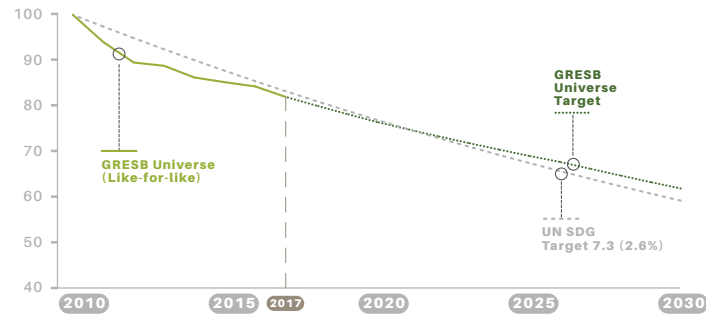


## UN SUSTAINABLE DEVELOPMENT GOALS

Tracking sector progress against SDG 7.3 and SDG 13 targets



The 17 United Nations Sustainable Development Goals (UN SDGs) cover a broad range of sustainability issues, many of them relevant for the real estate industry.



SDG 7.3 aspires to double energy efficiency improvement rates by 2030. To achieve this target, global energy efficiency has to improve by a 2.6% compounded rate between 2010 and 2030.

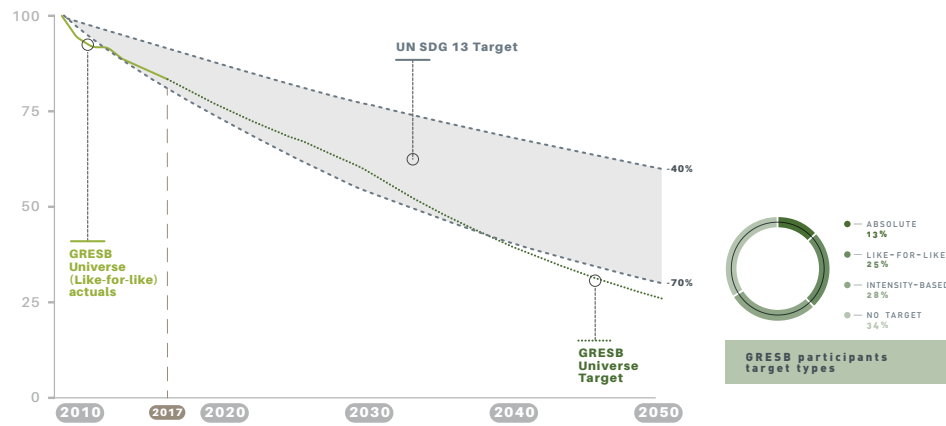
The overall like-for-like energy consumption reported to GRESB in 2018 is on track to meet the SDG Target 7.3. However, aggregated reported energy efficiency targets were less ambitious compared to last year, making the annualized targets no longer aligned with the target.

Guidance published by the UN to support the implementation of the SDGs states that in order to limit global warming to 1.5 degrees celsius, greenhouse gas emissions in 2050 must be 40-70% lower than 2010 levels.



This graph plots yearly relative changes in actual like-for-like greenhouse gas emissions of all GRESB participants from 2010 to 2017. From this point, the projected greenhouse gas emissions are based on reported reduction targets for 2018-2050.

The long term greenhouse gas emission reduction targets set by GRESB participants are generally in line with the more ambitious SDG13 requirement to reduce overall emissions by 70% by 2050.

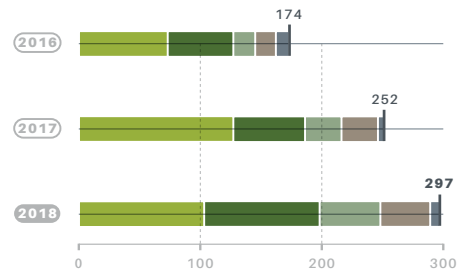


With the launch of the "Net Zero Carbon Buildings Commitment", the World Green Building Council is challenging real estate organizations to reach net zero operating emissions in their portfolios by 2030, and to advocate for all buildings to be net zero in operation by 2050. In 2018, only two participants reported to have 100% net zero portfolios, using a combination of renewable

energy and carbon offsets. These are great signals for the rest of the industry, albeit vastly insufficient for reaching the global goal. However, even if this is not already reflected in performance, an increasing number of participants have already set internal targets for net zero emissions. Most examples come from Australia, which once again demonstrates the region's leadership.

## HEALTH AND WELL-BEING and RESILIENCE

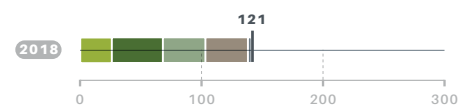
### HEALTH & WELL-BEING



% of GRESB participants completing the Health & Well-being Module

2018: 33%  
2017: 30%  
2016: 23%

### RESILIENCE



% of GRESB participants completing the Resilience Module

2018: 13%

The Health & Well-Being Module has benefited from robust participation - a 71% increase since its initial release in 2016. Each year has seen a significant uptick in the number of companies distinguishing themselves as leaders by taking action to promote health for their employees and tenants. In 2019, a selection of health promotion indicators will be incorporated into the GRESB Real Estate Assessment.

The new Resilience Module has been developed in response to organizations that are building a capacity to assess, manage and adapt in the face of social and environmental shocks and stressors. In its inaugural year, the Module was filled out by 13% of participants.

### About GRESB

GRESB is the global environmental, social and governance (ESG) benchmark for real assets. Working in collaboration with the industry, GRESB defines the standard for sustainability performance in real assets, providing standardized and validated ESG data to more than 75 institutional investors, representing

over USD 18 trillion in institutional capital. In 2018 a record 903 property companies and funds participated in the GRESB Real Estate Assessment, the Infrastructure Assessment covered 75 funds and 280 assets, and 25 portfolios completed the Debt Assessment.

Learn more at [www.gresb.com](http://www.gresb.com)

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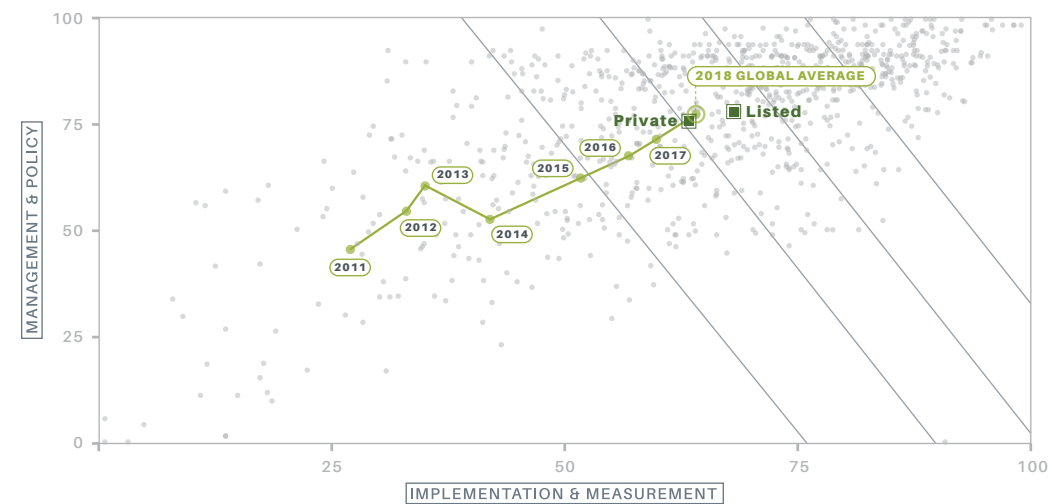
# 2018 RESULTS

## Sustainable Real Assets



## GRESB MODEL

2018 marks another year of improved ESG performance



The 2018 global average GRESB Score increased to 68, up from 63 in 2017. This strong improvement reflects the industry's commitment to further integrate best practices related to environmental, social and governance (ESG) issues.

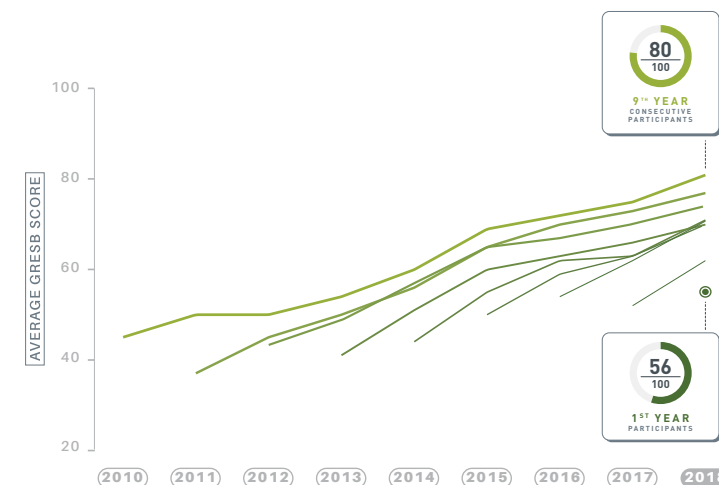
\* Average score Listed: 69 (2017: 66)  
\* Average score Private: 67 (2017: 62)



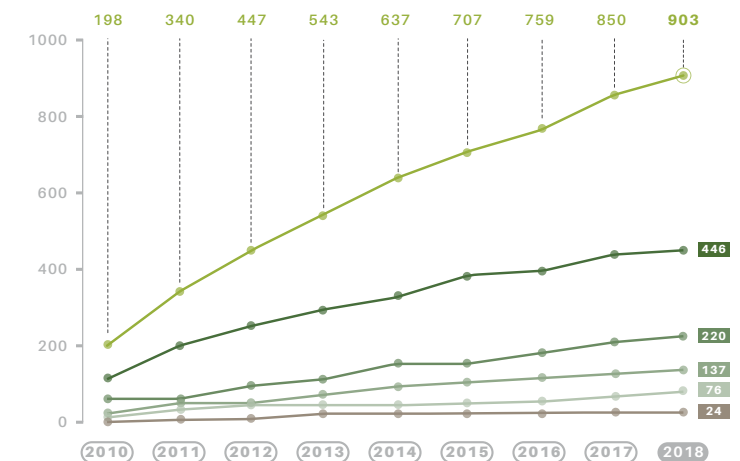
## GRESB SCORES

First time participants enter the benchmark with an all-time high score

The GRESB cohort is adapting faster and improving performance at a higher pace. GRESB is connecting companies and funds at the beginning of their sustainability journey with a community of leaders, helping them to close the performance gap. Not only has the GRESB benchmark grown from less than 200 participants in 2010 to more than 900 in 2018, but first time participants are achieving an ever high GRESB score: 56 (2017: 52).



## RESPONSE RATE DEVELOPMENT



## GRESB ASPECTS



## REGIONAL GRESB SCORE AND COVERAGE



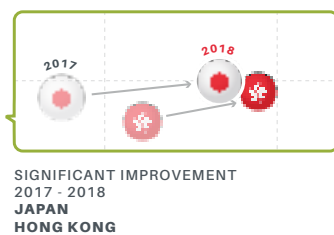
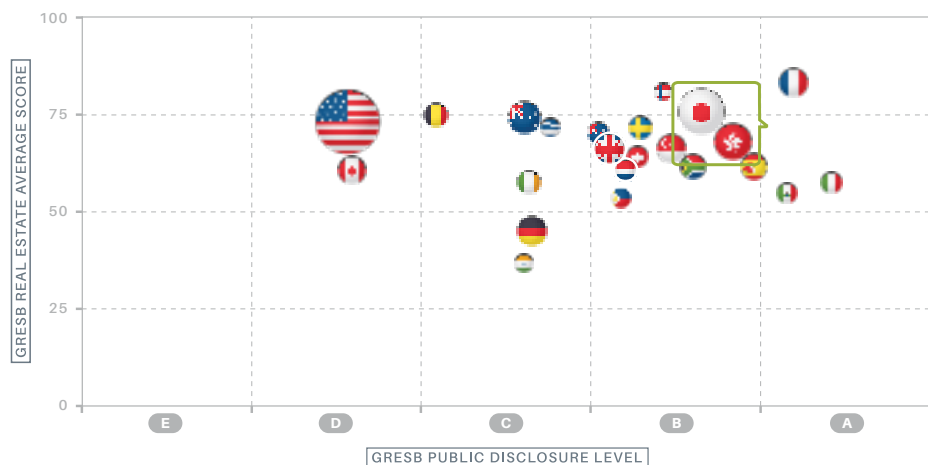
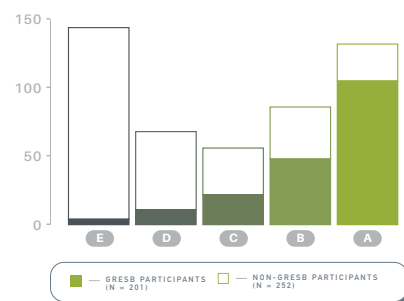
Australia maintains its leadership position but the the performance gap between the regions is narrowing

## GRESB PUBLIC DISCLOSURE

Real estate companies show a clear improvement in the depth and breath of ESG disclosure

GRESB Public Disclosure measures the level of ESG disclosures of the listed real estate sector. The dataset includes 453 listed property companies and REITs, with full coverage of the major listed real estate indices.

Assessment participants have a higher ESG disclosure level than entities that do not participate in the GRESB assessment. Listed companies and REITs from European and Asian countries take the lead in ESG disclosures, with North America and Australia lagging behind. However, the strong year-on-year improvement of ESG disclosure practices in Hong Kong and Japan shows that markets can catch up quickly, if being pressured by capital markets and regulators.



## ASSET-LEVEL REPORTING

Important step towards improved data quality

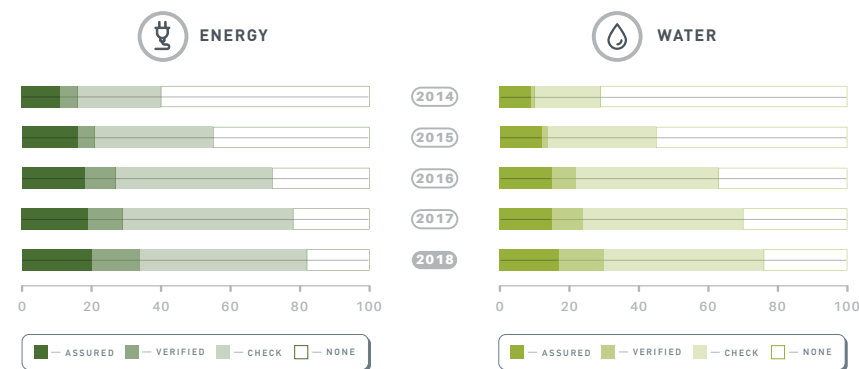


In 2018, GRESB introduced scores for asset-level reporting. This has led to a significant increase in the volume of asset-level data reported. A record 63% of the 79,000 assets included in the benchmark were reported using one of the available asset-level reporting tools.

The starting point is industry investments in third party data checks and assurance. Asset level reporting builds on this work and ensures the transfer of information to investors in a comparable format that can be used globally across all investments. Asset level reporting is not mandatory, but has proven to be an important filter for identifying gaps in data availability and ensuring consistency in the interpretation of the GRESB reporting rules.

## THIRD PARTY REVIEW

Third party review of ESG data is becoming mainstream



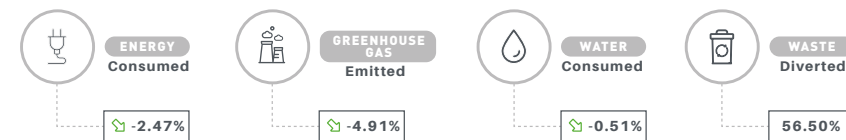
The past five years have seen a transformation in the real estate industry with third party reviews of ESG data becoming mainstream.

83% of energy consumption data was subject to a third party review in 2018, an increase of 43% compared to 2014. The same trend applies to water consumption data, with 77% reviewed by a third party in 2018.

Third-party reviews provide confidence regarding the integrity and reliability of the reported data. Of the three levels of third party reviews, external checks were the most popular form of review, selected by almost half of all 2018 participants. Assurance provides the highest level of scrutiny, but was selected by less than one fifth of participants.

## LIKE-FOR-LIKE CHANGE OF KEY PERFORMANCE INDICATORS

Real estate industry improving on all metrics



The focus on energy efficiency strategies is reflected in the 2.47% average reduction in energy consumption. This is coupled with an important 4.91% reduction in greenhouse gas emissions, accounting for Scope 1, Scope 2, as well as Scope 3 emissions (associated with tenant operations). There are no notable differences in water reduction, but the stable 0.5% like-for-like reduction has a positive net effect. The real estate industry diverted more waste from landfill: 56.5% (compared to 52.9% in 2017)

## INTENSITIES AND BUILDING CERTIFICATIONS PER PROPERTY TYPE

Almost half of the office buildings reported to GRESB have an operational green building certification



Intensity calculations account for external factors, such as weather conditions or occupancy rates, and can normalize for their effects. However, intensities can extremely vary between different property types. Intensity calculations account for external factors such as weather or occupancy levels and normalize their effects, but they can vary a lot between property types.

Approximately 11% of the total floor area of assets included in the 2018 benchmark have a green building certification awarded for design, construction or refurbishment. Almost twice as many participants obtained an operational building certification. Of all property types, offices showed the highest percentage of floor area for which an operational green building certification was obtained, namely 47%. Retail and Hotel followed suit, with roughly 23% of total floor area being certified.

Some 40% of all participants obtained an energy rating for their portfolios. Energy ratings are increasingly made mandatory, which explains the relatively high percentage of covered floor area.