations. It can generate financial savings through more efficient operating practices, and can improve the standing of the business with staff, client companies, partner organizations and other stakeholders. The existence of an EMS demonstrates a structured approach towards measuring and managing sustainability performance. 46 percent of participants have an EMS in place (2013: 43 percent). EMSs are most common in Europe and Australia/NZ (for both regions, 53 percent of participants use an EMS), while 43 percent of participants in Asia and 32 percent of participants in North America have an EMS in place. [...more](#)



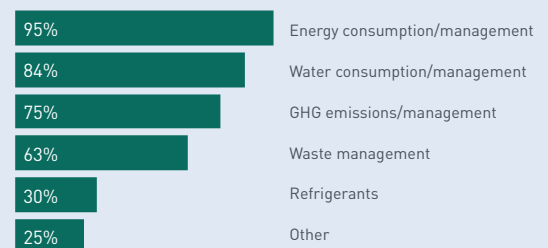
*"Incorporating new technologies into property operations demonstrates how our Responsible Property Investment focus is integrated into all operational aspects of our fund strategies."*

— Matthew H. Lynch, Head of Global Real Estate US  
UBS Trumbull Property Fund

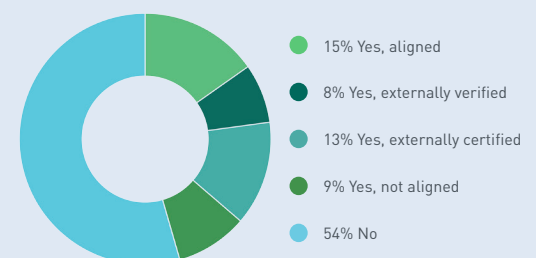
## Monitoring consumption



## Data Management System includes



## Environmental Management System





# Performance Indicators

Buildings and their occupants use a significant amount of natural resources, such as electricity, gas and water, and produce major quantities of waste. The Performance Indicator Aspect assesses consumption and efficiency, providing insight into opportunities for increasing data coverage and the resource efficiency of real estate portfolios.

## Key outcomes

### Energy consumption

The collection of energy consumption data has been challenging for the real estate sector, and the mere availability of data within property portfolios is a crucial metric. Continuing the positive trend documented in previous years, in 2014 data availability has increased for all property types. Data availability in residential portfolios has increased the most as compared to 2013. Data is now available for 65 percent of GRESB participants with residential assets in their portfolio (2013: 51 percent). Participants with offices and retail shopping centers have the most data available (on average 80 and 79 percent of GRESB participants with respectively office and retail shopping center assets in their portfolio). For hotels (43 percent) and retail high street (53 percent) data availability is relatively low, as well as for property types designated as “other” (this includes leisure, parking garages, data centers, etc.), for which data availability is 31 percent.

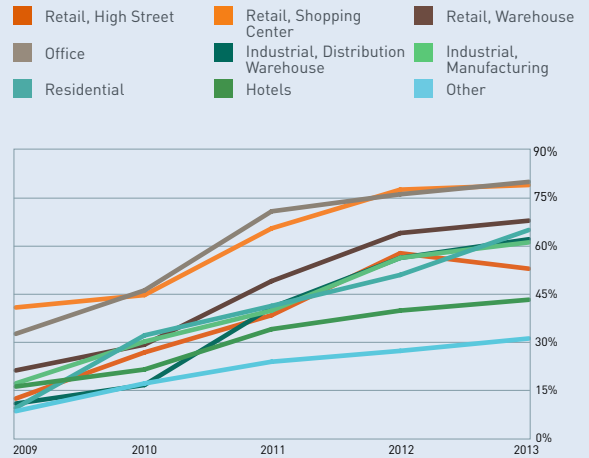
GRESB also measures the portfolio coverage of consumption data per property type – whether the data includes consumption in common areas, tenant areas, or both. In 2014, whole portfolio coverage is highest in office portfolios (average of 67 percent coverage) followed by retail shopping centers (average of 66 percent). Data coverage for hotels and retail high street is lower (35 and 34 percent, respectively). However, the coverage increased substantially as compared to 2013 (by 8 percent in both cases).

The implementation of energy efficiency improvements should ultimately result in reduction of energy consumption. Therefore, GRESB assesses the change in consumption of a “like-for-like” (or same store) portfolio. In 2014, the like-for-like change in energy consumption is -0.82 percent between 2012 and 2013, a total of 397,074 MWh, equivalent to 24,982 homes, based on data provided by 508 participants. A substantial difference compared to the -4.8 percent change between 2011 and 2012, based on data provided by 319 participants. [...more](#)

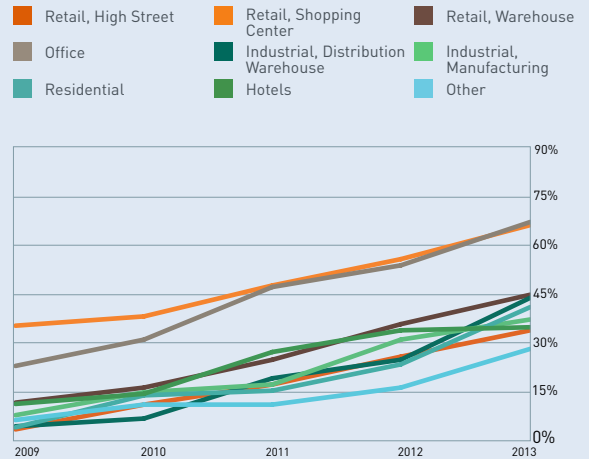
### Energy use intensities

Energy use intensities (where energy consumption is standardized by a variety of metrics) are a key metric for measuring the energy performance of a building. These metrics vary across regions, property types, and even within countries, but typically include building size, occupancy, and weather. When calculated correctly, energy use intensity metrics are building-agnostic and can be used for tracking and comparing portfolio performance over time. In 2014, GRESB started to collect

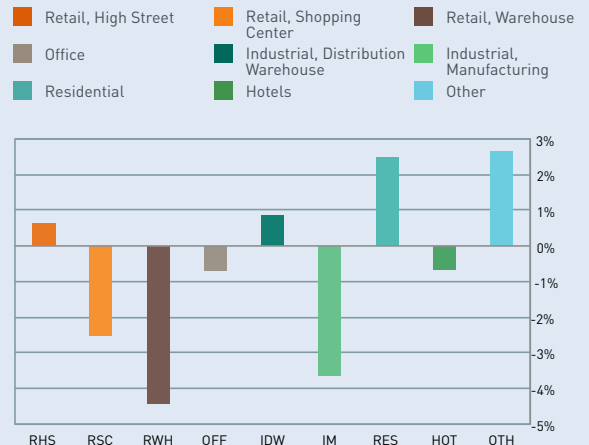
### Data availability (%)



### Whole portfolio coverage (%)



### Like-for-like change energy consumption (2012-2013)



*“We are thrilled to partner with a local utility and solar provider for our solar array at Weston Corporate Center. The installation has been a tremendous success utilizing renewable energy sources to both reduce our carbon emissions and energy cost and contributing to our achievement of a LEED Platinum certification.”*

— Mike LaBelle, Chief Financial Officer  
Boston Properties



basic data on participants' use of energy use intensities with a view to further developing its assessment in the future, once the consistency and accuracy of intensity calculations have further developed. Of participants that provided energy consumption data, an encouraging 72 percent also provided data on energy use intensities. [...more](#)

The use of renewable energy reduces the economic and environmental impact associated with fossil fuel energy use. Of the 2014 GRESB participants that have energy consumption data, 25 percent now have data on renewable energy consumption and/or generation. Renewable energy is mostly present in industrial manufacturing and retail warehouse portfolios (39 and 32 percent respectively of participants with these property types included in their portfolios), followed by offices (29 percent) and Retail Shopping Centers (28 percent).

## GHG emissions

An increasing number of countries have introduced mandatory GHG emissions reporting, in addition to organizations often setting their own voluntary GHG emission targets. Among 2014 GRESB participants, 50 percent collect and calculate GHG emission data. In 2014, the like-for-like change in GHG emissions is -0.31 percent between 2012 and 2013, a total of 69,283 metric tonnes, equivalent to 14,586 cars off the road, based on data provided by 434 participants. Compared to 2.5 percent between 2011 and 2012, based on data provided by 264 participants. [...more](#)

## Water consumption and waste management

Consistent collection of water consumption data gives property companies and fund managers the information they need to monitor their environmental impact with the aim of reducing the burden on potable water consumption and wastewater systems, and to assess their risk of exposure to disruptions in water supplies, and increases in the cost of water. Water consumption data is reported by 44 percent of 2014 GRESB participants. In 2014, the like-for-like change in water consumption is -2.3 percent between 2012 and 2013, a total of 8,275,660 m<sup>3</sup>, equivalent to 3310 Olympic swimming pools, based on data provided by 462 participants. [...more](#)

Consistent collection of waste data allows organizations to monitor their waste generation and process efficiency, with the aim both of developing more efficient waste management processes and reducing the amount of waste produced. 27 percent of 2014 participants report absolute waste data. [...more](#)

Environmental performance targets guide employees and help businesses to benchmark improvements in performance. In 2014, 49 percent of all GRESB participants and 63 percent of all listed participants have defined long-term targets. [...more](#)

## Third-party checks on data

Third-party checks on sustainability disclosure give investors comfort regarding the integrity and reliability of reported data. Across all property types, 37 percent of GRESB participants that collect energy consumption data have their data reviewed by an independent third party. 61 percent of participants that collect energy consumption data have undertaken external checks, 12 percent have undertaken external verification and for 27 percent the data was externally assured. [...more](#)

## Like-for-like change

### Energy Consumption



**-397.074 MWh**  
508 participants

Absolute change equivalent to

**24,982 Homes**

### GHG Emissions



**-69,283 metric tonnes**  
434 participants

Absolute change equivalent to

**14,586 Cars off the road**

### Water Consumption

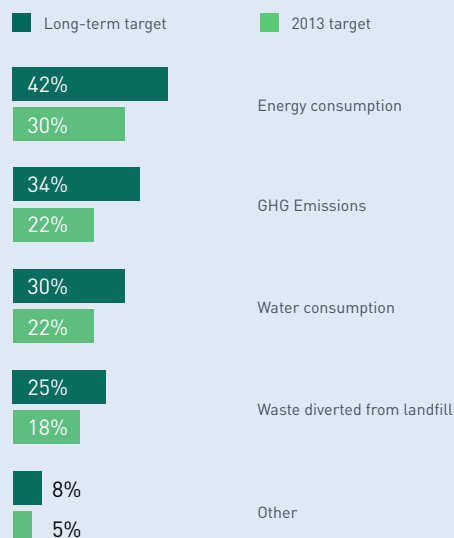


**-8,275,660 m<sup>3</sup>**  
462 participants

Absolute change equivalent to

**3,310 Olympic swimming pools**

## Long-term reduction targets



*"The GPT Group's commitment to the sustainability of its assets is exemplified by the advancements it has made in the handling of waste management, material recovery and reuse in its portfolio."*

— Michael Cameron, CEO & Managing Director  
The GPT Group



# Building Certifications

GRESB investigates two types of building certifications: (1) green building certificates, and (2) energy ratings. Building owners and occupiers can use green building certification and energy rating schemes and standards, in conjunction with improvements and programs, to measure the overall sustainability performance of real estate assets, and to communicate the sustainability characteristics and performance of an asset to the market. The criteria used in certification and rating schemes vary widely across countries and regions. However, the wide uptake in the use of voluntary schemes and the existence of mandatory reporting means that it is important for property companies and funds to monitor the use of green building certification and energy ratings in their portfolios.

## Key outcomes

### Green building certificates

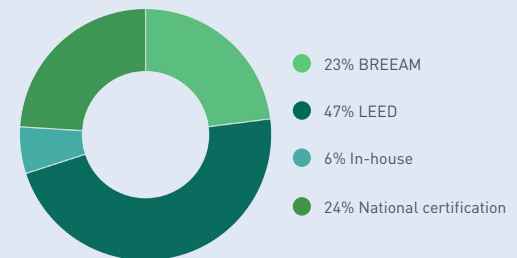
In 2014, 44 percent of GRESB participants obtained green building certificates for building design, development and structure, at the time of construction. LEED and BREEAM are the schemes that are most widely used by participants that obtained building certificates (by 47 and 23 percent of participants, respectively). For participants with office assets in their portfolio, 41 percent obtained building certificates. 48 percent of this group use LEED and 38 percent use BREEAM. Other green building certification schemes for offices are mostly at the national level. For example, Green Star (used by 14 percent of participants), HQE (8 percent), BCA Green Mark (3 percent), and CASBEE and DGNB (both 2 percent). [...more](#)

29 percent of participants obtained green building certifications for the operational performance of buildings (based on actual operational data for a specific period). LEED (43 percent) and BREEAM (36 percent) are the most frequently used schemes by participants that obtained such certifications. For participants with offices, 34 percent obtained operational green building certificates. 57 percent of these participants use LEED and 29 percent BREEAM.

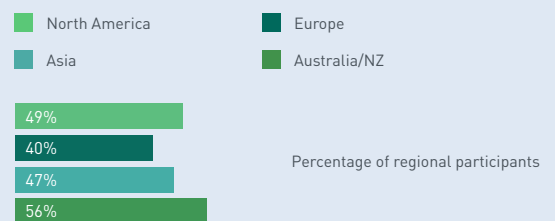
### Energy ratings

Energy rating systems measure the intrinsic or actual energy performance of real estate assets. Energy ratings are often mandatory or used as the basis for mandatory energy efficiency requirements. As a result, it is important for property companies and funds to monitor the use of energy rating schemes in their portfolios. Between and within regions there are differences regarding the availability of energy rating systems and their regulatory status. The number of 2014 participants with energy rating systems applied to buildings in their portfolio is relatively high in Europe, in light of mandatory EPC requirements in several countries. Participants with office assets most frequently obtained energy ratings (79 percent of participants), followed by those with retail warehouse assets (77 percent) and retail high street assets (73 percent). In North America, where Energy Star is the *de facto* standard, 79 percent of 2014 participants with office assets obtain an Energy Star rating, with a very high coverage of 94 percent of their portfolio, on average. In Australia and New Zealand, NABERS Energy is the local standard, and is extensively applied for offices (94 percent of participants, with an average coverage of 77 percent) and for retail shopping centers (71 percent, coverage 69 percent). In Asia, other local energy rating standards are applied, however the average availability is low. [...more](#)

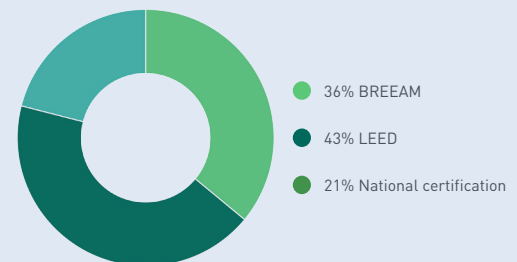
### Green building certificates (new construction)



### Use of green building certificates (new construction)



### Operational green building certificates



*"Our company recognizes the impact of the building sector on the natural environment and has committed itself to "Conserving as it Constructs". This approach is vital to the long-term viability of the company as well as the built environment."*

— Esther An, Chief Sustainability Officer  
City Developments Limited



# Stakeholder Engagement

Improving the sustainability performance of a real estate portfolio not only requires dedicated resources, commitment from senior management and tools for measurement/management of resource consumption, but also involves the cooperation of other stakeholders, including tenants, suppliers, the organization's workforce and the local community. The Stakeholder Engagement Aspect identifies the steps taken by participants to engage with those stakeholders and the nature of the engagement.

## Key outcomes

### Employees

Employees are critical for any company: a more skilled and aware workforce enhances organizations' human capital, and may help to improve employee satisfaction, which, in turn, can contribute towards improved business performance. Regular training for employees is now common, provided by 96 percent of the 2014 GRESB participants (2013: 91 percent). On average, 92 percent of employees received training, while 49 percent received sustainability-specific training. [...more](#)

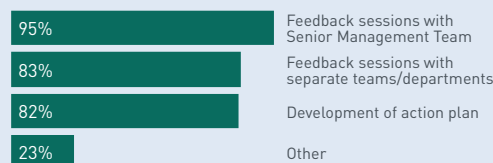
Employee satisfaction surveys help organizations to understand critical issues in the business, engage with their staff and increase employee satisfaction, which contributes towards improving retention rates and overall productivity. The 2014 GRESB data shows that 67 percent of property companies and funds undertook an employee satisfaction survey, equal to 2013. The average response rate was 79 percent, with independent third parties undertaking 72 percent of surveys. All participants that undertook an employee satisfaction survey have a program in place to improve their employee satisfaction, based on the survey outcomes. This mostly includes feedback sessions with the Senior Management Team (95 percent) or with separate teams or departments (83 percent), and the development of action plans (82 percent). [... more](#)

### Tenants/occupiers

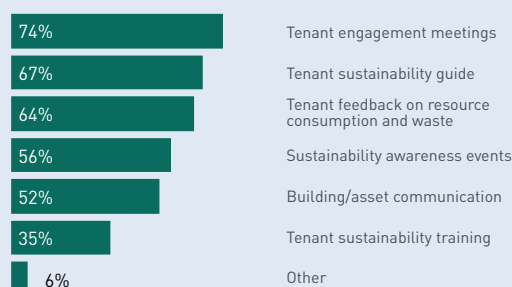
An effective tenant engagement program facilitates communication between tenant and landlord and provides the means by which tenants' suggestions and concerns can be integrated into operational and sustainability decision-making. 72 percent of 2014 GRESB participants have a tenant engagement program in place that includes sustainability-specific elements (2013: 73 percent). The most common elements included are tenant engagement meetings (74 percent), tenant sustainability guides (67 percent) and providing tenants with feedback on energy/water consumption and waste (64 percent). 35 percent also provide tenant sustainability training.

The content of lease contracts is the starting point for the landlord/tenant relationship, and defines both parties' respective rights and duties. Including sustainability-specific lease clauses creates tenant awareness, encourages mutual commitment, and empowers landlords to positively influence tenant behavior. In 2013, when GRESB asked about implementation of Green Leases and Memoranda of Understanding (MoUs), 29 percent made use of Green Lease formats and 6 percent used MoUs. This year, 43 percent of GRESB participants include sustainability-specific requirements in their standard lease contracts. The most popular provision is a clause regarding the sharing of sustainability-related data: 77 percent of participants include clauses requiring sharing of utility data, while 53 percent include clauses requiring the sharing of information that is relevant to green building certificates. Only 38 percent of participants have mutual environmental performance targets in place. [...more](#)

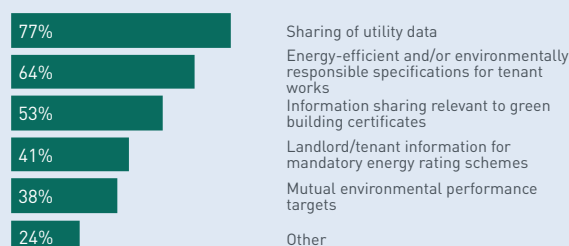
### Employee satisfaction improvement programs



### Tenant engagement programs



### Sustainability-specific requirements in standard lease contracts



*"For our company, focus on sustainability is important in order to maintain a strong relationship with our stakeholders, to ensure sustainable revenues for our investors, and to provide attractive lease areas for our tenants."*

— Michael Keller, Global Sustainability Co-ordinator  
AXA Real Estate Investment Managers



Tenant satisfaction surveys identify key issues and concerns, which can then be addressed in improvement measures and/or programs adopted by the landlord. Proper follow-up demonstrates commitment to the tenant engagement process, and to developing and maintaining tenant satisfaction. 52 percent of participants now undertake tenant satisfaction surveys (2013: 50 percent), on average covering 68 percent of tenants. The average response rate is 53 percent. Almost all participants that undertake a survey have a program in place to improve tenant satisfaction based on the survey outcomes (99 percent). Most common actions are feedback sessions with asset/property managers (92 percent) and with individual tenants (76 percent), followed by development of asset-specific action plans (72 percent).

Having a tenant fit-out and refurbishment program in place helps to align the views and actions of landlords and tenants at an early stage. Guidance and support from the start of the lease reinforces the importance placed on sustainability issues and creates a basis for operating and using the building in a sustainable way. Half of all participants (49 percent) have a fit-out and refurbishment program in place for tenants including sustainability-specific issues (2013: 44%). [...more](#)

### Supply chain

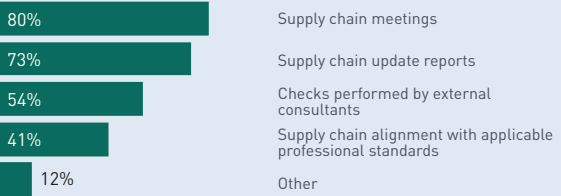
Effective implementation of sustainability strategies includes integration of organizations' sustainability-specific requirements into their supply chain. 65 percent of property companies and funds include such sustainability-specific requirements in their procurement processes. Requirements are mostly imposed on external contractors (81 percent) and external service providers (80 percent), followed by external property/asset managers (73 percent) and external suppliers (71 percent).

Independent monitoring of suppliers is important to back up organizations' sustainability claims. It also sends a strong message to suppliers, increases transparency and highlights potential supply chain problems that need to be rectified. 60 percent of participants monitor external property/asset managers' compliance with the sustainability-specific requirements in place (2013: 58 percent), while 62 percent monitor the compliance of other direct external suppliers and service providers (2013: 55 percent). Participants monitoring their supply chain mostly hold regular meetings (80 percent) or receive update reports (73 percent). 41 percent of participants check the alignment of their supply chain with applicable professional standards.

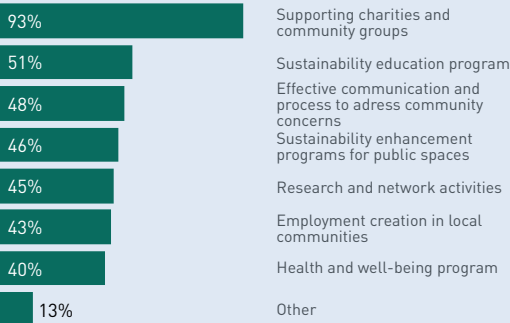
### Community

Community engagement is important for assessing the local impact of the operation of the asset. A structured and comprehensive approach to community engagement contributes towards development of more prosperous and sustainable communities. 64 percent of all participants have a community engagement program in place that includes sustainability-specific issues (2013: 69 percent). Of those that have a program, a large share of participants supports charities and community groups (93 percent). 51 percent of participants have a sustainability education program, while 40 percent have a health and well-being program. 48 percent focus on effective communication and processes that address community concerns. [...more](#)

### Supply chain's compliance with sustainability-specific requirements



### Community engagement program



*"CCT strives to not only be a provider of good quality office space with conducive work environment, but also be an environmentally responsible landlord. We started CCT Eco Race with a view to engaging our tenants in promoting practical ways in protecting the environment with fun and healthy activities."*

— Lynette Leong, Chief Executive Officer  
Capita Commercial Trust



# New Construction & Major Renovations

Integrating sustainability into construction activities can help mitigate some of the environmental impact of development work, as well as improving operational efficiencies during and after the construction process. In socio-economic terms, the built environment can have significant direct and indirect impact on social wellbeing and the livelihoods and prosperity of local communities and individuals. By implementing sustainable best practices in their construction activities, organizations can minimize the negative effects of the construction process and positively impact local economies.

In 2014, 289 property companies and funds completed the New Construction & Major Renovations Aspect of the GRESB Survey, an increase of 5 percent as compared to 2013. This total includes 20 companies and funds that are considered to be “development only” participants. 15 of these participants have portfolios allocated to Asia,<sup>6</sup> while the remainder are allocated to Europe (2), South America (2) and Australia (1). This year, participants reported on 550 new construction projects that were completed during the reporting period and 1,753 projects that were in progress during the reporting period. Participants also reported on 527 major renovation projects completed during the reporting period, and 499 projects that were in progress.

## Key outcomes

### Sustainable site selection

Proper site selection helps to conserve land and protect farmland and wildlife habitat. Site selection processes should be based on structured, predefined methodologies that include limits on the development of inappropriate sites or projects with a negative impact on the immediate surroundings, and on the environment in general. 57 percent of participants execute a sustainable site selection assessment for new construction projects (2013: 53 percent). [...more](#)

### Materials and certifications

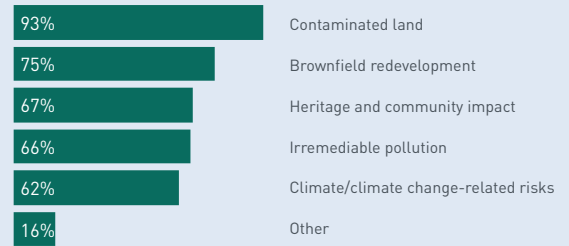
Sustainability-specific requirements for construction materials assist organizations with conserving resources, reducing waste and limiting the environmental impact (including embodied carbon) of new buildings. It also mitigates health risks associated with the use of non-sustainable materials. 62 percent of participants have a policy in place regarding construction materials (2013: 71 percent). [...more](#)

Green building certificates provide a measure of the intrinsic quality of an asset and its compliance with environmental standards and requirements. They are an independent assessment of the sustainability performance of an asset. 61 percent of participants have new construction and major renovation projects that obtained a green building certificate. Regional comparison shows that the highest levels of certification are in Europe (72 percent of participants use building certification schemes), but adoption of green building certificates for new construction projects is almost equally high in the other three regions where around 55 percent of participants have green building certificates.

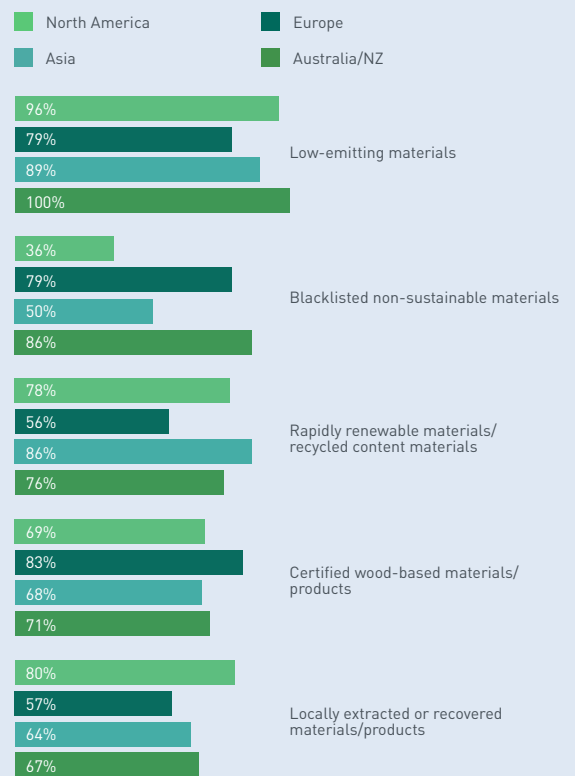
### Sustainable building characteristics

Sustainable buildings are often associated with improved occupant well-being, which may lead to increased employee satisfaction and greater productivity. 75 percent of participants implement measures specifically focused on occupant well-being, of which 94 percent focus on optimization of the indoor environment (indoor air quality, thermal

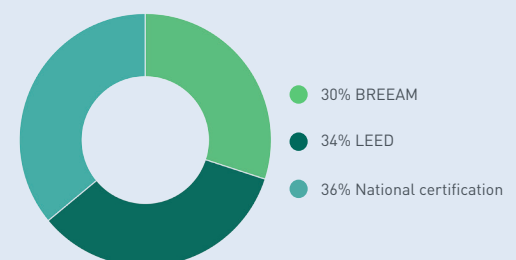
### Sustainable site selection assessment



### Construction materials policy



### Green building certifications



<sup>6</sup> See GRESB geographic location and property type allocation thresholds (Scoring & Methodology)

comfort, lighting and acoustic performance). 88 percent provide user-focused building facilities (fitness or gym, cafeteria, green areas and amenities), and specific furnishings and fit-outs, such as ergonomic work stations.

Implementing energy and water efficiency requirements during construction contributes to reducing the energy consumption of a building once it is operational. 69 percent of participants have minimum energy efficiency requirements for new construction and major renovation projects (2013: 58 percent). [...more](#)

On-site renewable energy generation reduces environmental and economic impacts associated with fossil fuel energy use. 35 percent of participants have new construction and major renovation projects that are designed to generate energy from on-site renewable sources (2013: 27 percent). [...more](#)

## Supply chain requirements

Sustainability-specific requirements for contractors aid the proper implementation of organizations' sustainability policies for new construction and major renovation projects. Relationships with contractors and the written agreements that define those relationships make sustainability requirements enforceable against a wider range of stakeholders. 67 percent of participants now monitor their contractors' compliance with the organization's sustainability-specific requirements (2013: 64 percent). [...more](#)

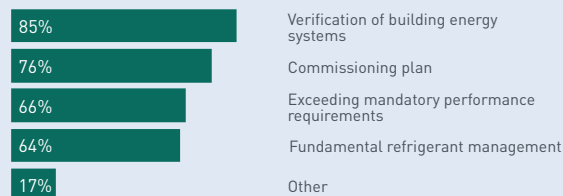
The dangerous nature of construction work can lead to incidents, injuries, and fatalities. These have the potential to undermine the organization's reputation and long-term financial performance. Occupational health and safety performance is a key indicator of an organization's approach to its duty of care. Monitoring of and reporting on on-site occupational health and safety thus assists prudent risk management. Keeping records of the number of injuries, fatalities and near misses helps to identify patterns that can guide the implementation of measures needed to minimize health and safety risks. In 2014, half of participants implemented an on-site occupational health and safety (OHS) management system. [...more](#)

## Community engagement

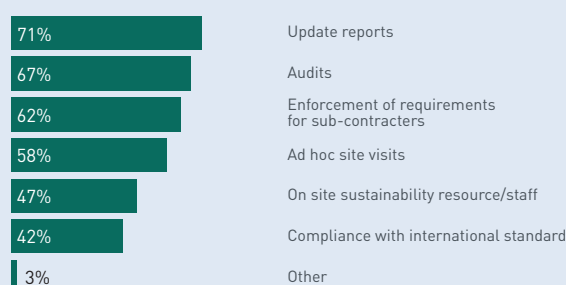
New construction and major renovation projects are likely to impact the local community. A communication policy demonstrates commitment to engaging with the community by obtaining their input and feedback on issues relevant to the development process. This helps to manage compliance with regulatory requirements and provides a structured approach to planning and controlling construction activities. 59 percent of 2014 GRESB participants with new construction and major renovation activities have a policy in place for communication with the local community regarding the impact of development projects, while 51 percent monitor the impact of the project on the local community during the different stages of the project.

34 percent of participants also assess the socio-economic impact of their projects on the community, which helps to minimize any negative impact and to create more sustainable communities. Most of these participants (87 percent) include community welfare in their impact assessments.

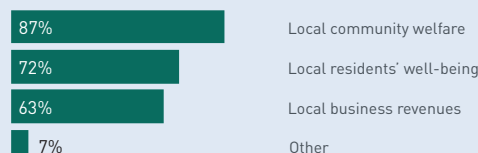
### Energy efficiency requirements



### Monitoring contractors' compliance



### Socio-economic impact assessment includes



*"The Old Dixie Eco-Walk represents the transformation of a dusty back road to a multifaceted amenity. It offers an exhibition space for local artists, a showcase for Florida flora, a haven for native species butterflies, and a tranquil nature walk for neighboring apartment residents."*

— Heitman America Real Estate Trust, L.P.

# Timeline

## Investor Members

## GRESB

<ul style="list-style-type: none"> <li>Engagement with the GRESB team on the most important topics in the Survey</li> </ul>	January	<ul style="list-style-type: none"> <li>Engagement with User Groups and Members regarding the most important topics in the Survey, and supporting documentation preparation. This continues throughout January and February</li> </ul>
	February	
<ul style="list-style-type: none"> <li>Receive engagement package</li> <li>Calls and webinars for a better understanding of the 2014 GRESB Survey and processes</li> <li>Outreach to investments to request participation in the 2014 Survey. This is part of the engagement process and continues until early April</li> </ul>	March	<ul style="list-style-type: none"> <li>Final amendments to the Survey and supporting documentation</li> <li>Early release of the Survey questions, in preparation for the official release</li> </ul>
	April	
<b>May 1</b> <ul style="list-style-type: none"> <li>Second outreach to investments to request participation in the 2014 Survey</li> <li>Monitoring of progress</li> </ul>	May	<b>April 1: Survey opens</b> <ul style="list-style-type: none"> <li>Companies and funds are invited to participate in the 2014 GRESB Survey at <a href="http://www.gresb.com">www.gresb.com</a>. After registration, participants receive login details by email</li> <li>Upon completion of all the sections in the Survey, GRESB gives participants the option to request a Response Check</li> <li>Participants are asked to confirm the accuracy of the data before submitting their response</li> </ul>
<b>June 15</b> <ul style="list-style-type: none"> <li>Third outreach to investments to request participation in the 2014 Survey</li> <li>Monitoring of progress</li> </ul>	June	<b>July 1: Survey closes</b> <ul style="list-style-type: none"> <li>All submissions must be received by July 1, 2014 latest. Unfortunately GRESB cannot accept any submissions received after this date</li> </ul>
	July	
<ul style="list-style-type: none"> <li>Data in Member Portal</li> <li>Analysis tool available</li> <li>Engagement with investments regarding the results. This is an ongoing process that is responsive to investor requirements and requests</li> </ul>	August	<b>July 1: Validation process starts</b> <ul style="list-style-type: none"> <li>Following submission GRESB analyzes all participants' Survey submissions. This process continues until early August. We contact participants during this time to clarify any outstanding issues with their submissions</li> </ul>
	September	<b>September: Survey results</b> <ul style="list-style-type: none"> <li>Participants receive a Scorecard containing the headline results including their overall GRESB score, their score for each of GRESB's seven sustainability aspects (plus their score for New Construction &amp; Major Renovations if applicable).</li> </ul>
<b>October 1: Consultation Period starts</b> <ul style="list-style-type: none"> <li>Investors provide feedback on Survey content, products and processes</li> <li>Collective or individual meetings to discuss Survey results with the GRESB team</li> </ul>	October	<b>October: Consultation Period starts</b> <ul style="list-style-type: none"> <li>Participants provide feedback on Survey content, products and services</li> </ul>
	November	
	December	<b>December 1 onwards</b> <ul style="list-style-type: none"> <li>Aggregate and analyze feedback</li> <li>Start the preparation for the new Survey</li> </ul>

# Governance and Contact

## Governance

GRESB is an industry-driven organization committed to rigorous and independent evaluation of the sustainability performance of real estate portfolios around the globe.

Since its inception, GRESB has grown from an initiative pioneered by three institutional investors (APG Asset Management, PGGM Investments and The Universities Superannuation Scheme (USS)) with the assistance of Maastricht University, into a benchmarking tool used by more than one hundred institutional investors, listed property companies and fund managers and backed by all leading international real estate associations and industry bodies.

GRESB B.V. undertakes the day-to-day management of GRESB's activities. It is a private limited company incorporated in the Netherlands with registration number 55416071 and whose registered office is at George Gershwinlaan 115, 1082 MT, Amsterdam, Netherlands. GRESB B.V. is a wholly owned subsidiary of Stichting GRESB, a foundation incorporated in the Netherlands with registration number 52383113. The Board of Stichting GRESB (referred to by GRESB as its Supervisory Board) controls the activities of GRESB B.V.. The GRESB B.V. Executive Board is responsible for GRESB's strategic management.

In addition to the GRESB Supervisory and Executive Boards, GRESB also benefits from the guidance of its Advisory Board, regional Benchmark Committees and user groups. The individuals that sit on the Advisory Board, Benchmark Committee, and user groups are all drawn from GRESB's membership community and they all perform a crucial role in giving GRESB strategic, commercial and technical input regarding both the Survey and services offered to the real estate industry.

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.

A detailed explanation of GRESB's governance structure is available on the [GRESB website](http://www.gresb.com).

## Contact

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[www.gresb.com](http://www.gresb.com)

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This Report is an aggregation and analysis of data that has been undertaken by GRESB using data provided by participants in the 2014 GRESB Survey. It reflects the opinions of GRESB and not of our members. The information in the Report has been provided in good faith and is provided on an "as is" basis. We take reasonable care to check the accuracy and completeness of the Report prior to its publication. However, the Report has not been independently verified. In addition, the statements in the Report may provide current expectations of future events based on certain assumptions. The variety of sources from which we obtain the information in the Report means that we make no representations and give no warranties, express or implied as to its accuracy, availability, completeness, timeliness, merchantability or fitness for any particular purpose.

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# GRESB Members

## Fund Manager and Property Company Members





## Partners



## Global Associate Members



## Associate Members



## Strategic Alliances



## Support Provided By

ACSI (The Australian Council of Superannuation Investors)  
AFIRE (The Association of Foreign Investors in Real Estate)  
ARES (The Association for Real Estate Securitization)  
Danish Property Federation  
PCA (Property Council of Australia)

PHILGBC (Philippine Green Building Council)  
RIAA (Responsible Investment Association of Australasia)  
SGBC (Singapore Green Building Council)  
Swedish Property Federation

# GRESB Participants

## Private entities

Aberdeen Asset Management ⑤	Forum Partners ⑤	Pamfleet
AEW Capital Management	Frogmore	Paramount Group, Inc.
AEW Europe	Gables	Pareto Limited
Alpha Investment Partners Ltd	Gaw Capital Partners	Parmenter Realty Partners
AltaFund	GenCap Partners	Perella Weinberg Real Estate UK LLP
Altera Vastgoed NV	Generali Real Estate	Phoenix Property Investors
Altis Property Partners	Genesta Property Nordic	Pradera ⑤
American Realty Advisors	Gerding Edlen Investment Management	Pramerica Real Estate Investors (Asia) Pte Ltd
AMP Capital	GI Partners	Prelios SGR
Amundi Asset Management	Goodman Group	Principal Real Estate Investors ⑤
Amvest	Grainger Asset Management Ltd	Prologis ⑤
Andersson Real Estate Investment Management ⑤	Greystar Investment Management	Prosperitas Investimentos
Arch Capital Management Co. Ltd.	Grosvenor Fund Management	Prudential Real Estate Investors ⑤
Ardstone Capital Ltd	GTIS Partners	PT Farpoint Realty Indonesia
Art-Invest Real Estate	Guggenheim Partners	Public Investment Corporation
ASR Real Estate Investment Management	Hansteen	Q-Park NV
ATP Ejendomme A/S	Harrison Street Real Estate Management, LLC	QIC Global Real Estate
AvalonBay Communities, Inc.	Healthcare of Ontario Pension Plan	Redwood Group Asia
Aviva Investors ⑤	Heitman	Rikshem AB
AXA Investment Management	Hemsö Fastighets AB	Rockefeller Group Development Corporation
AXA Real Estate	Hermes Real Estate Investment Management	Rockspring
Bank J. Safra Sarasin	IEF Capital Management B.V.	Royal London
Behringer Harvard ⑤	Inland Real Estate Investment Corporation	Savanna ⑤
Bentall Kennedy Group	International Housing Solutions	Schroder Property Investment Management Limited
BlackRock ⑤	Internos Global Investors	Scottish Widows Investment Partnership
Blackstone Real Estate Partners	Invesco Advisors, Inc.	SDA
Bluehouse Capital	Invesco Real Estate	Sentinel
Bouwfonds Fondsverwaltungs GmbH	Investa ⑤	Shorenstein Properties, LLC
Bouwfonds Investment Management ⑤	ISPT	SOCAM Development & TAN-EU Capital
Bouwinvest REIM	IVG Immobilien AG	Sonae Sierra ⑤
British Land Company Plc ⑤	J.P. Morgan Asset Management	Stam Europe
Brockton Capital LLP	J.P. Morgan Asset Management (UK) Limited	Standard Life Investments
Brookfield Office Properties Australia Pty Ltd	Jamestown Properties	Steen & Strom AS
CapitaMalls China Fund Management Pte Ltd	Jonathan Rose Companies	Stockbridge Capital Group
CapitaMalls India Fund Management Pte Ltd	JPMorgan Chase	Syntrus Achmea Real Estate & Finance
CBRE Global Investors ⑤	Kenedix, Inc.	TA Realty LLC
CIM Group	KingSett Capital	The Carlyle Group
CITIC Capital	LaSalle Investment Management	The Crown Estate
CitizenM Asset Management	Legal and General Property	The GPT Group ⑤
Clarion Partners	Lend Lease	The Hampshire Companies
Climate Change Capital	LimeTree Capital Car Park Investment Management	The Laramar Group, LLC ⑤
COLI ICBICI China Investment Management	Limited	The UNITE Group Plc
Commercial Estates Group	Local Government Super	Thor Equities
Commonwealth Bank of Australia ⑤	Lothbury Investment Management Limited	Threadneedle Property Investments Limited
CommonWealth Partners	M&G Real Estate ⑤	TIAA Henderson Real Estate ⑤
Conservatorio SA	MacFarlane Partners Investment Management ⑤	TIAA-CREF
Cordea Savills Fund Managers (Jersey) Limited ⑤	Madison Marquette	Timbercreek Asset Management
Cordea Savills Investment Management	Majid Al Futtaim Properties	Tishman Speyer ⑤
Cornerstone Real Estate Advisers	Mayfair Capital Investment Management	TRIF Investment Management Ltd
CorVal	MedicX	Tristan Capital Partners
DDR	MetLife Investment Management	UBS Global Asset Management (UK) Ltd.
Deutsche Asset & Wealth Management	Meyer Bergman	UBS Real Estate KAG mbH
DEXUS Funds Management	Moorfield Investment Management Limited	UBS Realty Investors LLC
DivcoWest	Morgan Stanley ⑤	Urban Car Park Management Limited
DNB Real Estate Investment Management	National Real Estate Advisors LLC	USAA Real Estate Company ⑤
e-Shang Cayman Limited	Neinver SA	VALAD Europe
Equity Estate BV	Niam	Value Retail PLC
Eurindustrial N.V. ⑤	Nordic Real Estate Partners	Vasakronan
Europa Capital LLP	OFI REIM	Vesteda Investment Management B.V. ⑤
Exeter Property Group	Orion Partners	Warburg-Henderson
Fairfield Residential Company LLC	Othrys Asset Management	Willhem
Fastighetsaktiebolaget Norrporten	OVG Real Estate	WP Group
Federal Capital Partners	Oxford Properties Group	XYMAX REAL ESTATE INVESTMENT ADVISORS Corporation
Fortius Funds Management	Palmer Capital	

⑤ Participant has reported for 5 consecutive Survey years



## Listed companies

Activia Properties Inc.	First Capital Realty Inc.	Mori Hills Reit Investment Corporation
Advance Residence Investment Corporation	First Industrial Realty Trust, Inc.	New Europe Property Investments plc
AEON MALL Co. Ltd.	Foncière des Régions	Nippon Prologis REIT, Inc.
AIMS AMP Capital Industrial REIT Management Limited	Franklin Street Properties	NSI
Altarea Cogedim <sup>⑤</sup>	GAGFAH S.A.	ORIX JREIT Inc.
American Assets Trust, Inc.	GECINA	Parkway Properties, Inc.
Associated Estates Realty Corporation	General Growth Properties	Post Properties, Inc.
Australand	GLP J-REIT	Prologis <sup>⑤</sup>
AvalonBay Communities, Inc.	Godrej Properties	PSP Swiss Property <sup>⑤</sup>
Ayala Land Inc.	Goodman Group	Public Storage
BEFIMMO SA	Government Properties Income Trust	Regency Centers Corporation <sup>⑤</sup>
Beni Stabili SpA Siiq	Grainger plc	SEGRO plc <sup>⑤</sup>
Big Yellow Plc <sup>⑤</sup>	Great Portland Estates plc	SFL
Boston Properties	Growthpoint Properties	Shaftesbury Plc <sup>⑤</sup>
Brandywine Realty Trust	Hammerson plc <sup>⑤</sup>	SIA REIT, Inc.
British Land Company Plc <sup>⑤</sup>	HCP, Inc.	Simon Property Group, Inc. <sup>⑤</sup>
Brookfield Office Properties Inc.	Health Care REIT, Inc.	Société de la Tour Eiffel
Camden Property Trust	HEIWA REAL ESTATE REIT, Inc.	Sponda Plc
Campus Crest Communities, Inc.	Hersha Hospitality Trust	Standard Life Investments
CapitaCommercial Trust	Host Hotels & Resorts, Inc.	Stockland
CapitaLand Limited <sup>⑤</sup>	Hulic Co., Ltd.	Swiss Prime Site Group AG
Capitamall Trust	Hyprop Investments Limited	Technopolis Plc 2014
Castellum AB <sup>⑤</sup>	Igd Siiq	The Conygar Investment Company Plc
Cegereal	Industrial & Infrastructure Fund Investment Corporation	The GPT Group <sup>⑤</sup>
Charities Property Fund	Inland Real Estate Corporation	The Link Management Limited
Charter Hall	Intu Properties plc	The Macerich Company
China Overseas Land & Investment Ltd.	Invesco Real Estate	The UNITE Group Plc
China Resources Land	Investa <sup>⑤</sup>	TIER REIT
City Developments Limited	Japan Excellent, Inc.	Tokyo Tatemono Co. Ltd.
Citycon Oyj <sup>⑤</sup>	Japan Logistics Fund, Inc.	TOKYU REIT, Inc.
CLS Holdings	Japan Prime Realty Investment Corporation	Top Spring International
COFINIMMO <sup>⑤</sup>	Japan Retail Fund Investment Corporation	Triodos
Commonwealth Bank of Australia <sup>⑤</sup>	Kenedix Office Investment Corporation	Unibail-Rodamco <sup>⑤</sup>
Corio N.V. <sup>⑤</sup>	Keppel Land Limited	Union Investment Institutional Property GmbH
Corporación Inmobiliaria Vesta S.A.B. de C.V.	Keppel REIT Management Limited	Union Investment Real Estate GmbH
Credit Suisse	Kilroy Realty Corporation <sup>⑤</sup>	United Urban Investment Corporation
Cromwell Property Group	Kimco Realty Corporation <sup>⑤</sup>	Vastned Retail N.V.
Daiwa Office Investment Corporation	Klépierre <sup>⑤</sup>	Ventas, Inc.
Derwent London Plc <sup>⑤</sup>	Land Securities Group PLC <sup>⑤</sup>	Vornado Realty Trust <sup>⑤</sup>
Deutsche EuroShop AG <sup>⑤</sup>	LaSalle Hotel Properties	Washington Real Estate Investment Trust
Deutsche Wohnen AG	Liberty Property Trust <sup>⑤</sup>	Weingarten Realty
DEXUS Property Group (DXS)	LondonMetric Property Plc	Wereldhave NV <sup>⑤</sup>
DiamondRock Hospitality Company	Mahindra Lifespaces Developers Limited	Westfield Group <sup>⑤</sup>
Equity One	McKay Securities PLC	Wihlborgs Fastigheter AB <sup>⑤</sup>
Equity Residential	Mirvac <sup>⑤</sup>	Workspace
Faberge	Mobimo Holding AG	Yatra Capital Limited

<sup>⑤</sup> Participant has reported for 5 consecutive Survey years