



2020

Resilience Assessment

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GRESB Resilience Indicators

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Introduction

Worldwide, the frequency, size and cost of disasters is increasing, driven by climate change, population growth, rapid urbanization, and other factors. Sustainability efforts are critical in helping mitigate these factors, including action to reduce greenhouse gas emissions; increase the use of clean, renewable energy sources; conserve water resources; and plan safe, equitable communities. Such efforts are essential and must be continued and expanded. At the same time, businesses or communities must prepare for the changes that lie ahead. Organizations need to identify hazards, assess risks, and systematically adapt to a changing climate and changing world.

Long-term, global trends including population growth, urbanization, and climate change necessitate that efforts to manage property and infrastructure in the future cannot entirely rely on past experience. Scientific evidence points to significant change, along with great uncertainty about local and regional impacts. The challenges of this dynamic future are daunting, but they also provide significant business opportunities. Scientists can already make reliable predictions about many types of impacts, along with information needed to identify the most vulnerable places and people. In parallel, new technologies and strategies are emerging that can mitigate local hazards, reduce risks, and protect life and property. The availability of this understanding and opportunities for positive action create the need to understand how property and infrastructure companies are acting to use these tools to manage risk and, in some cases, seize business opportunities.

These circumstances have motivated the development of the GRESB Resilience Module (the Module). The Module has two primary goals:

1. Meet investor demand for information about the resilience of property and infrastructure companies and funds; *and*
2. Provide more information about the processes that property and infrastructure companies use to identify, assess, and manage climate-related risks.

Definitions

For the Module, resilience is defined as the ability of an entity (i.e., organization or fund) to plan for, respond to, and rebound from short-term shocks and long-term stressors. This encompasses the Module's original working definition, "The ability to survive and thrive when subjected to shocks and stressors..."

The Resilience Module addresses two fundamental categories of climate-related risk identified by the Financial Stability Board's [Task Force on Climate-related Financial Disclosures](#) (TCFD): transition risk and physical risk.

Transition risks refer to those posed by market, policy, legal, reputational, technological, and other risk factors that arise from the ongoing shift to a low-carbon economy necessary to achieve the goals of the United Nations [Paris Agreement](#). This transition may create new liabilities for companies, particularly those reliant on inefficient or carbon-intensive technologies. Such companies may not only be at risk from the increased cost of complying with current and future regulation (e.g., U.K. Minimum Energy Efficiency Standards for leased property), but may also exhibit competitive disadvantages. However, the transition will also create new opportunities for companies capable of providing low-carbon solutions such as energy efficiency programs or buildings powered by renewable energy.

Physical risks are those associated with a myriad of acute shocks (e.g., wildfires, flood events, tropical and extratropical storms) and chronic stresses (e.g., changing heating and cooling degree days, precipitation levels) caused or exacerbated by climate change.

While the Resilience Module aligns with the TCFD in addressing both transition and physical risks, it takes a broader perspective than the TCFD by evaluating and scoring other resilience-related measures beyond these two major categories. Notably, the Module provides indicators related to social risks. Social risks in the 2020 Module are constrained to those caused or exacerbated by transition or physical climate-related risk factors – i.e., those that are climate-related. Social risk factors include social shocks and stressors such as labor market disruption, building inaccessibility, inequity, loss of life during catastrophic events, and others, many of which are described by the global 100 Resilient Cities program. Other social risks unrelated to climate change are addressed in the core assessment.

For the purpose of 2020 reporting, the Resilience Module provides relevant, actionable information related

to transition, physical, and social risks and opportunities facing real estate and infrastructure companies around the world.

Scope and Purpose

The Resilience Module provides investors with information needed to understand how real estate and infrastructure companies and funds are identifying and assessing long-term trends, preparing for potentially disruptive events and changing conditions, and ultimately becoming more resilient over time. The Module provides companies and funds with the opportunity to communicate their governance, risk assessment, business strategy, and performance measurement for climate-related risks and opportunities.

The Resilience Module was designed to align with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). While it is not meant to, by itself, constitute a complete climate-related risk disclosure in accordance with the TCFD, it nonetheless provides a strong basis for one in the context of real estate and infrastructure fund management.

The Resilience Module does not attempt to assess or communicate specific risks to *individual* assets, such as homes or buildings. Rather, the Resilience Module provides an entity-level framework to report on the processes used to conduct such risk assessments and use those results to manage risk and create value. Stakeholders interested in asset-level risk assessment and management are referred to a growing number of tools such as those identified in the [GRESB \(2018\) Special Report on Real Assets and Resilience](#).

Timeline

The GRESB Resilience Module is a three-year effort to improve reporting and benchmarking of climate risk and resilience management by property and infrastructure companies. The stages of development of the Module are as follows:

- 2018: The 2018 Resilience Module was an initial high-level screen intended to raise awareness, motivate internal discussion, and provide a basic level of transparency for investors. Results from 2018 Real Estate and Infrastructure Assessments are available in the [GRESB \(2018\) Special Report: Real Assets & Resilience](#).
- 2019: The 2019 Resilience Module built upon the high-level criteria, with more rigour with respect to the contents and quality of evidence. It also sought to increase the Module's alignment with the recommendations of the TCFD. The 2019 Resilience Module was opened to participation by Infrastructure Funds.
- 2020: The 2020 Resilience Module makes improvements in reporting indicators based on two-years of experience, with continued emphasis on increasing alignment with the recommendations of the TCFD. The 2020 Resilience Module also attempts to provide more practical and nuanced answer choices related to scenario analysis, as well as the identification, assessment, and management of specific risks. This is the last year that a distinct Resilience Module is planned to be offered.

In 2021, select climate risk and resilience indicators are expected to be incorporated, scored, and reported as part of the core Real Estate and Infrastructure Assessments.

Structure

The 2020 Resilience Module has four sections:

1. Leadership & Governance
2. Risk Assessment
3. Business Strategy & Financial Planning
4. Performance Metrics & Targets

The Resilience Module is available for the Real Estate, Developer, Infrastructure Asset and Infrastructure Fund Assessment.

The Resilience Module contains indicator structures familiar to users of the GRESB Real Estate or Infrastructure Assessments. Each item consists of a "Yes or No" question. Either choice provides the option of providing additional text comments. Selecting "Yes" provides a set of sub-options to refine the response and the option to provide supporting evidence in the form of an uploaded document or hyperlink.

Data Access

Participants in the Resilience Module can control access to Module results via the GRESB Portal by checking a box to confirm whether they wish to share their Module results with their investors. If a participant elects to share its Module results, the results will appear as a separate section in the participant's GRESB Benchmark Report. If a participant chooses not to share its results, Resilience Module results will not appear in the Benchmark Report. This selection can be changed upon request [here](#). Aggregated information from all Resilience Module participants will be used as the basis for a market report and related research.

GRESB Resilience Indicators

RS1 Has the organization assigned responsibility for the climate risk and resilience of the entity to an employee and/or a team?

☐ Yes

The entity has assigned responsibility to (select all that apply):

☐ An employee with primary responsibility for the management of climate risk and resilience is:

☐ The same individual as the senior decision-maker responsible for sustainability (identified in the Management Aspect of the main GRESB Assessment).

Scope of responsibility for this individual includes:

☐ Climate-related transition risks

☐ Physical risks

☐ Social risks

☐ A different individual(s) from the senior decision-maker responsible for sustainability.

Provide the details for the most senior of these employees

Name: _____

Job title: _____

E-mail: _____

Scope of responsibility for this individual includes:

☐ Climate-related transition risks

☐ Physical risks

☐ Social risks

☐ A team, group, or committee with responsibility for the management of climate risk and resilience

List the functional groups or departments represented on the team, group, or committee

Scope of responsibility for this team, group, or committee includes:

☐ Climate-related transition risks

☐ Physical risks

☐ Social risks

☐ No

Provide additional context for the answer provided (maximum 250 words)

RS2 Does the organization have a systematic process for communication and review of resilience-related information by the most senior governance body with responsibility for the entity?

☐ Yes

☐ Climate-related transition risks

Does the process include periodically informing the highest-level decision maker or decision-making body with responsibility for the entity?

☐ Yes

☐ No

The process includes (select all that apply):

☐ Written communications

☐ Presentations or briefings

☐ Briefing documents for review by the Board of Directors

☐ Other: _____

The materials from the communication and review process are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

☐ Physical risks

Does the process include periodically informing the highest-level decision maker or decision-making body with responsibility for the entity?

☐ Yes

☐ No

The process includes (select all that apply)

☐ Written communications

☐ Presentations or briefings

☐ Briefing documents for review by the Board of Directors

☐ Other: _____

The materials from the communication and review process are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

☐ Other: _____

☐ Social risks

Does the process include periodically informing the highest-level decision maker or decision-making body with responsibility for the entity?

☐ Yes

☐ No

The process includes (select all that apply)

☐ Written communications

☐ Presentations or briefings

☐ Briefing documents for review by the Board of Directors

☐ Other: _____

The materials from the communication and review process are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

Can the entity provide evidence as an UPLOAD or URL?

☐ Yes

UPLOAD or URL _____

Indicate where in the evidence the relevant information can be found _____

☐ No

☐ No

Provide additional context for the answer provided (maximum 250 words)

Does the organization have a systematic process to incorporate climate risk and resilience into planning, budgeting, evaluation, and/or similar activities?

☐ Yes

☐ Transition risk

Risks and opportunities are explicitly included in entity-level planning

☐ Budgeting

☐ Performance review

☐ Work plans

☐ Other: _____

☐ Physical risk

Risks and opportunities are explicitly included in entity-level planning

☐ Budgeting

☐ Performance review

☐ Work plans

☐ Other: _____

☐ Social risk

Risks and opportunities are explicitly included in entity-level planning

☐ Budgeting

☐ Performance review

☐ Work plans

☐ Other: _____

Can the entity provide evidence as an UPLOAD or URL?

☐ Yes

UPLOAD or URL _____

Indicate where in the evidence the relevant information can be found _____

☐ No

☐ No

RS4 Does the organization have a systematic process to assess the entity's exposure to climate-related transition risk?

☐ Yes

☐ The process is documented

The nature of the process is disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

☐ The process considers forward-looking scenarios

Select all that apply:

☐ Representative Concentration Pathway 2.6

☐ Representative Concentration Pathway 4.5

☐ Representative Concentration Pathway 6.0

☐ Representative Concentration Pathway 8.5

☐ IEA Current Policies Scenario

☐ IEA Stated Policies Scenario

☐ IEA Sustainable Development Scenario

☐ IEA 2DS

☐ IEA B2DS

☐ PRI Inevitable Policy Response "Forecast Policy Scenario"

☐ Rockström et al. (2017) 1.5°C Scenario

☐ Custom scenarios developed for the entity

☐ Other: _____

☐ The process identifies material climate-related transition risk factors

Name the material risk factor(s) identified:

☐ Transition risk factor 1: _____

☐ Transition risk factor 2: _____

☐ Transition risk factor 3: _____

Material risk(s) identified for the entity are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

Can the entity provide evidence as an UPLOAD or URL?

☐ Yes

UPLOAD or URL_____

Indicate where in the evidence the relevant information can be found_____

☐ No

☐ No

Provide additional context for the answer provided (maximum 250 words)

Does the organization have a systematic process to assess the entity's exposure to physical climate risks?

☐ Yes

☐ The process is documented

The nature of the process is disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

☐ The process considers forward-looking scenarios

Select all that apply:

☐ Representative Concentration Pathway 2.6

☐ Representative Concentration Pathway 4.5

☐ Representative Concentration Pathway 6.0

☐ Representative Concentration Pathway 8.5

☐ IEA Current Policies Scenario

☐ IEA Stated Policies Scenario

☐ IEA Sustainable Development Scenario

☐ IEA 2DS

☐ IEA B2DS

☐ PRI Inevitable Policy Response "Forecast Policy Scenario"

☐ Rockström et al. (2017) 1.5°C Scenario

☐ Custom scenarios developed for the entity

☐ Other: _____

☐ The process identifies material climate-related physical risk factors

Name the material risk factor(s) identified:

☐ Physical risk factor 1: _____

☐ Physical risk factor 2: _____

☐ Physical risk factor 3: _____

Material risk(s) identified for the entity are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

Can the entity provide evidence as an UPLOAD or URL?

☐ Yes

UPLOAD or URL _____

Indicate where in the evidence the relevant information can be found _____

☐ No

☐ No

Provide additional context for the answer provided (maximum 250 words)

RS6 Does the organization have a systematic process to assess the entity's exposure to social risks?

☐ Yes

☐ The process is documented

The nature of the process is disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

☐ The process considers forward-looking scenarios

Select all that apply:

☐ Representative Concentration Pathway 2.6

☐ Representative Concentration Pathway 4.5

☐ Representative Concentration Pathway 6.0

☐ Representative Concentration Pathway 8.5

☐ IEA Current Policies Scenario

☐ IEA Stated Policies Scenario

☐ IEA Sustainable Development Scenario

☐ IEA 2DS

☐ IEA B2DS

☐ PRI Inevitable Policy Response "Forecast Policy Scenario"

☐ Rockström et al. (2017) 1.5°C Scenario

☐ Custom scenarios developed for the entity

☐ Other: _____

☐ The process identifies material climate-related social risk factors

Name the material risk factor(s) identified:

☐ Social risk factor 1: _____

☐ Social risk factor 2: _____

☐ Social risk factor 3: _____

Material risk(s) identified for the entity are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

Can the entity provide evidence as an UPLOAD or URL?

☐ Yes

UPLOAD or URL_____

Indicate where in the evidence the relevant information can be found_____

☐ No

☐ No

Provide additional context for the answer provided (maximum 250 words)

RS7 Has the organization assessed the potential financial impacts of climate-related risks on the entity?

☐ Yes

Please describe the potential impacts that each of the risk factors identified in RS4, RS5, and RS6 have on the entity (select all that apply):

☐ Transition risks

☐ Transition risk 1

Please describe the potential financial impact of the transition risk factor 1 (identified in RS4) on the entity:

On what timeframe is this risk expected to impact the entity?

- ☐ It is already impacting the entity.
- ☐ Within the timeframe of the investment horizon of the entity.
- ☐ After the timeframe of the investment horizon of the entity but within the lifetime of the real assets included in the entity.

☐ Transition risk 2

Please describe the potential financial impact of the transition risk factor 2 (identified in RS4) on the entity:

On what timeframe is this risk expected to impact the entity?

- ☐ It is already impacting the entity.
- ☐ Within the timeframe of the investment horizon of the entity.
- ☐ After the timeframe of the investment horizon of the entity but within the lifetime of the real assets included in the entity.

☐ Transition risk 3

Please describe the potential financial impact of the transition risk factor 3 (identified in RS4) on the entity:

On what timeframe is this risk expected to impact the entity?

- ☐ It is already impacting the entity.
- ☐ Within the timeframe of the investment horizon of the entity.
- ☐ After the timeframe of the investment horizon of the entity but within the lifetime of the real assets included in the entity.

☐ Physical risks

☐ Physical risk 1

Please describe the potential financial impact of the physical risk factor 1 (identified in RS5) on the entity:

On what timeframe is this risk expected to impact the entity?

- ☐ It is already impacting the entity.

☐ It is already impacting the entity.

☐ Within the timeframe of the investment horizon of the entity.

☐ After the timeframe of the investment horizon of the entity but within the lifetime of the real assets included in the entity.

☒ Physical risk 2

Please describe the potential financial impact of the physical risk factor 2 (identified in RS5) on the entity:

On what timeframe is this risk expected to impact the entity?

☐ It is already impacting the entity.

☐ Within the timeframe of the investment horizon of the entity.

☐ After the timeframe of the investment horizon of the entity but within the lifetime of the real assets included in the entity.

☒ Physical risk 3

Please describe the potential financial impact of the physical risk factor 3 (identified in RS5) on the entity:

On what timeframe is this risk expected to impact the entity?

☐ It is already impacting the entity.

☐ Within the timeframe of the investment horizon of the entity.

☐ After the timeframe of the investment horizon of the entity but within the lifetime of the real assets included in the entity.

☒ Social risks

☒ Social risk 1

Please describe the potential financial impact of the social risk factor 1 (identified in RS6) on the entity:

On what timeframe is this risk expected to impact the entity?

☐ It is already impacting the entity.

☐ Within the timeframe of the investment horizon of the entity.

☐ After the timeframe of the investment horizon of the entity but within the lifetime of the real assets included in the entity.

☒ Social risk 2

Please describe the potential financial impact of the social risk factor 2 (identified in RS6) on the entity:

On what timeframe is this risk expected to impact the entity?

☐ It is already impacting the entity.

☐ Within the timeframe of the investment horizon of the entity.

- ☐ After the timeframe of the investment horizon of the entity but within the lifetime of the real assets included in the entity.

☒ Social risk 3

Please describe the potential financial impact of the social risk factor 3 (identified in RS6) on the entity:

On what timeframe is this risk expected to impact the entity?

- ☐ It is already impacting the entity.
- ☐ Within the timeframe of the investment horizon of the entity.
- ☐ After the timeframe of the investment horizon of the entity but within the lifetime of the real assets included in the entity.

Can the entity provide evidence as an UPLOAD or URL?

- ☐ Yes

UPLOAD or URL _____

Indicate where in the evidence the relevant information can be found _____

- ☐ No

- ☐ No

Provide additional context for the answer provided (maximum 250 words)

RS8 Has the organization implemented resilience-related business strategies associated with the entity during the reporting year?

☐ Yes

Please select and describe asset type-specific strategies used to create value and/or manage the (potential) risk impacts described in RS7 (select all that apply):

☐ New construction projects

☐ Transition risk management and value creation strategies: _____

☐ Physical risk management and value creation strategies: _____

☐ Social risk and management value creation strategies: _____

☐ Standing investments

☐ Transition risk management and value creation strategies: _____

☐ Physical risk management and value creation strategies: _____

☐ Social risk management and value creation strategies: _____

☐ New acquisitions

☐ Transition risk management and value creation strategies: _____

☐ Physical risk management and value creation strategies: _____

☐ Social risk management and value creation strategies: _____

Can the entity provide evidence as an UPLOAD or URL?

☐ Yes

UPLOAD or URL_____

Indicate where in the evidence the relevant information can be found_____

☐ No

☐ No

Provide additional context for the answer provided (maximum 250 words)

RS9 Did the organization have specific climate risk and/or resilience-related targets or goals associated with the entity during the reporting year?

☐ Yes

Please describe climate-related risk management and/or resilience-related targets:

☐ Transition risk management and value creation

Targets or goals: _____

Target year: _____

Transition risk management and value creation targets and goals are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

☐ Physical risk management and value creation

Targets or goals: _____

Target year: _____

Physical risk management and value creation targets and goals are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other

☐ Social risk management and value creation

Targets or goals: _____

Target year: _____

Social risk management and value creation targets and goals are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

Can the entity provide evidence as an UPLOAD or URL?

☐ Yes

UPLOAD or URL _____

Indicate where in the evidence the relevant information can be found_____

☐ No

☐ No

Provide additional context for the answer provided (maximum 250 words)

RS10 Did the organization track specific climate risk and/or resilience-related performance metrics associated with the entity during the reporting year?

☐ Yes

Please describe the metrics used to track outcomes:

☐ Transition risk management and resilience performance metrics

List the metrics related to the most material issues facing the entity:

Tracking of performance metrics:

☐ Continuous

☐ Monthly

☐ Quarterly

☐ Annual

☐ Other

These performance metrics are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

☐ Physical risk management and resilience performance metrics

List the metrics related to the most material issues facing the entity:

Tracking of performance metrics:

☐ Continuous

☐ Monthly

☐ Quarterly

☐ Annual

☐ Other

These performance metrics are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

☒ Social risk management and resilience performance metrics

List the metrics related to the most material issues facing the entity:

Tracking of performance metrics:

☐ Continuous

☐ Monthly

☐ Quarterly

☐ Annual

☐ Other

These performance metrics are disclosed to (if disclosed):

☐ The public

☐ Investors upon request

☐ Other stakeholders upon request

☐ Other: _____

Can the entity provide evidence as an UPLOAD or URL?

☐ Yes

UPLOAD or URL _____

Indicate where in the evidence the relevant information can be found _____

☐ No

☐ No

Provide additional context for the answer provided (maximum 250 words)
