

2015 GRESB Report - Asia Snapshot

Introduction

There are many ESG-related risks and opportunities in the Asian region, and real estate investors are increasingly demanding transparency on sustainability performance from their operators and managers. This enables capital flows to be directed towards relatively high performing property companies and funds, while providing the information necessary to identify and challenge those that do not adequately address material issues.

It is expected that Asia, with its coastal-concentrated and agriculture-dependent populations, will face significant long-term impacts from climate change. As a result, governments are starting to implement regulation to reduce greenhouse gas emissions and are preparing for changing conditions. Since buildings account for around 40% of energy use and one third of greenhouse gas emissions, they will inevitably be a target for new regulation.

A full understanding of the associated risks and opportunities of climate change in Asian property portfolios is needed in order to take appropriate actions. Increased taxation, fines, energy costs and carbon pricing will potentially affect financial valuations, as analysts start to account for environmental externalities. Property companies and funds who ignore these externalities run the risk of being left behind, as Asian regulators catch up with policies already established in other regions.

At the same time, more funding initiatives for sustainable buildings are being launched, reflecting a stronger business case for the Asian region. Evidence of operational cost savings for green buildings through reduced energy and water consumption and lower long-term maintenance costs is being established through regional case studies as well large-scale research projects. Furthermore, studies have shown that in certain markets green buildings can provide higher rental rates, shorter lease-up periods, lower vacancy levels, and improved marketability.

ESG considerations, particularly energy and climate change, will shape Asia's fast growing cities and, in part, determine the health of its people and quality of the environment.

Response Rate

Participation in the 2015 GRESB Survey increased by 13% in the Asian region, to a total of 104 property companies and funds. The aggregate value of the property companies and funds reporting to GRESB is now USD 391 billion (USD 274 billion in 2014). In 2015, Asian participants included:

- Japan: 32%
- China and Hong Kong: 22%
- Singapore: 13%
- India: 7%

The number of participating listed companies increased by 17% to 41, resulting in a market coverage of 39%, as measured by the FTSE EPRA/NAREIT Asia Developed Index. On the private equity side, the number of reporting entities is 63; an increase of 11% compared to 2014. This includes JV's and separate accounts, as well private funds, non-listed companies, and developers. Of the private (non-listed) participants, 43% identify themselves as Core, 25% as Value Added, and 32% as Opportunistic.

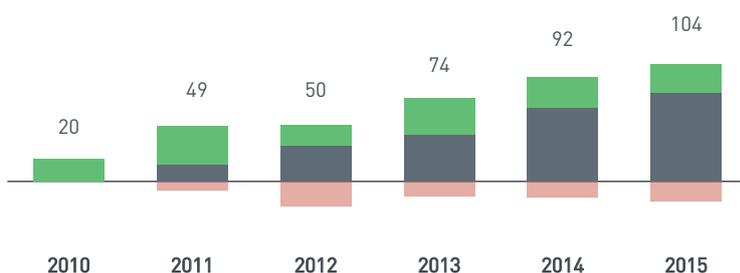
In 2015, GRESB participants from the Asian region represented different combinations of standing investments and development activities:

- Standing investments only: 49%
- Development only: 12%
- Combination of standing investments and development projects: 39%

By 2025, 28 of the world's 37 megacities (cities with a population > 10 million) will be in Asia

Response rate development

- New participants
- Existing participants
- Churn



"GRESB is the pre-eminent global standard-setter for transparent and meaningful ESG reporting in the real estate industry. GRESB's expanding suite of benchmarks and analytic tools provide investors with an invaluable guide to all ESG dimensions of fund-level performance."

Peter Verwer, Chief Executive, APREA

Regional Results

GRESB Scores

In 2015, the GRESB Score for Asia improved by an impressive 18% to an average score of 54. The region performs on par with North America (also 54) and ranks just behind Europe (55).

- Average GRESB Score for all Asian entities: 52 (global: 56)
- Average GRESB Score for listed Asian entities: 58 (global: 61)
- Average GRESB Score for private Asian entities: 51 (global: 54)

The performance improvement for Asia was evenly distributed across the dimensions of Management & Policy and Implementation & Measurement. Both dimensions increased by 18%, with a score of 61 and 51 respectively. These scores reflect regional gains in balancing policy and management with specific implementation measures and monitoring.

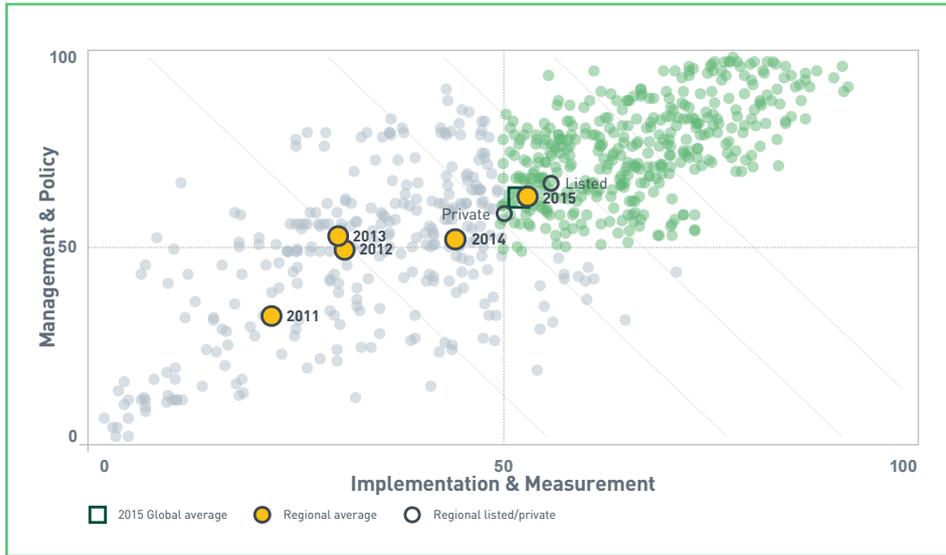
Quadrant Model

The GRESB Quadrant Model underlines the increased performance of the Asian region:

- 57% Green Stars (2014: 32%)
- 2% Green Walk (2014: 4%)
- 13% Green Talk (2014: 21%)
- 28% Green Starter (2014: 34%)

ESG Scores

The GRESB Score is broken down into separate scores for Environmental, Social and Governance (ESG). These scores are calculated based on the allocation of individual questions to E, S, or G. The results for Asia show that GRESB participants score relatively low on Environmental, with an average score of 47. The region scores in line with global results on Social (58) and just below global on Governance (67).



"ANREV's members are leading proponents of sustainability-related standards and reporting in the non-listed real estate industry. We are pleased once again to support GRESB's ground-breaking work in this area"

Alan Dalglish, Chief Executive Officer, ANREV

Aspects Scores

The GRESB Survey is structured into seven unique sustainable Aspects, plus a separate Aspect for New Construction & Major Renovations. The maximum score for each Aspect is the sum of scores for each question in that particular Aspect. The Asian region performs well on the Aspects of Management (81 versus 78 global). However, there are opportunities for improvement on the Aspects of Policy & Disclosure (57 versus 66 global) and Buildings Certifications (24 versus 35 global).



Sustainability Trends

Sustainability Disclosure

Increasingly, stock exchanges in Asia are encouraging listed companies to disclose Environmental, Social and Governance (ESG) information. The stock exchanges of Malaysia, China, Indonesia and Taiwan already require some sort of ESG reporting, while the stock exchanges of Hong Kong and Singapore recently announced plans to increase sustainability reporting on a “comply or explain” basis. In addition, a **growing number of investors** require their investment managers to report on material ESG issues, so they are able to assess risks and opportunities, and allocate their capital towards better managed companies. Of the 104 Asian property companies and funds reporting to the 2015 GRESB assessment, **78%** publicly disclose sustainability performance. Measures of disclosure include:

- Dedicated section of company website: **93%**
- Stand-alone sustainability report: **69%**
- Section of corporate annual report: **65%**
- Integrated Report: **8%**, an increase from 3% in 2014

Alignment of disclosure with reporting standards and framework ensures that the material ESG issues that are most important to stakeholders are reported on.

- Participants with a stand-alone sustainability report aligned with a recognized standard: **79%**, an increase from 73% in 2014

78% of Asia participants publicly disclose their sustainability performance

Environmental Policies & Risks

Much of the **expected global urban growth** will take place in Asia. As a result, the region faces numerous challenges in meeting the needs of the growing urban population, including housing, infrastructure, and transportation. Moreover, urbanization will also lead to an increase in energy consumption and greenhouse gas emissions, further contributing to climate change. This creates business challenges and will put the performance and profitability of organizations at risk. It is therefore important for property companies and funds to not only measure and manage their environmental impact, but also to identify the associated risks. The 2015 GRESB data indicate that **89%** of Asian participants have specific environmental policies, an increase from 82% in 2014. These policies address:

- Energy and water consumption and management: **100%**
- Greenhouse gas emissions: **85%**
- Waste management: **82%**
- Climate change and resilience issues: **49%**

Asian participants also report more frequent efforts to understand risks associated with climate change and natural hazards:

- Climate change risk assessments: **41%** for standing investments (32% in 2014), **47%** for new acquisition (44% in 2014)
- Natural hazard risk assessments, such as flooding and earthquakes: **53%** for standing investments, **46%** of participants for new acquisitions.

Energy & Water

Regional research has shown that green retrofits can result in a decrease of operational building costs, which typically make up around 85% of a building’s total lifecycle cost, and an increase in capital value of assets. Furthermore, energy savings alone typically exceed any cost premiums associated with the design and construction of more efficient buildings, within a reasonable payback period.

Data from the 2015 GRESB participants provides insight into changing energy and water practices. In 2015, **78%** of GRESB participants in the Asia region report conducting technical buildings assessments over the last four years, an increase from 55% in 2014. These assessments are frequently followed by action, with **76%** of participants reporting implementation of energy efficiency improvements within the last four years. The most commonly reported energy saving measures included:

- High-efficiency equipment: **56%**
- Building energy management: **34%**

- Wall/roof replacements: **28%**
- System commissioning: **27%**

Water consumption also drives operational costs and environmental impacts. In 2015, 34% of GRESB participants in the Asia region reported efforts to improve water efficiency over the last four years. The most commonly reported water conservation measures included:

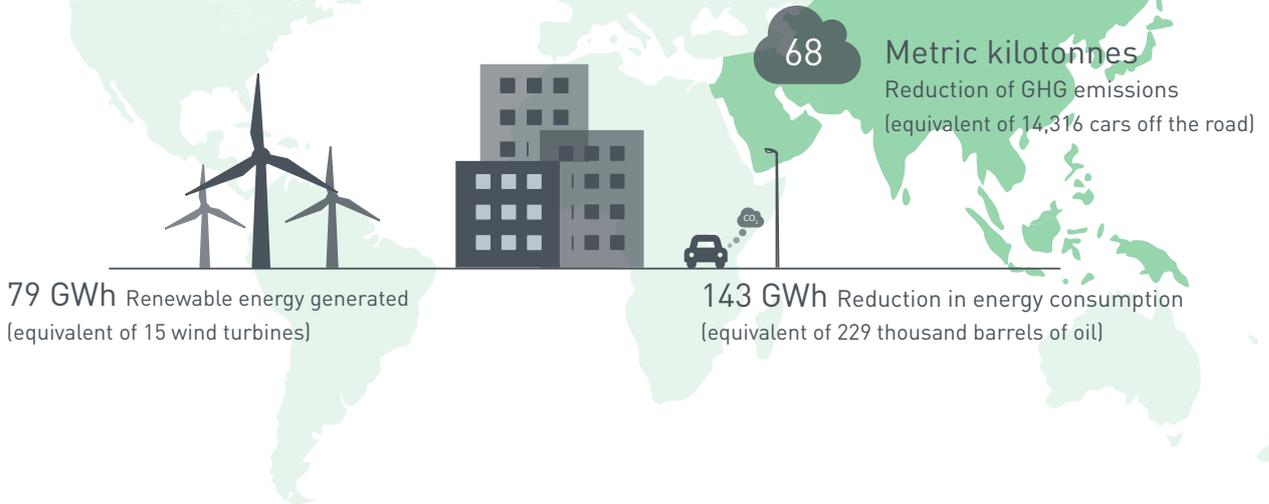
- High-efficiency fixtures: **56%**
- Occupant sensors: **28%**
- On-site waste water treatment: **20%**

Importantly, these actions are also reflected in real operational energy and water savings: the GRESB data shows that the Asian commercial real estate sector reduced its total energy consumption by **1.87%**, reduced its carbon footprint by **2.72%**, and water consumption by **2.69%** (all based on like-for-like data between 2013 and 2014). These reductions bode well for a more efficient, lower-impact built environment.

76% of participants implemented energy efficiency improvements



2013-2014 Consumption Change



Regional Sector Leaders

| Property type | Listed | Listed/Private combined | Private |
|----------------------------------|----------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------|
| Diversified | | CapitaLand Limited (Listed) | |
| Retail | | Lend Lease Asian Retail Investment Fund 1 - <i>Lend Lease</i> (Private) | |
| Office | Keppel REIT | | Invesco Real Estate Asia Fund - <i>Invesco Real Estate</i> |
| Industrial | Mahindra Lifespaces Developers Limited | | Goodman Japan Core Fund - <i>Goodman Group</i> |
| Residential | | Secisui House SI Residential Investment Corporation (Listed) | |
| Diversified - Retail/Office | | Japan Prime Realty Investment Corporation (Listed) | |
| Diversified - Residential/Office | | Hulic Co., Ltd. (Listed) | |

* Global Sector Leader

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