GRESB REAL ESTATE

2016 GRESB Snapshot - Canada

The Canadian government recognizes the necessity of a transition to a low-carbon, climate resilient economy. The government has advocated for increased accountability and transparency, investment in adaptation, and pursuit of cost-effective emissions reduction.

The Canadian property sector will need to play a significant role in this transition as commercial and residential real estate consume 47% of Canadian electricity and contribute directly to 11.9% of Canadian greenhouse gas emissions. Fortunately, real estate also offers some of the most cost-effective opportunities for emissions reduction, while also benefiting social and environmental issues, such as water conservation, waste management, and public health. Canadian companies and funds have begun to create value by offering solutions to these challenges. Their investors have recognized that this is a significant area of differentiation and risk. Consequently, investors are increasingly asking for high quality information about environment, social, and government (ESG) performance.
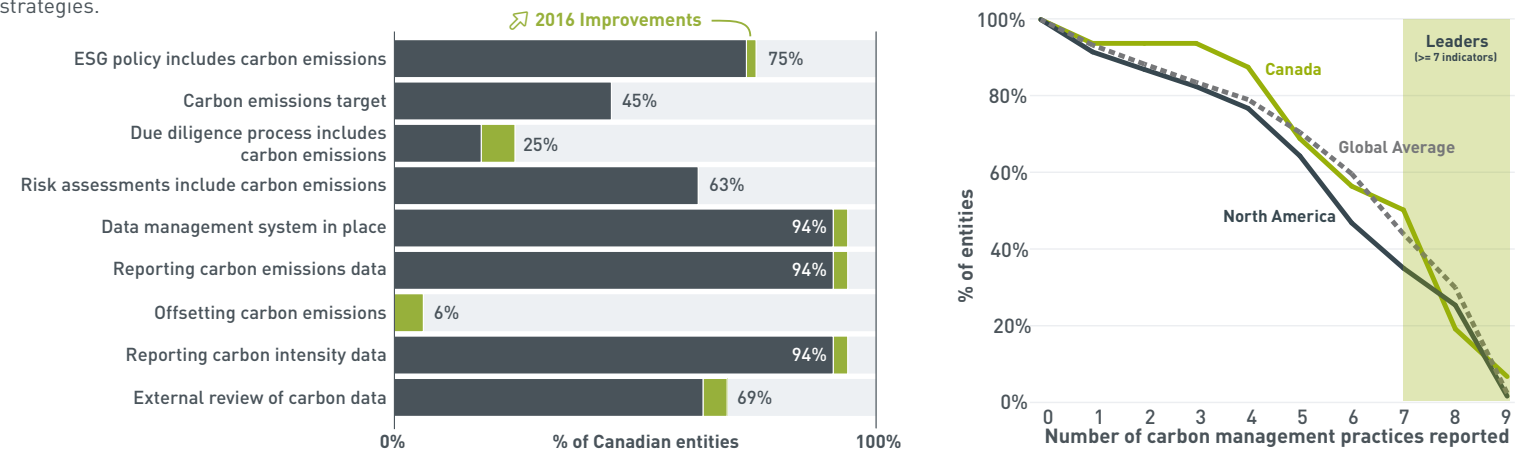
GRESB strives to meet this growing need with systematic assessment, objective scoring, and peer benchmarking. The 2016 data reflect a continued increase in Canadian participation with 16 companies and funds providing information about ESG performance. Multi-year participants demonstrate steady year-over-year improvements in overall ESG scores. The new GRESB data show that overall performance is driven by increasing engagement from senior leaders, more formal policy commitments, new and increasingly sophisticated information systems. For example, this year's global benchmark includes asset-level operational performance data for more than 22,000 individual buildings, often flowing directly to GRESB from third-party tools.
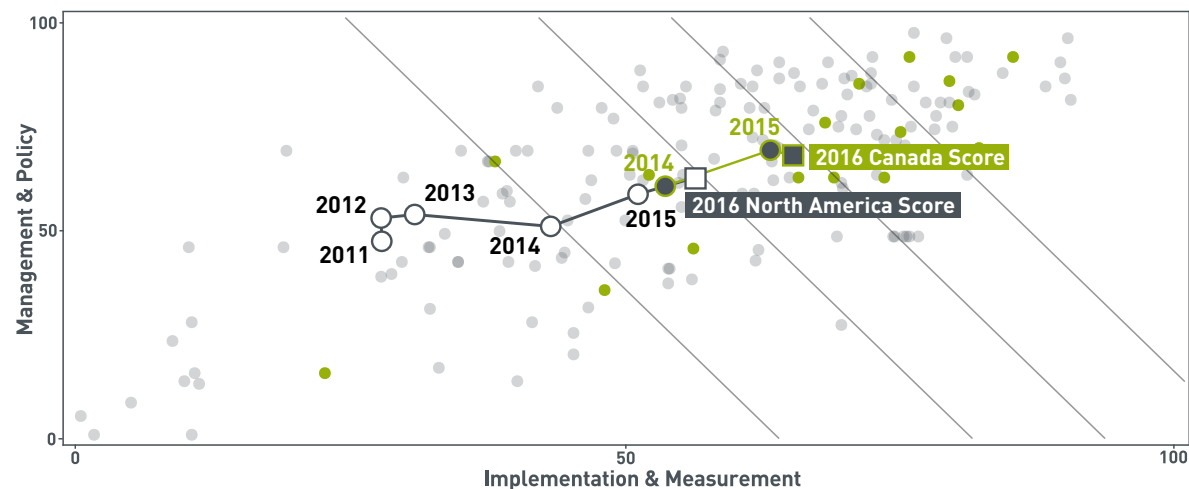
The new GRESB data show property companies and funds in a race for higher ESG performance – reducing greenhouse gas emissions, saving energy, conserving water, and providing healthier indoor environments. The leaders in this competition benefit from more efficient, more desirable properties. Their investors benefit from higher returns and lower risk. Over time, these actions contribute to Canada's national goal for a transition to a low-carbon, resilient economy as a part of the global effort to reduce emissions and adapt to climate change.

Carbon Management

GRESB indicators can be examined individually or as functional groups to understand management and performance in key areas, such as carbon, water, waste, and health. The charts below illustrate average responses to individual carbon management indicators and the cumulative achievement of the set of carbon management strategies.

2016 Improvements

- ESG policy includes carbon emissions — 75%
- Carbon emissions target — 45%
- Due diligence process includes carbon emissions — 25%
- Risk assessments include carbon emissions — 63%
- Data management system in place — 94%
- Reporting carbon emissions data — 94%
- Offsetting carbon emissions — 6%
- Reporting carbon intensity data — 94%
- External review of carbon data — 69%

% of Canadian entities (0% – 100%)

Leaders (>= 7 indicators) — Canada — Global Average — North America

% of entities / Number of carbon management practices reported

GRESB Model

Management & Policy vs Implementation & Measurement

2011, 2012, 2013, 2014, 2015 — **2016 Canada Score** — **2016 North America Score**
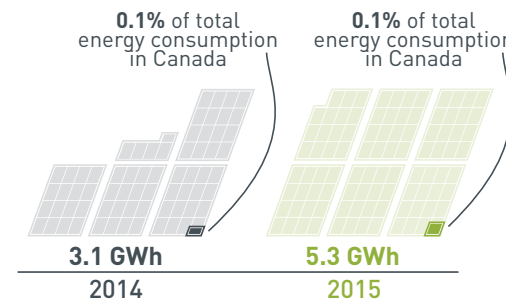
Country Score

66 / 100

The average GRESB Score of Canadian companies and funds improved from 65.5 in 2015 to 65.7 in 2016.

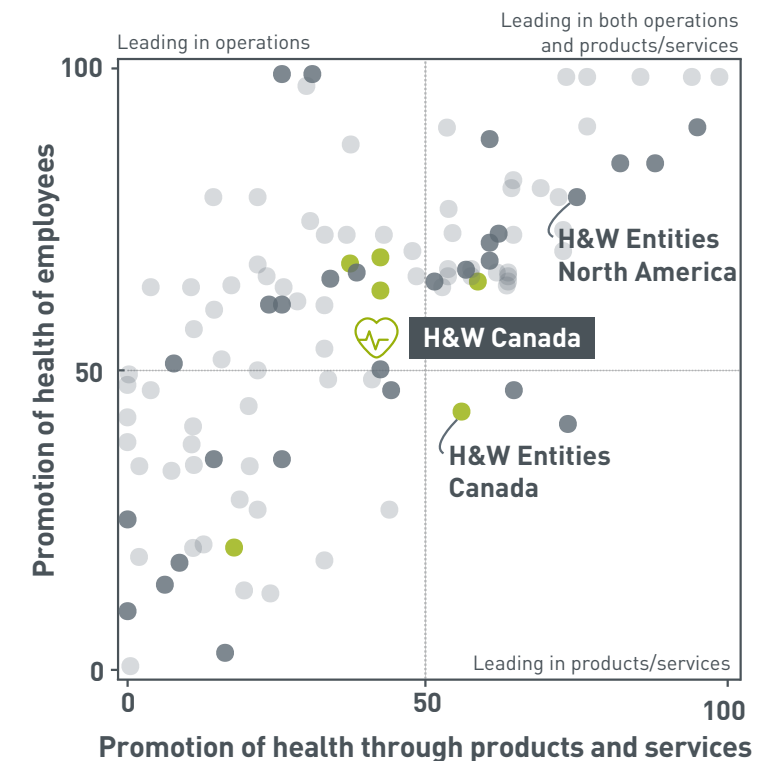Canadian portfolios continue to outperform US companies and funds.

Renewable Energy (generated on-site)

The GRESB Assessment provides data on year-over-year growth in on-site renewable energy. The dark shading indicates renewable energy generated by companies and funds based in Canada. The light shading indicates renewable energy generated elsewhere in the world.

0.1% of total energy consumption in Canada

0.1% of total energy consumption in Canada

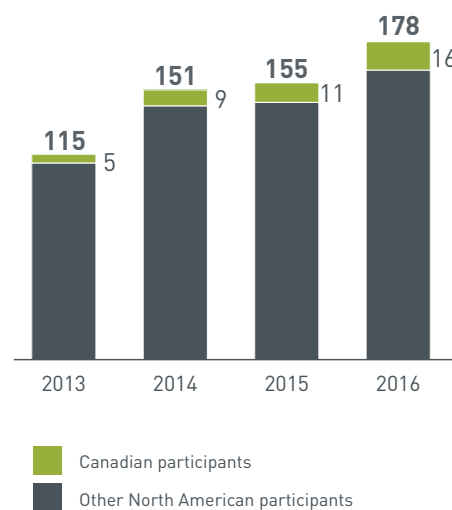**3.1 GWh** — 2014
5.3 GWh — 2015

Health & Well-being

New data for North American property companies and funds show significant variation in health and well-being practices. Many companies are working to promote the health of their employees. A smaller fraction of participants complement these internal efforts with strategies to actively promote the health of customers through their products and services.
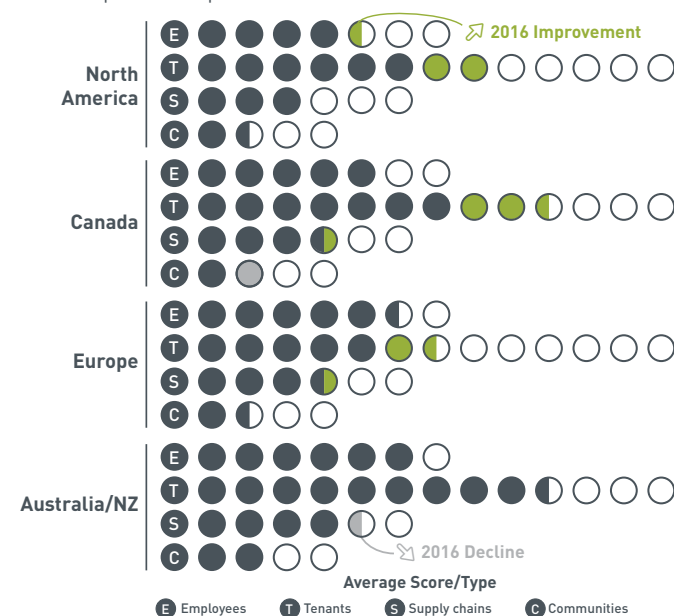

Leading in operations — Leading in both operations and products/services

Promotion of health of employees vs Promotion of health through products and services

H&W Entities North America — **H&W Canada** — H&W Entities Canada — Leading in products/services

GRESB Aspects

- Management — 82
- Policy & Disclosure — 72
- Risks & Opportunities — 71
- Monitoring & EMS — 71
- Performance Indicators — 55
- Building Certifications — 55
- Stakeholder Engagement — 69

Canada — North America

Response Rate Development

- 2013: 115 / 5
- 2014: 151 / 9
- 2015: 155 / 11
- 2016: 178 / 16

Canadian participants
Other North American participants

Stakeholder Engagement

GRESB includes 11 indicators addressing the engagement of property companies and funds with employees, tenants, supply chain, and community. Each circle represents a point available for these 11 indicators.

2016 Improvement

North America, Canada, Europe, Australia/NZ

E, T, S, C

Average Score/Type

2016 Decline

E Employees T Tenants S Supply chains C Communities

GRESB Industry Partners

REALpac
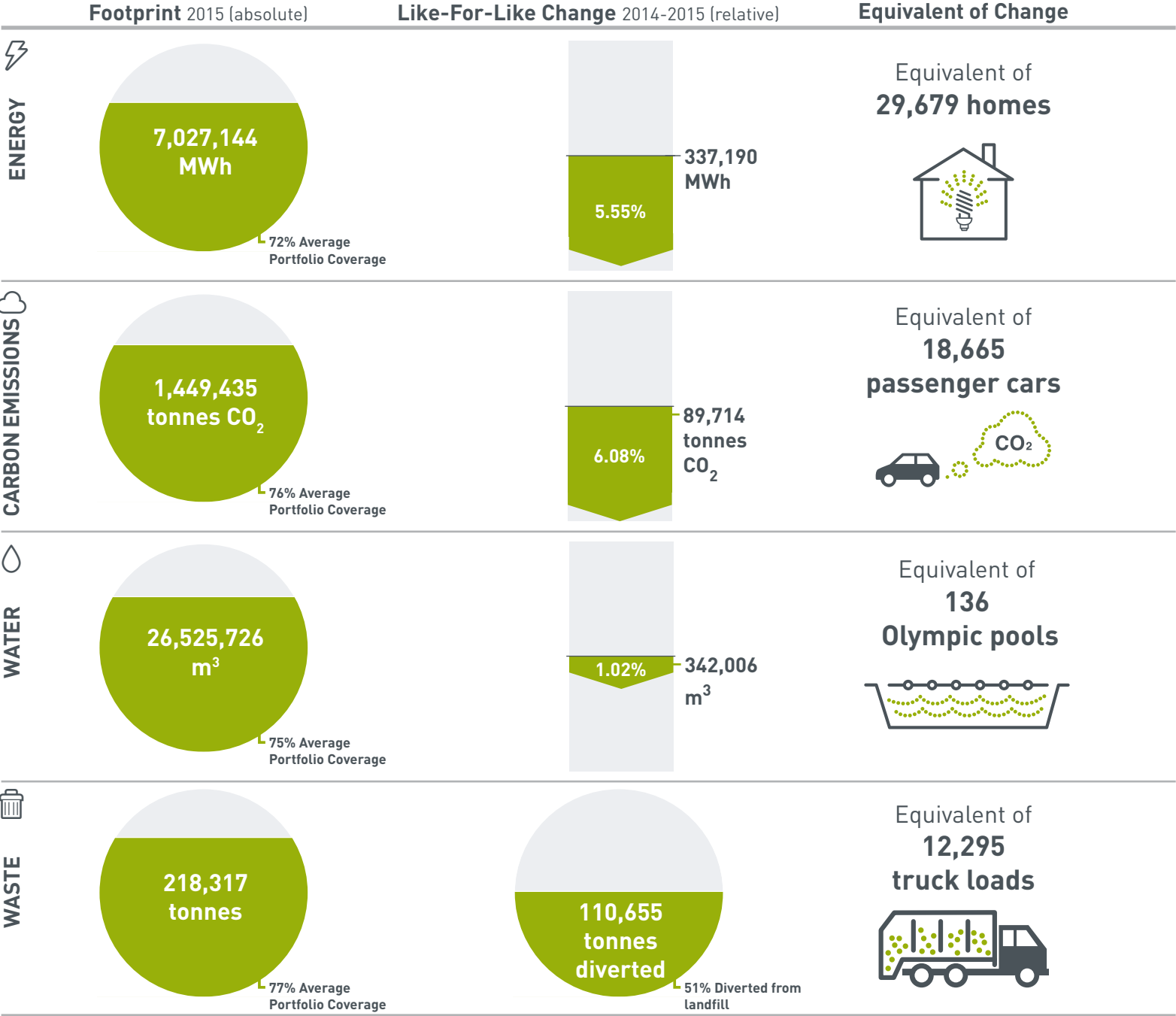Real property
Real leadership

The annual GRESB Assessment process has become an important management tool for our members, and REALpac applauds the sustained progress and superior performance of Canadian companies to date.
Michael Brooks – CEO, REALpac

Sector Leaders – North America

Property type	Entity name
Retail- Listed	The Macerich Company
Retail - Private	Pine Tree
Office - Listed	Kilroy Realty Corporation
Office - Private	MetLife/Norges Bank Investment Management Joint Venture - MetLife Investment Management
Industrial	Prologis
Residential - Listed	Equity Residential
Residential - Private	Rose New Jersey Green Affordable Housing Preservation Fund - Jonathan Rose Companies
Residential - Private	Leslie York Mills (MLYM Inc.) - The Minto Group
Residential - Private	Greystar Equity Partners Fund VIII - Greystar Investment Management
Residential - Private	Invesco Real Estate
Diversified	Invesco Real Estate
Diversified - Retail/Office	Oxford Properties Group (OMERS) - Oxford Properties Group
Diversified - Residential/Office	Multi-Employer Property Trust/MEPT Edgemoor - Bentall Kennedy Group

⊕ Global Sector Leader

Performance Indicators

Footprint 2015 (absolute)	Like-For-Like Change 2014-2015 (relative)	Equivalent of Change

ENERGY
7,027,144 MWh
72% Average Portfolio Coverage
5.55% — 337,190 MWh
Equivalent of **29,679 homes**

CARBON EMISSIONS
1,449,435 tonnes CO_2
76% Average Portfolio Coverage
6.08% — 89,714 tonnes CO_2
Equivalent of **18,665 passenger cars**

WATER
26,525,726 m³
75% Average Portfolio Coverage
1.02% — 342,006 m³
Equivalent of **136 Olympic pools**

WASTE
218,317 tonnes
77% Average Portfolio Coverage
110,655 tonnes diverted
51% Diverted from landfill
Equivalent of **12,295 truck loads**

GRESB defines "like-for-like" as the fraction of a portfolio continuously owned by an entity for at least 24 months. Like-for-like measurements represent a relatively stable sub-set of a portfolio, and they may better reflect management action to improve performance. GRESB like-for-like metrics do not directly account for variation in weather, occupancy, and other factors.

2016 GRESB Participants - North America

Listed
Alexandria Real Estate Equities, Inc.
AvalonBay Communities, Inc. ⑤
AvalonBay Fund II Communities
Boston Properties ⑤♡
Brandywine Realty Trust ⑤♡
Brookfield Property Partners
Camden Property Trust ⑤
Corporate Office Properties Trust ♡◊
Cousins Properties Incorporated ⑤
DiamondRock Hospitality Company
Equity One ⑤
Equity Residential
Essex Property Trust
Federal Realty Investment Trust ⑤
First Industrial Realty Trust, Inc. ⑤
Forest City Realty Trust, Inc.
Franklin Street Properties
General Growth Properties
Government Properties Income Trust
H&R Real Estate Investment Trust ◊
HCP, Inc.
Hersha Hospitality Trust ⑤
Host Hotels & Resorts, Inc. ♡
Kilroy Realty Corporation ⑤♡
Kimco Realty Corporation ⑤
Laramar Multi-Family Value Fund ♡
LaSalle Hotel Properties
Liberty Property Trust ⑤
Monogram Residential Trust, Inc. ⑤
Paramount Group, Inc. ⑤
Parkway Properties, Inc. ⑤

Post Properties, Inc. ⑤
Prologis ⑤♡
Public Storage
Regency Centers Corporation ⑤
Simon Property Group, Inc. ⑤
Taubman
The Macerich Company
TIER REIT ♡
U.S. General Services Administration ◊
Ventas, Inc. ⑤◊
Vornado Realty Trust ⑤♡
Washington Real Estate Investment Trust
Weingarten Realty
Welltower, Inc. ♡

Private
Abacus Capital Group LLC
AEW Capital Management ♡
Alberta Investment Management Corporation ♡◊
American Realty Advisors
Avison Young
Bentall Kennedy Group ⑤♡◊
BlackRock
Cadillac Fairview ◊
Carr Properties
CBRE Global Investors
CIM Group ⑤
Clarion Partners ♡◊
Colony Capital, Inc.
CommonWealth Partners ♡
Cornerstone Real Estate Advisers

Crocker Partners LLC
DDR ⑤
Deutsche Asset Management ⑤
DivcoWest
Exeter Property Group
Fairfield Residential Company LLC ⑤
Federal Capital Partners
GenCap Partners
Gerding Edlen Investment Management
GI Partners
Greystar Investment Management
Greystone Managed Investments Inc. ◊
GWL Realty Advisors ⑤◊
Harrison Street Real Estate Management, LLC
Healthcare of Ontario Pension Plan ◊
Heitman
Hermes Real Estate
Inland Real Estate Investment Corporation ◊
INP Retail, LP ⑤◊
Invesco Real Estate
Ivanhoe Cambridge
J.P. Morgan Asset Management ⑤
Jamestown Properties ♡
Jonathan Rose Companies
KingSett Capital ⑤◊
LaSalle Investment Management
MacFarlane Partners Investment Management ♡
Madison Marquette
Manulife Real Estate John Hancock Real Estate ◊

MetLife Investment Management ♡
Morgan Stanley ⑤
National Real Estate Advisors LLC
NBIM
Normandy Real Estate Partners
Oxford Properties Group ◊
Parmenter Realty Partners
PGIM Real Estate ⑤◊
Pine Tree ◊
Principal Real Estate Investors ⑤
Prologis
Rockefeller Group Investment Management Corp.
RXR Realty
Savanna
Scott Brown
SDA ◊
Sentinel ⑤
Shorenstein Properties, LLC
Stockbridge Capital Group
TA Realty LLC
The Blackstone Group
The Minto Group ◊
TIAA
TIAA-CREF ⑤
TIM ♡
Time Equities, Inc
Tishman Speyer ⑤◊
Trinity Real Estate
Triovest Realty Advisors Inc. ♡◊
UBS Global Asset Management ⑤
USAA Real Estate Company ⑤

⑤ 5-year participant ♡ Health & Well-being Module completed ◊ Canadian participant

GRESB Global Partners

CBRE · CUSHMAN & WAKEFIELD · DELOS INNOVATE WELL · JLL · SIEMENS · TRANSWESTERN · WSP PARSONS BRINCKERHOFF

Premier Partners - North America

aquicore · Carrier United Technologies · CODEGREEN sustainability and energy management · Energy Profiles Limited · energywatch energy economics simplified · ENERNOC · GE

goby · Healthy Buildings · JDM ASSOCIATES · LORD Green real estate strategies · MEASURABL · PARTNERENERGY · real foundations

Refined Risk · VERDANI PARTNERS · YARDI

Partners - North America

KINGSLEY ASSOCIATES · Quinn & Partners Sustainability strategies for leaders

$7.6 trillion
Institutional capital represented by GRESB's 58 Investor Members

About GRESB
GRESB is an industry-driven organization committed to assessing the environmental, social, and governance (ESG) performance of real assets globally, including real estate portfolios (public, private and direct), real estate debt portfolios, and infrastructure. More than 200 members, including 58 pension funds and their fiduciaries, use GRESB data in their investment management and engagement process, with a clear goal to optimize the risk/return profile of their investments. For more information, visit www.gresb.com.