

017 GRESB EVELOPER SNAPSHOT



The development of sustainable buildings is crucial to combating climate change and accelerating the transition to a sustainable, lowcarbon built environment.

Buildings are responsible for around 30% of global greenhouse gas (GHG) emissions on average and 50% of emissions in major cities. Rapid urbanization is accelerating these negative impacts, with emissions expected to double by 2050, under a business-as-usual

Taking appropriate actions throughout the lifecycle of buildings (development, use, and recovery) remains among the most cost effective means of reducing global GHG emissions. Furthermore, the construction and development of sustainable buildings offers significant opportunities for energy reduction, cost savings, job creation, and building a more resilient economy.

The World Green Building Council has set a target for all new buildings to be net-zero by 2030, ensuring that no new carbon emissions are emitted from building operations.

Integrating sustainability into construction and development activities helps meet this target by reducing energy demand and associated emissions during the operational phase of buildings, and by minimizing embodied carbon, waste generation, and the use of finite natural resources during the non-operational phase

At the same time, the sustainable development of new construction and major renovation projects supports adaptation and resilience to climate change, promotes occupant health and well-being, and enhances the positive impact of buildings on cities and local communities.

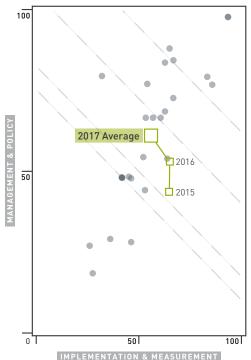
GRESB ASSESSMENT

The "New Construction & Major Renovations" (NC&MR) aspect of the GRESB Real Estate Assessment evaluates efforts to address ESG issues during the design, construction, and renovation of buildings. All GRESB participants reporting on new construction and major renovation projects complete the additional NC&MR aspect of the Real Estate Assessment, while participants that focus on construction and development activities rather than the management of standing investments complete the GRESB Developer

The Developer Assessment is fully aligned with the Real Estate Assessment, and includes the NC&MR aspect. By specifically assessing organizations that focus on construction and development activities, GRESB provides the real estate industry with more relevant comparisons and material insights into best practices in sustainable development.

This year, 27 organizations participated in the Developer Assessment, and 365 real estate companies, funds, and developers filled out the NC&MR aspect.

GRESB DEVELOPER MODEL





Global Average



Management &



Implementation &

2017 DEVELOPER SECTOR LEADERS

LISTED

Goodman Group

Lendlease International Towers Sydney Trust

ABOUT GRESB

GRESB is an industry-driven organization transforming the way capital markets assess the environmental, social and governance (ESG) performance of real asset investments. 850 property companies and funds, jointly representing more than USD 3.7 trillion in assets under management, participate in the GRESB Real Estate Assessment. The Infrastructure Assessment covers 64 funds and 160 assets, and 25 portfolios complete the Debt Assessment.

GRESB data and analytical tools are used by 66 institutional and retail investors, including pension funds and insurance companies, collectively representing over USD 17 trillion in institutional capital, to engage with investment managers to enhance and protect shareholder value.

For more information, visit



ADVANCING NET-ZERO

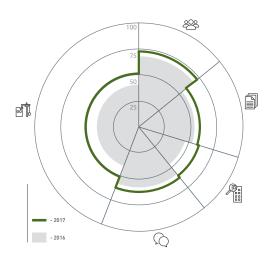
In May 2017, the World Green Building Council published the report "From Thousands to Billions", the first major output from its global project "Advancing Net-Zero". In order to keep global temperature rise in line with the goals of the Paris Agreement, the project aims for all new buildings to be net-zero starting in 2030, while all buildings should be net-zero by 2050.

This means no buildings should be built below net-zero standards beyond 2030, and existing buildings must be renovated at an accelerated rate and to net-zero carbon standards, so that all buildings operate at net-zero carbon by 2050.

The World Green Building Council defines a net-zero building as:

"A highly energy-efficient building with all remaining operational energy use from renewable energy, preferably on-site but also off-site production, to achieve net-zero carbon emissions annually in operation.'

GRESB DEVELOPER ASPECTS





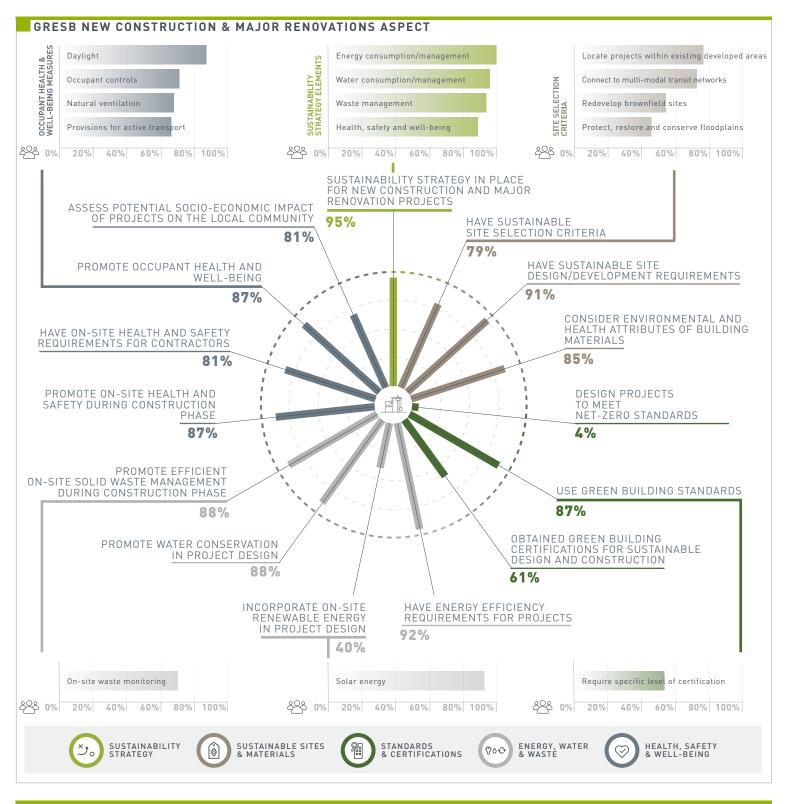


POLICY & DISCLOSURE

© 63

STAKEHOLDER ENGAGEMENT

52 NEW CONSTRUCTION & MAJOR RENOVATIONS



GRESB DEVELOPER ASSESSMENT AND SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs), released by the United Nations in 2015, are a set of 17 global goals comprising a broad range of economic, social and environmental objectives. The GRESB Developer Assessment is aligned with the following SDGs*:

- Goal 3 Good Health and Well-being:
 - Promotion of occupant health and well-being in new construction and major renovation projects (NC11)
- · Goal 7 Affordable and Clean Energy:
 - Incorporation of on-site renewable energy in design of projects (NC7.1)
- Goal 8 Decent Work and Economic Growth:
 - Environmental and social requirements in place for contractors (NC10.1)
 - Promotion of on-site health and safety during construction phase (NC12.1)
- Goal 9 Industry, Innovation and Infrastructure:
 - Sustainability strategy for new construction and major renovation projects (NC1)

- Goal 11 Sustainable Cities and Communities:
 - Use of green building standards (NC5.1)
 - Assessment of potential socio-economic impact of projects on the community (NC13)
- Goal 12 Responsible Consumption and Production:
 - Consideration of environmental and health attributes of building materials (NC4)
 - Promotion of efficient on-site solid waste management during construction phase (NC9)
- Goal 13 Climate Action:
 - Implementation of minimum energy efficiency requirements in design of projects (NC6)
 - Requirement to meet net-zero energy codes and/or standards (NC7.2)
- Goal 15 Life on Land:
 - Sustainable site selection criteria for projects (NC2)
 - Sustainable site design/development requirements (NC3)

^{*} See indicator numbers in the NC&MR aspect of the GRESB Developer Assessment