

G R E S B[®]
INFRASTRUCTURE

2020

Asset Reference Guide

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Disclaimer: 2020 GRESB Infrastructure Asset Assessment Reference Guide

The 2020 GRESB Infrastructure Asset Assessment Reference Guide (“Reference Guide”) accompanies the 2020 GRESB Infrastructure Asset Assessment and is published both as a standalone document and in the GRESB Portal alongside each Assessment indicator. The Reference Guide reflects the opinions of GRESB and not of our members. The information in the Reference Guide has been provided in good faith and is provided on an “as is” basis. We take reasonable care to check the accuracy and completeness of the Reference Guide prior to its publication. While we do not anticipate major changes, we reserve the right to make modifications to the Reference Guide. We will publicly announce any such modifications.

The Reference Guide is not provided as the basis for any professional advice or for transactional use. GRESB and its advisors, consultants and sub-contractors shall not be responsible or liable for any advice given to third parties, any investment decisions or trading or any other actions taken by you or by third parties based on information contained in the Reference Guide.

Except where stated otherwise, GRESB is the exclusive owner of all intellectual property rights in all the information contained in the Reference Guide. While we do not anticipate major changes, we reserve the right to make modifications prior to the official start of the 2020 reporting year on April 1 and the official release of the 2020 Infrastructure Asset Assessment. We will publicly announce any such modifications.

The GRESB Assessments

About GRESB

Mission-driven and investor-led, GRESB is the environmental, social and governance (ESG) benchmark for real assets. We work in collaboration with the industry to provide standardized and validated ESG data to the capital markets. The 2019 real estate benchmark covers more than 1,000 property companies, real estate investment trusts (REITs), funds, and developers. Our coverage for infrastructure includes 500 infrastructure funds and assets. Combined, GRESB represents USD 4.5 trillion in real asset value. More than 100 institutional investors, with over USD 22 trillion AUM, use GRESB data to monitor their investments, engage with their managers, and make decisions that lead to a more sustainable real asset industry.

For more information, visit [gresb.com](https://www.gresb.com). Follow @GRESB on Twitter.

Overview of GRESB Assessments

GRESB Real Estate Assessment

The GRESB Real Estate Assessment is the global standard for ESG benchmarking and reporting for listed property companies, private property funds, developers and investors that invest directly in real estate. The Assessment evaluates performance against three ESG Components - Management, Performance, and Development. The methodology is consistent across different regions, investment vehicles and property types and aligns with international reporting frameworks, such as GRI and PRI.

The GRESB Real Estate Assessment provides investors with actionable information and tools to monitor and manage the ESG risks and opportunities of their investments, and to prepare for increasingly rigorous ESG obligations. Assessment participants receive comparative business intelligence on where they stand against their peers, a roadmap with the actions they can take to improve their ESG performance and a communication platform to engage with investors.

(Real Estate) Supplement: NAREIT Leader in the Light

GRESB works in close collaboration with the National Association of Real Estate Investments Trusts (Nareit), a GRESB Industry Partner. NAREIT encourages its corporate members to complete the annual GRESB Real Estate Assessments, which, for the past seven years, has been the basis for their annual Leader in the Light Award competition. The Leader in the Light Awards are presented to REITs in eight property sectors: Diversified, Global (for non-U.S. companies), Health Care, Industrial, Lodging/Resorts, Office, Residential and Retail. If there are both large and small cap entries that meet the awards criteria in a given property sector, awards are presented to both the leading large and small cap companies. To participate in the Leader in the Light Award program, Nareit members must complete both the GRESB Real Estate Assessment and the Leader in the Light Supplement. Once all sections of the GRESB Real Estate Assessment are completed, including the Leader in the Light Supplement, participants are able to submit their entire submission which will automatically be included in the Leader in the Light Award competition.

GRESB Infrastructure Assessments

The GRESB Infrastructure Assessments are an ESG engagement and benchmarking tool for institutional investors, fund managers, infrastructure companies and asset operators working in the infrastructure space.

There are two complimentary GRESB Infrastructure Assessments: a Fund Assessment and an Asset Assessment. Both address critical aspects of ESG performance through a globally applicable and standardized reporting and benchmarking framework. The Fund Assessment is intended for infrastructure funds and portfolios of assets, while the Asset Assessment is meant to be completed by the individual underlying assets (portfolio companies). Both Assessments cover the full breadth of infrastructure sectors, including:

- Data infrastructure
- Energy and water resources
- Environmental services
- Network utilities
- Power generation x-renewables
- Renewable power
- Social infrastructure
- Transport

The GRESB Infrastructure Assessment provides investors with actionable information and tools to monitor and manage the ESG risks and opportunities of their investments, and to prepare for increasingly rigorous ESG obligations. In turn, GRESB Infrastructure Assessment participants receive comparative business intelligence

on where they stand against their peers, a roadmap with actions they can take to improve their ESG performance and a communication platform to engage with investors.

GRESB (Real Estate and Infrastructure) Public Disclosure

[GRESB Public Disclosure](#)

evaluates the level of ESG disclosure of listed companies and investment vehicles for an entire investable universe. The evaluation is based on a set of indicators aligned with the GRESB Real Estate and Infrastructure Assessments. It provides investors with a resource hub to access ESG disclosure documents across their full listed investment portfolio and make comparisons against an investable universe with full coverage.

GRESB Public Disclosure data is initially collected by the GRESB team for selected companies, including both 2019 GRESB Real Estate and Infrastructure Asset Assessment participants and non-participants. All data collected must come from publicly available sources, private documents are not accepted.

All constituents have the opportunity to review and update the data collected prior to it becoming accessible to GRESB Listed Investor Members. GRESB Public Disclosure consists of four Aspects: Governance of ESG, Implementation, Operational Performance and Stakeholder Engagement. Together, these Aspects contribute towards a Public Disclosure Level, expressed through an A to E sliding scale.

(Real Estate and Infrastructure) Supplement: Resilience Module

The GRESB Resilience Module is an optional supplement to the GRESB Real Estate and Infrastructure Assessments. The Resilience Module evaluates 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 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.

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. Additionally, while the Resilience Module aligns with the TCFD, it takes a broader perspective than the TCFD by providing indicators related to social risks caused or exacerbated by transition or physical climate-related risk factors.

2020 Assessments Structure

The 2020 Assessment development process reconfirmed that the Assessments address material ESG topics for real assets. As a result, the 2020 development process was focused on making structural changes to the Assessments rather than making extensive content changes.

The structural changes arise from the introduction of the separate Management, Performance and Development Components (the latter is for the Real Estate Assessment only). In both Real Estate and Infrastructure Assessments, the focus has been to simplify reporting and facilitate greater accuracy of the reported information.

Overall, the 2020 Assessments provide greater consistency between the Real Estate and Infrastructure Assessments, improved alignment with other ESG reporting standards and frameworks, and progressively greater focus on performance measurement. The Assessments also enables GRESB to provide new data and analytical tools in the portal and support a further evolution in data quality.

The starting point for the Assessment development process was the 2019 Assessments. The 2019 indicators have been allocated to the new Management, Performance and Development components, on the basis that:

- The Management Component (all Assessments) measures the entity's strategy and leadership management, policies and processes, risk management, and stakeholder engagement approach, composing of information collected at the entity level.
- The Performance Component (Real Estate Assessment, Infrastructure Asset Assessment) measures the entity's asset portfolio performance, comprising of information collected at the asset level. It is suitable for any company with operational assets.
- The Development Component (Real Estate Assessment only) measures the entity's efforts to address ESG issues during the design, construction, and renovation of buildings. This component is suitable for entities involved in new construction (building design, site selection and/or construction) and/or major renovation projects, with on-going projects or completed projects during the reporting year.

For more information about the 2020 Assessments development process, [click here](#).

Participation Fees

The Assessment participation fee applies to all GRESB Assessments. This means that Infrastructure Assets will need to pay a participation fee in 2020. Participants may choose to complete just one Assessment component (Management, Performance, or Development), but the standard participation fee applies regardless.

Entities can participate in the GRESB Assessments for their first year for free. The entity will be benchmarked and receive a free Scorecard. They will have the option of purchasing a Benchmark Report.

Entities headquartered in non-OECD countries can also participate in the GRESB Assessments for free. The entity will be benchmarked and receive a free Scorecard with their GRESB Score. They will have the option of purchasing a Benchmark Report.

Other products and services (e.g. Response Checks, Customized Benchmark Reports, training seats, etc.) are no longer bundled with the Assessment participation fee. This allows participants to select only those products and services they require.

Additional information about the 2020 participation fee is available [here](#).

Timeline & Process

The Assessment Portal opens on April 1, 2020. The submission deadline is July 1, 2020 (23:59:59 PST), providing participants with a three-month window to complete the Assessment. This is a fixed deadline, and GRESB will not accept submissions received after this date. GRESB validates and analyzes all participants' Assessment submissions.

The GRESB validation process starts on June 15, 2020 and continues until July 31, 2020. Participants may be contacted during this time to clarify any issues with their response.

In 2020 GRESB introduces a new Review Period in the Assessment Cycle to further strengthen the reliability of the Assessments and benchmark results. The Review Period will start on September 1, when preliminary individual GRESB results will be made available to all participants and run for the month. During the Review Period, participants will be able to submit a review request to GRESB using a dedicated form.

The final results will be launched to both participants and Investor Members on October 1. Public Results events and other results outputs will be scheduled for October and November in order to accommodate the September Review Period.

For more information on the Review Period see [Appendix 5](#).

For more information about the 2020 Assessment timeline, [click here](#)

Response Check

A [Response Check](#) is a high-level check of a participant's GRESB submission. The Response Check is carried out by the GBCI Validation team and features a careful review of Assessment responses followed by a 1-hour discussion call. It can be particularly useful for first time participants.

The Response Check does not exclude the participant from any element of the validation process, nor does it guarantee a better GRESB score. It is intended to ensure that no important details have been overlooked in the

submission and provides the opportunity to ask for additional guidance and clarification on the GRESB Assessment indicators. The Response Check helps reduce errors that may adversely impact Assessment results and identifies inconsistent responses and incorrect answer formats.

The Response Check fee is 1,750 EUR (exclusive of VAT). The Response Check is available for request from April 1 to June 1, 2020 (11:59:59 p.m., PST Pacific time) subject to available resources availability. GRESB strongly encourages participants to place their request as early as possible. The Response Check can be requested before the Assessment has been completed, but the scope of the review will be limited the information filled in at the time of the request.

Guidance & Support

The Assessment Portal includes indicator-specific guidance, available under the “Guidance” buttons that explains:

- The intent of each indicator;
- The requirements for each response;
- The type of validation that applies ;
- Basic scoring information and the number of points available;
- Explanation of any terminology used;
- References to any third-party documents.

In addition to the guidance in the Portal, each Assessment is accompanied by a Reference Guide (this guide). The Reference Guide provides introductory information on the Assessments and a report-format version of the indicator-by-indicator guidance that is available under the Guidance tab in the Portal.

Moreover, there are several tools and functionalities in the Portal to support submissions. For example, the Portal has real-time error detection systems and warnings. More detail can be found in Participant Tools.

GRESB works with a select group of Partners who can help participants with their GRESB Infrastructure Assessment submission. To learn more about the services offered by GRESB Partners, take a look at our [Partner Directory](#).

Participants are able to contact the [GRESB Helpdesk](#) at any time for support and guidance.

GRESB Assessment training program

The GRESB Assessment Training is designed to help GRESB participants, potential participants and other GRESB stakeholders (managers, consultants, data partners) improve their ESG reporting through the GRESB Assessments.

GRESB has launched a free online training platform in 2020. The training courses are modular and self-paced, walking participants through the various aspects of the Assessments, summarizing changes in 2020 compared to last year, and providing detailed examples and tips for a successful submission. Registration will be available via this [link](#).

Dates and locations for the training can be found [here](#).

Outputs

The preliminary results are published in September and final results on October 1 after the Review Period. Participants will receive the following outputs (subject to payment of participation fees as noted earlier):

- Scorecard
- [Benchmark Report](#)
- Use of the [Portfolio Analysis Tool](#)

Additional products and services, such as customized Benchmark Reports (more information can be found [here](#)), can be purchased via the Assessment portal following the results release.

Access to Data

Data is submitted to GRESB through a secure online platform and can only be seen by GRESB Staff and authorized personnel from GRESB's validation service provider, GBCI, Inc. ('GBCI'). GRESB benchmark scores are not made public. For listed entities, the entity name is disclosed in the Benchmark Report, as well as the entity names of listed peer group constituents.

Access to results

Data collected through the GRESB Infrastructure Assessments is only disclosed to the participants themselves and any GRESB Investor and Fund Manager Members that have been granted access by the participant. GRESB Investor Members and/or Fund Manager Members must request access to participant data in the GRESB Portal.

Participants must individually approve data access requests from GRESB Investor and Fund Manager Members. A request is received via email and, upon approval by the participant, the requesting GRESB Member may view the participant's Benchmark Report. Participants may reject data access requests. Rejecting a request blocks the requesting member's access to the participant's results.

Participants should always check the identity of the organization requesting access to GRESB Infrastructure Assessment results.

No other third parties will see the data.

Grace Period

GRESB offers participants reporting for the first time the option to not disclose their results to their investors. This 'Grace Period' gives participants a year to familiarize themselves with the GRESB reporting and assessment process before sharing results with GRESB Investor Members.

While the names of Grace Period participants are disclosed, Investor Members are not able to request access to their results. Grace Period participants receive a GRESB Scorecard and have the opportunity to purchase a Benchmark Report for a more in-depth analysis of their ESG performance.

Grace Period participants can use their Scorecard and Benchmark Report to identify opportunities to improve their performance for future submissions. First-time participants wishing to opt for the Grace Period can select the option from the settings section in the Assessment Portal. Note that the Grace Period is not available in the second year of participation, regardless of whether it was used in the first year or not.

It is possible to 'lift' or 'remove' the Grace Period status immediately after results are released. This can be done through a formal request to the [GRESB Helpdesk](#)

Access to uploaded evidence

Documentation provided as evidence can be made available to GRESB Investor and Fund Manager Members on a document by document basis. Each uploaded document has a checkbox (with the default set to 'not available') which, when selected by the participant, makes this evidence available to all investors with access to that entity. It is not possible for participants to choose a subset of investors to share the documents with.

Access to peer group results

GRESB provides an opt-in option that will disclose the entity's name (public) or fund manager's name (private) as well as the scores for the different Components to participants in the peer group that also opted to disclose their name and dimension scores. GRESB strongly encourages participants to select this option as it is commonly asked for by participants but needs to be selected at time of submission.

GDPR compliance

The GRESB Privacy Statement can be found [here](#). GRESB also has specific internal policies related to GDPR, such as a Data Breach Policy and Data Protection Policy, that cannot be shared externally for security reasons. Note that asset level data does not fall under the incidence of GDPR because it does not contain any personal information.

If participants are unable to report certain metrics such as 'Racial Diversity' and 'Background' due to GDPR restrictions then they may leave a comment in the open text box provided.

Cybersecurity

GRESB's data security measures and systems have been reviewed by an external expert and no issues were flagged. The GRESB website and the GRESB Portal are fully HTTPS/TLS encrypted. GRESB has strict and extensive policies on data security that cannot be shared externally for security reasons. GRESB's public policies can be accessed [here](#).

Language

All Assessment responses must be submitted in English.

Documents uploaded as supporting evidence do not need to be entirely translated. However, for evidence provided in languages other than English, a thorough summary confirming that the requirements have been met is required for validation purposes. Participants may make use of the open text box to provide the document(s) summary. In addition, each selected issue must be identified in the evidence uploads by providing page number and exact location such as paragraph, clause, sentence, bullet number, etc.

GRESB provides a Japanese translation of the 2020 GRESB Assessments. For other languages, the GRESB assessment portal can be translated by using "Google translate" via the Google Chrome web browser. This applies to the assessment portal, guidance notes and online version of the reference guide. Follow these steps to translate:

1. Open the Google Chrome browser.
2. Go to the web page that is to be translated into another language.
3. Right click anywhere on the web page and select "Translate to ..."
4. At the top, to the right of the search bar, click the Translate icon.
5. Select Options, Change languages and set the Translation language as the preferred language.
6. Click "Done", Chrome will translate the web page.

This works for the entire GRESB portal.

A translated pdf or printed version of the Reference Guide can be generated by opening the Reference Guide and completing the translation steps above. Before printing or generating a PDF, scroll through the entire Reference Guide first to force the translation to occur as only visible content on screen will be translated. Then click Download PDF at the top of the guide and either print, or print to PDF.

Refer to [Google Chrome Help](#) for more details.

Disclaimer: Note that not all text may be translated accurately or be translated at all. GRESB is not responsible for incorrect or inaccurate translations. GRESB will not be held responsible for any damage or issues that may result from using Google Translate.

Guide to the 2020 Infrastructure Asset Assessment

This section provides specific guidance for the 2020 GRESB Infrastructure Asset Assessment (referred to as the "Assessment").

This guide should provide all the basic information needed to complete the 2020 Assessment. Contact the [GRESB Helpdesk](#) for any additional support and guidance.

Asset Assessment Participation

Precisely what constitutes an infrastructure asset is typically defined by investors at the investable entity level. These assets (investable entities) may comprise of single or multiple facilities. Either type of asset may participate in the Asset Assessment; however, reporting as a single facility provides the best basis for benchmark comparisons and is therefore recommended. Different approaches to participation are explained in the following sections. Note that these are only illustrative and that other scenarios are possible. Participants with questions about specific circumstances are encouraged to contact the [GRESB Helpdesk](#) for guidance.

Single-facility assets

Single-facility assets undertake their activities at one facility or across one facility network. These entities may be large and complex, or small and narrowly focused. The full description of the facility and business activities

should be expressed in the Entity & Reporting Characteristics section of the Asset Assessment.

Examples of single-facility assets include:

- A provider of water and wastewater services in a single network;
- An airport;
- A telecommunications company with a single telecommunications network (e.g. in a single country).

Multi-facility assets

In some cases, the asset's activities may be spread across a number of facilities - GRESB considers this to be a multi-facility asset. A multi-facility asset has the option to report:

1. separately for each facility using multiple Asset Assessments, or;
2. as a group using a single Asset Assessment.

Completing multiple assessments allows comparisons between assets and is strongly encouraged, whilst a single assessment may take less time if the relevant data is more readily available at the aggregated asset level.

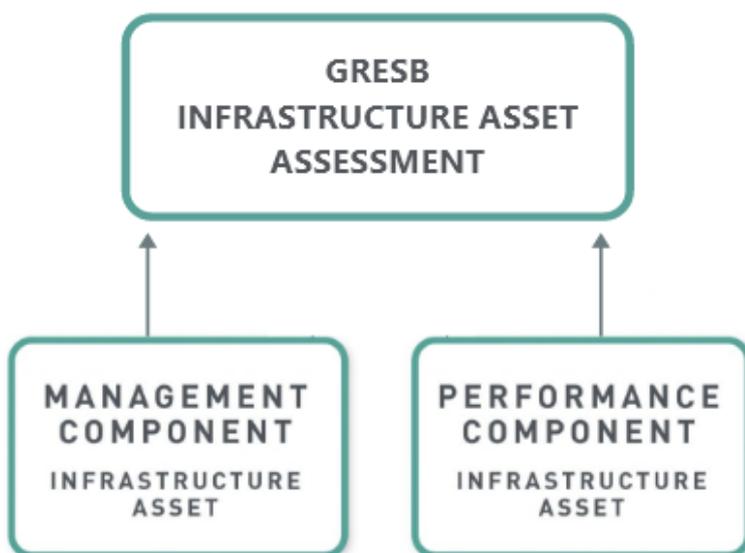
Examples of multi-facility assets include:

- An entity that operates several toll roads as one asset;
- An entity that owns a portfolio of small wind farms;
- An entity that operates a collection of distributed-scale solar projects.

If a participant elects to report on multiple facilities in a single asset assessment, then it is strongly recommended that this aggregation be kept at a single sector and country combination, otherwise peer group comparisons are likely to be far less specific and useful. For example, a multi-facility asset that consists of on-shore wind farms in the UK can be compared to other UK wind farms, whereas an asset with wind and solar farms in various European countries will likely fall into a peer group of renewable energy in Europe which is far less useful for comparisons. Multi-facility assets that participate as one entity should have centralized management and aggregated performance data. See "Sector and Geography" (RC3) in the Entity and Reporting Characteristics Aspect for more details.

Assessment Components

The Assessment consists of Entity and Reporting Characteristics, and Management and Performance Components, as well as the optional Resilience Module.



Importantly, the premier measurement of ESG performance for investors is the full GRESB Score - Infrastructure Asset (i.e. Management plus Performance Components).

Management component

The Management Component focuses on management and processes and is pitched at the organizational level.

The Management Component is suitable for any type of infrastructure company, asset and investment strategy.

The 2020 Management Component - Infrastructure Asset consists of 23 indicators across 5 Aspects:

- Leadership
- Policies
- Reporting
- Risk Management
- Stakeholder Engagement

Assets completing the Management Component will obtain a Management Score – Infrastructure Asset.

In the Management Component, many indicators apply materiality-based scoring. Before starting the Management Component, entities should therefore first complete “GRESB Materiality Assessment (RC7) in ‘Entity & Reporting Characteristics’ to determine the materiality weightings for ESG issues. These weightings will affect how each indicator should be addressed and also determine scoring.

Performance component

The Performance Component focuses on measuring performance and is pitched at the asset level. It can also be completed individually or in combination with the Management Component. The 2020 Performance Component - Infrastructure Asset consists of 20 indicators across 12 Aspects:

- Implementation
- Output & Impact
- Energy
- Greenhouse Gas Emissions
- Air Pollution
- Water
- Waste
- Biodiversity & Habitat
- Health & Safety
- Employees
- Customers
- Certifications & Awards

Assets completing the Performance Component will obtain a Performance Score – Infrastructure Asset.

In the Performance Component, many indicators apply materiality-based scoring. Before starting the Performance Component, entities should therefore first complete “GRESB Materiality Assessment (RC7) in ‘Entity & Reporting Characteristics’ to determine the materiality weightings for ESG issues. These weightings will affect how each indicator should be addressed and also determine scoring.

GRESB Score

Importantly, the premier measurement of ESG performance for investors is the full GRESB Score - Infrastructure Asset (i.e. Management plus Performance Components). Only entities that submit both Components will receive a GRESB Score and GRESB Rating. This also allows the asset to be allocated to an appropriate peer group and therefore receive relevant benchmark performance comparisons.

Participant Tools

- [GRESB Materiality & Scoring Tool](#): Assets that participate in the 2020 assessment are required to fill in the GRESB Materiality Assessment (RC7) in ‘Entity and Reporting Characteristics’. This survey, plus answers to other reporting characteristics, will determine the materiality of ESG issues based on 15 factors. Participants can use this tool to review the scoring impact of each indicator on the final score. This includes the indicator's impact on the ESG and Management and Performance dimensions.
- Prefilling: Assets that participated in the GRESB Infrastructure Asset Assessment in 2019 will have certain indicators prefilled in their 2020 Assessment response. Indicator-specific guidance includes

details on prefilling and changes from the 2019 Asset Assessment. Always review prefilled responses and evidence before submitting the Asset Assessment. Evidence should apply to the reporting year listed in the Entity Characteristic section.

- GRESB evidence cover page: It is recommended to make use of the GRESB [cover page](#) when uploading documentation in order to better structure evidence provided at an indicator level.
- Template Tool: Participants can use the Template Tool to store and share indicator responses that are identical across multiple participating entities. Participants can access the tool in the Assessment Portal.
- Assessment Access Tool: A participating asset can invite colleagues, advisors and consultants to register in the Portal to assist with the submission of data to GRESB.
- Document Library: The Document Library can be accessed in the Assessment Portal and provides an overview of all documents that are submitted as evidence.

Indicator Structure

Every indicator has a short title (e.g. “ESG Specific Objectives”) and a code (e.g. LE3). These are followed by an initial indicator question that can be answered with ‘Yes’ or ‘No’.

When selecting ‘Yes’, participants are required to provide further information by selecting one or more answer options and/or completing an open text box or table. Participants should select all answer options that accurately describe the entity. Indicators that require evidence are clearly marked in the GRESB Portal and Reference Guide.

When selecting ‘No’, participants may not select any additional sub-options; the indicator will receive no points.

Each indicator displays the corresponding 2019 indicator, or ‘NEW’ if the indicator has been added in 2020. This is also reflected in the guidance notes for every indicator.

Allocation to E, S, G

Each indicator is allocated to one of the three sustainability dimensions (E- environmental; S- social; G- governance):

- E – indicators related to actions and efficiency measures undertaken in order to monitor and decrease the environmental footprint of the asset;
- S – indicators related to the entity’s relationship with and impact on its stakeholders and direct social impact of its activities
- G – indicators related to the governance of sustainability, policies and procedures, approach to sustainability at entity or organization level.

In the results outputs, scores will be allocated to each ESG dimension.

Indicator elements

Answer options for each indicator may use one or more of the following five core elements– Radio buttons, Checkboxes, ‘Other’ answers, Open Text Boxes and Evidence. These elements are explained below:

- Radio buttons: Some indicators have additional mutually exclusive radio buttons. In all cases participants must select the one that is the most applicable.
- Checkboxes: The majority of Asset Assessment indicators contain a set of checkboxes that participants can select after answering ‘Yes’ to the overall indicator question. Participants may select multiple sub-options that apply to their entity.
- ‘Other’ answers: Some indicators offer the opportunity to provide an alternative answer option (‘Other’). Such ‘other’ answers must be distinctly different to the options listed in the question. While it is possible to report multiple other answers within one text box, additional points will not be provided for any more than one acceptable ‘other’ answer. All answers are validated as part of the data validation process.
- Open text box: GRESB distinguishes between two kinds of open text boxes:
 - For reporting purposes only. These are displayed in the Benchmark Report but are not validated or scored;
 - Additional context for the answer provided. These are below the Yes/No response and enable the participant to provide general comments that will appear on the Benchmark Report, but are not validated or scored.

Evidence

Selected indicators in the Assessment require supporting evidence. Evidence is information that can be used to validate the overall answer to the indicator and support the additionally selected criteria.

GRESB does not have a standard for evidence. Instead, a validator with reasonable domain expertise should be able to review the evidence and find support for the overall indicator response and selected answer options. More information on evidence is provided with each indicator.

Evidence should clearly reference the answer options selected by the participant. The evidence should not require extensive interpretation or inference and participants are strongly encouraged to provide the simplest evidence that supports their claim. Evidence can be provided through a document upload or a hyperlink.

Document Upload

Participants may submit any document that supports selected checkboxes, tables and/or content of an open text box. Uploads are used by the validation team to substantiate claims.

- Redacted documents: Participants may redact documents. However, they must contain sufficient information to validate the indicator response. Re-written summaries of documents must be on the entity's letterhead and contain enough information to validate the response.
- Extracted documents: If the information that the participant wants to provide is part of a larger document, it is possible to provide an extract with the relevant parts. The name and date of the publication of the document should be included in the document upload.
- Location of relevant information: In order to facilitate the data validation process, it is mandatory to indicate where relevant information can be found within the document using the assigned box. Additionally, a [cover page](#) can be added at the beginning of the document.
- Evidence template: The Evidence template may be used as a standalone document or as a cover page for uploaded evidence. This template allows for easier identification of relevant information for each sub-option selected within an indicator.
- Optional evidence sharing with investors: GRESB uses uploaded documents for validation purposes. Documentation provided as evidence can be made available to investors on a document by document basis. Each uploaded document has a checkbox which is set as default to unselected. When selected, the evidence will be made available to investors. It is not possible to choose a sub-set of investors to share the documents with.

For indicators that are subject to manual validation, it is highly recommended to identify where each selected issue from an indicator is located in the evidence uploads. For evidence provided in languages other than English, a thorough summary sufficient to convey the requirements have been met is required for validation purposes. Participants may make use of the open text box provided in the cover page to provide a document summary. In addition, each selected issue must be identified in the evidence uploads by providing page number and exact location such as paragraph, clause, sentence, etc.

Uploaded documents are stored in a participant's Document Library, which can be accessed in the portal and will remain accessible after submission.

Hyperlink

If a hyperlink is provided, ensure that the relevant page can be accessed within two steps. Ideally, the landing page should contain all the information needed to validate the answer. In order to qualify as valid supporting evidence, the evidence provided must demonstrate the achievement of the criteria selected. The participant has the obligation to ensure that the hyperlink is functioning at the time of validation. Broken links are the responsibility of the participant and will be interpreted as the absence of evidence. Hyperlinks in uploaded documents will not be checked.

- Permitted number of uploads/links: Per indicator, multiple documents and/or hyperlinks can be provided as evidence. In these cases, make it clear which evidence relates to which claim. Use an evidence template where necessary.
- Previously accepted evidence: Uploaded or linked evidence that was accepted during a previous reporting period might not be accepted in following submissions. Enhanced validation checks and/or a change in the level of validation (see "GRESB Validation Process") may result in different validation outcomes. In order to be accepted, the provided evidence should meet the requirements as stipulated in the guidance. Participants should review each of their answers.

- **Good Practice Links:** Guidance includes good practice examples. These are shared via links under the Evidence section in the guidance and are drawn from publicly available evidence provided for the indicators. The intention is to provide participants with more guidance and examples of good practices to assist their improvement efforts, however, does not guarantee similar evidence will be accepted in validation. Participants should make their own decisions about the suitability of the examples to their own circumstances.

Reporting Year

Answers throughout the Assessment must be applicable to the reporting year identified in “Reporting year” (EC3) in the Entity and Reporting Characteristics, unless the indicator specifies an alternative reporting period. For the Performance Component, exceptions to this temporal boundary must be reported under the “Exceptions” box for that indicator.

A response to an indicator must be true at the close of the reporting year; however, the response does not need to have been true for the entire reporting period. For example, if a policy was put in place one month prior to the end of the reporting year, this is acceptable, it need not have been in place for the entire reporting year. GRESB does not favour the use of calendar year over fiscal year or vice versa, as long as the chosen reporting year is used consistently throughout the Assessment.

Reporting Entity

Responses should relate specifically to the “reporting entity” (i.e. the Asset) for which the Assessment is submitted. Evidence in relation to the Entity can come from any of the organizations involved with the activities within the Entity’s boundaries.

The Entity may include the physical asset itself, the asset manager, the asset operator and/or the asset maintainer. Responses may relate to any organization involved with the asset and the service it provides, for example the asset owner, asset maintainer or asset operator. Evidence must show that the relevant organization's practices apply to the reporting entity.

Certain indicators refer to different reporting levels (e.g. Group, Operator, Contractor) that should be addressed within the indicator response and supporting evidence.

In the example in the figure below, the Reporting Entity (Asset) is Big City Airport. This Asset is part of Infrastructure Fund IV which is managed by Fund Manager LLC. Information pertinent to the Asset Assessment for Big City Airport may come from Big City Airport Management Ltd, Operations Contractor or Maintenance Contractor. In some cases, Fund Manager LLC may also provide relevant information for the Assessment. The airline, El Cheapo Air, is outside of the reporting entity boundary and so information relating to El Cheapo Air would not typically be relevant to the Assessment.



Reporting Boundries

Setting and describing appropriate boundaries for reporting on ESG is critical to allow:

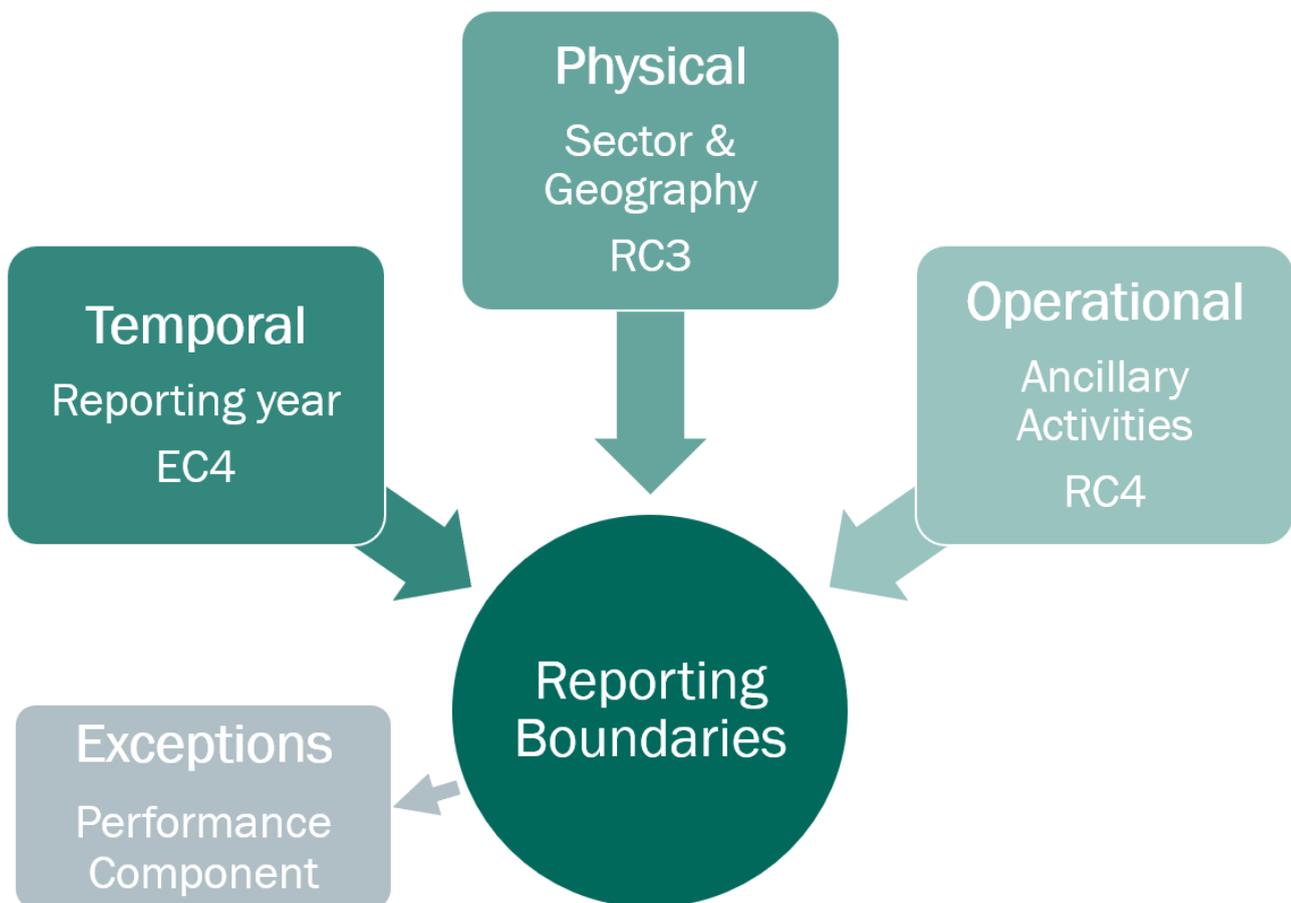
- Data to be collected and reported consistently for an entity
- Trends over time for an entity to be accurately observed
- Objective comparisons to be made between entities

GRESB intends to work with the industry to move over the next few years to give more focus on performance measurement and scoring. To cater for this, as well as reporting using accurate boundaries, the scope of reporting will need to become far more standardised across entities, to ensure that 'apples versus apples' comparisons can be made and this reflected in scoring.

To this end, the Asset Assessment includes indicators that help to accurately describe the boundaries of reporting for each entity. These indicators are:

- Reporting year (EC4) - this describes the *temporal* boundary for reporting
- Sector & Geography (RC3) - this includes the list of asset facilities with their geolocation, thus describing the physical boundary for reporting
- Ancillary activities (RC4) - this includes the list of ancillary activities undertaken by the entity, thus describing the operational boundary for reporting

The combination of these indicators provides an accurate picture of the reporting boundary. Everything 'within' the boundary should be reported on within the relevant indicators, and everything 'outside' the boundary should not be included. We recognise however, that this reporting boundary may not apply to all reported ESG issues. For example, water data may not be available for certain facilities even though energy data is. These exceptions to the reporting boundary must be described in the Exception boxes included in the Performance Component indicators.



This reporting boundary data will be carefully analysed and used in future years to standardise the reporting boundaries for all entities within similar sectors, thereby enabling fair and equitable data comparisons and scoring.

2020 GRESB Data Validation Process

Data validation is an important part of GRESB's annual benchmarking process. The purpose of data validation is to encourage best practices in data collection and reporting. It provides the basis for GRESB's continued efforts to provide investment grade data to its investor members.

GRESB validation is a check on the existence, accuracy, and logic of data submitted through the GRESB Assessments. The validation process is structured into two categories: automatic validation and manual validation.

Automatic validation is integrated into the portal as participants fill out their Assessments, and consists of errors and warnings displayed in the portal to ensure that Assessment submissions are complete and accurate.

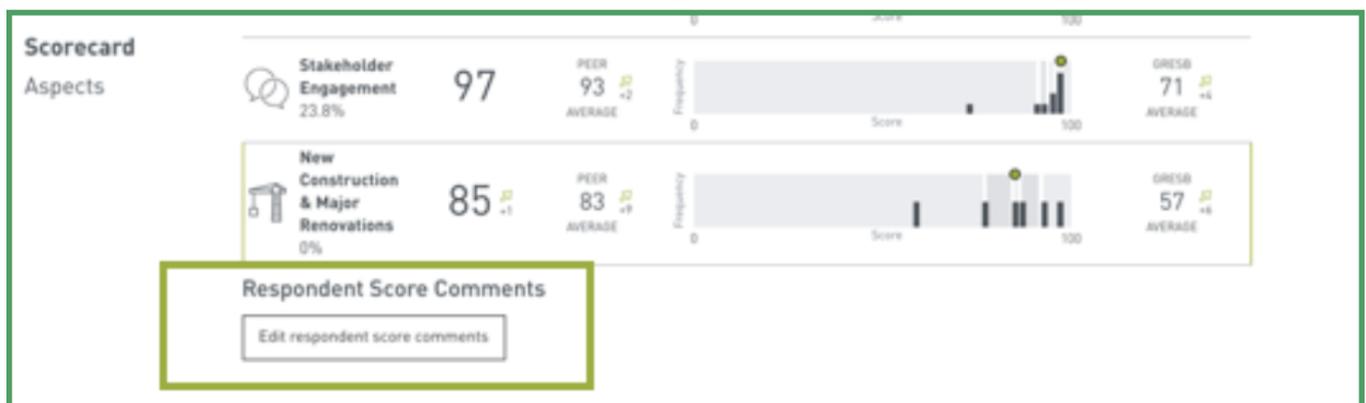
Manual validation takes place after submission, and consists of document and text review to check that the answers provided in Assessment are supported by sufficient evidence. The validation rules and process are set and overseen by GRESB but the validation is performed by a third party, GBCI.

For more information about the 2020 Validation Process, see Appendix 4.

Review Period

New in 2020, GRESB will introduce a new Review Period (see Appendix 5 for more information) in the Assessment Cycle to further strengthen the reliability of our Assessments and benchmark results. The Review Period will start on September 1, when preliminary individual GRESB results will be made available to all participants and run for the month. During the Review Period, participants will be able to submit a review request to GRESB using a dedicated form. The final results will be launched to both participants and Investor Members on October 1. Public Results events and other results outputs will be rescheduled to October and November in order to accommodate the September Review Period.

Participants who want to communicate specific points on the results presented in the Benchmark Report can use the "Respondent score comments" field – this will be seen by investors



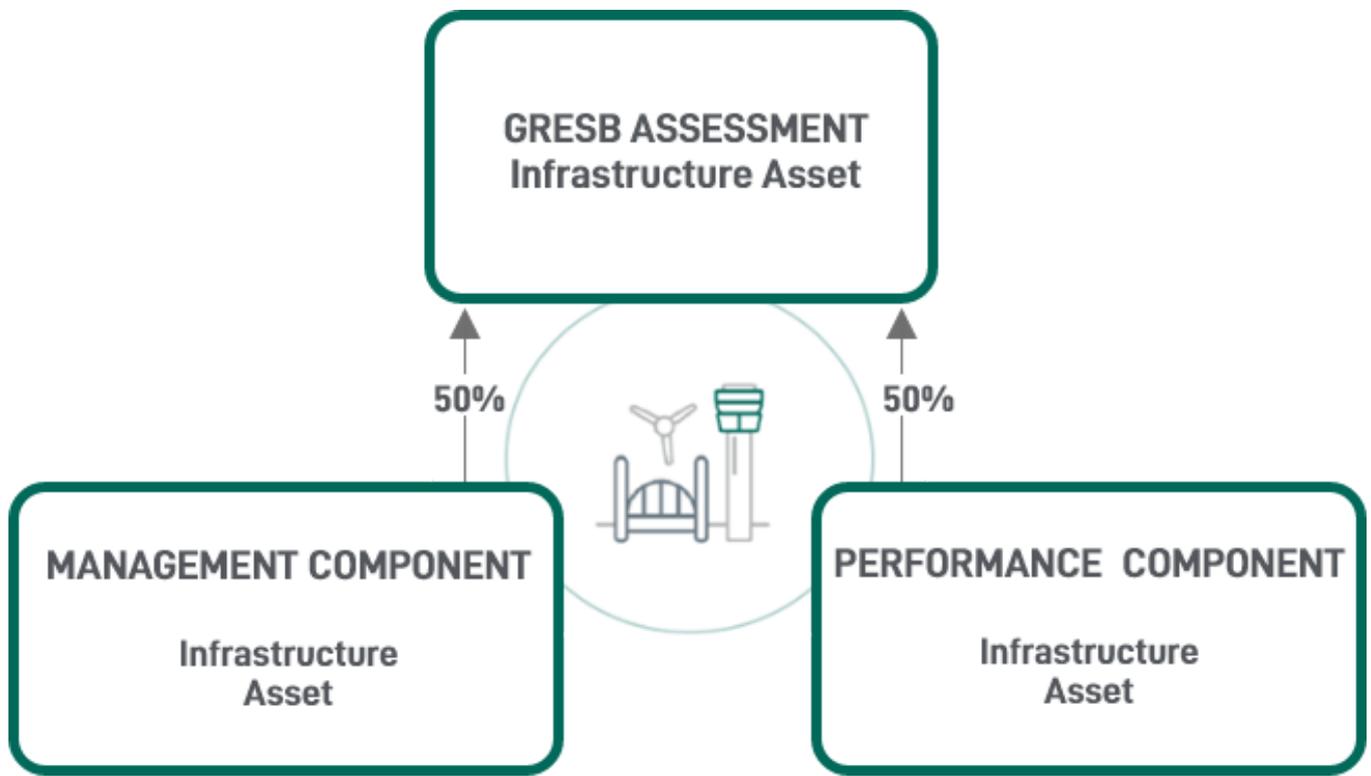
Scoring Methodology

Asset Scoring

The sum of the scores for all indicators adds up to a maximum of 100 points, therefore the overall GRESB Score - Infrastructure Asset is an *absolute* measure of ESG management and performance expressed as a percentage.

The GRESB Infrastructure Asset Assessment is split into two components namely, the Management Component and Performance Component. The overall GRESB Score - Infrastructure Asset is the sum of the Management Score - Infrastructure Asset and the Performance Score - Infrastructure Asset:

GRESB Score = Management Score + Performance Score



GRESB Rating

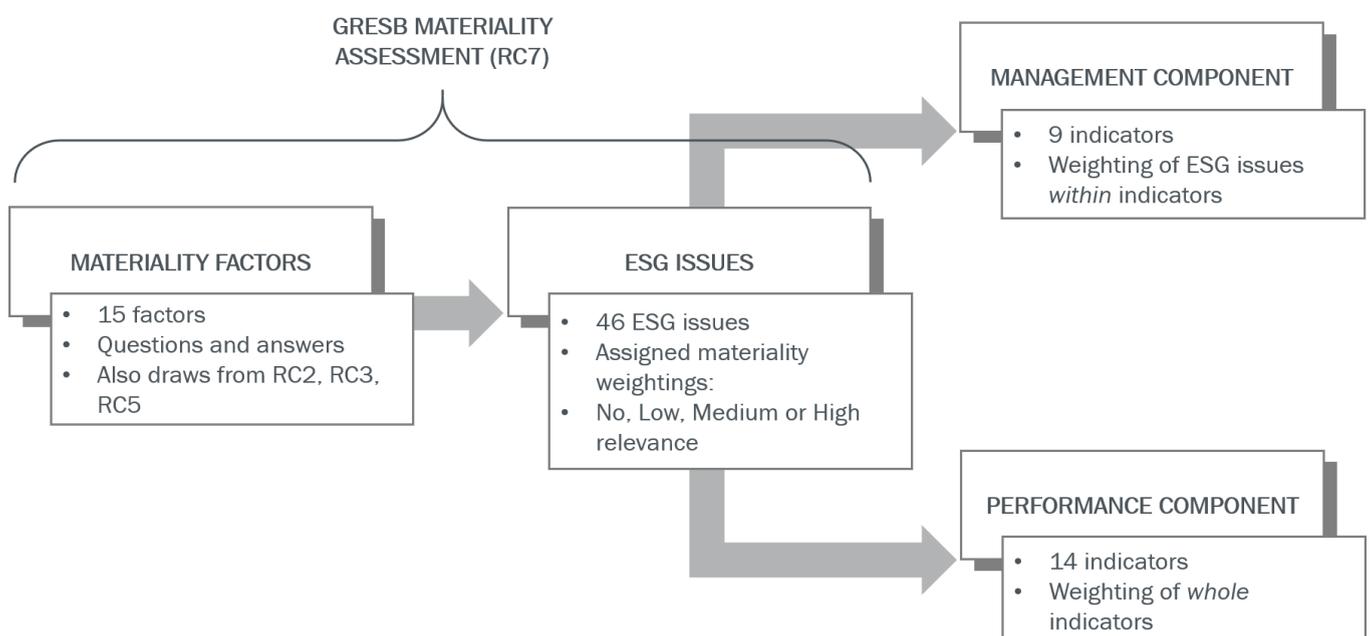
The GRESB Rating is an overall relative measure of ESG management and performance of the asset.

The calculation of the GRESB Rating is based on the GRESB Score and its quintile position relative to the GRESB universe, with annual calibration of the model. If the participant is placed in the top quintile, it will have a GRESB 5-star rating; if it ranks in the bottom quintile, it will have a GRESB 1-star rating, etc.

Materiality-based Scoring

GRESB uses Materiality-based scoring across the Asset Assessment. This process applies the well proven process of materiality assessment to scoring ensuring that all assets are assessed and scored based on the ESG issues that are most material to their circumstances.

The materiality-based scoring process is illustrated in the diagram below.



Materiality Factors

The first part of the process is contained within the GRESB Materiality Assessment indicator (RC7). In this indicator, a set of 15 simple questions relating to Materiality factors are answered using simple drop down selections. For six of the factors, answers are drawn from other indicators RC2, RC3 and RC5. These factors include for example the primary sector of the asset, its primary location, whether it is on contaminated land, and the number of customers it serves. See the GRESB Materiality Assessment indicator (RC7) for details of the materiality factors and their associated questions and answers.

ESG Issues

There are 46 ESG issues in the Asset Assessment (14 Environmental, 16 Social and 16 Governance). Each of the materiality factors is associated with one or more ESG issues, so that as the factor questions are answered, the materiality of the ESG issues is determined. Note that the materiality is fixed for seven of the 46 ESG issues (i.e. they are unaffected by the Materiality factors). There are four possible materiality levels that can be assigned to ESG issues, and these directly translate to a scoring weighting in the Assessment, as follows:

Materiality	Weighting
No relevance	0
Low relevance	0
Medium relevance	1
High relevance	2

Management Component

For the Management Component, the aspects of Policies (and its three indicators) and Risk management (with its six indicators) all apply materiality-based scoring. These indicators use the standard list of (46) Environmental, Social or Governance issues and are scored based on how many of the material issues are addressed. Consider for example, the indicator 'Policies on environmental issues' (PO1). Each of the 14 standard Environmental issues will receive a materiality weighting from the GRESB Materiality Assessment.

Performance Component

For the Performance Component, most aspects apply materiality-based scoring (only Implementation, Output & Impact and Certification & Awards aspects do not). Thus 14 indicators are affected. These indicators each address one specific ESG issue, so the materiality weightings from the GRESB Materiality Assessment apply directly to the weighting of each whole indicator. Indicators relating to ESG issues of High relevance are weighted highly, and Medium relevance moderately. Indicators relating to issues of No or Low relevance are not scored. The weighting of the material (scored) indicators is automatically redistributed to ensure that the Performance Component retains its overall weighting of 50% of the Asset Assessment. Using the earlier example of an Asset with a primary sector of 'Renewable power: Solar power generation' - in this case the Air pollution indicator will not be scored and more weight will be given to material indicators (like Energy). Thus materiality-based scoring brings the focus tightly onto only the material ESG issues and minimises reporting burden for participants.

The Materiality Tool

Whilst the GRESB Materiality Assessment and the whole materiality-based scoring process are straight forward to understand and apply, some participants may want to understand them, and how they apply to their situation, in more detail. GRESB provides an Excel based [GRESB Materiality & Scoring Tool](#). for this purpose. This tool duplicates the materiality-based scoring process embedded in the portal but in an easier and more transparent layout. In addition, the tool provides the ability for participants to record their own view of materiality for each issue and provide associated justification for feedback to GRESB in future refinement of materiality-based scoring. Completed feedback should be sent to the GRESB via the contact form. The tool also contains a 'Materiality Matrix' and a 'Sector Determined' matrix that transparently link each Materiality factor answer to the relevance for the associated ESG issues. Finally, the tool contains a Scoring and Weighting sheet that shows how indicator weightings are modified by the materiality-based scoring.

Scoring Weightings

The Management component is made up of 5 Aspects, whilst the Performance component consists of 12. The Asset Assessment contains 47 indicators with the exclusion of Entity & Reporting Characteristics. The below weights apply for 2020.

Component	Aspect	Indicator	Code	Weighting (%)
Entity and Reporting Characteristics	Entity Characteristics	Reporting entity	EC1	
		Nature of ownership	EC2	
		Entity commencement date	EC3	
		Reporting year	EC4	
	Reporting Characteristics	Reporting currency	RC1	
		Economic size	RC2	
		Sector & geography	RC3	
	Ancillary activities	RC4		
	Nature of entity's business	RC5		
	Description of the asset	RC6		
	GRESB materiality assessment	RC7		
Management Component	Leadership	Entity materiality assessment	LE1	1.80%
		ESG leadership commitments	LE2	
		ESG objectives	LE3	3.55%
		Individual responsible for ESG	LE4	1.80%
		ESG senior decision maker	LE5	1.80%
		Personnel ESG performance targets	LE6	3.55%
	Policies	Policies on environmental issues	PO1	1.80%
		Policies on social issues	PO2	1.80%
		Policies on governance issues	PO3	1.80%
	Reporting	ESG reporting	RP1	3.55%
		ESG incident monitoring	RP2.1	1.80%
		ESG incident occurrences	RP2.2	
	Risk-Management	Management systems	RM1	3.55%
		Environmental risk assessment	RM2.1	3.55%
		Social risk assessment	RM2.2	3.55%
		Governance risk assessment	RM2.3	3.55%
		Monitoring of environmental performance	RM3.1	1.80%
		Monitoring of social performance	RM3.2	1.80%
		Monitoring of governance performance	RM3.3	1.80%
	Stakeholder Engagement	Stakeholder engagement program	SE1	3.55%
Supply chain engagement program		SE2	1.80%	
Stakeholder grievance process		SE3.1	1.80%	
Stakeholder grievance monitoring		SE3.2		
Performance Component	Implementation	Implementation of environmental actions	IM1	
		Implementation of social actions	IM2	
		Implementation of governance actions	IM3	
	Output & Impact	Output & impact	OI1	
	Energy	Energy	EN1	Materiality-Based 47.6%
	Greenhouse Gas Emissions	Greenhouse gas emissions	GH1	
	Air Pollution	Air pollution	AP1	
	Water	Water inflows/ withdrawals	WT1	
		Water outflows/discharges	WT2	
	Waste	Waste	WS1	
	Biodiversity & Habitat	Biodiversity & habitat	BI1	
	Health & Safety	Health & safety: employees	HS1	
		Health & safety: contractors	HS2	
		Health & safety: users	HS3	
Health & safety: community		HS4		
Employees	Employee engagement	EM1		
	Inclusion & diversity	EM2		
Customers	Customer satisfaction monitoring	CU1		
Certification & Awards	Infrastructure certifications	CA1	2.40%	
	Awards	CA2		

Indicator Scoring

The following is a scoring overview of indicators in the 2020 Infrastructure Asset Assessment. Some general remarks and notes on the structure of indicators:

There are four models used within indicators for scoring:

- One Section indicator - consisting of only Section 1 (Elements)
- Two Section indicator (Evidence validated) - consisting of both Section 1 (Elements) & 2 (Evidence).
- Two Section indicator (Evidence not validated) - consisting of both Section 1 (Elements) & 2 (Evidence) where the evidence provided is not validated and is for reporting purposes only.
- Not scored

Note that selection of the 'Yes/No' responses in relation to the indicator question, will no longer be scored in 2020

The overall outcome of these models is to generate a fractional score (i.e. between zero and one) which is then multiplied by the indicator weighting (maximum score) to generate the score for the indicator.

Section One (Elements)

Every scored indicator begins with this section which can receive a fractional score (i.e. between zero and one), determined by selections made in checkboxes and radio buttons, and answers provided in open text boxes. Based upon these inputs, fractional scores are calculated using either an aggregated fractions or a diminishing increase in scoring methodology.

Aggregated scoring: For indicators where one or more answers can be selected, fractional scores are awarded cumulatively for each individual selected answer and then aggregated to calculate a final fractional score for the section. In some cases, each checkbox answer may be equally weighted and in others, each checkbox answer may be assigned a higher or lower fractional score each, to reflect best practice responses. For many indicators, the final fractional score is capped at a maximum, which means that it is not necessary to select all checkbox answers in order to receive full points.

Materiality-based scoring: These indicators are similar to Aggregated points, where points are awarded cumulatively for each individual selected answer and then aggregated to calculate a final score for the indicator. Where materiality-based scoring applies, each checkbox answer is weighted to reflect the materiality of the relevant ESG issue, as determined by the GRESB Materiality Assessment.

Diminishing increase in scoring: The idea behind this concept is that the fractional score achieved for each additional data point provided decreases as the number of provided data points increases. This means that the fractional score achieved for the first data point will be higher than the fractional score achieved for the second, which again will be higher than for the third, and so on.

LE6 ✓ Pre-filled from 2019 🔗 Guidance 🗨️ Ask GRESB

Personnel ESG performance targets

Does the entity include ESG factors in the annual performance targets of personnel? clear answer

Yes

Does performance against these targets have predetermined consequences? (multiple answers possible) clear answer

Yes

Financial consequences

Non-financial consequences

No

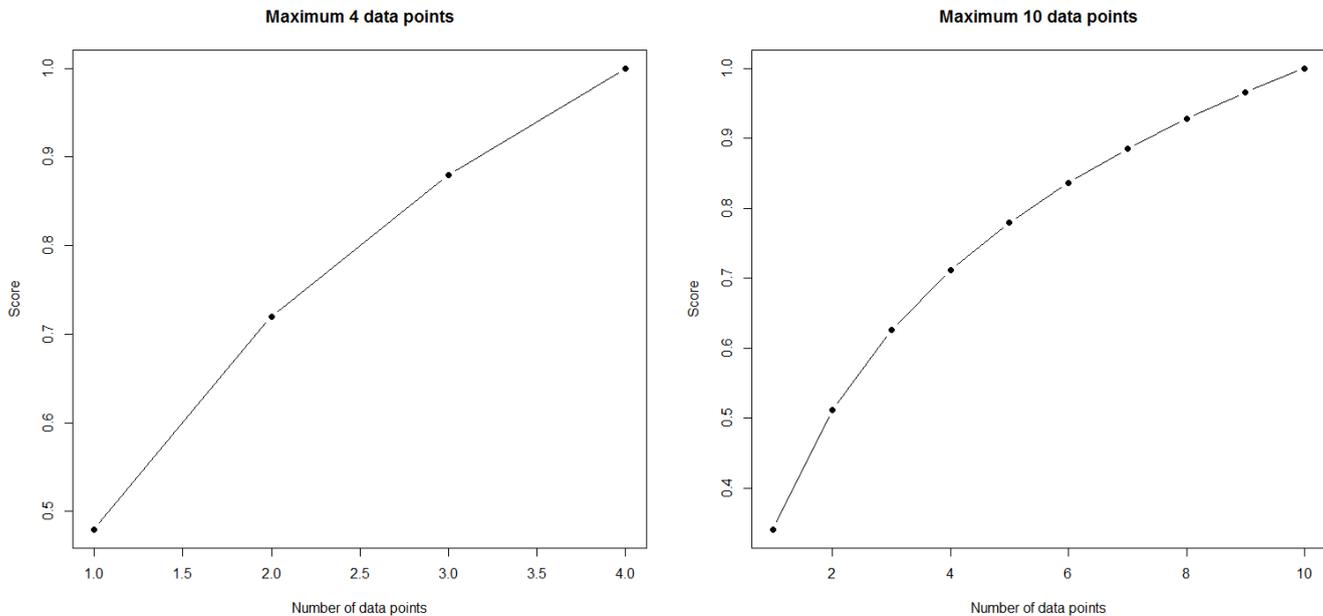
Provide applicable evidence

Add supporting evidence ▼

Section 1 (Elements)

Section 2 (Evidence)

Plots of scores for differing number of reported data points



If an indicator is a One Section indicator, the score calculated in this section will also be its final score.

Section 2 (Evidence)

Some indicators include an evidence section to verify information provided in section 1 (Elements). In these cases, the fractional score for the evidence section acts as a multiplier to the Section 1 score. As of 2020, evidence is always mandatory. Where evidence is mandatory it is scored as follows - zero (0) fractional points are given for providing no evidence or not-accepted evidence, 0.5 fractional points are given for providing partially accepted evidence and 1 fractional point is given for providing fully accepted evidence. To clarify, the indicator will receive zero score unless the hyperlink and/or uploaded document is considered valid (i.e. partially or fully accepted).

The final indicator score is then calculated as:

The total indicator score is then calculated as:

$$\text{Indicator score} = \text{Indicator score} = (\text{Section 1 fractional score}) \times (\text{Section 2 multiplier}) \times \text{Indicator weighting}$$

Peer group allocation and benchmarking

For benchmarking purposes, each participant is assigned to a peer group, based on the entity's primary sector, primary location and other factors, as reported in RC3 and EC2. To ensure participant anonymity, GRESB will only create a peer group if there is a minimum of six participants allocated to the peer group (the participant and five other peers).

Peer group assignments do not affect an entity's score, but determine how GRESB puts participant's results into context.

The goal of the peer group creation process is to compare participants who share important characteristics, while:

- Maintaining a minimum threshold of 6 and
- Having less than 50% of the participants in the group from the same company.

Each participant can be part of multiple peer groups, but can only have one active peer group. The active peer group is the one which is used for benchmarking and is displayed in the participant's Benchmark Report. This means that participant A can be in the active peer group of participant B, without participant B being in the active peer group of participant A.

The peer group composition is determined by a simple set of rules and provides consistent treatment for all participants. If the peer group is too small, we eliminate filters until we have a valid peer group. There are two ways in which the filter can be widened:

- Using a more general version of the characteristic (e.g. filtering on the entity's region, not country)
- Dropping a characteristic entirely (e.g. ignoring a participant's scope of service).

The system attempts to find the optimum peer group based on the criteria presented above. This process repeats in a loop following the logic described in Appendix 7: Peer Group Allocation Logic.

Sector Leader

The GRESB Sector Leader program recognizes the best performers annually from across the GRESB Assessments. Achieving sector leader status is clear recognition of best practice ESG performance by Infrastructure companies and funds. A minimum number of entities is necessary to award a Sector Leader. This minimum number is reviewed each year. If any significant ESG fines and/or penalties are reported (see Reporting of ESG-related incidents (RP2.2)), the entity may not be entitled to sector leader status.

Entity & Reporting Characteristics

Intent and Overview

Information provided in the Entity and Reporting Characteristics consists of two parts:

Entity characteristics: Identifies the reporting entity's characteristics that remain constant across different reporting periods (year-on-year).

Reporting characteristics: Describe the entity, define the reporting scope for the current reporting year and determines the structure of the Assessment submission.

Entity Characteristics

2019 Indicator

EC1 Reporting entity

Entity Name: _____

Organization Name (May be same as entity name): _____

EC1

Intent

Identify the participating entity. The entity name will be used to identify the entity on the GRESB portal and will be displayed in the entity's Benchmark Report.

Requirements

Complete all applicable fields.

Prefill: This indicator has remained the same as the 2019 Assessment and has been prefilled with 2019 Assessment answers. Review the response and/or evidence carefully.

Terminology

Entity name: Name of the asset for which the Assessment is submitted. For example, 'Big City Airport'.

Organization name: Name of the organization that manages the asset. For example, 'Big City Airport Management Limited' or 'Big Global Asset Manager LLC'.

Ownership (Select one)

- Public (listed) entity
Specify ISIN: _____
- Private (non-listed) entity
- Public-Private Partnership (PPP) entity
- Non-profit entity
- Government entity
- Other: _____

**Note that some elements of this indicator from 2019 have been moved to RC5.*

Intent

Describe the ownership status and structure of the participating entity.

Requirements

Select the nature of the participating entity. If applicable, select the relevant sub-options and provide details.

The Revenue Basis aligns with the EDHECInfra TICCS classification for Business Risk.

Prefill: This indicator has remained the same as the 2019 Assessment and has been prefilled with 2019 Assessment answers. Review the response and/or evidence carefully.

2020 changes: Ticker and exchange information removed. Scope of service moved to RC5.

Other: Other answers must be outside the options listed in the indicator to be valid.

Terminology

ISIN: International Securities Identification Number. ISINs are assigned to securities to facilitate unambiguous clearing and settlement procedures. They are composed of a 12-digit alphanumeric code and act to unify different ticker symbols, which can vary by exchange and currency for the same security. In the United States, ISINs are extended versions of 9-character CUSIP codes.

Non-profit organization: An organization that uses its earnings and/or donations to pursue the organization's objectives. Usually these organizations are listed as charities or other public service organizations.

Public Entity: A company that is publicly listed and traded on a recognized stock exchange such as Nasdaq or NYSE.

Public-Private Partnerships (PPP): A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.

References

[EDHECInfra, The Infrastructure Company Classification Standards \(TICCS™\), 2018](#)

[IPWEA, International Infrastructure Management Manual, 2015](#)

[World Bank Group, Public-Private Partnership in Infrastructure Resource Centre](#)

What is the year of operation commencement?

Year: _____

Intent

Establish the age of the entity.

Requirements

State the year when the entity first commenced or is expected to commence operation.

Prefill: This indicator has remained the same as the 2019 Assessment and has been prefilled with 2019 Assessment answers. Review the response and/or evidence carefully.

If the reporting entity represents a single facility, then the year entered should reflect when that facility commenced operation. If the reporting entity represents a portfolio of facilities being assessed as one asset (i.e. multi-facility asset) then it should be when the first facility in the portfolio commenced operation.

If the entity is still under construction (sometimes known as a greenfield asset), then enter the expected year when operations will commence.

If the entity is both in construction and operational, then enter the year when the first part of the project commenced operations.

- Calendar year
- Fiscal year

Specify the starting month

Intent

Set the entity’s annual reporting year. This information is used in combination with the Sector & Geography (RC3) and Ancillary Activities (RC4) descriptions to describe the entity’s reporting boundary. Exceptions to the described reporting boundary must be described in the Performance Component indicators. Clear understanding of reporting boundaries will provide for their standardisation in future and therefore accurate like for like comparisons to be made.

Requirements

Complete all applicable fields.

The table below details the period for which information throughout the Assessment would be expected, for a selected starting month:

Starting month	Reporting Year
January	Select "Calendar Year"
February	Feb 2019 - Jan 2020
March	Mar 2019 - Feb 2020
April	Apr 2019 - Mar 2020
May	May 2019 - Apr 2020
June	Jun 2019 - May 2020
July	Jul 2018 - Jun 2019
August	Aug 2018 - Jul 2019
September	Sept 2018 - Aug 2019
October	Oct 2018 - Sept 2019
November	Nov 2018 - Oct 2019
December	Dec 2018 - Nov 2019

Pre-fill: This indicator is similar to the one included in the 2019 assessment and some sections have been pre-filled from the 2019 assessment. Review the response and/or evidence carefully.

Terminology

Calendar year: January 1 – December 31.

Fiscal year: The period used for annual financial statements. Depending on the jurisdiction the fiscal year can start on April 1, July 1, October 1, etc.

Reporting year: Answers must refer to the reporting year identified in EC4 (Reporting year) in the Infrastructure Assessment. A response to an indicator must be true at the close of the reporting period; however, the response does not need to have been true for the entire reporting year. GRESB does not favour the use of calendar year over fiscal year or viceversa, as long as the chosen reporting year is used consistently throughout the Assessment.

RC1 Reporting currency

Values are reported in

RC1

Currency

- Australian Dollar (AUD)
- Brazilian Real (BRL)
- Canadian Dollar (CAD)
- Chilean Peso (CLP)
- Chinese Yuan (CNY)
- Colombian Peso (COP)
- Danish Krone (DKK)
- Euro (EUR)
- Hong Kong Dollar (HKD)
- Indian Rupee (INR)
- Japanese Yen (JPY)
- Malaysian Ringgit (MYR)
- Mexican Peso (MXN)
- New Zealand Dollar (NZD)
- Norwegian Krone (NOK)
- Philippine Peso (PHP)
- Pound Sterling (GBP)
- Singapore Dollar (SGD)
- South African Rand (ZAR)
- South Korean Won (KRW)
- Swedish Krona (SEK)
- Swiss Franc (CHF)
- United States Dollar (USD)
- Other: _____

Intent

Set the currency for which the entity is denominated.

Requirements

State the currency used by the entity for Assessment indicators that require a monetary value as a response.

Pre-fill: This indicator has remained the same as the 2019 Assessment and has been pre-filled with 2019 Assessment answers. Review the response and/or evidence carefully.

2020 changes: Chilean Peso (CLP) and Colombian Peso (COP) have now been added to the list of currencies.

Other: Other answer must be outside the options listed in the indicator to be valid. Participants should state a currency.

Gross asset value (required) (in millions): _____

Revenue (required) (in millions): _____

Number of full time equivalent (FTE) workers (employees): _____

Number of full time equivalent (FTE) workers (contractors): _____

Intent

Establish the economic size and number of Full Time Equivalent (FTE) workers of the entity. The number of Full Time Equivalent (FTE) workers and contractors influence materiality (see guidance in RC7 and the GRESB Materiality Tool for more details).

The number of Full Time Equivalent (FTE) workers and contractors influence materiality (see guidance in RC7 and the

[GRESB Materiality Matrix](#) for more details).

Requirements

Complete the measures of the economic size of the entity GAV and Revenue, both in millions (e.g. \$75,000,000 must be reported as 75). GAV should be provided as at the end of the reporting year, and should include development and construction projects (if any). Revenue should be for the reporting year. It is mandatory to provide both the GAV and revenue. Estimates are acceptable (for example annual operating costs may be used instead of revenue). Like all information provided to GRESB, this information will be kept confidential to just you and any investors for which you give permission. This information is used (as denominators) to calculate intensity performance metrics which are comparable between assets.

Do not include a currency, as this has been reported in indicator RC1 above, but make sure the currency applied is consistent with indicator RC1.

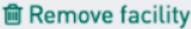
Prefill: This indicator is similar to the one included in the 2019 assessment and some sections have been prefilled from the 2019 assessment. Review the response and/or evidence carefully.

2020 changes: Economic size has been standardised to the mandatory metrics of Gross Asset Value (GAV) and Revenue so there is no need for 'Other' answer. Number of FTE employees and contractors has been added as new size metrics relevant to materiality, peer grouping and insights.

Terminology

Gross Asset Value (GAV): The gross infrastructure value owned by the entity being the 'tangible fixed assets' or 'property, plant and equipment' associated with the infrastructure asset.

Revenue: The annual income generated by the entity in exchange for providing the asset service.

 Remove facility #1

Facility Name

Weight GAV

 %

Address

Latitude

Longitude

Sector

Lifecycle stage

In operation (brownfield)

In development (greenfield)

This facility is included in the reporting boundary

Yes

No

Describe the facility

[+ Add facility](#)

Intent

Describe the sectors and locations of the facility or facilities that comprise the asset. Select the lifecycle stage and reporting boundaries applicable to each facility. This information is used for materiality-based scoring and to determine peers for benchmarking and reporting purposes. It is also used in combination with the Ancillary Activities (RC4) and Reporting Year (EC4) descriptions to describe the entity's reporting boundary. Exceptions to the described reporting boundary must be described in the Performance Component indicators. Clear understanding of reporting boundaries will provide for their standardisation in future and therefore accurate like for like comparisons to be made. This information is for reporting purposes only.

Requirements

It is up to the participant to determine the best structure for reporting of facilities since they have the best understanding of their facilities. Multiple small facilities may be grouped into a facility network or similar, particularly if the core sector is the same for the grouped facilities. For example, a network of water pipelines and pumping stations might be grouped into a single sewerage pipeline network. Another grouped facility might be a group of rooftop solar installations within a certain region or country. Please note that the selected structure may affect your peer grouping based on the outcome of the primary sector and location.

List all significant facilities that comprise the asset and complete details for each as follows:

- Weight GAV: Assign a relative weight for each facility based on the actual or estimated proportion it comprises of the total asset GAV. The total weights of facilities must sum to 100%.

- Country: The full list of countries aligns to the UN Standard Country or Area Codes for Statistical Use.
- Address Coordinates: Type the address of the facility. Suggestions will appear in a drop-down. Select the relevant address. Latitude and longitude coordinates will be automatically prefilled if the address is valid. In the case the typed address is not found, please provide the latitude and longitude coordinates in the appropriate fields or provide an approximate location (e.g: street name).
- Latitude and Longitude Coordinates: Type in the latitude and longitude of the facility in the relevant fields. The address coordinates will automatically prefill based on the coordinates reported. Coordinates should be provided in decimal degrees.
- Sector: Sector: Select the appropriate sector by clicking on the drop-down list or by typing in a keyword. Only list the facility's core sector (its main infrastructure service). If there is more than one core sector for the facility then consider splitting it up into multiple facilities with one core sector per facility. The full list of sectors aligns to the EDHECInfra TICCS™ standard Industrial Classifications and is provided in Appendix 3.

The asset's primary sector and primary location will be determined from, and shown below, the facility table.

- The primary sector is determined based on the mix of facility sectors, using a three-tier system as follows:
 - Sub-class: If 75% or more of the facilities belong to a single sub-class then the primary sector will be that sub-class, otherwise move to the class level;
 - Class: If 75% or more of the facilities belong to a single class then the primary sector will be that class, otherwise move to the super-class level;
 - Super-class: If 75% or more of the facilities belong to a single super-class then the primary sector will be that super-class, otherwise the primary sector is 'Diversified'.
- Similarly, the primary location is determined based on the mix of facility locations, using a three-tier system as follows:
 - Country: If 59% or more of the facilities are located in a single country, then the primary location is that country, otherwise move to the sub-region level;
 - Sub-region: If 59% or more of the facilities are located in a single sub-region, then the primary location is that sub-region, otherwise move to the region level;
 - Region: If 59% or more of the facilities are located in a single region, then the primary location is that region, otherwise the location is 'globally diversified'

This information will be used to identify peers from the same or similar sectors and locations, and also are factors in the materiality -based scoring for the asset (see RC7 for more details). Select the appropriate lifecycle stage, whether in operation or development, and select whether the data provided in the performance component is included or not in the reporting boundaries.

Note: The country, subregion, region are defined using the UN country classification guidelines available here. The only Super-region used is Asia Pacific, grouped from Asia (code 142 in the UN classification) and Oceania (code 142 in the UN classification).

Prefill: This indicator is similar to the one included in the 2019 assessment and some sections have been prefilled from the 2019 assessment. Review the response and/or evidence carefully.

2020 changes: Added lifecycle stage of facility i.e. whether in Operation or in Development. Embedded google maps software in the address bar for facility locations.

Other: For sectors that do not appear in the drop-down list, "Other" can be selected.

Terminology

Address: The address should include the number, street, town/city, and region/state.

Facility: A site, structure or installation for engaging in an activity that provides infrastructure services.

GPS coordinates: Location based on the latitude and longitude in decimal degrees DD. eg: Latitude ("52.336424") - Longitude ("4.884971"). Coordinates can be generated using [GPS Coordinates.org](https://www.gps-coordinates.org/)

Gross Asset Value (GAV): The gross infrastructure value owned by the entity being the 'tangible fixed assets' or 'property, plant and equipment' associated with the infrastructure asset.

In development: The facility is under development and is not yet 'in operation'.

In operation: The facility is providing its core service (output) and has commenced earning revenue.

Sector: A group of specific industrial activities and types of physical assets and technologies.

References

[EDHECInfra - The Infrastructure Company Classification Standards \(TICCS™\), 2018](#)

RC4 Ancillary activities

Does the entity engage in any ancillary activities, outside the main activity associated with its sector?

Yes

Indicate which of the following activities are undertaken by the entity (multiple options possible)

- Maintenance of natural areas (e.g. parks, fields, riparian zones)
- Operation of natural areas (e.g. parks, fields, riparian zones)
- Maintenance of mobile equipment and plant (e.g. vehicles, mobile machinery, aircraft, rolling stock)
- Operation of mobile equipment and plant (e.g. vehicles, mobile machinery, aircraft, rolling stock)
- Storage of mobile equipment (e.g. parking, hangars, docks)
- Maintenance of civil infrastructure (e.g. tunnels, waterways, roads, tracks, runways)
- Operation of civil infrastructure (e.g. tunnels, waterways, roads, tracks, runways)
- Maintenance of utility infrastructure (e.g. cables, sewage, drains, pipes)
- Operation of utility infrastructure (e.g. cables, sewage, drains, pipes)
- Operation of water utility plant (e.g. water collection, storage, treatment)
- Operation of waste utility plant (e.g. storage, processing, sorting)
- Maintenance of real estate (e.g. terminals, halls)
- Maintenance of energy infrastructure (e.g. plant, transmission lines, pipelines)
- Fuel and resource extraction (e.g. oil, natural gas, coal mining)
- Fuel storage
- Fuel processing (e.g. refining, hydrogen production)
- Energy distribution and transmission (e.g. natural gas pipelines, district heating)
- Electricity generation (e.g. renewable energy generation, power plants)
- Electricity storage (e.g. batteries)
- Electricity distribution and transmission
- Office activities
- Network management (e.g. signalling, traffic control, smart grids, toll booths)
- Information management (e.g. data processing, servers, smart meters)
- Transport of passengers (e.g. transit, baggage handling)
- Transport of goods (e.g. cargo handling, distribution)

- Storage of goods (e.g. warehousing)
- Provision of food and recreational services (e.g. waiting areas, restaurants, hotels, retail)
- Provision of care and educational services (e.g. hospitals, clinics, schools)
- Provision of security services (e.g. customs, correctional facilities)
- Provision of cleaning services (e.g. window washing, rubbish collection)
- Construction and development (e.g. major renovations, expansions and refurbishments)
- Other: _____
- Indicate which of the ancillary activities are included within the reporting boundary (multiple options possible)
 - Maintenance of natural areas (e.g. parks, fields, riparian zones)
 - Operation of natural areas (e.g. parks, fields, riparian zones)
 - Maintenance of mobile equipment and plant (e.g. vehicles, mobile machinery, aircraft, rolling stock)
 - Operation of mobile equipment and plant (e.g. vehicles, mobile machinery, aircraft, rolling stock)
 - Storage of mobile equipment (e.g. parking, hangars, docks)
 - Maintenance of civil infrastructure (e.g. tunnels, waterways, roads, tracks, runways)
 - Operation of civil infrastructure (e.g. tunnels, waterways, roads, tracks, runways)
 - Maintenance of utility infrastructure (e.g. cables, sewage, drains, pipes)
 - Operation of utility infrastructure (e.g. cables, sewage, drains, pipes)
 - Operation of water utility plant (e.g. water collection, storage, treatment)
 - Operation of waste utility plant (e.g. storage, processing, sorting)
 - Maintenance of real estate (e.g. terminals, halls)
 - Maintenance of energy infrastructure (e.g. plant, transmission lines, pipelines)
 - Fuel and resource extraction (e.g. oil, natural gas, coal mining)
 - Fuel storage
 - Fuel processing (e.g. refining, hydrogen production)
 - Energy distribution and transmission (e.g. natural gas pipelines, district heating)
 - Electricity generation (e.g. renewable energy generation, power plants)
 - Electricity storage (e.g. batteries)
 - Electricity distribution and transmission
 - Office activities
 - Network management (e.g. signalling, traffic control, smart grids, toll

- Network management (e.g. signaling, traffic control, smart grids, toll booths)
- Information management (e.g. data processing, servers, smart meters)
- Transport of passengers (e.g. transit, baggage handling)
- Transport of goods (e.g. cargo handling, distribution)
- Storage of goods (e.g. warehousing)
- Provision of food and recreational services (e.g. waiting areas, restaurants, hotels, retail)
- Provision of care and educational services (e.g. hospitals, clinics, schools)
- Provision of security services (e.g. customs, correctional facilities)
- Provision of cleaning services (e.g. window washing, rubbish collection)
- Construction and development (e.g. major renovations, expansions and refurbishments)
- Other: _____

No

Intent

Describe the ancillary activities engaged in by the entity. This information is used in combination with the Sector & Geography (RC3) and Reporting Year (EC4) descriptions to describe the entity's reporting boundary. Exceptions to the described reporting boundary must be described in the Performance Component indicators. Clear understanding of reporting boundaries will provide for their standardisation in future and therefore accurate like for like comparisons to be made.

Requirements

- Select all significant activities engaged in by the entity, outside of its main activity. Insignificant activities typically make up less than 1% of the entity's budget, resourcing or revenue, so excluding them from ESG reporting still provides a complete picture to stakeholders.
- Select all of the ancillary activities that are included within the boundary of ESG reporting of the entity. This must be a sub-set (or all) of the activities listed in the previous section (in other words only select from the activities that were selected in the previous list).

Terminology

Ancillary activity: The activities engaged in by the entity that assist it in providing its core service(s) but that are not its main activity.

Main activity: The activity engaged in by the entity that are associated with its sector and the core service that the entity provides.

References

Infrastructure as an asset class, Second edition, by Barbara Weber, Mirjam Staub-Bisang and Hans Wilhelm Alfen, 2016.

Structure

- Corporate
- Special Purpose Vehicle (SPV)
- Other: _____

Business Risk (Revenue basis)

- Merchant
- Concessionary/Contracted
- Regulated
- Other: _____

Scope of service

In addition to simply providing the asset, does the entity provide associated services (multiple answers possible)?

- Yes
- Asset maintenance
Name of Asset Maintainer (May be same as organization name): _____
- Asset operation
Name of Asset Operator (May be same as organization name): _____
- No

Intent

Describe the structure and business risk of the participating entity. The scope of service of the entity influences materiality (see guidance in RC7 and the [GRESB Materiality Matrix](#) for more details).

Requirements

Select the nature of the participating entity and relevant sub-options as follows:

Structure: Select whether the entity's structure is that of a Corporate, a Special Purpose Vehicle or some other structure (if so, then please describe).

Business Risk (Revenue basis): Select the most significant business risks (or revenue basis) borne by the entity being Merchant, Concessionary/Contracted, Regulated, or Other. This aligns with the EDHECinfra™TICCS™ classification for Business Risk. Multiple answers are possible. For 'Other' answer, describe the business risk borne.

Scope of Service: Select whether the entity provides associated services in addition to providing the asset itself. The associated services may be Asset Maintenance and/or Asset Operation. This section then determines whether the Scope of Service provided by the entity is:

- Asset provision
- Asset provision and maintenance
- Asset provision and operation
- Asset provision, maintenance and operation.

This information is used for materiality-based scoring and to determine peers for benchmarking and reporting purposes.

Prefill: This indicator is similar to the one included in the 2019 assessment and some sections have been pre-filled from the 2019 assessment. Review the response and/or evidence carefully.

Terminology

Asset maintenance: All actions necessary for retaining an asset as near as practicable to its original condition, but excluding rehabilitation or renewal. Maintenance does not increase the service potential of the asset or keep it in its original condition, it slows down deterioration and delays when rehabilitation or replacement is necessary.

Asset operation: The active process of utilizing an asset, which will consume resources such as manpower, energy, chemicals and materials.

Asset provision: The act of owning and making an asset physically available for operational and maintenance activities by the organization's private parties or any other third-party (e.g contractors). Asset provision can also include design & construction, work typically done on Greenfield Assets. For classification purposes, Greenfield Asset developers should see themselves as Asset providers.

Concessionary/Contracted: A contracted infrastructure organization that enters into a long-term contract to presell all or most of its output at a pre-agreed price. All or the majority of market risk (price and/or demand) is transferred to a third party. The contract is for a significant period of the investment's life, typically one or several decades.

Corporate: A corporate structure is that of a legal entity that is separate and distinct from its owners. Corporations have limited liability, which means that shareholders may take part in the profits through dividends and stock appreciation but are not personally liable for the company's debts.

Merchant: An organization that collects fees and tariffs from end users as a function of the effective demand for the provided service. The organization is mostly or fully exposed to market risks (price and demand risk).

Public Entity: A company that is publicly listed and traded on a recognized stock exchange such as Nasdaq or NYSE.

Regulated: An organization whose business is regulated by government agencies via limits on tariffs, rate of returns, or revenues. Also referred to as discretionary regulation.

Special Purpose Vehicle (SPV): A subsidiary entity with an asset/liability structure and legal status that makes its obligations secure.

References

[EDHECInfra, The Infrastructure Company Classification Standards \(TICCS™\), 2018](#)

[IPWEA, International Infrastructure Management Manual, 2015](#)

[World Bank Group, Public-Private Partnership in Infrastructure Resource Centre](#)

RC6 Description of the asset

RC4

Provide a description of the entity (max 250 words): _____

Can the entity upload (as supporting evidence) a photo(s) that represents the asset (for GRESB marketing purposes)?

By uploading an image, you give GRESB permission to credit the image to the Reporting Entity specified in EC1, and to use the image, both in print and digitally, for marketing and communication purposes only.

Yes

UPLOAD or URL _____

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

No

Can the entity upload (as supporting evidence) a logo(s) that represents the asset (for GRESB marketing purposes)?

By uploading a logo image, you give GRESB permission to credit the logo to the Reporting Entity specified in EC1, and to use the logo, both in print and digitally, for marketing and communication purposes only.

Yes

UPLOAD or URL _____

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

No

Intent

Provide a description and image of the entity.

Requirements

The description may include:

- Purpose of the entity's operations;
- The service(s) provided by the asset
- Ownership and governance
- Market position of the entity
- Link to website

It is not necessary to re-state information that has already been provided, such as the entity's sector focus or location of operations.

Upload a logo for the entity or the organisation that manages it. This is used for promotional purposes.

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been prefilled from the 2019 Assessment. Review the response and/or evidence carefully.

2020 changes: Added upload of entity's logo.

Select the answers applicable to your entity below

Habitat and biodiversity - What is the entity's proximity to ecological habitat?

- Containing, overlapping, adjacent
- Close (<100m)
- Distant (>100m)

Contaminated land - Does the entity have contamination on site?

- Yes
- No

Resilience and adaptation to climate change - Is the entity located in an area close to the sea, prone to earthquakes, droughts, floods, wildlandfires or other?

- Yes

Is the entity located in a coastal area?

- Yes
- No
- No

Water inflows/withdrawals - What is the scale of the entity's water use/withdrawal and water stress in the location?

- High consumption (>1 Megalitre/US\$) in locations with high water stress
- High consumption (>1 Megalitre/US\$) in locations with low water stress
- Low consumption (<1 Megalitre/US\$) in locations with high water stress
- Low consumption (<1 Megalitre/US\$) in locations with low water stress
- No consumption

Water outflows/discharges - Is there a risk of pollution from discharges to waterways (including groundwater)?

- Yes and waterways are in locations with high water stress
- Yes but waterways are not in locations with high water stress
- No

Light pollution - Does the entity use significant external lighting at night?

- Yes and the location is densely populated
- Yes but the location is not densely populated
- No

Noise pollution - Does the entity emit noise externally?

- Yes and the location is densely populated
- Yes but the location is not densely populated

No

Number of customers - What is the number of customers?

>100

10-100

<10

Number of users - What is the number of users that physically interact with the asset?

>1000

100-1000

10-100

<10

Materiality results

Environmental		Social		Governance	
Issue	Entity specific materiality	Issue	Entity specific materiality	Issue	Entity specific materiality
Air pollutants	Low/Medium/High	Child labour	Low/Medium/High	Audit committee structure /independence	Low/Medium/High
Biodiversity & Habitat	Low/Medium/High	Community development	Low/Medium/High	Board composition	Low/Medium/High
Contamination	Low/Medium/High	Customer satisfaction	Low/Medium/High	Bribery and corruption	Low/Medium/High
Energy	Low/Medium/High	Employee engagement	Low/Medium/High	Compensation committee structure/ independence	Low/Medium/High
Greenhouse gas emissions	Low/Medium/High	Forced or compulsory labor	Low/Medium/High	Cybersecurity	Low/Medium/High
Light pollution	Low/Medium/High	Freedom of association	Low/Medium/High	Data protection and privacy	Low/Medium/High
Material sourcing and resource efficiency	Low/Medium/High	Gender and diversity	Low/Medium/High	Executive compensation	Low/Medium/High
Noise	Low/Medium/High	Health and safety: community	Low/Medium/High	Fiduciary duty	Low/Medium/High
Resilience (adaptation) to climate change	Low/Medium/High	Health and safety: contractors	Low/Medium/High	Fraud	Low/Medium/High
Resilience to catastrophe/ disaster	Low/Medium/High	Health and safety: customers	Low/Medium/High	Independence of board chair	Low/Medium/High
Waste	Low/Medium/High	Health and safety: employees	Low/Medium/High	Lobbying activities	Low/Medium/High
Water discharge/pollution	Low/Medium/High	Health and safety: supply chain	Low/Medium/High	Political contributions	Low/Medium/High
Water use/withdrawal	Low/Medium/High	Labor standards and working conditions	Low/Medium/High	Whistleblower protection	Low/Medium/High
		Social enterprise partnering	Low/Medium/High		
		Stakeholder relations	Low/Medium/High		

Not scored

Intent

Infrastructure is a diverse asset class, where the relevance (materiality) of ESG issues can vary between assets due to a range of factors. The intent of this indicator is to determine the materiality of a range of ESG issues covered by the GRESB Assessment.

Requirements

It is mandatory to complete the GRESB Materiality Assessment as this forms an essential part of the materiality-based scoring applied in this Assessment.

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been prefilled from the 2019 Assessment. Review the response and/or evidence carefully.

Specific materiality weightings are assigned to the entity based on fifteen Materiality factors comprising the Number of Employees and Contractors (from RC2), Primary Sector and Primary Location (from RC3), the Scope of Service (from EC2) and the answers to the nine questions in this indicator. Answer each of the nine questions. Where the answer is somewhat uncertain, it is recommended to err on the conservative side and select the response with the higher relevance.

Based on the fifteen Materiality factors, scoring weightings are assigned to ESG issueset at one of four possible materiality levels, and these directly translate to a scoring weighting in the Assessment, as follows:

Materiality

Weighting

No relevance	0
Low relevance	0
Medium relevance	1
High relevance	2

These entity specific weightings are used in several subsequent indicators for scoring (this is noted within each relevant indicator).

The outcome of completing this indicator is an entity specific materiality weighting for each of the ESG issues. These weightings are displayed at the bottom of the indicator in the portal. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the Materiality Tool.

Terminology

Factor	Question	Answers	Guidance
Primary Sector (RC3)	What is the entity's Primary Sector?	See Sector Matrix	
Primary Location (RC3)	Is the entity's Primary Location in developed countries, developing countries or mixed?	Developed	Developed countries are Japan, Canada, United States, Australia, New Zealand, Israel and Europe. See RC3 for more details.
		Developing	Developing countries are any that are not developed.
		Mixed	Mixed means that the entity is located in locations that are a mix of developed and developing countries.
Biodiversity and habitat	What is the entity's proximity to ecological habitat?	Containing, overlapping, adjacent	Ecological habitat means terrestrial or aquatic areas distinguished by geographic, abiotic and biotic features, whether entirely natural or semi-natural.g. as per the classifications in Annex I of the EU Habitat Directive . The distance should be measured as the closest point of any part of the asset to any part of an ecological habitat. Adjacent means directly bordering or where habitat is within the asset facility boundary.
		Close (<100m)	
		Asset provision and operation	
Contaminated Land	Does the entity have contamination on site?	Yes	Contaminated land contains substances that are causing or could cause (a) significant harm to people, property or protected species; or (b) significant pollution of surface waters (for example lakes and rivers) or groundwater. Land contamination can result from a variety of intended, accidental, or naturally occurring activities and events
		No	

			such as manufacturing, mineral extraction, abandonment of mines, national defense activities, waste disposal, accidental spills, illegal dumping, leaking underground storage tanks, hurricanes, floods, pesticide use, and fertilizer application.
Resilience and climate change adaptation	Is the entity located in an area close to the sea, prone to earthquakes, droughts, floods, cyclones, wildlandfires or other natural disasters?	Yes and is in a coastal area	In a coastal area' means that the asset has at least 50 % of its surface area within a distance of 10 km from the line of mean high tide between land and water.
		Yes but is not in a coastal area	
		No	
Water inflows/withdrawals	What is the scale of the entity's water use/withdrawal and scarcity of water in the location?	High consumption (Greater than 1 Megalitre per US\$) in location with high water stress	High consumption means greater than 1 Megalitre per US\$ in Gross Asset Value.
		High consumption (Greater than 1 Megalitre per US\$) in locations with low water stress	High water stress means High or Extremely High Baseline Water Stress as classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct.
		Low consumption (Lower than 1 Megalitre per US\$) in locations with high water stress	Low consumption means less than 1 Megalitre per US\$ in Gross Asset Value.
		Low consumption (Lower than 1 Megalitre per US\$) in locations with low water stress	
		No consumption	Low water stress means not High or Extremely High Baseline Water Stress
Water outflows/discharges	Is there a risk of pollution from discharges to waterways (including groundwater)?	Yes and waterways are in locations with high water stress	Risk of pollution means there are measurable pollutants in the discharge that if their levels were elevated could cause negative impact.
		Yes but waterways are not in locations with high water stress	High water stress means High or Extremely High Baseline Water Stress as classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct.
		No	
Light pollution	Does the entity use significant external lighting at night?	Yes and the location is densely populated	Densely populated means greater than 2000 people per square kilometer.
		Yes but the location is not densely populated	
		No	
Noise pollution	Does the entity	Yes and the location is densely	Densely populated means greater

	emit noise externally?	populated	than 2000 people per square kilometer.
		Yes but the location is not densely populated	
		No	
Number of customers	What is the number of customers?	>100	Customers are people or organisations that purchase the service(s) provided by the asset. This can include business (B2B) and retail customers.
		10-100	
		<10	
Number of users	What is the number of users that physically interact with the asset?	>1000	Users are people that interact physically with the asset when they use its services. Interaction means using one or more of their physical senses e.g. a mass transit passenger service. There is typically a safety risk associated with the users physical interaction.
		100-1000	
		10-100	
		<10	
Number of employees (RC)	What is the number of FTE employees?	>100	(FTE) Full Time Equivalent of the entity's employees. FTE is calculated by adding all hours paid to employees (full-time, part-time, or any other) and dividing them by the number of hours that a full-time employee should work in that given period.
		20-100	
		<20	
Number of contractors (RC)	What is the number of FTE contractors?	>100	(FTE) Full Time Equivalent of the entity's contractors FTE is calculated by adding all hours paid to contractors(full-time, part-time, or any other) and dividing them by the number of hours that a full-time contractor should work in that given period.
		10-100	
		<20	
Number of workers (RC) calculated	What is the number of FTE workers (employees and contractors)?	100 20-100 <20	(FTE) Full Time Equivalent of the entity's employees and contractors FTE is calculated by adding all hours paid to workers (full-time, part-time, or any other) and dividing them by the number of hours that a full-time workers should work in that given period.
Number of employees and scope of service (RC5)	What is the entity's number of employees and scope of service?	Number of employees >100 - Asset provision	(FTE) Full Time Equivalent of the entity's employees combined with its scope of service (see RC5).
		Number of employees >100 - Asset provision and maintenance	
		Number of employees >100 - Asset provision and operation	
		Number of employees >100 -	

	Asset provision, maintenance and operation
	Number of employees 20-100 - Asset provision
	Number of employees 20-100 - Asset provision and maintenance
	Number of employees 20-100 - Asset provision and operation
	Number of employees 20-100 - Asset provision, maintenance and operation
	Number of employees <20 - Asset provision
	Number of employees <20 - Asset provision and operation
	Number of employees <20 - Asset provision, maintenance and operation

Environmental issues: The impact on living and non-living natural systems, including land, air, water and ecosystems. This includes, but is not limited to, biodiversity, transport and product and service-related impacts, as well as environmental compliance and expenditures. Full reference to listed environmental issues can be found in Appendix 2.

Governance issues: Governance structure and composition of the organization. This includes how the highest governance body is established and structured in support of the organization's purpose, and how this purpose relates to economic, environmental and social dimensions. Full reference to listed governance issues can be found in the Appendix 2.

High relevance: An issue is of high relevance if it is of high importance for (a) reflecting an entity's environmental, social or governance impacts; or (b) substantively influencing the assessments and decisions of stakeholders.

Low relevance: An issue is of low relevance if it is of low importance for (a) reflecting an entity's environmental, social or governance impacts; or (b) substantively influencing the assessments and decision of stakeholders

Material: An issue is material if it may reasonably be considered important for reflecting an entity's relevant environmental, social or governance impacts; or substantively influencing the assessments and decisions of stakeholders.

Materiality assessment: The process for determining which ESG issues are material to an entity.

Medium relevance: An issue is of medium relevance if it is of medium importance for (a) reflecting an entity's environmental, social or governance impacts; or (b) substantively influencing the assessments and decisions of stakeholders.

No relevance: An issue is of no relevance if it is of no importance for (a) reflecting an entity's environmental, social or governance impacts; or (b) substantively influencing the assessments and decisions of stakeholders.

Primary sector: The main infrastructure sector of the entity as provided in RC3 ("Sector & geography").

Social issues: Concerns the impacts the organization has on the social systems within which it operates. Full reference to listed social issues can be found in Appendix 2.

References

[Columbia University/NASA Socioeconomic Data and Applications Center's \(SEDAC\) Gridded Population of the World \(GPW\), v4](#)

[Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora \(2013\).](#)

[Eurostat Glossary - Coastal area 2018](#)

[UK Environmental Protection Act](#)

[United Nations Standard Country or Area Codes for Statistical Use \(M49\)](#)

[World Resources Institute - Aqueduct Water Risk Atlas](#)

Alignment with External Frameworks

[DJSI CSA 2019 - 3.2 Materiality](#)

[GRI Standards 2016 - 101-1.3: The Materiality Principle](#)



Management: Leadership

Intent and Overview

This aspect evaluates how the entity integrates ESG into its overall business strategy. The purpose of this section is to (1) identify public ESG commitments made by the entity, (2) identify who is responsible for managing ESG issues and has decision-making authority; (3) communicate to investors how the entity structures management of ESG issues and (4) determine how ESG is embedded into the entity.

Leadership

2019 Indicator

Has the entity undertaken an ESG materiality assessment in the last three years?

Yes

Elements covered in the materiality assessment report (multiple answers possible)

Identification of the material ESG issues from the entity's operations

Engagement with relevant stakeholders to identify which issues are material

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , G

Intent

The intent of this indicator is to assess whether the entity has undertaken a materiality assessment. A materiality assessment is a common exercise adopted to inform sustainability reporting and communication strategies.

As well as guiding the issues for ESG reporting, a materiality assessment should also be used as a strategic business tool. A materiality process delivers greatest benefits when used as an opportunity to apply an ESG lens to business risk, opportunity, trend-spotting and enterprise risk management processes, and as an engagement tool with stakeholders.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Prefill: This indicator has remained the same as the 2019 Assessment and has been prefilled with 2019 Assessment answers. Review the response and/or evidence carefully.

Validation

This indicator is not subject to automatic or manual validation.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. The score of this indicator is based on the materiality assessment i.) identifying material ESG issues assessed and ii.) engaging with stakeholders to identify material issues. Selecting both checkboxes is required in order to score maximum points.

Terminology

Material: An issue is material if it may reasonably be considered important for reflecting an entity's relevant environmental, social or governance impacts; or substantively influencing the assessments and decisions of stakeholders.

Materiality assessment: The process for determining which ESG issues are material to an entity.

Relevant impacts: Are those that are a subject of established concern for expert communities, or that have been identified using established tools, such as impact assessment methodologies or life cycle assessments. Impacts that are considered important enough to require active management or engagement by the entity are likely to be considered relevant.

References

Good practice example: Please refer to pages from 4 to 9 at this link.

Alignment with External Frameworks

DJSI CSA 2019 - 3.2 Materiality

GRI Standards 2016 - 101-1.3: The Materiality Principle

Relevant UN Sustainable Development Goals

Has the entity made a public commitment to ESG leadership standards or principles? Yes

- General ESG commitments (multiple answers possible)
 - Commitments that are publicly evidenced and oblige the organization to take action (multiple answers possible).
 - UN Global Compact
 - Other: _____
 - Commitments that are publicly evidenced and do not oblige the organization to take action (multiple answers possible).
List commitment(s): _____
- Formal environmental issue-specific commitments (multiple answers possible)
 - Commitments that are publicly evidenced and oblige the organization to take action (multiple answers possible).
 - EV100
 - Powering Past Coal Alliance (PPCA)
 - RE 100
 - Science Based Targets Initiative
 - UNFCCC Climate Neutral Now Pledge
 - UN Global Compact Our Only Future
 - WorldGBC's Net Zero Carbon Buildings Commitment
 - Other: _____
 - Commitments that are publicly evidenced and do not oblige the organization to take action (multiple answers possible).
 - Task force on Climate-related Financial Disclosures
 - Other: _____
- Formal social issue-specific commitments (multiple answers possible)
 - Commitments that are publicly evidenced and oblige the organization to take action (multiple answers possible).
List commitment(s): _____
 - Commitments that are publicly evidenced and do not oblige the organization to take action (multiple answers possible).
 - The Responsible Labor Initiative (RLI)
 - World Business Council for Sustainable Development's Call to Action
 - 30% Club
 - Other: _____

Formal governance issue-specific commitments (multiple answers possible)

Commitments that are publicly evidenced and oblige the organization to take action (multiple answers possible).

List commitment(s): _____

Commitments that are publicly evidenced and do not oblige the organization to take action (multiple answers possible).

List commitment(s): _____

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Not scored , G

Intent

The intent of this indicator is to assess the entity's commitment to ESG leadership standards or principles. By making a commitment to ESG leadership standards or principles, an entity publicly demonstrates its commitment to ESG, uses organizational standards and/or frameworks that are universally accepted and may have obligations to comply with the standards and/or frameworks.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Public commitment: Commitment must be public (e.g via public register) and the entity a member/signatory.

Requires action: The commitment requires the entity to take action (where participant has indicated that it does).

Validation

This indicator is not subject to automatic or manual validation.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is not scored and is for reporting purposes only.

Terminology

[EV100:](#)

A global initiative bringing together forward looking companies committed to accelerating the transition to electric vehicles (EVs) and making electric transport the new normal by 2030.

[RE100:](#)

RE100 is a global initiative uniting businesses committed to 100% renewable electricity, working to massively increase demand for and delivery of renewable energy. RE100 is convened by The Climate Group in partnership with CDP.

[Powering PastCoal Alliance \(PPCA\):](#)

A coalition of countries, states and business working towards the global phase-out of unabated coal power.

[Science Based Targets Initiative:](#)

The initiative is a collaboration between CDP, the United Nations Global Compact, World Resources Institute, and the World Wide Fund for Nature (WWF) which has a goal of enabling companies setting science based targets to reduce GHG emissions.

[Task Force on Climate-related Financial Disclosures:](#)

The Task Force on Climate-related Financial Disclosures will develop voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders.

The Responsible Labor Initiative (RLI):

A multi-industry, multi-stakeholder collaboration stemming out of the forced labor commitments and programs of the Responsible Business Alliance (RBA), formerly the Electronic Industry Citizenship Coalition (EICC).

UNFCCC Climate Neutral Now Pledge

A pledge representing a group of signatory companies and governments taking the lead on reducing emissions and accelerating the global journey to a climate-neutral future.

UN Global Compact:

The UN Global Compact is a voluntary initiative based on CEO commitments to implement universal sustainability principles and to take steps to support UN goals.

UN Global Compact Our Only Future:

A global movement of leading companies aligning their businesses with the most ambitious aim of the Paris Agreement, to limit global temperature rise to 1.5 °C above pre-industrial levels.

World Business Council for Sustainable Development's Call to Action:

A global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world and helping member companies become more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies.

WorldGBC's Net Zero Carbon Buildings Commitment:

The Net Zero Carbon Buildings Commitment (the Commitment) challenges companies, cities, states and regions 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.

30% Club:

A campaign group of Chairs and CEOs taking action to increase gender diversity on boards and senior management teams.

Does the entity have specific ESG objectives? Yes

The objectives relate to (multiple answers possible)

- General sustainability
- Environment
- Social
- Governance

The objectives are

 Publicly available

Please provide applicable hyperlink or a separate publicly available document

UPLOAD or URL _____

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

 Not publicly available

Provide applicable evidence

UPLOAD

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

 No

Provide additional context for the answer provided (not validated, for reporting purposes only)

3.55 points , G**Intent**

Clear Environmental, Social and Governance (ESG) objectives help participants identify material issues and integrate them into overall day-to-day management practices. Integrating ESG practices into the overall business strategy fosters alignment between management of sustainability issues and the overall strategy of the entity. Having clear ESG objectives also demonstrates commitment to monitoring and improving ESG performance.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been pre-filled from the 2019 Assessment. Review the response and/or evidence carefully.

Validation

Evidence: Document upload or hyperlink. The evidence should sufficiently support all the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps.

The provided evidence should cover the following elements:

- Specific, actionable ESG objective(s) that relate to each of the selected criteria (i.e. Evidence of implementation or formal adoption of the objectives).
- The public availability of the objectives (if applicable).

Acceptable evidence may include illustrative portions of business plans, annual report, strategic developments, target documents, company presentations, etc.

Hyperlink: Hyperlink is mandatory for this indicator when publicly available is selected. Ensure that the hyperlink is not outdated and the relevant page can be accessed within two steps. The URL should demonstrate the existence of publicly available commitment(s) selected.

Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: Fractional points are awarded to each objective type and then aggregated to calculate the final fractional score. It is not necessary to select all checkboxes in order to obtain the maximum score for this indicator. The objectives are not all assigned equal weights.

Section 2: 'Evidence' is mandatory for this indicator. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. Non-publicly available evidence will score lower. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Terminology

Environmental objectives: Overall environmental goals, arising from policies, that an entity sets itself to achieve. The objectives should be quantifiable and correlated with the entity's ambition.

Formally adopted: To set and communicate a strategy/target/program, at least internally, and having implemented or prepared actions to achieve this.

General sustainability objectives: Strategic or cross-cutting objectives to improve overall ESG performance that are not specific to environmental, social or governance issues. For example, relative position on sustainability indices or rankings.

Governance objectives: Overall governance goals, arising from policies, that an entity sets itself to achieve. The objectives should be quantifiable and correlated with the entity's ambitions.

Overall business strategy: The entity's long-term strategy for meeting its objectives.

Social objectives: Overall social goals, arising from policies, that an entity sets itself to achieve. The objectives should be quantifiable and correlated with the entity's ambitions.

References

[ISO14001: Environmental Management](#)

[UNPRI, PRI Reporting Framework, 2018](#)

Does the entity have one or more persons responsible for implementing ESG objectives?

Yes

Dedicated employee for whom sustainability is the core responsibility

Provide the details for the most senior of these employees

Name: _____

Job title: _____

Employee for whom sustainability is among their responsibilities

Provide the details for the most senior of these employees

Name: _____

Job title: _____

External consultant/manager

Name of the main contact: _____

Job title: _____

Investment partners (co-investors/JV partners)

Name of the main contact: _____

Job title: _____

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , G

Intent

The intent of this indicator is to identify resources allocated to ESG management and their scope of responsibilities. Having personnel dedicated to ESG issues increases the likelihood that the entity's ESG objectives will be properly managed and targets will be met.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Details of employee: Participants must provide the name and job title of the relevant employee. This information will be used for reporting purposes only.

Validation

This indicator is not subject to automatic or manual validation.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. The score of this indicator is based on the level of responsibility of the selected person(s). Selecting all checkboxes is not required in order to score maximum points.

Terminology

Dedicated employee(s) for whom ESG is the core responsibility: The employee(s)' main responsibility is defining, implementing and monitoring the ESG objectives at entity level.

Employee(s) for whom ESG is among their responsibilities: The implementation and monitoring of ESG is part of the employee's role, but is not necessarily their main responsibility.

ESG objectives: Strategic priorities and key topics for the management and/or improvement of ESG issues.

Investment partners (co-investor/JV partners): A General Partner that co-owns and operates (part of) the entity's assets and is responsible for implementing ESG objectives at asset level.

Persons responsible: A person or group of people who work on the implementation and completion of the task, project or strategy.

References

Recommendations of the Task Force on Climate-Related Financial Disclosures June 2017: Governance A&B Alignment with External Frameworks

[GRI Standards 2016 - 102-20: Executive-level responsibility for economic, environmental, and social topics](#)

Does the entity have a senior decision-maker accountable for ESG issues?

Yes

Provide the details for the most senior decision-maker on ESG issues

Name: _____

Job title: _____

The individual's most senior role is as part of:

Board of directors

C-suite level staff

Fund/portfolio managers

Investment committee

Other: _____

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , G

Intent

The presence of senior management dedicated to ESG increases the likelihood that the objectives will be met. A structured process to keep the most senior decision-maker informed on the entity's ESG performance increases accountability and encourages continuous improvement.

Requirements

Select Yes or No: If selecting Yes, select all applicable checkbox(es).

Senior decision-maker: The entity's most senior decision-maker on ESG is expected to be actively involved in the process of defining the ESG objectives and should approve associated strategic decisions regarding ESG. This person can be the same as the individual identified in LE3.

Details of employee: Participants must provide the name and job title of the relevant employee. This information will be used for reporting purposes only.

Open text box: The content of this open text box is not used for scoring, but will be included in the Benchmark Report. Participants may use this open text box to communicate on:

- Means of communication. Examples can include, but are not limited to: written memos, formal reports, presentations or meeting minutes;
- Frequency of reporting. Examples can include, but are not limited to: monthly, quarterly or annually;
- Contents of reporting. Examples can include, but are not limited to: (i) an overview of asset performance (quantitative), (ii) realized ESG performance against objectives, (iii) updates regarding long-term strategic objectives, (iv) updates/notifications regarding regulatory changes or (v) updates regarding proposed actions to improve the performance of the assets.

Validation

Other: State the other senior decision-maker on ESG issues. The answer should only refer to the department or governance body of which the senior decision maker is part of. Report only one other answer.

See Appendix 4 of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. Points are awarded based on the level of seniority of the responsible senior decision-maker. Checkboxes are equally weighted.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Terminology

Asset manager: A person or group of people responsible for developing and overseeing financial and strategic developments of investments at asset level.

Board of Directors: A body of elected or appointed members who jointly oversee the activities of a company or organization as detailed in the corporate charter. Boards normally comprise both executive and non-executive directors.

C-suite level staff: A team of individuals who have the day-to-day responsibility of managing the entity. C-suite level staff are sometimes referred to, within corporations, as senior management, executive management, executive leadership team, top management, upper management, higher management, or simply seniors.

ESG strategy: Strategy that (1) sets out the participant's procedures and (2) sets the direction and guidance for the entity's implementation of ESG measures.

Fund/portfolio manager: A person or a group who manages a portfolio of investments and the deployment of investor capital by creating and implementing asset level strategies across the entire portfolio or fund.

Investment Committee: A group of individuals who oversee the entity's investment strategy, evaluates investment proposals and maintains the investment policies, subject to the Board's approval.

Person accountable: A person with sign off (approval) authority over the deliverable task, project or strategy. The accountable person can delegate the work to other responsible people who will work on the implementation and completion of the task, project or strategy.

Senior decision-maker accountable for ESG issues: A senior individual with sign off (approval) authority for approving strategic ESG objectives and steps undertaken to achieve these objectives. The accountable person can delegate the work to other responsible people who will work on the implementation and completion of the task, project or strategy.

References

[Recommendations of the Task Force on Climate-Related Financial Disclosures June 2017: Governance A&B Alignment with External Frameworks](#)

[CDP Climate Change 2020 - C1 Governance](#)

[GRI Standards 2016 - 102-20: Executive-level responsibility for economic, environmental, and social topics](#)

Does the entity include ESG factors in the annual performance targets of personnel? Yes

Does performance against these targets have predetermined consequences?
(multiple answers possible)

 Yes Financial consequences

Select the personnel to whom these factors apply (multiple answers possible):

- All other employees
- Asset managers
- Board of directors
- C-suite level staff
- Dedicated staff on ESG issues
- ESG managers
- External managers or service providers
- Fund/portfolio managers
- Investment analysts
- Investment committee
- Investor relations
- Other: _____

 Non-financial consequences

Select the personnel to whom these factors apply (multiple answers possible):

- All other employees
- Asset managers
- Board of directors
- C-suite level staff
- Dedicated staff on ESG issues
- ESG managers
- External managers or service providers
- Fund/portfolio managers
- Investment analysts

- Investment committee
- Investor relations
- Other: _____

No

Provide applicable evidence

UPLOAD or URL _____

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

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

3.55 points , G

Intent

This indicator intends to identify whether and to what extent, ESG issues are addressed in personnel performance targets. Including ESG factors in annual performance targets for all personnel can increase the entity's capacity to achieve improved ESG performance.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Validation

Evidence: Document upload or hyperlink. The evidence should sufficiently support all the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps.

Evidence requirements:

- Existence of employee performance targets on ESG related issues to each of the selected personnel groups.
- Clearly demonstrated financial and/or non-financial consequences for the selected personnel groups.
- Targets must relate to all members within the selected personnel groups. If the target relates to a single employee, that employee should be listed as an Other.

Evidence examples may include but are not limited to:

- Official documents from the entity describing rewards, penalties, or support associated with specific ESG-related targets.
- Examples of financial consequence include employee KPI and bonus schemes. Examples of non-financial consequence include targets being covered in performance reviews, 'employee of the month' awards and recognition schemes.

Other: State the other employee type. Other answers should relate to groups of employees such as acquisition, development, or facilities teams, or specific personnel who have ESG targets assigned to them. Ensure that the other answer provided is not a duplicate of a selected option above (e.g., sustainability team when 'dedicated staff on ESG issues' is selected). It is possible to report multiple other answers.

Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: Fractional points are awarded depending on the participant having i.) financial or non-financial consequence of ESG targets and ii.) the selected group(s) of employees. Employee groups are not equally scored. Fractional points are then aggregated to calculate the indicator's final score. It is not necessary to select all checkboxes to receive maximum points.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Section 2: 'Evidence' is mandatory for this indicator. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Terminology

Annual performance targets: Targets set in annual performance reviews based on assessments of employee performance.

Asset manager: A person or group of people responsible for developing and overseeing financial and strategic developments of investments at asset level.

Board of Directors: A body of elected or appointed members who jointly oversee the activities of a company or organization as detailed in the corporate charter. Boards normally comprise both executive and non-executive directors.

C-suite level staff: A team of individuals who have the day-to-day responsibility of managing the entity. C-suite level staff are sometimes referred to, within corporations, as senior management, executive management, executive leadership team, top management, upper management, higher management, or simply seniors.

Dedicated employee(s) for whom ESG is the core responsibility: The employee(s)' main responsibility is defining, implementing and monitoring the ESG objectives at entity level.

ESG manager: A person or a group who manages the ESG strategy and implementation of the entity.

External manager or service provider: Organizations, businesses or individuals that offer services to others in exchange for payment. These include, but are not limited to, consultants, agents and brokers.

Financial consequences: Monetary benefits (or detriments) incorporated into employee compensation structures. Financial consequences are contingent upon the achievement of the annual performance targets.

Fund/portfolio manager: A person or a group who manages a portfolio of investments and the deployment of investor capital by creating and implementing asset level strategies across the entire portfolio or fund.

Investment analysts: A person or group with expertise in evaluating financial and investment information, typically for the purpose of making buy, sell and hold recommendations for securities.

Investment Committee: A group of individuals who oversee the entity's investment strategy, evaluates investment proposals and maintains the investment policies, subject to the Board's approval.

Investor relations: A person or a group that provides investors with an accurate account of company affairs so investors can make better informed decisions.

Non-financial consequences: Non-financial benefits (or detriments), such as verbal or written recognition, non-financial rewards or opportunities. Non-financial consequences are contingent upon the achievement of the annual performance targets.

References

Alignment with External Frameworks

[CDP Climate Change 2020 - C1.3 Employee Incentives](#)

[DJSI CSA 2019 - 4.3.1 Management Incentives](#)

[GRI Standards 2016 - 102-35: Remuneration policies](#)

Good practice example: Please refer to page 27 at this link.



Management: Policies

Intent and Overview

This aspect evaluates the steps undertaken to stay abreast of material ESG related risks.

Policies

2019 Indicator

Does the entity have a policy or policies on environmental issues?

Yes

Select all material issues which are covered by a policy or policies (multiple answers possible)

- Air pollution
- Biodiversity and habitat
- Climate/climate change adaptation
- Contaminated land
- Energy
- Greenhouse gas emissions
- Hazardous substances
- Light pollution
- Material sourcing and resource efficiency
- Noise pollution
- Resilience to catastrophe/disaster
- Waste
- Water outflows/discharges
- Water inflows/withdrawals
- Other issues: _____

Provide applicable evidence

UPLOAD or URL_____

Indicate where in the evidence the relevant information can be found_____

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , E

Intent

The intent of this indicator is to identify the existence and scope of policies that address environmental issues. Policies on environmental issues assist organizations with incorporating environmental criteria into their business practices and managing environmental risks.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been prefilled from the 2019 Assessment. Review the response and/or evidence carefully.

2020 changes: i.) 'Hazardous substances' was added as an environmental issue. ii.) Section on which stakeholder(s) the policy applied to has been removed.

Note: The policy or policies must be existing and valid policies during the Reporting Year identified in EC 4.

Validation

Evidence: Document upload or hyperlink. The evidence should sufficiently support all the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps.

Evidence requirements:

1. Demonstrate that there is a formal policy document in place and not simply a list of general goals and/or commitments.
2. Specifically addresses each Environmental issue selected. For example, a policy on issues such as energy or air pollution.

Acceptable evidence may include a formal policy that is in place such as an Environmental Policy document, official documents or links to online resources describing the entity's environmental policies. Reference can be provided, such as bullets or passages within a policy, to describe the goals or ambition for each issue.

Other: State the other environmental issue. Ensure that the other answer provided is not a duplicate of a selected option above (e.g. recycling when 'waste management' is selected). It is possible to report multiple other answers. If valid, the issue will be assigned Medium Relevance.

Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: For section 1 of the indicator, fractional points are awarded depending on the participant selecting the issues deemed material by the GRESB Materiality Assessment (see output in RC7 which will automatically populate once the indicators RC3 and RC7 of the Asset Assessment have been fully completed). It is therefore not necessary to select all checkboxes to receive maximum points. Fractional points are then aggregated to calculate the indicator's final score.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Materiality-based scoring:

The scoring of this indicator links to the materiality for the entity, as determined by the GRESB Materiality Assessment (RC7).

Specific materiality weightings are assigned to the entity for each ESG issue as described in (RC7). The weightings are set at one of four levels for each of the ESG issues:

- No relevance (weighting: 0)
- Low relevance (weighting: 0)
- Medium relevance (weighting: 1)
- High relevance (weighting: 2)

Where an issue is of 'No relevance' or 'Low relevance' it is not considered in scoring (i.e. it has a weighting of 0). If an issue is of 'Medium relevance' the issue counts towards the score with 'standard' weighting (i.e. 1). If an issue is of 'High relevance' the issue counts towards the score with higher than 'standard' weighting (i.e. 2).

All issues of 'Medium relevance' and 'High relevance' need to be selected and addressed in the evidence to obtain the maximum score. For more details on how materiality is determined, download the [GRESB Materiality & Scoring Tool](#).

Section 2: 'Evidence' is mandatory for this indicator. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Materiality-based scoring: The scoring of this indicator links to the Materiality for the entity, as determined by the GRESB Materiality Assessment (RC7).

Specific materiality weightings are assigned to the entity for each ESG issue as described in (RC7). The weightings are set at one of four levels for each of the ESG issues: No Relevance, Low Relevance, Medium Relevance, and High Relevance. Where an issue is of 'No relevance' or 'Low relevance' then the issue is not considered in scoring (i.e. there is no impact on score whether or not the issue is addressed). If an issue is of 'Medium relevance' then the issue counts towards the score with 'standard' weighting. If an issue is of 'High relevance' then the issue counts towards the score with higher than 'standard' weighting.

All issues of "Medium relevance" and "High relevance" need to be selected and addressed in the evidence to obtain the maximum score.

Terminology

Air pollution: Air pollutants are particles and gases released into the atmosphere that may adversely affect living organisms. Additionally, some pollutants contribute to climate change or exacerbate the effects of climate change locally.

Biodiversity and habitat: Issues related to wildlife, endangered species, ecosystem services, habitat management, and invasive species. Biodiversity refers to the variety of all plant and animal species. Habitat refers to the natural environment in which these plant and animal species live and function.

Climate change adaptation: Preparation for long-term change in climatic conditions or climate related events. Example of climate change adaptation measures can include, but are not limited to: building flood defenses, xeriscaping and using tree species resistant to storms and fires, adapting building codes to extreme weather events.

Contamination: Land that contains substances in or under it that are actually or potentially hazardous to human health or the environment.

Energy: Energy refers to energy consumption and generation from non-renewable and renewable sources (e.g. electricity, heating, cooling, steam).

Environmental issues: The impact on living and non-living natural systems, including land, air, water and ecosystems. This includes, but is not limited to, biodiversity, transport and product and service-related impacts, as well as environmental compliance and expenditures.

Greenhouse gas emissions: GHGs refers to the seven gases listed in the Kyoto Protocol: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); nitrogen trifluoride (NF₃) and sulphur hexafluoride (SF₆).

Hazardous substances: Any substance or chemical which is a "health hazard" or "physical hazard," including: chemicals which are carcinogens, toxic agents, irritants, corrosives, sensitizers; agents which act on the hematopoietic system; agents which damage the lungs, skin, eyes, or mucous membranes; chemicals which are combustible, explosive, flammable, oxidizers, pyrophorics, unstable-reactive or water-reactive; and chemicals which in the course of normal handling, use, or storage may produce or release dusts, gases, fumes, vapors, mists or smoke which may have any of the previously mentioned characteristics. (Full definitions can be found at 29 Code of Federal Regulations (CFR) 1910.1200.) Ref US OSHA's definition includes any substance or chemical which is a "health hazard" or "physical hazard," including: chemicals which are carcinogens, toxic agents, irritants, corrosives, sensitizers; agents which act on the hematopoietic system; agents which damage the lungs, skin, eyes, or mucous membranes; chemicals which are combustible, explosive, flammable, oxidizers, pyrophorics, unstable-reactive or water-reactive; and chemicals which in the course of normal handling, use, or storage may produce or release dusts, gases, fumes, vapors, mists or smoke which may have any of the previously mentioned characteristics. (Full definitions can be found at 29 Code of Federal Regulations (CFR) 1910.1200.)

Light pollution: Excessive or obtrusive artificial light also known as photo pollution or luminous pollution. Examples of light pollution and reflection include: spilled light from construction zones and parking lots which

may impact breeding grounds or resting areas; highly reflective towers which may affect bird flight.

Materials sourcing and resource efficiency: Responsible sourcing of materials considers the environmental, social and economic impacts of the procurement and production of products and materials. Resource efficiency means using those products and materials in an efficient and sustainable manner while minimizing impacts on the environment and society.

Noise pollution: Refers to noise pollution, also known as environmental noise, which is the propagation of noise with harmful impact on the activity of human or animal life.

Policy: Defines an organizational commitment, direction or intention as formally adopted by the organization.

Resilience to catastrophe/disaster: Preparedness of the built environment towards existing and future threats of natural disasters (e.g., the ability to absorb disturbances such as increased precipitation or flooding while maintaining its structure). This can be achieved by management policies, informational technologies, educating tenant, community, suppliers and physical measures at the asset level.

Waste: Entity's consideration of waste disposal methods and whether waste minimization strategies emphasize prioritizing options for reuse, recycling, and then recovery over other disposal options to minimize ecological impact.

Water outflows/discharges: Discharge of water to water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater) or to third-parties for treatment or use.

Water inflows/withdrawals: Water drawn into the boundaries of the entity from all sources (including surface water, ground water, rainwater, and municipal water supply) as well as water reuse, efficiency, and recycling, including the entity's consideration of whether water sources are significantly affected by withdrawal of water.

References

[Supply Chain Sustainability School \(UK and Australia\), 2012](#)

Alignment with External Frameworks

[GRI Standards 2016 - 103-2: The management approach and its components](#)

[GRI Standards 2016 - 300 series: Environmental Standards](#)

Does the entity have a policy or policies on social issues?

Yes

Select all material issues which are covered by a policy or policies (multiple answers possible)

- Child labor
- Community development
- Customer satisfaction
- Employee engagement
- Forced or compulsory labor
- Freedom of association
- Health and safety: community
- Health and safety: contractors
- Health and safety: employees
- Health and safety: supply chain
- Health and safety: users
- Inclusion and diversity
- Labor standards and working conditions
- Local employment
- Social enterprise partnering
- Stakeholder relations
- Other issues: _____

Provide applicable evidence

UPLOAD or URL _____

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

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , S

Intent

The intent of this indicator is to describe the existence and scope of policies that address social issues. Policies on social issues assist organizations with incorporating social criteria into their business practices and managing social risks.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been pre-filled from the 2019 Assessment. Review the response and/or evidence carefully.

2020 changes: i.) 'Local employment' was added as a social issue. ii.) Section on which stakeholder(s) the policy applied to has been removed.

Note: The policy or policies must be existing and valid policies during the Reporting Year identified in EC 4.

Validation

Evidence: Document upload or hyperlink. The evidence should sufficiently support all the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps.

Evidence requirements:

1. Demonstrate that there is a formal policy document in place and not simply a list of general goals and/or commitments.
2. Specifically addresses each Social issue selected. For example, a policy on issues such as local employment or child labor.

Acceptable evidence may include a formal policy that is in place such as an Social Policy document, official documents or links to online resources describing the entity's Social policies. Reference can be provided, such as bullets or passages within a policy, to describe the goals or ambition for each issue.

Note: If certain social issues are embedded in law and/or regulation in the countries of operation, the entity may select the relevant checkbox and evidence can be provided as a reference to the specific law or regulation on the provided Document Upload Cover Page (see Appendix 12).

Other: State the other social issue. Ensure that the other answer provided is not a duplicate of a selected option above (e.g., modern slavery when 'forced or compulsory labor' is selected). It is possible to report multiple other answers. If valid, the issue will be assigned Medium Relevance.

Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: Fractional points are awarded depending on the participant selecting the issues deemed material by the GRESB Materiality Assessment (see output in RC7 which will automatically populate once the indicators RC3 and RC7 of the Asset Assessment have been fully completed). It is therefore not necessary to select all checkboxes to receive maximum points. Fractional points are then aggregated to calculate the indicator's final score.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Materiality-based scoring:

The scoring of this indicator links to the materiality for the entity, as determined by the GRESB Materiality Assessment (RC7).

Specific materiality weightings are assigned to the entity for each ESG issue as described in (RC7). The weightings are set at one of four levels for each of the ESG issues:

- No relevance (weighting: 0)
- Low relevance (weighting: 0)
- Medium relevance (weighting: 1)
- High relevance (weighting: 2)

Where an issue is of 'No relevance' or 'Low relevance' it is not considered in scoring (i.e. it has a weighting of 0). If an issue is of 'Medium relevance' the issue counts towards the score with 'standard' weighting (i.e. 1). If an issue is of 'High relevance' the issue counts towards the score with higher than 'standard' weighting (i.e. 2).

All issues of 'Medium relevance' and 'High relevance' need to be selected and addressed in the evidence to obtain the maximum score. For more details on how materiality is determined, download the [GRESB Materiality & Scoring Tool](#).

Section 2: 'Evidence' is mandatory for this indicator. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Materiality-based scoring: The scoring of this indicator links to the Materiality for the entity, as determined by the GRESB Materiality Assessment (RC7).

Specific materiality weightings are assigned to the entity for each ESG issue as described in (RC7). The weightings are set at one of four levels for each of the ESG issues: No Relevance, Low Relevance, Medium Relevance, and High Relevance. Where an issue is of 'No relevance' or 'Low relevance' then the issue is not considered at all in scoring (i.e. there is no impact on score whether or not the issue is addressed). If an issue is of 'Medium relevance' then the issue counts towards the score with 'standard' weighting. If an issue is of 'High relevance' then the issue counts towards the score with higher than 'standard' weighting.

All issues of "Medium relevance" and "High relevance" need to be selected and addressed in the evidence to obtain the maximum score.

Terminology

Child labor: Work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical or mental development including by interfering with their education. Specifically, it means types of work that are not permitted for children below the relevant minimum age.

Community development: A process where community members come together to take collective action and generate solutions to common problems.

Customer satisfaction: Customer satisfaction is one measure of an entity's sensitivity to its customers' needs and preferences and, from an organizational perspective, is essential for long-term success. In the context of sustainability, customer satisfaction provides insight into how the entity approaches its relationship with one stakeholder group (customers).

Employee engagement: An employee's involvement with, commitment to and satisfaction with the entity.

Forced or compulsory labor: All work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered themselves voluntarily.

Freedom of association: Right of employers and workers to form, to join and to run their own organizations without prior authorization or interference by the state or any other entity.

Health and safety: The principles of occupational health and safety management systems include developing a policy, analyzing and controlling health and safety risks, providing training, and recording and investigating health and safety incidents.

Inclusion and diversity: Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity including discrimination.

Labor standards and working conditions: Labor standards and working conditions are at the core of paid work and employment relationships. Working conditions cover a broad range of topics and issues, from working time (hours of work, rest periods, and work schedules) to remuneration, as well as the physical conditions and mental demands that exist in the workplace.

Local employment: Providing jobs and skills to local people as employees, and to local contractors.

Policy: Defines an organizational commitment, direction or intention as formally adopted by the organization.

Social enterprise partnering: An entity's partnerships with organizations that have social objectives that serve as the primary purpose of the organization.

Stakeholder relations: The practice of forging mutually beneficial connections with third-party groups and individuals that have a stake in common interest.

References

[Supply Chain Sustainability School \(UK and Australia\), 2012](#)

Alignment with External Frameworks

[GRI Standards 2016 - 103-2: The management approach and its components](#)

[GRI Standards 2016 - 400 series: Social Standards](#)

Good practice example: Please refer to this link.

Does the entity have a policy or policies on governance issues? Yes

Select all material issues which are covered by a policy or policies (multiple answers possible)

- Audit committee structure/independence
- Board composition
- Board ESG oversight
- Bribery and corruption
- Compensation committee structure/independence
- Conflicts of interest
- Cybersecurity
- Data protection and privacy
- Delegating authority
- Executive compensation
- Fraud
- Independence of board chair
- Lobbying activities
- Political contributions
- Shareholder rights
- Whistleblower protection
- Other issues: _____

Provide applicable evidence

UPLOAD or URL _____

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

 No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , G

Intent

The intent of this indicator is to describe the existence and scope of policies that address governance issues. Policies on governance issues assist organizations with incorporating governance criteria into their business practices and managing governance risks.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been prefilled from the 2019 Assessment. Review the response and/or evidence carefully.

2020 changes: i). 'Conflicts of interest', 'Delegating authority', 'Shareholder rights', 'Board ESG oversight' were added as governance issues. ii.) 'Fiduciary duty' was removed. iii.) Section on which stakeholder(s) the policy applied to has been removed.

Note: The policy or policies must be existing and valid policies during the Reporting Year identified in EC 4.

Validation

Evidence: Document upload or hyperlink. The evidence should sufficiently support all the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps. If valid, the issue will be assigned Medium Relevance.

Evidence requirements:

1. Demonstrate that there is a formal policy document in place and not simply a list of general goals and/or commitments.
2. Specifically addresses each Governance issue selected. For example, a policy on issues such as cybersecurity or board composition.

Acceptable evidence may include a formal policy that is in place such as a governance policy document, official documents or links to online resources describing the entity's governance policies. Reference can be provided, such as bullets or passages within a policy, to describe the goals or ambition for each issue.

Note: If certain governance issues are embedded in law and/or regulation in the countries of operation, the entity may select the relevant checkbox and evidence can be provided as a reference to the specific law or regulation on the provided Document Upload Cover page (see Appendix 12).

Other: State the other governance issue. Ensure that the other answer provided is not a duplicate of a selected option above (e.g., Information security when 'Cybersecurity' is selected). It is possible to report multiple other answers. If valid, the issue will be assigned Medium Relevance.

Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: Fractional points are awarded depending on the participant selecting the issues deemed material by the GRESB Materiality Assessment (see output in RC7 which will automatically populate once the indicators RC3 and RC7 of the Asset Assessment have been fully completed). It is therefore not necessary to select all checkboxes to receive maximum points. Fractional points are then aggregated to calculate the indicator's final score.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Materiality-based scoring:

The scoring of this indicator links to the materiality for the entity, as determined by the GRESB Materiality Assessment (RC7).

Specific materiality weightings are assigned to the entity for each ESG issue as described in (RC7). The weightings are set at one of four levels for each of the ESG issues:

- No relevance (weighting: 0)
- Low relevance (weighting: 0)
- Medium relevance (weighting: 1)
- High relevance (weighting: 2)

Where an issue is of 'No relevance' or 'Low relevance' it is not considered in scoring (i.e. it has a weighting of 0). If an issue is of 'Medium relevance' the issue counts towards the score with 'standard' weighting (i.e. 1). If an issue is of 'High relevance' the issue counts towards the score with higher than 'standard' weighting (i.e. 2).

All issues of 'Medium relevance' and 'High relevance' need to be selected and addressed in the evidence to obtain the maximum score. For more details on how materiality is determined, download the [GRESB Materiality & Scoring Tool](#).

Section 2: 'Evidence' is mandatory for this indicator. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Materiality-based scoring: The scoring of this indicator links to the Materiality for the entity, as determined by the GRESB Materiality Assessment (RC7).

Specific materiality weightings are assigned to the entity for each ESG issue as described in (RC7). The weightings are set at one of four levels for each of the ESG issues: No Relevance, Low Relevance, Medium Relevance, and High Relevance. Where an issue is of 'No relevance' or 'Low relevance' then the issue is not considered at all in scoring (i.e. there is no impact on score whether or not the issue is addressed). If an issue is of 'Medium relevance' then the issue counts towards the score with 'standard' weighting. If an issue is of 'High relevance' then the issue counts towards the score with higher than 'standard' weighting.

All issues of "Medium relevance" and "High relevance" need to be selected and addressed in the evidence to obtain the maximum score.

Terminology

Audit committee structure/independence: A corporate board of directors establishes an audit committee to assist in discharging its fiduciary responsibility. An effective audit committee is an important feature of a strong corporate governance culture, and should have a clear description of duties and responsibilities.

Board composition: Composition of the board and its committees by (i) Executive or non-executive, (ii) Independence, (iii) Tenure on the governance body, (iv) Number of each individual's other significant positions and commitments, and the nature of the commitments, (v) Gender, (vi) Membership of under-represented social groups, (vii) Competences relating to economic, environmental and social impacts, (viii) Stakeholder representation.

Board ESG oversight: The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material topics are covered.

Board-level issues: Governance issues that should be recognized at board-level by the entity.

Bribery: The offering, giving, receiving or soliciting an item of value to influence the actions of an official or other person in charge of a public or legal fiduciary duty.

Compensation committee structure/independence: Compensation decisions are central to the governance of many entities. Compensation committees or analogous organizations are established to govern employee compensation and ensure employee remuneration decisions are made in a fair, consistent and independent manner. An independent compensation committee may be one indicator of effective governance.

Conflicts of interest: Situations where an individual is confronted with choosing between the requirements of his or her function and his or her own private interests.

Corruption: Abuse of entrusted power for private gain.

Cybersecurity: The protection of internet-connected systems, including hardware, software and data, from any unauthorised use or access. Malicious attacks in particular can pose a significant threat to infrastructure assets.

Data protection and privacy: Customer privacy includes matters such as the protection of data; the use of information or data for their original intended purpose only, unless specifically agreed otherwise; the obligation to observe confidentiality; and the protection of information or data from misuse or theft.

Delegating authority: The process for delegating authority for economic, environmental, and social topics from the highest governance.

Executive compensation: The financial and non-financial compensation of executives, in a manner that motivates executives to perform their roles in alignment with the entities objectives and risk tolerance.

Fraud: Wrongful deception intended to result in financial or personal gain.

Independence of Board chair: A non-executive member of the board who does not have any management responsibilities within the organization and is not under any other undue influence, internal or external, political or ownership, that would impede the board member's exercise of objective judgment.

Lobbying activities: Any activity carried out to influence a government or institution's policies and decisions in favor of a specific cause or outcome.

Operational issues: Governance issues that should be recognized on operational-level by the entity.

Policy: Defines an organizational commitment, direction or intention as formally adopted by the organization.

Political contributions: Disclosure of and guidelines for political contributions, such as the amounts and recipients of all monetary and non-monetary contributions made by an organization, which include political contributions made through third parties.

Shareholder rights: Assessing the potential risk of breaking or working against the entity's contractual shareholder rights. Shareholder rights are defined in the company's charter and bylaws.

Whistle-blower mechanism: A process that offers protection for individuals that want to reveal illegal, unethical or dangerous practices. An efficient whistle-blower mechanism prescribes clear procedures and channels to facilitate the reporting of wrongdoing and corruption, defines the protected disclosures, outlines the remedies and sanctions for retaliation.

References

[Supply Chain Sustainability School \(UK and Australia\), 2012](#)

Good practice example: Please refer to this link.

Alignment with External Frameworks

[GRI Standards 2016 - 103-2: The management approach and its components](#)

[GRI Standards 2016 - 200 series: Economic Standards](#)



Management: Reporting

Intent and Overview

Institutional investors and other shareholders are primary drivers for greater sustainability reporting and disclosure among investable entities. Real estate companies and managers share how ESG management practices performance impacts the business through formal disclosure mechanisms. This aspect evaluates how the entity communicates its ESG actions and/or performance.

Reporting

2019 Indicator

Does the entity disclose its ESG actions and/or performance?

Yes

Please select all applicable options (Multiple answers possible)

Integrated Report*

*Integrated Report must be aligned with the IIRC framework

Select the applicable reporting level

Entity

Group

Is this disclosure third-party reviewed?

Yes

Externally checked

Externally verified

using

Externally assured

using

No

Provide applicable evidence

UPLOAD or URL_____

Indicate where in the evidence the relevant information can be found_____

Stand-alone sustainability report(s)

Select the applicable reporting level

Entity

Group

Aligned with third-party standard

Is this disclosure third-party reviewed?

Yes

Externally checked

Externally verified

using

Externally assured

using

No

Provide applicable evidence

UPLOAD or URL_____

Indicate where in the evidence the relevant information can be found_____

Section of Annual Report

Select the applicable reporting level

Entity

Group

Aligned with third-party standard

Is this disclosure third-party reviewed?

Yes

Externally checked

Externally verified

using

Externally assured

using

No

Provide applicable evidence

or URL_____

Indicate where in the evidence the relevant information can be found_____

Dedicated section on website

Select the applicable reporting level

Entity

Group

URL_____

Indicate where in the evidence the relevant information can be found_____

Entity reporting to investors

Frequency of reporting: _____

Select the applicable reporting level

Entity

Group

Aligned with third-party standard

Is this disclosure third-party reviewed?

Yes

Externally checked

Externally verified

using

Externally assured

using

No

Provide applicable evidence

UPLOAD or URL_____

Indicate where in the evidence the relevant information can be found_____

Other: _____

Select the applicable reporting level

Entity

Group

Aligned with third-party standard

Is this disclosure third-party reviewed?

Yes

Externally checked

Externally verified

using

Externally assured

using

No

Provide applicable evidence

UPLOAD or URL_____

Indicate where in the evidence the relevant information can be found_____

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C

- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Guideline name

- GRI Standards, 2016
- GRI Sustainability Reporting Guidelines, G4
- IIRC International Integrated Reporting Framework, 2013
- PRI Reporting Framework, 2018
- TCFD Recommendations, 2017
- Other: _____

3.55 points , G

Intent

The intent of this indicator is to assess the level of ESG disclosure undertaken by the entity. It also evaluates the entity's use of third-party ESG reporting review to ensure the reliability, integrity, and accuracy of ESG disclosure. Disclosure of ESG information and performance demonstrates an entity's transparency in explaining how ESG policies and management practices are implemented by the entity, and how these practices impact the business. In addition, third-party ESG disclosure review increases investors' confidence in the information disclosed.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

In all cases:

1. Select the applicable reporting level. If the entity reports at multiple levels, you should select the most detailed reporting level.
 - i. Entity: Related specifically to the named entity, where entity is defined as the investable portfolio for which you are submitting an Assessment response. This option should be selected if the scope of the reporting (e.g., Annual Report) includes actions/performance disclosure that is in direct reference to and/or matches the entity subject to the GRESB submission. For example, an Annual Report that is solely applicable to the entity or includes specific and detailed actions/performance of the entity in addition to other entities within the group of companies.
 - ii. Group: Related to the group of companies of which the participating entity forms a part. This option should be selected if the scope of the reporting (e.g., Annual Report) includes the entity subject to the GRESB submission. For example, an Annual report that does not include specific and detailed actions/performance of the entity itself, but rather for the larger group of companies as an aggregate.
2. If applicable, select alignment from the dropdown lists to confirm that your method of reporting is aligned with a third-party standard. The list is based on leading international best practice guides for sustainability reporting. If reporting is aligned with more than one standard, select the standard with which there is most alignment.
3. State whether the methods of reporting are checked, verified or assured (select one option; the most detailed level of scrutiny to which the disclosure was subject to).
4. If applicable, select alignment from the dropdown lists to confirm that your method of reporting is aligned with an external standard or guideline. The list is based on leading international best practice guides for sustainability reporting. If reporting is aligned with more than one standard, select the standard with which there is most alignment.
5. Provide document upload or URL. A piece of supporting evidence document or URL cannot be uploaded for more than one disclosure method selected i.e., the same evidence cannot be used for separate disclosure methods.

Validation

Reporting year: Answers must refer to the reporting year identified in EC4. The disclosure must be referencing actions and/or performance from the reporting year. For example, disclosures published in 2020 referencing 2019 actions and/or performance are valid. Stand-alone sustainability reports can also refer to the year prior to the reporting year, and integrated reports can also refer to two years prior to the reporting year identified in EC4.

Reporting level: Answers must clearly reference the applicable reporting level. The ESG information and/or performance must be directly in reference to the entity if entity-level is chosen.

Third party review: The evidence provided must support the selected level of third party review (if applicable). The assurance and/or verification of ESG disclosure is separate from the assurance and/or verification of performance data reported in the Data Monitoring & Review aspect. Supplementary evidence can be provided if the disclosure itself does not include confirmation of review. The evidence relating to the check, verification, and/or assurance must be in reference to the uploaded disclosure method provided (i.e., Annual report).

Evidence: Document upload or hyperlink is required. The evidence should sufficiently support all of the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps.

Disclosure type: Provide unique evidence for each relevant disclosure type. Note that identical documents will not be accepted for more than one disclosure type, select the most appropriate disclosure type for each piece of evidence (e.g. an integrated report cannot be provided for both Annual report and Integrated report).

- Annual report: The report must reference actions and/or performance from the reporting year. For example, an Annual Report referencing the 2019 calendar year is valid for those entities reporting on calendar year. An Annual Report referencing 2018 calendar year actions and/or performance is not valid unless it is explicitly noted that the 2019 Annual Report has not been published yet.
- Standalone sustainability report: The report must reference the reporting year or the year prior. For example, a Sustainability Report referencing 2019 or 2018 actions and/or performance, as well as a 2018 Sustainability report is valid. A Sustainability Report in reference to 2017 is not valid. Standalone sustainability reports must be published separately from the Annual Report, a section in the Annual Report would not be appropriate evidence for this disclosure type, but should be reported under Annual Report.
- Integrated report: The document upload or URL provided must contain clear evidence of alignment with the International Integrated Reporting Council (IIRC) Integrated Reporting Framework (December 2013). Integrated reports can reference 2019, 2018, or 2017 performance and/or actions.
- Dedicated section on corporate website: A separate section on the company's website that explicitly addresses ESG and includes actions and/or performance. A hyperlink to the Annual Report or Sustainability report is not valid.
- Entity reporting to investors: A summary outlining an entity's overall approach to sustainability that does not contain any analysis of performance is insufficient. Entity reporting to investors should include year-on-year comparison of sustainability performances supported by explanatory comments. Performance achievements should be linked to measures formerly implemented by the entity. Quarterly updates, newsletters, or press releases disclosing ESG actions and/or performance are considered valid.
- Other: An additional disclosure method such as third-party forms of disclosure like 2019 CDP Questionnaires or 2019 UN PRI Transparency Reports are valid. Ensure applicability to the reporting year based on the actions and/or performance disclosed.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: Fractional points are awarded to each disclosure method based on (1) reporting level, (2) alignment and (3) third-party review of the disclosure and fractional points are then aggregated to calculate the indicator's final score. Disclosure methods are not equally scored. It is not necessary to select all reporting methods to receive maximum points.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Section 2: 'Evidence' is mandatory for this indicator for each reporting method selected. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Terminology

Alignment: To agree and match with a recognized sustainability reporting standard (either voluntary or mandatory).

Annual report: A yearly record of an entity's financial performance that is distributed to investors under applicable financial reporting regulations.

Assured/Verified: The process of checking data, as well as its collection methods and management systems, through a systematic, independent and documented process against predefined criteria or standards.

Assurance/Verification services should be in line with a standard and can only be provided by accredited professionals.

Checked: A third-party review that does not comply with the definition of Assurance/Verification.

Dedicated section on corporate website: A section of the entity's website that explicitly addresses ESG performance.

Disclosure: The act of making information or data readily accessible and available to all interested individuals and institutions. Disclosure must be external and cannot be an internal and/or ad hoc communication.

Entity reporting to investors: A report prepared by the participant for the purpose of informing investors on the ESG performance of the entity. A summary outlining an entity's overall approach to ESG that does not contain any analysis of performance (as defined below) is insufficient.

ESG actions: Specific activities performed to improve management of environmental, social and governance issues within the entity.

ESG performance: Reporting of material indicators that reflect implementation of environmental, social, or governance (ESG) management

Integrated report: A report that is aligned with the requirements of the International Integrated Reporting Council (IIRC) Integrated Reporting Framework.

Standalone sustainability report: A separately-issued report dedicated to the entity's sustainability performance.

References

[IIRC - Integrated Reporting Framework](#)

[UNPRI - PRI Reporting Framework](#)

Alignment with External Frameworks

[GRI Standards 2016 - 102: General Disclosures](#)

Good practice examples: Please refer to the links below:

- [Integrated Report.](#)
- [Stand-alone Sustainability Report.](#)

- 
- Section of Annual Report.
(See pages from 42 to 53)
 - Dedicated section on website.
 - Entity reporting to investors.
 - Other.

Does the entity have a process to monitor and communicate about ESG-related controversies, misconduct, penalties, incidents, accidents or breaches against the codes of conduct/ethics?

Yes

The entity would communicate misconduct, penalties, incidents or accidents to (multiple answers possible)

- Clients/customers
- Contractors
- Community/public
- Employees
- Investors/shareholders
- Regulators/government
- Special interest groups
- Suppliers
- Other stakeholders: _____

Describe the communication process (for reporting purposes only) (maximum 250 words)

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

** The information in RP2.1 and RP2.2 may be used as criteria for the recognition of 2020 Sector Leaders*

1.8 points , G

Intent

This indicator intends to identify whether the entity has a defined process in place to monitor and communicate any ESG-related controversies, misconduct, penalties, incidents, accidents or breaches against the codes of conduct/ethics to its stakeholders. The entity’s external communication process is one aspect of management controls necessary to provide investors with transparency about regulatory risks and liabilities. Recurring ESG-related misconduct, penalties, incidents or accidents can increase the risk profile of the entity as they can translate into reputational, compliance, and financial risks.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Prefill: This indicator is the same as the one included in the 2019 Assessment and some sections have been prefilled from the 2019 Assessment. Review the response and/or evidence carefully.

Open text box: The content of this open text box is not used for scoring, but will be included in the Benchmark Report. Participate may use this open text box to communicate on the process the reporting entity intends to follow in order to communicate any ESG-related misconducts to its stakeholders.

Validation

Other: State the other stakeholder groups. Ensure that the other answer provided is not a duplicate of a selected option above. It is possible to add multiple other answers.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. Fractional points are awarded based on the different selections of external stakeholders.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Diminishing Increase in Score approach: As indicated by the blue line, some elements of this indicator are scored based on a Diminishing Increase in Score approach, per additional checkbox selected.

Open Text Box: :The open text box is not scored and is for reporting purposes only.

Terminology

Accident: An unplanned, undesired event that results in damage or injury.

Codes of conduct/ethics: An agreement on rules of behaviour for the employees of the entity.

Controversy: Public allegation and/or litigation that could negatively impact the entity's reputation.

ESG fines and/or penalties: Sanctions resulting from an illegal act or non-compliant behavior, which directly harms the environment and/or stakeholders of the entity.

Incident: An unplanned, undesired event with actual or potential adverse impacts.

Misconduct: Unacceptable or improper behavior, especially by an employee or organization.

Penalty: A punishment imposed for breaking a law, rule, or contract.

Special interest group: Organization with a shared interest or characteristic (e.g. trade unions, non-governmental organizations).

References

[DJSI CSA 2019 - 3.4.1 Codes of Conduct](#)

[DJSI CSA 2019 - 3.4.4 Systems/Procedures](#)

[GRI Standards 2016 - 102-17: Mechanisms for advice and concerns about ethics](#)

[GRI Standards 2016 - 205-2: Communication and training about anti-corruption policies and procedures](#)

Has the entity been involved in any significant ESG-related controversies, misconduct, penalties, incidents or accidents during the reporting period? (The response to this indicator will be reviewed as part of sector leader requirements)

(For reporting purposes only)

Yes

Specify the total number of cases which occurred: _____

Specify the total value of fines and/or penalties incurred during the reporting period (must align with currency selected in RC1)

Specify the total number of currently pending investigations: _____

Provide additional context for the response, focusing on the three most serious incidents

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

** The information in RP2.1 and RP2.2 may be used as criteria for the recognition of 2020 Sector Leaders*

Not scored , G

Intent

This indicator intends to ensure the communication of any ESG-related misconduct, penalties, incidents, accidents breaches against the codes of conduct/ethics to the reporting entity’s investor. Recurring misconducts and penalties can increase the risk profile of the portfolio as they impose financial, management and regulatory burdens on the entity.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

2020 changes: Added ‘Specify the total number of currently pending investigations’.

Open text box: The content of this open text box is not used for scoring, but will be included in the Benchmark Report. Participants may use this open text box to communicate on how the entity has resolved or intends to resolve the above issue(s).

Validation

This indicator is not subject to automatic or manual validation.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is not scored and is used for reporting purposes only.

*The information in RP2.1 and RP2.2 may be used as criteria for the recognition of 2020 Sector Leaders.

Terminology

ESG fines and/or penalties: Sanctions resulting from an illegal act or non-compliant behavior, which directly harms the environment and/or stakeholders of the entity.

References

Alignment with External Frameworks

[DJSI CSA 2019 - 3.4.6 Corruption and Bribery Cases](#)

[DJSI CSA 2019 - 3.4.7 Reporting on Breaches](#)

[GRI Standards 2016 - 205-3: Confirmed incidents of corruption and actions taken](#)

[GRI Standards 2016 - 307: Environmental Compliance](#)

[GRI Standards 2016 - 419: Socioeconomic Compliance](#)



Management: Risk Management

Intent and Overview

The intent of this Aspect is to assess the entity's understanding and mitigation of material ESG risks and opportunities.

Risk Management

2019 Indicator

Is the entity's management system accredited to, or aligned with, ESG-related management standards?

Yes

Accreditations maintained or achieved (multiple answers possible)

ISO 55000

ISO 14001

ISO 9001

OHSAS 18001

Other standard: _____

Provide applicable evidence

UPLOAD or URL _____

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

Management standards aligned with (multiple answers possible)

ISO 55000

ISO 14001

ISO 9001

OHSAS 18001

ISO 26000

ISO 20400

ISO 50001

Other standard: _____

Provide applicable evidence

UPLOAD or URL _____

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

The management system is not aligned with an ESG related standard nor external certification

Provide applicable evidence

UPLOAD or URL _____

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

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

3.55 points , G

Intent

This indicator assesses the entity's use of management systems to manage environmental impacts, risks and opportunities.. The presence and application of an ESG-related management standard or comparable framework is an indicator of an entity's commitment to effectively action ESG issues.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

2020 changes: ISO and OHSAS standards added to the list of aligned standards. Added the option to select a non-aligned or certified ESG management system.

Validation

Evidence: Document upload or hyperlink. The evidence should sufficiently support all the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps.

Accredited: If the Management System is accredited by an independent third party, the evidence must include signed proof of the certification according to the standard, which must be named within the evidence, as well as contact information of the independent third party involved, and the date of the most recent accreditation (certification).

Other answers: Provide the name of the Other recognized standard that has been certified to or aligned with.

To qualify as valid, the evidence provided for an Other answer must include:

1. A high level outline or diagram of the implemented Management System with which the entity has attempted to align.
2. A clear framework for managing an entity's ESG impact.
3. The applicability of the Management System at the entity level.
4. The stages, elements and/or processes currently covered by the Management System.
5. Evidence of implementation of the Management System into the entity's operations.

See Appendix 4 of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: Consists of three sub-sections, i.) accreditation to a management standard(s) and ii.) alignment to a management standard(s) iii.) management system with no accreditation. Fractional points are awarded (equally) for each selected accreditation or alignment to a management standard and are then aggregated to calculate the total score for the section. No fractional points are awarded for having management system with no alignment to an EG-related management standard. Not all checkboxes need to be selected to receive full points. The checkboxes within each subsection are equally scored.

Diminishing Increase in Score approach: As indicated by the blue line, some elements of this indicator are scored based on a Diminishing Increase in Score approach, per additional checkbox selected.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Section 2: 'Evidence' is mandatory for this indicator. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Terminology

Alignment: To agree and match with a recognized sustainability reporting standard (either voluntary or mandatory).

Accreditation (Certified): Third-party recognition of meeting the requirements of a recognized standard.

Environmental Management System (EMS): A framework for managing an entity's environmental impact based on its sustainability and related objectives. It covers environmental impacts, impact reduction targets and plans to achieve targeted reductions. An EMS can cover a wide range of environmental topics, including, but not limited to: energy, GHG emissions, water, waste, transportation, climate change, resilience, risks, and materials. An EMS may be certified to an external standard, such as ISO140001.

ISO 9001:2015 sets out the criteria for a quality management system.

ISO 14001:2015 sets out the criteria for an environmental management system.

ISO 20400:2017 provides guidance to organizations, independent of their activity or size, on integrating sustainability within procurement. It is intended for stakeholders involved in, or impacted by, procurement decisions and processes.

ISO 26000 provides guidance on how businesses and organizations can operate in a socially responsible way. This means acting in an ethical and transparent way that contributes to the health and welfare of society.

ISO 55000:2014 provides an overview of asset management, its principles and terminology and the expected benefits from adopting asset management.

ISO 50001:2011 provides a framework of requirements for organizations to: (i) Develop a policy for more efficient use of energy, (ii) Fix targets and objectives to meet the policy, (iii) Use data to better understand and make decisions about energy use, (iv) Measure the results, (v) Review how well the policy works, and (vi) Continually improve energy management.

OHSAS 1800:2007 Occupational Health and Safety Management Certification is an international standard which provides a framework to identify, control and decrease the risks associated with health and safety within the workplace.

References

[ISO - International Organization for Standardization](#)

Has the entity performed an environmental risk assessment(s) within the last three years?

Yes

Select elements of the risk assessment process undertaken by the entity (multiple answers possible)

- Risk assessments are regularly conducted or reviewed and updated
- Risks are analysed
- Risks are evaluated and treated

Select all material issues for which risk is assessed (multiple answers possible)

- Air pollution
- Biodiversity and habitat
- Climate/climate change adaptation
- Contaminated land
- Energy
- Greenhouse gas emissions
- Hazardous substances
- Light pollution
- Material sourcing and resource efficiency
- Noise pollution
- Resilience to catastrophe/disaster
- Waste
- Water outflows/discharges
- Water inflows/withdrawals
- Other: _____

Provide applicable evidence

UPLOAD or URL _____

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

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

3.55 points , E

Intent

The intent of this indicator is to assess the entity's process for assessing material environmental risks, and its understanding and mitigation of these risks. Systematic responses to environmental risks include effective risk assessment, thoughtful mitigation planning, and implementation of action plans.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

2020 changes: "Hazardous substances" added as an environmental issue.

Contractor and/or operator engagement: In some cases, an indicator addresses an activity that applies to the reporting entity, yet is undertaken by an assigned contractor, operator and/or contracted entity. This is often the case, for example, for PPP type arrangements. In these cases, when providing evidence, the participant should specify the entity undertaking the activity and the relationship to that entity, to verify how these actions are applicable to the reporting entity. Copies of redacted contractual agreements/clauses to verify these relationships are acceptable.

Validation

Evidence: Document upload or hyperlink. The evidence should sufficiently support all the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps.

The provided evidence piece(s) should:

- Confirm that an environmental risk assessment was conducted.
- Contain all selected elements of the risk assessment process, highlighting or bringing attention to these where possible.
- Include all selected issues within the assessment, highlighting or bringing attention to these where possible.

Evidence examples may include but are not limited to:

- A document describing the entity's environmental risk assessments or other tangible proof of the entity's risk assessment activity.
- Acceptable evidence may include an extract of a procedure undertaken such as register or matrix, checklists, scenario analysis or a section of an environmental management plan addressing environmental risks.

Evidence completeness: Evidence does not necessarily need to be provided in full. Rather, the evidence needs to be sufficient to verify the existence of the claimed risk assessment for each issue.

Reporting Year: Evidence provided must refer to an assessment that has taken place within the last three years; up to and including the end of the reporting year identified in EC3.

Other: State the other environmental issue. Ensure that the other answer provided is not a duplicate of a selected option above (e.g. recycling when 'waste management' is selected). It is possible to report multiple other answers. If valid, the issue will be assigned Medium Relevance.

Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: For section 1 of the indicator, fractional points are awarded depending on the participant selecting the issues deemed material by the GRESB Materiality Assessment (see output in RC7 which will automatically populate once the indicators RC3 and RC7 of the Asset Assessment have been fully completed). It is therefore not necessary to select all checkboxes to receive maximum points. Fractional points are then aggregated to calculate the indicator's final score.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Materiality-based scoring:

The scoring of this indicator links to the materiality for the entity, as determined by the GRESB Materiality Assessment (RC7).

Specific materiality weightings are assigned to the entity for each ESG issue as described in (RC7). The weightings are set at one of four levels for each of the ESG issues:

- No relevance (weighting: 0)
- Low relevance (weighting: 0)
- Medium relevance (weighting: 1)
- High relevance (weighting: 2)

Where an issue is of 'No relevance' or 'Low relevance' it is not considered in scoring (i.e. it has a weighting of 0). If an issue is of 'Medium relevance' the issue counts towards the score with 'standard' weighting (i.e. 1). If an issue is of 'High relevance' the issue counts towards the score with higher than 'standard' weighting (i.e. 2).

All issues of 'Medium relevance' and 'High relevance' need to be selected and addressed in the evidence to obtain the maximum score. For more details on how materiality is determined, download the [GRESB Materiality & Scoring Tool](#).

Section 2: 'Evidence' is mandatory for this indicator. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Terminology

Air pollution: Air pollutants are particles and gases released into the atmosphere that may adversely affect living organisms. Additionally, some pollutants contribute to climate change or exacerbate the effects of climate change locally.

Biodiversity and habitat: Issues related to wildlife, endangered species, ecosystem services, habitat management, and invasive species. Biodiversity refers to the variety of all plant and animal species. Habitat refers to the natural environment in which these plant and animal species live and function.

Climate change adaptation: Preparation for long-term change in climatic conditions or climate related events. Example of climate change adaptation measures can include, but are not limited to: building flood defenses, xeriscaping and using tree species resistant to storms and fires, adapting building codes to extreme weather events.

Contamination: Land that contains substances in or under it that are actually or potentially hazardous to human health or the environment.

Energy: Energy refers to energy consumption and generation from non-renewable and renewable sources (e.g. electricity, heating, cooling, steam).

Environmental issues: The impact on living and non-living natural systems, including land, air, water and ecosystems. This includes, but is not limited to, biodiversity, transport and product and service-related impacts, as well as environmental compliance and expenditures.

Greenhouse gas emissions: GHGs refers to the seven gases listed in the Kyoto Protocol: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); nitrogen trifluoride (NF₃) and sulphur hexafluoride (SF₆).

Hazardous substances: Also known as dangerous goods. Any substances that can pose a health or physical hazard to humans or the environment, such as carcinogens, toxic agents, irritants, corrosives, combustibles or explosives.

Light pollution: Excessive or obtrusive artificial light also known as photo pollution or luminous pollution. Examples of light pollution and reflection include: spilled light from construction zones and parking lots which may impact breeding grounds or resting areas; highly reflective towers which may affect bird flight.

Materials sourcing and resource efficiency: Responsible sourcing of materials considers the environmental, social and economic impacts of the procurement and production of products and materials. Resource efficiency means using those products and materials in an efficient and sustainable manner while minimizing impacts on the environment and society.

Noise pollution: Refers to noise pollution, also known as environmental noise, which is the propagation of noise with harmful impact on the activity of human or animal life.

Policy: Defines an organizational commitment, direction or intention as formally adopted by the organization.

Resilience to catastrophe/disaster: Preparedness of the built environment towards existing and future threats of natural disasters (e.g., the ability to absorb disturbances such as increased precipitation or flooding while maintaining its structure). This can be achieved by management policies, informational technologies, educating tenant, community, suppliers and physical measures at the asset level.

Risk assessment: Careful examination of the factors that could potentially adversely impact the value or longevity of an infrastructure asset. The results of the assessment assist in identifying measures that have to be implemented in order to prevent and mitigate the risks.

Waste: Entity's consideration of waste disposal methods and whether waste minimization strategies emphasize prioritizing options for reuse, recycling, and then recovery over other disposal options to minimize ecological impact.

Water outflows/discharges: Discharge of water to water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater) or to third-parties for treatment or use.

Water inflows/withdrawals: Water drawn into the boundaries of the entity from all sources (including surface water, ground water, rainwater, and municipal water supply) as well as water reuse, efficiency, and recycling, including the entity's consideration of whether water sources are significantly affected by withdrawal of water.

References

[CDP Climate Change 2020 - C2.1 Management Practices](#)

[DJSI CSA 2019 - 3.3.3 Emerging Risks](#)

[DJSI CSA 2019 - 3.3.4 Risk Culture](#)

[GRI Standards 2016 - 102-29: Identifying and managing economic, environmental and social impacts](#)

Has the entity performed a social risk assessment(s) within the last three years?

Yes

Select elements of the risk assessment process undertaken by the entity (multiple answers possible)

- Risk assessments are regularly conducted or reviewed and updated
- Risks are analysed
- Risks are evaluated and treated

Select all material issues for which risk is assessed (multiple answers possible)

- Child labor
- Community development
- Customer satisfaction
- Employee engagement
- Forced or compulsory labor
- Freedom of association
- Health and safety: community
- Health and safety: contractors
- Health and safety: employees
- Health and safety: supply chain
- Health and safety: users
- Inclusion and diversity
- Labor standards and working conditions
- Local employment
- Social enterprise partnering
- Stakeholder relations
- Other: _____

Provide applicable evidence

UPLOAD or URL _____

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

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Intent

The intent of this indicator is to assess the entity's understanding and mitigation of material social risks. Systematic responses to social issues include effective risk assessment, thoughtful mitigation planning, and implementation of action plans.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

2020 changes: "Local employment" added to the list of social issues.

Contractor and/or operator engagement: In some cases, an indicator addresses an activity that applies to the reporting entity, yet is undertaken by an assigned contractor, operator and/or contracted entity. This is often the case, for example, for PPP type arrangements. In these cases, when providing evidence, the participant should specify the entity undertaking the activity and the relationship to that entity, to verify how these actions are applicable to the reporting entity. Copies of redacted contractual agreements/clauses to verify these relationships are acceptable.

Validation

Evidence: Document upload or hyperlink. The evidence should sufficiently support all the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps.

The provided evidence piece(s) should:

- Confirm that a social risk assessment was conducted.
- Contain all selected elements of the risk assessment process, highlighting or bringing attention to these where possible.
- Include all selected issues within the assessment, highlighting or bringing attention to these where possible.

Evidence examples may include but are not limited to:

- A document describing the entity's social risk assessments or other tangible proof of the entity's risk assessment activity.
- Acceptable evidence may include an extract of a procedure undertaken such as register or matrix, checklists, scenario analysis or a section of a social management plan addressing social risks.

Evidence completeness: Evidence does not necessarily need to be provided in full. Rather, the evidence needs to be sufficient to verify the existence of the claimed risk assessment for each issue.

Reporting Year: Evidence provided must refer to an assessment that has taken place within the last three years; up to and including the end of the reporting year identified in EC3.

Note: If certain social issues are embedded in law and/or regulation in the countries of operation, the entity may select the issue and evidence can be provided as a reference to the specific law or regulation and how it has been complied with, on the provided Evidence template.

Other: State the other social issue. Ensure that the other answer provided is not a duplicate of a selected option above (e.g., modern slavery when 'forced or compulsory labor' is selected). It is possible to report multiple other answers. If valid, the issue will be assigned Medium Relevance.

Document uploaded: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: For section 1 of the indicator, fractional points are awarded depending on the participant selecting the issues deemed material by the GRESB Materiality Assessment (see output in RC7 which will automatically populate once the indicators RC3 and RC7 of the Asset Assessment have been fully completed). It is therefore not necessary to select all checkboxes to receive maximum points. Fractional points are then aggregated to calculate the indicator's final score.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Materiality-based scoring:

The scoring of this indicator links to the materiality for the entity, as determined by the GRESB Materiality Assessment (RC7).

Specific materiality weightings are assigned to the entity for each ESG issue as described in (RC7). The weightings are set at one of four levels for each of the ESG issues:

- No relevance (weighting: 0)
- Low relevance (weighting: 0)
- Medium relevance (weighting: 1)
- High relevance (weighting: 2)

Where an issue is of 'No relevance' or 'Low relevance' it is not considered in scoring (i.e. it has a weighting of 0). If an issue is of 'Medium relevance' the issue counts towards the score with 'standard' weighting (i.e. 1). If an issue is of 'High relevance' the issue counts towards the score with higher than 'standard' weighting (i.e. 2).

All issues of 'Medium relevance' and 'High relevance' need to be selected and addressed in the evidence to obtain the maximum score. For more details on how materiality is determined, download the [GRESB Materiality & Scoring Tool](#).

Section 2: 'Evidence' is mandatory for this indicator. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Terminology

Child labor: Work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical or mental development including by interfering with their education. Specifically, it means types of work that are not permitted for children below the relevant minimum age.

Community development: A process where community members come together to take collective action and generate solutions to common problems.

Customer satisfaction: Customer satisfaction is one measure of an entity's sensitivity to its customers' needs and preferences and, from an organizational perspective, is essential for long-term success. In the context of sustainability, customer satisfaction provides insight into how the entity approaches its relationship with one stakeholder group (customers).

Employee engagement: An employee's involvement with, commitment to and satisfaction with the entity.

Forced or compulsory labor: All work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered themselves voluntarily.

Freedom of association: Right of employers and workers to form, to join and to run their own organizations without prior authorization or interference by the state or any other entity.

Health and safety: The principles of occupational health and safety management systems include developing a policy, analyzing and controlling health and safety risks, providing training, and recording and investigating health and safety incidents.

Inclusion and diversity: Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity including discrimination.

Labor standards and working conditions: Labor standards and working conditions are at the core of paid work and employment relationships. Working conditions cover a broad range of topics and issues, from

working time (hours of work, rest periods, and work schedules) to remuneration, as well as the physical conditions and mental demands that exist in the workplace.

Local employment: Providing jobs and skills to local people as employees, and to local contractors.

Risk assessment: Careful examination of the factors that could potentially adversely impact the value or longevity of an infrastructure asset. The results of the assessment assist in identifying measures that have to be implemented in order to prevent and mitigate the risks.

Social enterprise partnering: An entity's partnerships with organizations that have social objectives that serve as the primary purpose of the organization.

Stakeholder relations: The practice of forging mutually beneficial connections with third-party groups and individuals that have a stake in common interest.

References

[DJSI CSA 2019 - 3.3.3 Emerging Risks](#)

[DJSI CSA 2019 - 3.3.4 Risk Culture](#)

[GRI Standards 2016 - 102-29: Identifying and managing economic, environmental and social impacts](#)

Has the entity performed a governance risk assessment(s) within the last three years?

Yes

Select elements of the risk assessment process undertaken by the entity (multiple answers possible)

- Risk assessments are regularly conducted or reviewed and updated
- Risks are analysed
- Risks are evaluated and treated

Select all material issues for which risk is assessed (multiple answers possible)

- Audit committee structure/independence
- Board composition
- Board ESG oversight
- Bribery and corruption
- Compensation committee structure/independence
- Conflicts of interest
- Cybersecurity
- Data protection and privacy
- Delegating authority
- Executive compensation
- Fraud
- Independence of board chair
- Lobbying activities
- Political contributions
- Shareholder rights
- Whistleblower protection
- Other issues: _____

Provide applicable evidence

UPLOAD or URL _____

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

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Intent

The intent of this indicator is to assess the entity's understanding and mitigation of material governance risks. Systematic responses to governance issues include effective risk assessment, thoughtful mitigation planning, and implementation of action plans.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

2020 changes: i). 'Conflicts of interest', 'Delegating authority', 'Shareholder rights', 'Board ESG oversight' were added as governance issues. ii.) 'Fiduciary duty' was removed.

Contractor and/or operator engagement: In some cases, an indicator addresses an activity that applies to the reporting entity, yet is undertaken by an assigned contractor, operator and/or contracted entity. This is often the case, for example, for PPP type arrangements. In these cases, when providing evidence, the participant should specify the entity undertaking the activity and the relationship to that entity, to verify how these actions are applicable to the reporting entity. Copies of redacted contractual agreements/clauses to verify these relationships are acceptable.

Validation

Evidence: Document upload or hyperlink. The evidence should sufficiently support all the items selected for this question. If a hyperlink is provided, ensure that it is not outdated and the relevant page can be accessed within two steps.

The provided evidence piece(s) should:

- Confirm that a governance risk assessment was conducted.
- Contain all selected elements of the risk assessment process, highlighting or bringing attention to these where possible.
- Include all selected issues within the assessment, highlighting or bringing attention to these where possible.

Evidence examples may include but are not limited to:

- A document describing the entity's governance risk assessments or other tangible proof of the entity's risk assessment activity.
- Acceptable evidence may include an extract of a procedure undertaken such as register or matrix, checklists, scenario analysis or a section of a governance management plan addressing governance risks.

Evidence completeness: Evidence does not necessarily need to be provided in full. Rather, the evidence needs to be sufficient to verify the existence of the claimed risk assessment for each issue.

Reporting Year: Evidence provided must refer to an assessment that has taken place within the last three years; up to and including the end of the reporting year identified in EC3.

Note: If certain governance issues are embedded in law and/or regulation in the countries of operation, the entity may select the issue and evidence can be provided as a reference to the specific law or regulation and how it has been complied with, on the provided Evidence template.

Other: State the other governance issue. Ensure that the other answer provided is not a duplicate of a selected option above (e.g., Information security when 'Cybersecurity' is selected). It is possible to report multiple other answers. If valid, the issue will be assigned Medium Relevance.

Document uploaded: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a Two Section Indicator (i.e. Section 1: 'Elements' response and, Section 2: 'Evidence' response).

Section 1: For section 1 of the indicator, fractional points are awarded depending on the participant selecting the issues deemed material by the GRESB Materiality Assessment (see output in RC7 which will automatically populate once the indicators RC3 and RC7 of the Asset Assessment have been fully completed). It is

therefore not necessary to select all checkboxes to receive maximum points. Fractional points are then aggregated to calculate the indicator's final score.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Materiality-based scoring:

The scoring of this indicator links to the materiality for the entity, as determined by the GRESB Materiality Assessment (RC7).

Specific materiality weightings are assigned to the entity for each ESG issue as described in (RC7). The weightings are set at one of four levels for each of the ESG issues:

- No relevance (weighting: 0)
- Low relevance (weighting: 0)
- Medium relevance (weighting: 1)
- High relevance (weighting: 2)

Where an issue is of 'No relevance' or 'Low relevance' it is not considered in scoring (i.e. it has a weighting of 0). If an issue is of 'Medium relevance' the issue counts towards the score with 'standard' weighting (i.e. 1). If an issue is of 'High relevance' the issue counts towards the score with higher than 'standard' weighting (i.e. 2).

All issues of 'Medium relevance' and 'High relevance' need to be selected and addressed in the evidence to obtain the maximum score. For more details on how materiality is determined, download the [GRESB Materiality & Scoring Tool](#).

Section 2: 'Evidence' is mandatory for this indicator. Therefore, no points will be awarded unless the hyperlink and/or the uploaded document is considered valid, based on the evidence criteria stated above. The evidence is validated which determines a multiplier, according to the table below:

Evidence: The evidence is manually validated and assigned a multiplier, according to the table below. The evidence must support the validation requirements. If any requirements are not met, the evidence may be partially accepted or not accepted depending on the level of alignment with the requirements.

Validation status	Score
Accepted	2/2
Partially accepted	1/2
Not accepted/not provided	0

Terminology

Audit committee structure/independence: A corporate board of directors establishes an audit committee to assist in discharging its fiduciary responsibility. An effective audit committee is an important feature of a strong corporate governance culture, and should have a clear description of duties and responsibilities.

Board composition: Composition of the board and its committees by (i) Executive or non-executive, (ii) Independence, (iii) Tenure on the governance body, (iv) Number of each individual's other significant positions and commitments, and the nature of the commitments, (v) Gender, (vi) Membership of under-represented social groups, (vii) Competences relating to economic, environmental and social impacts, (viii) Stakeholder representation.

Board ESG oversight: The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material topics are covered.

Board-level issues: Governance issues that should be recognized at board-level by the entity.

Bribery: The offering, giving, receiving or soliciting an item of value to influence the actions of an official or other person in charge of a public or legal fiduciary duty.

Compensation committee structure/independence: Compensation decisions are central to the governance of many entities. Compensation committees or analogous organizations are established to govern employee compensation and ensure employee remuneration decisions are made in a fair, consistent and independent manner. An independent compensation committee may be one indicator of effective governance.

Conflicts of interest: Situations where an individual is confronted with choosing between the requirements of his or her function and his or her own private interests.

Corruption: Abuse of entrusted power for private gain.

Cybersecurity: The protection of internet-connected systems, including hardware, software and data, from any unauthorised use or access. Malicious attacks in particular can pose a significant threat to infrastructure assets.

Data protection and privacy: Customer privacy includes matters such as the protection of data; the use of information or data for their original intended purpose only, unless specifically agreed otherwise; the obligation to observe confidentiality; and the protection of information or data from misuse or theft.

Delegating authority: The process for delegating authority for economic, environmental, and social topics from the highest governance.

Executive compensation: The financial and non-financial compensation of executives, in a manner that motivates executives to perform their roles in alignment with the entities objectives and risk tolerance.

Fraud: Wrongful deception intended to result in financial or personal gain.

Independence of Board chair: A non-executive member of the board who does not have any management responsibilities within the organization and is not under any other undue influence, internal or external, political or ownership, that would impede the board member's exercise of objective judgment.

Lobbying activities: Any activity carried out to influence a government or institution's policies and decisions in favor of a specific cause or outcome.

Operational issues: Governance issues that should be recognized on operational-level by the entity.

Political contributions: Disclosure of and guidelines for political contributions, such as the amounts and recipients of all monetary and non-monetary contributions made by an organization, which include political contributions made through third parties.

Risk assessment: Careful examination of the factors that could potentially adversely impact the value or longevity of an infrastructure asset. The results of the assessment assist in identifying measures that have to be implemented in order to prevent and mitigate the risks.

Shareholder rights: Assessing the potential risk of breaking or working against the entity's contractual shareholder rights. Shareholder rights are defined in the company's charter and bylaws.

Whistle-blower mechanism: A process that offers protection for individuals that want to reveal illegal, unethical or dangerous practices. An efficient whistle-blower mechanism prescribes clear procedures and channels to facilitate the reporting of wrongdoing and corruption, defines the protected disclosures, outlines the remedies and sanctions for retaliation.

References

[DJSI CSA 2019 - 3.3.3 Emerging Risks](#)

[DJSI CSA 2019 - 3.3.4 Risk Culture](#)

[GRI Standards 2016 - 102-29: Identifying and managing economic, environmental and social impacts](#)

Does the entity monitor environmental performance? Yes

Select all material issues for which performance is monitored (multiple answers possible)

- Air pollution
- Biodiversity and habitat
- Climate/climate change adaptation
- Contaminated land
- Energy
- Greenhouse gas emissions
- Hazardous substances
- Light pollution
- Material sourcing and resource efficiency
- Noise pollution
- Resilience to catastrophe/disaster
- Waste
- Water outflows/discharges
- Water inflows/withdrawals
- Other: _____

 No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , E**Intent**

The intent of this indicator is to assess the entity's use of a systematic process to collect data to monitor and assess environmental performance.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

2020 changes: "Hazardous substances" added as an environmental issue.

Contractor and/or operator engagement: In some cases, an indicator addresses an activity that applies to the reporting entity, yet is undertaken by an assigned contractor, operator and/or contracted entity. This is often the case, for example, for PPP type arrangements. In these cases, when providing evidence, the participant should specify the entity undertaking the activity and the relationship to that entity, to verify how these actions are applicable to the reporting entity. Copies of redacted contractual agreements/clauses to verify these relationships are acceptable.

Validation

Other: State the other environmental issue. Ensure that the other answer provided is not a duplicate of a selected option above (e.g. recycling when 'waste management' is selected). It is possible to report multiple other answers. If valid, the issue will be assigned Medium Relevance.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. Fractional points are awarded depending on the participant selecting the issues deemed material by the GRESB Materiality Assessment (see output in RC7 which will automatically populate once the indicators RC3 and RC7 of the Asset Assessment have been fully completed). It is therefore not necessary to select all checkboxes to receive maximum points. Fractional points are then aggregated to calculate the indicator's final score.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Materiality-based scoring: This indicator applies materiality-based scoring. Specific materiality weightings are assigned to the entity for each ESG issue in the GRESB Materiality Assessment indicator (RC7). The weightings are set at one of four levels for each of the ESG issues: No Relevance, Low Relevance, Medium Relevance, and High Relevance. Where an issue is of 'No relevance' or 'Low relevance' then the issue is not considered in scoring (i.e. there is no impact on score whether or not the issue is addressed). If an issue is of 'Medium relevance' then the issue counts towards the score with 'medium' weighting. If an issue is of 'High relevance' then the issue counts towards the score with 'high' weighting.

All issues of "Medium relevance" and "High relevance" need to be selected and addressed in the evidence to obtain the maximum score. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [Gresb Materiality & Scoring Tool](#).

Terminology

Air pollution: Air pollutants are particles and gases released into the atmosphere that may adversely affect living organisms. Additionally, some pollutants contribute to climate change or exacerbate the effects of climate change locally.

Biodiversity and habitat: Issues related to wildlife, endangered species, ecosystem services, habitat management, and invasive species. Biodiversity refers to the variety of all plant and animal species. Habitat refers to the natural environment in which these plant and animal species live and function.

Climate change adaptation: Preparation for long-term change in climatic conditions or climate related events. Example of climate change adaptation measures can include, but are not limited to: building flood defenses, xeriscaping and using tree species resistant to storms and fires, adapting building codes to extreme weather events.

Contamination: Land that contains substances in or under it that are actually or potentially hazardous to human health or the environment.

Energy: Energy refers to energy consumption and generation from non-renewable and renewable sources (e.g. electricity, heating, cooling, steam).

Environmental issues: The impact on living and non-living natural systems, including land, air, water and ecosystems. This includes, but is not limited to, biodiversity, transport and product and service-related impacts, as well as environmental compliance and expenditures.

Greenhouse gas emissions: GHGs refers to the seven gases listed in the Kyoto Protocol: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); nitrogen trifluoride (NF₃) and sulphur hexafluoride (SF₆).

Hazardous substances: Any substance or chemical which is a "health hazard" or "physical hazard," including: chemicals which are carcinogens, toxic agents, irritants, corrosives, sensitizers; agents which act on the hematopoietic system; agents which damage the lungs, skin, eyes, or mucous membranes; chemicals which are combustible, explosive, flammable, oxidizers, pyrophorics, unstable-reactive or water-reactive; and chemicals which in the course of normal handling, use, or storage may produce or release dusts, gases, fumes, vapors, mists or smoke which may have any of the previously mentioned characteristics. (Full definitions can be found at 29 Code of Federal Regulations (CFR) 1910.1200.) Ref US OSHA's definition includes any substance or chemical which is a "health hazard" or "physical hazard," including: chemicals which are carcinogens, toxic agents, irritants, corrosives, sensitizers; agents which act on the hematopoietic system; agents which damage the lungs, skin, eyes, or mucous membranes; chemicals which are

combustible, explosive, flammable, oxidizers, pyrophorics, unstable-reactive or water-reactive; and chemicals which in the course of normal handling, use, or storage may produce or release dusts, gases, fumes, vapors, mists or smoke which may have any of the previously mentioned characteristics. (Full definitions can be found at 29 Code of Federal Regulations (CFR) 1910.1200.)

Light pollution: Excessive or obtrusive artificial light also known as photo pollution or luminous pollution. Examples of light pollution and reflection include: spilled light from construction zones and parking lots which may impact breeding grounds or resting areas; highly reflective towers which may affect bird flight.

Materials sourcing and resource efficiency: Responsible sourcing of materials considers the environmental, social and economic impacts of the procurement and production of products and materials. Resource efficiency means using those products and materials in an efficient and sustainable manner while minimizing impacts on the environment and society.

Monitor: To observe the progress of entity's ESG performance over a period of time.

Noise pollution: Refers to noise pollution, also known as environmental noise, which is the propagation of noise with harmful impact on the activity of human or animal life.

Policy: Defines an organizational commitment, direction or intention as formally adopted by the organization.

Resilience to catastrophe/disaster: Preparedness of the built environment towards existing and future threats of natural disasters (e.g., the ability to absorb disturbances such as increased precipitation or flooding while maintaining its structure). This can be achieved by management policies, informational technologies, educating tenant, community, suppliers and physical measures at the asset level.

Waste: Entity's consideration of waste disposal methods and whether waste minimization strategies emphasize prioritizing options for reuse, recycling, and then recovery over other disposal options to minimize ecological impact.

Water outflows/discharges: Discharge of water to water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater) or to third-parties for treatment or use.

Water inflows/withdrawals: Water drawn into the boundaries of the entity from all sources (including surface water, ground water, rainwater, and municipal water supply) as well as water reuse, efficiency, and recycling, including the entity's consideration of whether water sources are significantly affected by withdrawal of water.

References

[GRI Standards 2016 - 102-29: Identifying and managing economic, environmental and social impacts](#)

[GRI Standards 2016 - 300 series: Environmental Standards](#)

Does the entity monitor social performance? Yes

Select all material issues for which performance is monitored (multiple answers possible)

- Child labor
- Community development
- Customer satisfaction
- Employee engagement
- Forced or compulsory labor
- Freedom of association
- Health and safety: community
- Health and safety: contractors
- Health and safety: employees
- Health and safety: supply chain
- Health and safety: users
- Inclusion and diversity
- Labor standards and working conditions
- Local employment
- Social enterprise partnering
- Stakeholder relations
- Other: _____

 No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , S**Intent**

The intent of this indicator is to assess the entity's use of a systematic process to collect data to monitor and assess social performance.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

2020 changes: "Hazardous substances" added as an environmental issue.

Contractor and/or operator engagement: In some cases, an indicator addresses an activity that applies to the reporting entity, yet is undertaken by an assigned contractor, operator and/or contracted entity. This is often the case, for example, for PPP type arrangements. In these cases, when providing evidence, the

participant should specify the entity undertaking the activity and the relationship to that entity, to verify how these actions are applicable to the reporting entity. Copies of redacted contractual agreements/clauses to verify these relationships are acceptable.

Validation

Other: State the other social issue. Ensure that the other answer provided is not a duplicate of a selected option above (e.g., modern slavery when 'forced or compulsory labor' is selected). It is possible to report multiple other answers. If valid, the issue will be assigned Medium Relevance.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. Fractional points are awarded depending on the participant selecting the issues deemed material by the GRESB Materiality Assessment (see output in RC7 which will automatically populate once the indicators RC3 and RC7 of the Asset Assessment have been fully completed). It is therefore not necessary to select all checkboxes to receive maximum points. Fractional points are then aggregated to calculate the indicator's final score.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Materiality-based scoring: This indicator applies materiality-based scoring. Specific materiality weightings are assigned to the entity for each ESG issue in the GRESB Materiality Assessment indicator (RC7). The weightings are set at one of four levels for each of the ESG issues: No Relevance, Low Relevance, Medium Relevance, and High Relevance. Where an issue is of 'No relevance' or 'Low relevance' then the issue is not considered in scoring (i.e. there is no impact on score whether or not the issue is addressed). If an issue is of 'Medium relevance' then the issue counts towards the score with 'medium' weighting. If an issue is of 'High relevance' then the issue counts towards the score with 'high' weighting.

All issues of "Medium relevance" and "High relevance" need to be selected and addressed in the evidence to obtain the maximum score. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [Gresb Materiality & Scoring Tool](#).

Terminology

Child labor: Work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical or mental development including by interfering with their education. Specifically, it means types of work that are not permitted for children below the relevant minimum age.

Community development: A process where community members come together to take collective action and generate solutions to common problems.

Customer satisfaction: Customer satisfaction is one measure of an entity's sensitivity to its customers' needs and preferences and, from an organizational perspective, is essential for long-term success. In the context of sustainability, customer satisfaction provides insight into how the entity approaches its relationship with one stakeholder group (customers).

Employee engagement: An employee's involvement with, commitment to and satisfaction with the entity.

Forced or compulsory labor: All work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered themselves voluntarily.

Freedom of association: Right of employers and workers to form, to join and to run their own organizations without prior authorization or interference by the state or any other entity.

Health and safety: The principles of occupational health and safety management systems include developing a policy, analyzing and controlling health and safety risks, providing training, and recording and investigating health and safety incidents.

Inclusion and diversity: Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity including discrimination.

Labor standards and working conditions: Labor standards and working conditions are at the core of paid work and employment relationships. Working conditions cover a broad range of topics and issues, from working time (hours of work, rest periods, and work schedules) to remuneration, as well as the physical conditions and mental demands that exist in the workplace.

Local employment: Providing jobs and skills to local people as employees, and to local contractors.

Monitor: To observe the progress of entity's ESG performance over a period of time.

Social enterprise partnering: An entity's partnerships with organizations that have social objectives that serve as the primary purpose of the organization.

Stakeholder relations: The practice of forging mutually beneficial connections with third-party groups and individuals that have a stake in common interest.

References

[GRI Standards 2016 - 102-29: Identifying and managing economic, environmental and social impacts](#)

[GRI Standards 2016 - 400 series: Social Standards](#)

Does the entity monitor governance performance? Yes

Select all material issues for which performance is monitored (multiple answers possible)

- Audit committee structure/independence
- Board composition
- Board ESG oversight
- Bribery and corruption
- Compensation committee structure/independence
- Conflicts of interest
- Cybersecurity
- Data protection and privacy
- Delegating authority
- Executive compensation
- Fraud
- Independence of board chair
- Lobbying activities
- Political contributions
- Shareholder rights
- Whistleblower protection
- Other issues: _____

 No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , G**Intent**

The intent of this indicator is to assess the entity's use of a systematic process to collect data to monitor and assess governance performance.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

2020 changes: i). 'Conflicts of interest', 'Delegating authority', 'Shareholder rights', 'Board ESG oversight' were added as governance issues. ii.) 'Fiduciary duty' was removed. iii.) Section on which stakeholder(s) the policy applied to has been removed.

Contractor and/or operator engagement: In some cases, an indicator addresses an activity that applies to the reporting entity, yet is undertaken by an assigned contractor, operator and/or contracted entity. This is often the case, for example, for PPP type arrangements. In these cases, when providing evidence, the participant should specify the entity undertaking the activity and the relationship to that entity, to verify how these actions are applicable to the reporting entity. Copies of redacted contractual agreements/clauses to verify these relationships are acceptable.

Validation

Other: State the other governance issue. Ensure that the other answer provided is not a duplicate of a selected option above (e.g., Information security when 'Cybersecurity' is selected). It is possible to report multiple other answers. If valid, the issue will be assigned Medium Relevance.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. Fractional points are awarded depending on the participant selecting the issues deemed material by the GRESB Materiality Assessment (see output in RC7 which will automatically populate once the indicators RC3 and RC7 of the Asset Assessment have been fully completed). It is therefore not necessary to select all checkboxes to receive maximum points. Fractional points are then aggregated to calculate the indicator's final score.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Materiality-based scoring: This indicator applies materiality-based scoring. Specific materiality weightings are assigned to the entity for each ESG issue in the GRESB Materiality Assessment indicator (RC7). The weightings are set at one of four levels for each of the ESG issues: No Relevance, Low Relevance, Medium Relevance, and High Relevance. Where an issue is of 'No relevance' or 'Low relevance' then the issue is not considered in scoring (i.e. there is no impact on score whether or not the issue is addressed). If an issue is of 'Medium relevance' then the issue counts towards the score with 'medium' weighting. If an issue is of 'High relevance' then the issue counts towards the score with 'high' weighting.

All issues of "Medium relevance" and "High relevance" need to be selected and addressed in the evidence to obtain the maximum score. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [Gresb Materiality & Scoring Tool](#).

Terminology

Audit committee structure/independence: A corporate board of directors establishes an audit committee to assist in discharging its fiduciary responsibility. An effective audit committee is an important feature of a strong corporate governance culture, and should have a clear description of duties and responsibilities.

Board composition: Composition of the board and its committees by (i) Executive or non-executive, (ii) Independence, (iii) Tenure on the governance body, (iv) Number of each individual's other significant positions and commitments, and the nature of the commitments, (v) Gender, (vi) Membership of under-represented social groups, (vii) Competences relating to economic, environmental and social impacts, (viii) Stakeholder representation.

Board ESG oversight: The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material topics are covered.

Board-level issues: Governance issues that should be recognized at board-level by the entity.

Bribery: The offering, giving, receiving or soliciting an item of value to influence the actions of an official or other person in charge of a public or legal fiduciary duty.

Compensation committee structure/independence: Compensation decisions are central to the governance of many entities. Compensation committees or analogous organizations are established to govern employee compensation and ensure employee remuneration decisions are made in a fair, consistent and independent manner. An independent compensation committee may be one indicator of effective governance.

Conflicts of interest: Situations where an individual is confronted with choosing between the requirements of his or her function and his or her own private interests.

Corruption: Abuse of entrusted power for private gain.

Cybersecurity: The protection of internet-connected systems, including hardware, software and data, from any unauthorised use or access. Malicious attacks in particular can pose a significant threat to infrastructure assets.

Data protection and privacy: Customer privacy includes matters such as the protection of data; the use of information or data for their original intended purpose only, unless specifically agreed otherwise; the obligation to observe confidentiality; and the protection of information or data from misuse or theft.

Delegating authority: The process for delegating authority for economic, environmental, and social topics from the highest governance.

Executive compensation: The financial and non-financial compensation of executives, in a manner that motivates executives to perform their roles in alignment with the entities objectives and risk tolerance.

Fraud: Wrongful deception intended to result in financial or personal gain.

Independence of Board chair: A non-executive member of the board who does not have any management responsibilities within the organization and is not under any other undue influence, internal or external, political or ownership, that would impede the board member's exercise of objective judgment.

Lobbying activities: Any activity carried out to influence a government or institution's policies and decisions in favor of a specific cause or outcome.

Monitor: To observe the progress of entity's ESG performance over a period of time.

Operational issues: Governance issues that should be recognized on operational-level by the entity.

Political contributions: Disclosure of and guidelines for political contributions, such as the amounts and recipients of all monetary and non-monetary contributions made by an organization, which include political contributions made through third parties.

Shareholder rights: Assessing the potential risk of breaking or working against the entity's contractual shareholder rights. Shareholder rights are defined in the company's charter and bylaws.

Whistle-blower mechanism: A process that offers protection for individuals that want to reveal illegal, unethical or dangerous practices. An efficient whistle-blower mechanism prescribes clear procedures and channels to facilitate the reporting of wrongdoing and corruption, defines the protected disclosures, outlines the remedies and sanctions for retaliation.

References

[GRI Standards 2016 - 102-29: Identifying and managing economic, environmental and social impacts](#)

[GRI Standards 2016 - 200 series: Economic Standards](#)



Management: Stakeholder Engagement

Intent and Overview

Improving the sustainability performance of infrastructure assets requires dedicated resources, a commitment from senior management and tools for measurement/management of resource consumption. It also requires the cooperation of other stakeholders, including employees and suppliers.

This aspect identifies actions taken to engage with those stakeholders, as well as the nature of the engagement.

Stakeholder Engagement

2019 Indicator

Does the entity have a stakeholder engagement program? Yes

Select elements of the stakeholder engagement program (multiple answers possible)

- Planning and preparation for engagement
- Development of action plan
- Implementation of engagement plan
- Program review and evaluation
- Feedback sessions with senior management team
- Feedback sessions with separate teams/departments
- Focus groups
- Training
- Other: _____

Is the stakeholder engagement program aligned with third-party standards and/or guidance?

 Yes
 ▼
 No

Which stakeholders does the stakeholder engagement program apply to? (multiple answers possible)

- Clients/customers
- Community/public
- Contractors
- Investors/shareholders
- Regulators/government
- Special interest groups
- Other: _____

 No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Guideline name

- GRI Standards, 2016
- GRI Sustainability Reporting Guidelines, G4
- IIRC International Integrated Reporting Framework, 2013
- PRI Reporting Framework, 2018
- TCFD Recommendations, 2017
- Other: _____

Intent

The intent of this indicator is to assess the existence, scope and reach of the entity's stakeholder engagement program. Effective stakeholder engagement programs are often critical in preventing or addressing controversy that may create regulatory risks, legal liabilities, or undermine the entity's social license to operate and maximizing opportunities for creating shared value.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Third-party alignment: Indicate whether and which third-party standard the stakeholder engagement program aligns with. Finally, select which stakeholders the stakeholder engagement program applies to.

Guideline name: Additional guidelines such as 'IAP2 Core Values: Ethics and Spectrum' can be listed under 'Other'.

2020 changes: i.) Removal of sub-options 'Employees', 'Suppliers' and 'Supply Chain (beyond Tier 1 suppliers and contractors)'. ii.) Added stakeholder program elements.

Validation

Other: This indicator contains two options to provide an Other answer. Other answers must be outside the options listed in the indicator to be valid nor a duplicate of a selected answer. Within the respective sections state:

1. An 'Other' element of the stakeholder engagement program;
2. An 'Other' external stakeholder group.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. Fractional points are awarded based on the selections of:

- Employee engagement program elements.
- Alignment of the program with third-party standards.
- Stakeholder groups selected.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Diminishing Increase in Score approach: As indicated by the blue line, some elements of this indicator are scored based on a Diminishing Increase in Score approach, per additional checkbox selected.

Terminology

Stakeholder engagement program: A formal strategy to communicate with stakeholders to achieve and maintain their support.

Stakeholder groups: Terminology for the various stakeholder groups is defined in Appendix 2.

References

Alignment with External Frameworks

[GRI Standards 2016 - 102-40: List of stakeholder groups](#)

[GRI Standards 2016 - 102-42: Identifying and selecting stakeholders](#)

[GRI Standards 2016 - 102-43: Approach to stakeholder engagement](#)

Does the entity include ESG specific requirements in procurement processes? Yes

Select elements of the supply chain engagement program (multiple answers possible)

- Developing or applying ESG policies
- Planning and preparation for engagement
- Development of action plan
- Implementation of engagement plan
- Training
- Program review and evaluation
- Feedback sessions with stakeholders

Select all issues covered by procurement processes (multiple answers possible)

- Business ethics
- Child labor
- Environmental process standards
- Environmental product standards
- Human rights
- Human health-based product standards
- Occupational health and safety
- Labor standards and working conditions
- Other: _____

Select the external parties to whom the requirements apply (multiple answers possible)

- Contractors
- Operators
- Suppliers
- Supply chain (beyond tier 1 suppliers and contractors)
- Other: _____

 No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Intent

This indicator describes the management practices and requirements the entity uses to manage supply chain risks. The procurement process is an effective way to integrate the entity's sustainability-specific requirements into their supply chain. This indicator applies to existing and new contracts.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

2020 changes: Added a section on 'elements of the supply chain engagement program' which replaces the former SE6 indicator.

Validation

1. Other: State the other issue included in requirements, and/or;
2. Other: State the other external party to whom the requirements apply to. It is possible to report multiple other answers for the above sub-options.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. Fractional points are awarded based on the selections of:

- Supply chain engagement program elements.
- Issues covered by the procurement process.
- External parties to whom the program applies to.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Diminishing Increase in Score approach: As indicated by the blue line, some elements of this indicator are scored based on a Diminishing Increase in Score approach, per additional checkbox selected.

Terminology

Action plan: A detailed plan outlining actions needed to enhance tenant satisfaction. An action plan has three major elements (1) Specific tasks: what will be done and by whom; (2) Time horizon: when will it be done; (3) Resource allocation: what specific funds are available for specific activities.

Business ethics: Basic moral and legal principles used to address issues such as corporate governance, insider trading, bribery, discrimination, corporate social responsibility and fiduciary responsibilities.

Child labor: Work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical or mental development including by interfering with their education. Specifically, it means types of work that are not permitted for children below the relevant minimum age.

Environmental process standards: Minimum standards required during the procurement process in relation to environmental processes, such as requirements for disposal of waste generated by contractors.

Environmental product standards: Minimum standards required during the procurement process in relation to environmental products, such as requiring a certain percentage of products to be locally sourced or contain recycled content.

ESG-specific requirements: Includes specification and use of sustainable and energy efficient materials, systems, equipment and onsite operating practices that relate to ESG issues.

Health and safety - employees: The health and safety of employees responsible for the entity.

Employee health & well-being: The health & well-being of employees responsible for the entity.

Human health-based product standards: Minimum standards for the health-related attributes of products, such as lists of prohibited chemicals.

Human rights: Human rights are rights inherent to all human beings, whatever their nationality, place of residence, sex, national or ethnic origin, colour, religion, language or any other status.

Suppliers: Organizations or persons in the supply chain that provide a product or service used during the reporting year.

References

[GRI Standards 2016 - 204: Procurement Practices](#)

[GRI Standards 2016 - 308: Supplier Environmental Assessment](#)

[GRI Standards 2016 - 414: Supplier Social Assessment](#)

[DJSI CSA 2019 - 3.6.1 Supplier Code of Conduct](#)

[DJSI CSA 2019 - 3.6.3 Risk Exposure](#)

[DJSI CSA 2019 - 3.6.5 ESG Integration in Supply Chain Management Strategy](#)

Is there a formal process for stakeholders to communicate grievances that apply to this entity? Yes

Select all the characteristics applicable to the process (multiple answers possible)

- Dialogue based
- Legitimate and safe
- Accessible and easy to understand
- Improvement based
- Predictable
- Equitable and rights compatible
- Transparent
- Anonymous
- Prohibitive against retaliation
- Other: _____

Which stakeholders does the process apply to? (multiple answers possible)

- Clients/customers
- Community/public
- Contractors
- Employees
- Investors/shareholders
- Regulators/government
- Special interest groups
- Suppliers
- Supply chain (beyond Tier 1 suppliers and contractors)
- Other: _____

 No

Provide additional context for the answer provided (not validated, for reporting purposes only)

1.8 points , S**Intent**

This indicator identifies the existence of a grievance mechanism at the reporting entity. An entity's procurement decisions and activities can lead to significant negative sustainability impacts in the supply

chain, including human rights violations, even when entities operate optimally. Grievance mechanisms play an important role to provide access to remedy and reflect an entity's commitment to ESG management. An entity should establish a mechanism for stakeholders in the supply chain to bring this to the attention of the entity and seek redress.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been prefilled from the 2019 Assessment. Review the response and/or evidence carefully.

Validation

Other: This indicator contains two options to provide an Other answer. Other answers must be outside the options listed in the indicator to be valid. Within the respective sections, state:

1. Other: State the other method used for the grievance process. It is possible to report multiple other answers.
2. Other: State the other stakeholder group. It is possible to report multiple other answers.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is scored as a One Section Indicator. Evidence is not required. Fractional points are awarded based on the selections of:

- Characteristic elements selected that are applicable to the grievances process.
- Stakeholder to which the process applies to.

Other: Any 'other' answer provided will be manually validated and must be accepted before achieving the respective fractional score. If multiple 'other' answers are listed, more than one may be accepted in manual validation, but only one will be counted towards the score.

Diminishing Increase in Score approach: As indicated by the blue line, some elements of this indicator are scored based on a Diminishing Increase in Score approach, per additional checkbox selected.

Terminology

Accessible: Known to relevant stakeholder groups and provides adequate assistance for those who may face particular barriers to access (e.g. 24/7, language translations)

Dialogue based: Looks for mutually agreed solutions through engagement between parties.

Equitable: Ensure that parties have reasonable access to sources of information, advice and expertise necessary to engage in a grievance process on fair, informed and respectful terms (e.g. independent review).

Grievance mechanism: Formal, legal or non-legal (or 'judicial/non-judicial') complaint or feedback process that can be used by individuals, communities and/or civil society organizations that are being negatively affected by certain business activities and operations. The process enables the complaining party to flag an issue, seek redress and remedy.

Improvement based: Drawing on lessons learnt to improve processes and prevent future harms.

Legitimate: Enable trust from stakeholder groups.

Predictable: Provide a clear procedure with an indicative time frame for each stage, and clarity on the types of process and outcome available.

Rights compatible: Ensure that outcomes accord with international norms of behavior.

Transparent: Stakeholders are informed about the process and complainants are kept informed about the progress of grievances.

Safe: Protect stakeholders from potential threats and retaliations through a secure, anonymous, independent and two-way communication system.

Stakeholder groups: Terminology for the various stakeholder groups is defined in Appendix 2.

References

[ISO20400: Sustainable Procurement](#)

UN Guiding Principles on Business and Human Rights

Alignment with External Frameworks

GRI Standards 2016 - 103-2: The management approach and its components

Good practice example: Please refer to this

[link](#)

Has the entity received stakeholder grievances during the reporting period? (for reporting purposes only)

Yes

Describe the grievances received during the reporting period

Number of grievances communicated: _____

Summary of grievances: _____

Summary of resolutions for grievances: _____

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Not scored , S

Intent

The intent of this indicator is to communicate the nature of grievances received by the entity and how they have been resolved. Although this is not scored in the assessment, this is of significant interest to investors.

Requirements

Select Yes or No: If selecting Yes, select applicable sub-options.

Zero (0) may be entered but only if there is a formal grievance mechanism in place as per SE3.1 and no grievances have been received during the reporting year; Provide a summary of those grievances (if applicable);

Provide a summary of resolutions available for those grievances (if applicable).

Validation

This indicator is not subject to automatic or manual validation.

See [Appendix 4](#) of the reference guide for additional information about GRESB Validation.

Scoring

This indicator is not scored and is for reporting purposes only.

Terminology

Grievance mechanism: Formal, legal or non-legal (or 'judicial/non-judicial') complaint or feedback process that can be used by individuals, communities and/or civil society organizations that are being negatively affected by certain business activities and operations. The process enables the complaining party to flag an issue, seek redress and remedy.

References

[ISO20400: Sustainable Procurement](#)

[UN Guiding Principles on Business and Human Rights](#)

Alignment with External Frameworks

[GRI Standards 2016 - 103-2: The management approach and its components](#)



Performance: Implementation

Intent and Overview

The intent of this Aspect is to describe the actions implemented by the entity in relation to ESG issues.

Implementation

2019 Indicator

Can the entity list the key actions implemented to mitigate environmental risks or improve environmental performance?

Yes



No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Categories of environmental issues (select applicable issue for each activity)

- Air pollution
- Biodiversity and habitat protection
- Contamination
- Energy
- Greenhouse gas emissions
- Hazardous substances
- Light pollution
- Materials sourcing & resource efficiency
- Noise pollution
- Resilience to catastrophe/disaster
- Climate/climate change adaptation
- Waste
- Water discharge/pollution
- Water use/withdrawal
- Other: _____

Not scored , E

Intent

The purpose of this indicator is to describe specific actions implemented to mitigate environmental risk and/or improve environmental performance. Although unscored, this indicator provides an opportunity for the entity to communicate to its investors the meaningful efforts that are being made.

Requirements

Select Yes or No: If you select “Yes”, provide at least one example to complete the table.

Change: Indicator R04 (2019) was moved to the Performance Component and restructured. It has also been split into environmental, social and governance indicators. These indicators are now for reporting purposes only and no longer scored.

No prefill: This indicator has changed from the 2019 Assessment and has not been prefilled with 2019 Assessment answers.

Add an issue: Describe the actions implemented by completing the table as follows for each action:

1. Select the environmental issue addressed in column 1 (“Issues addressed”) or use the ‘other’ option to list a custom environmental issue;
2. Select the relevant category in column 2 (“Category”);
3. Describe the action taken in column 3 (“Description”) (What did the action (project or initiative) involve?);
4. Select the relevant incentive (i.e. motivation or reason) for implementing the action in column 4 (“Incentive”);
5. Describe the impact of the action, i.e. the outcome, in column 5 (“Impact of the action”). For example, what benefit will or has been achieved by implementing the action, or how did the action mitigate environmental risk and/or improve environmental performance;
6. Provide an indication of the monetary impact in column 6 (“Monetary impact”). This can be an exact number, an estimate or a description, e.g. return on investment (ROI), payback period or net present value (NPV);
7. Select the status of the action at the end of the reporting period in column 7 (“Status”). If the action has been completed and operational for more than three years (at the end of the reporting period), it should not be included.
8. Finally, it is possible to provide additional context to the response provided in column 8 (“Context”).

The actions should be specific, tangible and outside the regular business activities. For example, a standing policy should not be included here, but a program to increase energy efficiency could be appropriate.

The action must have taken place within the last three years, up to and including the end of the reporting period identified in EC3.

Validation

This indicator is not subject to manual validation.

Scoring

This indicator is not scored and is for reporting purposes only.

Terminology

Environmental issues: The impact on living and non-living natural systems, including land, air, water and ecosystems. This includes, but is not limited to, biodiversity, transport and product and service-related impacts, as well as environmental compliance and expenditures. Full reference to listed environmental issues can be found in Appendix 2.

References

[DJSI 2019 - 3.3.3 Emerging risks](#)

[CDP Climate Change 2020 - C4.3 Emissions reduction initiatives](#)

Can the entity list the key actions implemented to mitigate social risks or improve social performance?

Yes



No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Categories of social issues (select applicable issue for each activity)

- Child labor
- Community development
- Customer satisfaction
- Employee engagement
- Forced or compulsory labor
- Freedom of association
- Gender and diversity
- Health and safety: employees
- Health and safety: users
- Health and safety: community
- Health and safety: contractors
- Labor standards and working conditions
- Local employment
- Social enterprise partnering
- Stakeholder relations
- Other: _____

Not scored , S

Intent

The purpose of this indicator is to describe specific actions implemented to mitigate social risk and/or improve social performance. Although unscored, this indicator provides an opportunity for the entity to communicate to its investors the meaningful efforts that are being made.

Requirements

Select Yes or No: If you select “Yes”, provide at least one example to complete the table.

Change: Indicator R04 (2019) was moved to the Performance Component and restructured. It has also been split into environmental, social and governance indicators. These indicators are now for reporting purposes only and no longer scored.

No prefill: This indicator has changed from the 2019 Assessment and has not been prefilled with 2019 Assessment answers.

Add an issue: Describe the actions implemented by completing the table as follows for each action:

1. Select the social issue addressed in column 1 (“Issues addressed”) or use the ‘other’ option to list a custom social issue;
2. Select the relevant category in column 2 (“Category”);
3. Describe the action taken in column 3 (“Description”) (What did the action (project or initiative) involve?);
4. Select the relevant incentive (i.e. motivation or reason) for implementing the action in column 4 (“Incentive”);
5. Describe the impact of the action, i.e. the outcome, in column 5 (“Impact of the action”). For example, what benefit will or has been achieved by implementing the action, or how did the action mitigate social risk and/or improve social performance;
6. Provide an indication of the monetary impact in column 6 (“Monetary impact”). This can be an exact number, an estimate or a description, e.g. return on investment (ROI), payback period or net present value (NPV);
7. Select the status of the action at the end of the reporting period in column 7 (“Status”). If the action has been completed and operational for more than three years (at the end of the reporting period), it should not be included.
8. Finally, it is possible to provide additional context to the response provided in column 8 (“Context”).

The actions should be specific, tangible and outside the regular business activities. For example, a standing policy should not be included here, but an employee outreach program to improve health and safety could be appropriate.

The action must have taken place within the last three years, up to and including the end of the reporting period identified in EC3.

Validation

This indicator is not subject to manual validation.

Scoring

This indicator is not scored and is for reporting purposes only.

Terminology

Social issues: Concerns the impacts the organization has on the social systems within which it operates. Full reference to listed social issues can be found in Appendix 2.

References

Alignment with External Frameworks

[DJSI 2019 - 3.3.3 Emerging risks](#)

Can the entity list the key actions implemented to mitigate governance risks or improve governance performance?

Yes



No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Categories of governance issues (select applicable issue for each activity)

- | | |
|--|---|
| <ul style="list-style-type: none"> ■ Audit committee structure/independence ■ Board composition ■ Board ESG oversight ■ Bribery and corruption ■ Compensation committee structure/independence ■ Conflicts of interest ■ Cybersecurity ■ Data protection and privacy (incl. cybersecurity) ■ Delegating authority | <ul style="list-style-type: none"> ■ Executive compensation ■ Fiduciary duty ■ Fraud ■ Independence of Board chair ■ Lobbying activities ■ Political contributions ■ Shareholders rights ■ Whistleblower protection ■ Other: _____ |
|--|---|

Not scored , G

Intent

The purpose of this indicator is to describe specific actions implemented to mitigate governance risk and/or improve governance performance. Although unscored, this indicator provides an opportunity for the entity to communicate to its investors the meaningful efforts that are being made.

Requirements

Select Yes or No: If you select “Yes”, provide at least one example to complete the table.

Change: Indicator R04 (2019) was moved to the Performance Component and restructured. It has also been split into environmental, social and governance indicators. These indicators are now for reporting purposes only and no longer scored.

No prefill: This indicator has changed from the 2019 Assessment and has not been pre-filled with 2019 Assessment answers.

Add an issue: Describe the actions implemented by completing the table as follows for each action:

1. Select the governance issue addressed in column 1 (“Issues addressed”) or use the ‘other’ option to list a custom governance issue;
2. Select the relevant category in column 2 (“Category”);
3. Describe the action taken in column 3 (“Description”) (What did the action (project or initiative) involve?);
4. Select the relevant incentive (i.e. motivation or reason) for implementing the action in column 4 (“Incentive”);
5. Describe the impact of the action, i.e. the outcome, in column 5 (“Impact of the action”). For example, what benefit will or has been achieved by implementing the action, or how did the action mitigate governance risk and/or improve governance performance;
6. Provide an indication of the monetary impact in column 6 (“Monetary impact”). This can be an exact number, an estimate or a description, e.g. return on investment (ROI), payback period or net present value (NPV);
7. Select the status of the action at the end of the reporting period in column 7 (“Status”). If the action has been completed and operational for more than three years (at the end of the reporting period), it should not be included.
8. Finally, it is possible to provide additional context to the response provided in column 8 (“Context”).

The actions should be specific, tangible and outside the regular business activities. For example, a standing policy should not be included here, but a new initiative to support whistleblowers could be appropriate.

The action must have taken place within the last three years, up to and including the end of the reporting period identified in EC3.

Validation

This indicator is not subject to manual validation.

Scoring

This indicator is not scored and is for reporting purposes only.

Terminology

Governance issues: Governance structure and composition of the organization. This includes how the highest governance body is established and structured in support of the organization's purpose, and how this purpose relates to economic, environmental and social dimensions. Full reference to listed governance issues can be found in the Appendix 2.

References

Alignment with External Frameworks

[DJSI 2019 - 3.3.3 Emerging risks](#)



Performance: Output & Impact

Intent and Overview

The intent of this Aspect is to provide metrics that describe the entity's capacity, output and impact in the reporting year.

Output & Impact

2019 Indicator

Can the entity report on measures of output and impact? (for reporting purposes only)

Yes

Metrics	Activity metric	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
			2018	2019	2019	[enter year]
Capacity	[sector-specific]	[sector-specific]	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Output	[sector-specific]	[sector-specific]	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Impact value	Currency	[local currency]	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Output intensity (/GAV)	[output]/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Output intensity (/revenue)	[output]/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Impact intensity (/GAV)	[currency]/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Impact intensity (/revenue)	[currency]/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Impact intensity (/output)	[currency]/[output]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Not scored , G

Intent

The intent of this indicator is to assess the entity's reporting on broad metrics covering capacity, output and impact value. These metrics assess the physical output from the entity and the service it provides. The output metric is then used as a denominator with other quantitative metrics (e.g. GHG emissions) to calculate intensity metrics. Intensity metrics will not be used as a basis for scoring in 2019, but may be used in future years. The impact value metric allows entities to report the ESG value of their activities.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: The metric "Output" is now mandatory, and metrics on GAV, revenue and input have been removed from the Output Table.

Prefill: The metrics in the column "Previous-year performance" have been prefilled with the 2019 Assessment response.

Performance Tables

Output table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for "Output" (cell highlighted with a green border).
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide the mandatory data then it must select 'No' for the overall indicator.
 - The metrics and/ units for "Capacity" and "Output" will be automatically allocated based on the participant's primary sector (as determined by RC3). For example, for the sector Renewable Power: Solar Power Generation the relevant capacity unit would be 'Installed capacity (MW)' and the relevant output unit would be 'Energy generated (MWh)'. In some cases, a sector will not have any relevant metric/units assigned, so 'Not applicable' will be displayed and the field does not need to be completed.
 - "Impact value" should be estimated using Social Return on Investment (SROI) or a similar methodology. Methodology details may be provided in the additional context box.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Output and impact intensities table: Intensity metrics provide a basis for comparing and benchmarking ESG performance. Intensity metrics are not mandatory and not scored in 2020. The table should be completed as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Intensity performance metrics are calculated automatically as follows:
 - Output intensity (/GAV) = Output/GAV. GAV is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Output intensity (/Revenue) = Output/Revenue. Revenue is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Impact intensity (/GAV) = Impact value/GAV. GAV is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Impact intensity (/Revenue) = Impact value/Revenue. Revenue is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Impact intensity (/Output) = Impact value/Output. "Output" is reported in the Output table and is specific to the entity's primary sector (reported in RC3).

In some cases, the calculated cells may show as 'Not applicable'. This is either due to:

- i. the participant not reporting the input data (within the indicator);
 - ii. the participant not reporting on the relevant denominator (GAV/Revenue/Output);
 - iii. there being no output metric applicable to the entity's primary sector.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting period for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set the target at least internally and has implemented or is preparing actions to achieve the target.
 - Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.

- A target must be formally adopted.
- The target must be set for any future year that is not the reporting year.

An overview with the GRESB sector metrics and units list is also available [here](#)

Exceptions:

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

This indicator is not subject to manual validation.

Scoring

This indicator is not scored and is for reporting purposes only.

Terminology:

Capacity: The entity's physical capacity or maximum output over a period of time.

Gross Asset Value (GAV): The gross infrastructure value owned by the entity being the 'tangible fixed assets' or 'property, plant and equipment' associated with the infrastructure asset.

Impact value: The estimated net value (benefits minus costs) of the social and/or environmental impacts of the entity over the reporting period in monetary units.

Output: The entity's physical primary output for the reporting period.

Revenue: The annual income generated by the entity in exchange for providing the asset service.

References

[The SROI Network, 2012 - A Guide to Social Return on Investment](#)

Alignment with External Frameworks

[GRI Standard 201: Economic Performance](#)

[GRI Standard 203: Indirect Economic Impacts](#)

Relevant UN Sustainable Development Goals

[SDG 7 - Affordable and Clean Energy](#)

7.1 By 2030, ensure universal access to affordable, reliable and modern energy services

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

7.3 By 2030, double the global rate of improvement in energy efficiency

[SDG 8 - Decent Work and Economic Growth](#)

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead

[SDG 9 - Industry, Innovation and Infrastructure](#)

9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

[SDG 11 - Sustainable Cities and Communities](#)

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries



Performance: Energy

Intent and Overview

The intent of this Aspect is to provide metrics that describe the Entity's energy performance during the reporting year

Energy

2019 Indicator

Can the entity report on energy?

Yes

Has the entity imported or purchased energy?

Yes

Fuel / energy type	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Biofuels	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Renewable hydrogen	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Waste (non-biomass)	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Renewable electricity	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Renewable steam, heating and cooling	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Coal	MWh	Prefilled 2018	<input type="text"/>	<input type="text"/>	<input type="text"/>
Diesel	MWh	Prefilled 2018	<input type="text"/>	<input type="text"/>	<input type="text"/>
Motor gasoline	MWh	Prefilled 2018	<input type="text"/>	<input type="text"/>	<input type="text"/>
Natural gas	MWh	Prefilled 2018	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-renewable hydrogen	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
[enter "other non-renewable fuel"]	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-renewable electricity	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-renewable steam, heating and cooling	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total	MWh	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
% Renewable energy	%	N/A	Calculated	<input type="text"/>	<input type="text"/>

No

Has the entity generated energy from fuels?

Yes

Fuel	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Biofuels	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Renewable hydrogen	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Waste (non-biomass)	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Coal	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Diesel	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Motor gasoline	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Natural gas	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-renewable hydrogen	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
[enter "other non-renewable fuel"]	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total	MWh	N/A	Calculated	<input type="text"/>	<input type="text"/>

No

Has the entity generated energy from non-combustible sources?

Yes

Generation source	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Geothermal	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>

Hydro-electric	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Solar	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Wind	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="[enter 'other renewable source']"/>	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Nuclear	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total	MWh	N/A	Calculated	<input type="text"/>	<input type="text"/>

No

Has the entity exported or sold energy?

Yes

Fuel / energy type	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	<input type="text" value="[enter year]"/>
Biofuels	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Renewable hydrogen	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Renewable electricity	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Renewable steam, heating and cooling	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Coal	MWh	Prefilled 2018	<input type="text"/>	<input type="text"/>	<input type="text"/>
Diesel	MWh	Prefilled 2018	<input type="text"/>	<input type="text"/>	<input type="text"/>
Motor gasoline	MWh	Prefilled 2018	<input type="text"/>	<input type="text"/>	<input type="text"/>
Natural gas	MWh	Prefilled 2018	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-renewable hydrogen	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="[enter 'other non-renewable fuel']"/>	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-renewable electricity	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-renewable steam, heating and cooling	MWh	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total	MWh	Prefilled 2018	Calculated	<input type="text"/>	<input type="text"/>
% Renewable energy	%	N/A	Calculated	<input type="text"/>	<input type="text"/>

No

Complete the table below for any energy consumption targets that apply

Fuel / energy type	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	<input type="text" value="[enter year]"/>
Renewable energy	MWh	N/A	Calculated	<input type="text"/>	<input type="text"/>
Non-renewable energy	MWh	N/A	Calculated	<input type="text"/>	<input type="text"/>
Total	MWh	Prefilled 2018	Calculated	<input type="text"/>	<input type="text"/>
% Renewable energy	%	N/A	Calculated	<input type="text"/>	<input type="text"/>

Complete the table below for any energy intensity targets that apply

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	<input type="text" value="[enter year]"/>
Energy consumption intensity (/GAV)	MWh/[currency]	N/A	Calculated	<input type="text"/>	<input type="text"/>
Energy consumption intensity (/revenue)	MWh/[currency]	N/A	Calculated	<input type="text"/>	<input type="text"/>
Energy consumption intensity (/output)	MWh/[output]	N/A	Calculated	<input type="text"/>	<input type="text"/>
Energy export intensity (/GAV)	MWh/[currency]	N/A	Calculated	<input type="text"/>	<input type="text"/>
Energy export intensity (/revenue)	MWh/[currency]	N/A	Calculated	<input type="text"/>	<input type="text"/>
Energy export intensity (/output)	MWh/[output]	N/A	Calculated	<input type="text"/>	<input type="text"/>

External review

Has the data reported above been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using

Externally assured

Using

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND

- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol

- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Determined by materiality , E

Intent

The intent of this indicator is to assess the entity's measurement of and target setting for energy performance. The use of energy is both a direct cost and a critical source of local, regional, and global environmental impacts.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: The indicator structure has changed to provide a clearer step-by-step reporting process. To this end, "Electricity" and "Steam, Heating and Cooling" have been split into renewable and non-renewable and "Total Renewable Energy Consumed" and "Total Non-Renewable Energy Consumed" are calculated automatically.

New metrics have also been added ("Biofuels", "Waste (non-biomass)", "Renewable Hydrogen", "Non-renewable hydrogen", "Geothermal", "Hydro-electric", "Solar", "Wind", "[enter "other renewable source"]", "Nuclear"). The metric "Other fuels" has been changed to "[enter "other non-renewable fuel"]".

Prefill: The cells in the column "Previous-year performance" have been prefilled with the 2019 Assessment response where metrics have remained the same. Data has not been prefilled for new metrics or metrics that have substantially changed relative to the 2019 Assessment.

Performance Tables

Imported/purchased energy, Energy generated from fuels, Energy generated from non-combustible sources, Energy exported/sold: Complete the tables as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for all metrics highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall table.
 - The metric "[Enter other...]" should only be completed when the metric is outside the options already listed in the table.
 - Calculated total cells: Certain performance cells are automatically calculated based on inputs to other performance cells within the table or inputs to another indicator. Totals are the sum of all metrics in that table.
 - % Renewable Energy: for some tables, percentage renewable energy is calculated. The fraction renewable energy is calculated by dividing the sum of the renewable metrics by the overall total for that table. Renewable metrics included in the calculation are:
 - Biofuels
 - Renewable hydrogen
 - Waste (non-biomass)
 - Renewable electricity
 - Renewable steam, heating and cooling
 - Geothermal
 - Hydro-electric
 - Solar
 - Wind
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.

- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Energy consumed: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Data for reporting-year performance is calculated automatically based on the tables above. The calculations are:
 - Total renewable energy consumed = Sum of renewable energy imported/purchased + Sum of renewable energy generated from non-combustible sources - Sum of renewable energy exported/sold
 - Total non-renewable energy consumed = Sum non-renewable energy imported/purchased + Sum non-renewable energy generated from non-combustible sources - Sum non-renewable energy exported/sold
 - Total energy consumed = Sum renewable energy consumed + Sum non-renewable energy consumed
 - % Renewable energy = (Total renewable energy consumed / Total energy consumed) * 100
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Energy intensities table: Intensity metrics provide a basis for comparing and benchmarking ESG performance. Intensity metrics are not mandatory and not scored in 2020. The table should be completed as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year or is new, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Intensity performance metrics are calculated automatically as follows:
 - Energy export intensity (/GAV) = Total energy exported/GAV. Gross Asset Value (GAV) is reported in RC2 (Economic size) and is converted from millions to units within the calculation.
 - Energy export intensity (/Revenue) = Total energy exported/Revenue. Revenue is reported in RC2 (Economic size) and is converted from millions to units within the calculation.
 - Energy export intensity (/Output) = Total energy exported/Output. Output is reported in OI1 and is specific to the entity's primary sector as reported in RC3 (Sector & geography).
 - Energy consumption intensity (/GAV) = Total energy consumed/GAV. Gross Asset Value (GAV) is reported in RC2 (Economic size) and is converted from millions to units within the calculation.
 - Energy consumption intensity (/Revenue) = Total energy consumed/Revenue. Revenue is reported in RC2 (Economic size) and is converted from millions to units within the calculation.
 - Energy consumption intensity (/Output) = Total energy consumed/Output. Output is reported in OI1 and is specific to the entity's primary sector as reported in RC3 (Sector & geography).

In some cases, the calculated cells may show as 'Not applicable'. This is either due to:

- i. the participant not reporting the input data (within the indicator);
 - ii. the participant not reporting on the relevant denominator (GAV/Revenue/Output);
 - iii. there being no output metric applicable to the entity's primary sector.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting period for each metric, where available.
 - A target can be interpolated from a future-year target.

- A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set the target at least internally and has implemented or is preparing actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

External Review

Select Yes or No: If selecting “Yes”, state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to energy data. As such, a standard initially designed to verify/assure non-energy data (e.g. water) can be selected as long as the same thoroughness and review criteria are applied to data reported in EN1.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the 'Energy' issue in the GRESB Materiality Assessment (RC7).

Where this issue is of 'High' relevance, this indicator will be weighted highly and where this issue is of 'Medium' relevance, it will be weighted moderately. If materiality for this issue is set at 'No' or 'Low' relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green or orange is used for scoring:

- For participants whose primary sector is 'Power Generation x-Renewables' or 'Renewable Power', only the "Total" metric in the Energy exported/sold table is scored, as indicated by orange shading of the cells.
- For all other sectors, only the "Total" metric in the Energy consumed table is scored, as indicated by green shading of the cells.

For the scored metric, all columns ("Reporting-year performance", "Reporting-year target" and "Future-year target") should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in "Reporting-year performance".
- 20% of the indicator score will be based on the reporting of a target in "Reporting-year target". For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in "Future-year target". For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Energy consumed: Energy consumed on site in undertaking the entity's business activities and including losses. This is calculated as renewable energy consumed + non-renewable energy consumed.

Energy exported/sold: Any energy that the entity has supplied or distributed to third-parties, either the distribution of energy that has been imported by the entity, or energy that has been generated by the entity.

Energy generated from fuels: Any energy generated from fuels imported or purchased by the entity. For example, electricity generated from natural gas.

Energy generated from non-combustible sources: Any energy generated from non-combustible sources. For example, solar PV-generated electricity.

Energy imported/purchased: Any energy that the entity has obtained or purchased from outside the entity's reporting boundaries.

Geothermal: Energy generated from heat within the Earth's crust.

Hydro-electric: Energy generated from turbines powered by water, such as tidal energy, dams and water mills.

Hydrogen: A fuel that has no carbon emissions when combusted. Can be generated from hydrocarbons or electrolysis of water.

Motor gasoline: Liquid fossil fuel that is created from crude oil, also known as petrol. Includes forecourt gasoline blended with biofuels.

Natural gas: Gaseous fossil fuel comprised mostly of methane. Can be compressed as CNG or liquified as LNG.

Non-renewable energy: Energy sources that cannot be replenished in a short time through natural cycles or processes.

Nuclear: Energy generated from nuclear reactions. This includes nuclear fission, nuclear decay and nuclear fusion. Nuclear energy is not renewable.

Renewable energy: Energy sources that can be replenished in a short time through natural cycles or processes.

Solar: Energy generated from the sun's heat or light. Includes solar thermal and solar photovoltaic.

Waste (non-biomass): Any waste that is not categorized as biomass (biomass waste falls under biofuels) that is used to generate energy.

Wind: Energy generated from wind in turbines. Can be off- or onshore.

References

[CDP Climate Change 2019 - Technical Note: Fuel definitions](#)

[Eurostat - Energy Glossary](#)

Alignment with External Frameworks

[CDP Climate Change 2020 - C8 Energy](#)

[DJSI CSA 2019 - 4.2.3 EP - Energy](#)

[DJSI CSA 2019 - 4.2.4 EP - Energy Consumption](#)

[GRI Standards 2016 - 302: Energy](#)

Relevant UN Sustainable Development Goals

[SDG 7 - Affordable and Clean Energy](#)

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

7.3 By 2030, double the global rate of improvement in energy efficiency

[SDG 9 - Industry, Innovation and Infrastructure](#)

9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities



Performance: Greenhouse Gas Emissions

Intent and Overview

The intent of this Aspect is to provide metrics that describe the Entity's greenhouse gas emissions during the reporting year.

Greenhouse Gas Emissions

2019 Indicator

Can the entity report on greenhouse gas emissions?

Yes

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Emissions from combustion of fuels	tCO ₂ e	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Process emissions	tCO ₂ e	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Fugitive emissions	tCO ₂ e	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
Scope 1 (total)	tCO ₂ e	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Scope 2	tCO ₂ e	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Scope 1 + 2	tCO₂e	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Scope 3	tCO ₂ e	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Total Scope 1, 2 + 3	tCO₂e	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Emissions avoided* (renew. energy export)	tCO ₂ e	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
On-site offsets	tCO ₂ e	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Offsets purchased	tCO ₂ e	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Net GHG emissions (Scope 1 + 2)	tCO₂e	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Net GHG emissions (Scope 1, 2 + 3)	tCO₂e	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

Can the entity report on scope 3 greenhouse gas emissions?

Yes

Metrics	Units	Previous-year performance	Reporting-year performance
		2018	2019
Purchased goods and services	tCO ₂ e	N/A	<input type="text"/>
Capital goods	tCO ₂ e	N/A	<input type="text"/>
Fuel- and energy-related activities	tCO ₂ e	N/A	<input type="text"/>
Upstream transportation & distribution	tCO ₂ e	N/A	<input type="text"/>
Waste generated in operations	tCO ₂ e	N/A	<input type="text"/>
Business travel	tCO ₂ e	N/A	<input type="text"/>
Employee commuting	tCO ₂ e	N/A	<input type="text"/>
Upstream leased assets	tCO ₂ e	N/A	<input type="text"/>
Downstream transportation & distribution	tCO ₂ e	N/A	<input type="text"/>
Processing of sold products	tCO ₂ e	N/A	<input type="text"/>
Use of sold products	tCO ₂ e	N/A	<input type="text"/>
End-of-life treatment of sold products	tCO ₂ e	N/A	<input type="text"/>
Downstream leased assets	tCO ₂ e	N/A	<input type="text"/>
Franchises	tCO ₂ e	N/A	<input type="text"/>
Investments	tCO ₂ e	N/A	<input type="text"/>
Total Scope 3 emissions	tCO₂e	<i>Prefilled 2018</i>	Calculated

No

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Gross GHG emissions intensity (/GAV)	tCO ₂ e/[currency]	N/A	Calculated	<input type="text"/>	<input type="text"/>
Gross GHG emissions intensity (/revenue)	tCO ₂ e/[currency]	N/A	Calculated	<input type="text"/>	<input type="text"/>
Gross GHG emissions intensity (/output)	tCO ₂ e/[output]	N/A	Calculated	<input type="text"/>	<input type="text"/>
Net GHG emissions intensity (/GAV)	tCO ₂ e/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Net GHG emissions intensity (/revenue)	tCO ₂ e/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Net GHG emissions intensity (/output)	tCO ₂ e/[output]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

Scope 2 emissions reporting

Indicate which of the following approaches was used to calculate the scope 2 emissions reported above:

- Location-based
- Market-based
- Mix of location-based and market-based

External review

Has the data reported above been reviewed by an independent third party?

- Yes
 - Externally checked
 - Externally verified
 - Using ▼
 - Externally assured
 - Using ▼

Please provide applicable evidence

UPLOAD or URL _____

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

- No

Science-based targets

Are any of the targets reported in the table above approved by the Science-Based Targets Initiative?

- Yes
 - Select the metric(s) for which the target has been approved by the SBTI.
 - Scope 1 (total)
 - Scope 2
 - Scope 3
 - Total scope 1 + 2
 - Total scope 1, 2 + 3
 - Gross GHG emissions intensity (/GAV)
 - Gross GHG emissions intensity (/revenue)

Gross GHG emissions intensity (/output)

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Determined by materiality , E

Intent

The intent of this indicator is to assess the entity's measurement of greenhouse gas (GHG) emissions. GHG emissions are the primary driver of anthropogenic climate change and a critical source of local, regional, and global environmental impacts. GHGs may result from the consumption or generation of energy, or from processes that produce GHGs directly, such as the production of cement. Evaluating direct and indirect GHG emissions (or Scope 1 and 2 emissions) has become the norm for organizations. Additionally, an increasing number of organizations is looking at emissions throughout their value chains (Scope 3 emissions).

Requirements

Select Yes or No: If selecting “Yes”, the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: Scope 1 emissions are now broken down into three metrics (“Emissions from combustion of fuels”, “Process emissions”, “Fugitive emissions”) in accordance with the GHG Protocol. A new table has been added that allows participants to provide a breakdown of scope 3 emissions. A new metric has been added “Net GHG emissions (Scope 1, 2 + 3)”. New questions have been added on scope 2 emissions calculation methodology and science-based targets.

Prefill: The cells in the column “Previous-year performance” have been prefilled with the 2019 Assessment response where metrics have remained the same. Data has not been prefilled for new metrics or metrics that have substantially changed relative to the 2019 Assessment.

Performance Tables

Total greenhouse gas emissions table Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year’s Assessment, or if there is no data available for the entity for the previous year, ‘N/A’ is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for all metrics highlighted with a green border.
 - ‘Zero’ is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select “No” for the overall indicator.
 - “Emissions avoided* (renew. energy export)” applies to the export of renewable energy (see EN1) only. Only entities in the primary sector ‘Renewable Power’ should report this metric. Offsets should be reported under “On-site offsets” or “Offsets purchased”.
 - Calculated total cells: Certain performance cells are automatically calculated based on inputs to other performance cells within the table or inputs to another indicator. The equations for these calculated cells are:
 - Scope 1 (total) = “Emissions from combustion of fuels” + “Process emissions” + “Fugitive emissions”
 - Total scope 1 + 2 = “Scope 1 (total)” + “Scope 2”
 - Scope 3 = “Total” (from Scope 3 emissions table)
 - Total Scope 1, 2 + 3 = “Total Scope 1 + 2” + “Scope 3”
 - Net GHG emissions (Scope 1 + 2) = “Total Scope 1 + 2” - “On-site offsets” - “Offsets purchased”
 - Net GHG emissions (Scope 1, 2 + 3) = “Total Scope 1, 2 + 3” - “On-site offsets” - “Offsets purchased”
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Note: all values reported in the Total greenhouse gas emissions table should be absolute (i.e. equal or greater than zero).

Scope 3 greenhouse gas emissions table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year’s Assessment, or if there is no data available for the entity for the previous year, ‘N/A’ is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - ‘Zero’ is an acceptable answer if it is true and accurate. If the entity cannot provide any values, it must select “No” for the overall indicator.

- Calculated total cells: Certain performance cells are automatically calculated based on inputs to other performance cells within the table or inputs to another indicator. Totals are the sum of all metrics in that table.

Note: all values reported in the the Scope 3 greenhouse gas emissions table should be absolute (i.e. equal or greater than zero).

Greenhouse gas emissions intensities table: Intensity metrics provide a basis for comparing and benchmarking ESG performance. Intensity metrics are not mandatory and not scored in 2020. The table should be completed as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year or is new, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Intensity performance metrics are calculated automatically as follows:
 - Gross GHG emissions intensity (/GAV) = "Total Scope 1 + 2"/GAV. Gross Asset Value (GAV) is reported in RC2 (Economic size) and is converted from millions to units within the calculation.
 - Gross GHG emissions intensity (/Revenue) = "Total Scope 1 + 2"/Revenue. Revenue is reported in RC2 (Economic size) and is converted from millions to units within the calculation.
 - Gross GHG emissions intensity (/Output) = "Total Scope 1 + 2"/Output. Output is reported in OI1 and is specific to the entity's primary sector as reported in RC3 (Sector & geography).
 - Net GHG emissions intensity (/GAV) = "Net GHG emissions (Scope 1 + 2)/GAV. Gross Asset Value (GAV) is reported in RC2 (Economic size) and is converted from millions to units within the calculation.
 - Net GHG emissions intensity (/Revenue) = "Net GHG emissions (Scope 1 + 2)/Revenue. Revenue is reported in RC2 (Economic size) and is converted from millions to units within the calculation.
 - Net GHG emissions intensity (/Output) = "Net GHG emissions (Scope 1 + 2)/Output. Output is reported in OI1 and is specific to the entity's primary sector as reported in RC3 (Sector & geography).

In some cases, the calculated cells may show as 'Not applicable'. This is either due to:

- i. the participant not reporting the input data (within the indicator);
 - ii. the participant not reporting on the relevant denominator (GAV/Revenue/Output);
 - iii. there being no output metric applicable to the entity's primary sector.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting period for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set the target at least internally and has implemented or is preparing actions to achieve the target.
 - Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Scope 2 Emissions Reporting

Select one of the options Select the applicable answer. The emissions methodology must apply to the reported Scope 2 emissions in the table Total greenhouse gas emissions. This question is for reporting purposes only.

External Review

Select Yes or No: If selecting "Yes", state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the

dropdown.

GRESB does not require the selected standard to be specific to GHG data. As such, a standard initially designed to verify/assure non-energy data (e.g. water) can be selected as long as the same thoroughness and review criteria are applied to data reported in GH1.

Science-based Targets

Select Yes or No: If selecting “Yes”, select the checkbox(es) that apply. Any selected metric(s) must:

- Have a target reported under “Reporting-year target” or “Future-year target” in the Total greenhouse gas emissions table
- Have its target(s) approved by the Science-based Targets Initiative.

For more information on science-based targets, see the “References” section. This question is for reporting purposes only.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the ‘Greenhouse gas emissions’ issue in the GRESB Materiality Assessment (RC7).

Where this issue is of ‘High’ relevance, this indicator will be weighted highly and where this issue is of ‘Medium’ relevance, it will be weighted moderately. If materiality for this issue is set at ‘No’ or ‘Low’ relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall

weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green or orange is used for scoring:

- For participants whose primary sector is 'Renewable Power', only the "Avoided emissions" metric in the Total greenhouse gas emissions table is scored, as indicated by orange shading of the cells.
- For all other sectors, only the "Net GHG emissions (Scope 1 + 2)" metric in the Energy consumed table is scored, as indicated by green shading of the cells. The other cells shaded in green should be completed to obtain the reporting-year value for this metric.

For the scored metric, all columns ("Reporting-year performance", "Reporting-year target" and "Future-year target") should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in "Reporting-year performance".
- 20% of the indicator score will be based on the reporting of a target in "Reporting-year target". For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in "Future-year target". For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of scope 2 emissions methodology, external data review, science-based targets and exceptions are not scored in 2020.

Terminology

Carbon dioxide equivalent (CO₂e): The unit of measurement to express the Global Warming Potential (GWP) of a greenhouse gas, relative to the GWP of 1 unit of carbon dioxide (definition based on the GHG protocol).

Emissions avoided (renewable energy export): Relates to the emissions avoided through generation of renewable energy on site and exported off-site (sold) to customers.

Emissions from combustion of fuels: Greenhouse gas emissions that result from the combustion of fuels such as natural gas, gasoline or coal.

Fugitive emissions: Greenhouse gas emissions from intentional or unintentional releases, such as methane during transport of natural gas and HFC emissions from refrigeration equipment.

Greenhouse gas emissions: GHGs refers to the seven gases listed in the Kyoto Protocol: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); nitrogen trifluoride (NF₃) and sulphur hexafluoride (SF₆).

GHG offsets: A GHG (or carbon) offset represents a quantity of GHG emissions reductions, measured in units (usually metric tons) of carbon dioxide-equivalent (CO₂e), that occur as a result of a discrete project. The emissions reductions from that project can be sold to enable the purchaser/owner to claim those GHG reductions as their own. These reductions can then be used to reduce, or offset, any GHG emissions for which the purchaser is responsible.

Location-based: A method to calculate scope 2 emissions, reflecting the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data) (definition based on the GHG protocol)

Market-based: A method to calculate scope 2 emissions, reflecting emissions from electricity that the entity has purposefully chosen (or their lack of choice). It derives emission factors from contractual instruments (definition based on the GHG protocol).

Net GHG emissions: Net GHG emissions are calculated using this formula: Scope 1 + Scope 2 - On-site offsets - Offsets purchased.

On-site offsets: GHG offsets created from projects undertaken on site that sequester carbon such as tree planting. It does not include renewable energy generation or other GHG emission reduction projects.

Offsets purchased: GHG offsets created externally by third parties that are purchased to reduce the GHG footprint of the entity. These could be a range of types including renewable energy, tree planting, energy efficiency etc. This does not include renewable energy imported and consumed since this directly reduces the GHG emissions of the entity.

Process emissions: Greenhouse gas emissions that arise during chemical and industrial processes as a by-product, such as CO₂ release during cement production.

Science-based targets: A target is science-based if it has been set by the Entity in line with meeting the goals of the Paris Agreement to limit global warming to below 2C above pre-industrial levels. A science-based target must have been approved by the Science-based Targets Initiative.

Scope 1 emissions: GHG emissions that arise from operations that are directly owned or controlled by the Entity (definition based on the GHG protocol). Examples include combustion of fuels in boilers, machinery or vehicles controlled by the Entity, emissions from industrial processes and fugitive emissions from Entity-controlled refrigeration equipment.

Scope 2 emissions: GHG emissions from the generation of purchased or acquired electricity and steam, heating and cooling consumed by the Entity (definition based on the GHG protocol).

Scope 3 emissions: All indirect GHG emissions not included in scope 1 or 2 that occur in the value chain of the entity, including both upstream and downstream emissions (definition based on the GHG protocol). Scope 3 emissions are typically divided into categories to facilitate reporting.

References

[CDP Climate Change 2019 - Technical note on science-based targets](#)

[Eurostat - Environment Glossary](#)

[Science-based Targets Initiative - Tools and resources](#)

[WRI - GHG Protocol Scope 2 Guidance](#)

[WRI & WBCSD - Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#)

[WRI & WBCSD - Technical Guidance for Calculating Scope 3 Emissions](#)

[WRI & WBCSD - The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard](#)

Alignment with External Frameworks

[CDP Climate Change 2020 - C4 Targets and performance](#)

[CDP Climate Change 2020 - C5 Emissions methodology](#)

[CDP Climate Change 2020 - C6 Emissions data](#)

[CDP Climate Change 2020 - C7 Emissions breakdown](#)

[DJSI CSA 2019 - 4.2.1 EP - Direct Greenhouse Gas Emissions \(Scope 1\)](#)

[DJSI CSA 2019 - 4.2.2 EP - Indirect Greenhouse Gas Emissions \(Scope 2\)](#)

[DJSI CSA 2019 - 4.3.4 Climate-related Targets](#)

[DJSI CSA 2019 - 4.3.6 Scope 3 GHG Emissions](#)

[GRI Standards 2016 - 305: Emissions](#)

Relevant UN Sustainable Development Goals

[SDG 9 - Industry, Innovation and Infrastructure](#)

9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

[SDG 13: Climate Action](#)



Performance: Air Pollution

Intent and Overview

The intent of this Aspect is to provide metrics that describe the Entity's greenhouse gas emissions during the reporting year.

Air Pollution

2019 Indicator

Can the entity report on air pollution?

Yes

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
SO _x	kg	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
NO _x	kg	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
PM2.5	kg	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
PM10	kg	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ozone (O ₃)	kg	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lead (Pb)	kg	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Mercury (Hg)	kg	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-compliances	Number	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

External review

Has the data reported above been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using ▼

Externally assured

Using ▼

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

■ AA1000AS

■ Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)

- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- Swiss Climate CO2 Label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Determined by materiality , E

Intent

The intent of this indicator is to assess the entity's measurement of air pollution emissions. Air pollution can have significant impacts on human health and the environment. Additionally, air pollutants can also put entities at risk of regulation and maintaining a social license to operate. Significant air pollutants are ground-level ozone (O₃), nitrogen oxides (NO_x), sulphur oxides (SO_x), particulates and heavy metals such as lead and mercury.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: The metric "Other" has been removed.

Prefill: The metrics in the column "Previous-year performance" have been prefilled with the 2019 Assessment response.

Performance Tables

Air pollution table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for the metric "Non-compliances", highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

There is no intensity table for this indicator.

External Review

Select Yes or No: If selecting “Yes”, state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to air pollution data. As such, a standard initially designed to verify/assure other types of ESG data (e.g. water) can be selected as long as the same thoroughness and review criteria are applied to data reported in AP1.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the ‘Air pollution’ issue in the GRESB Materiality Assessment (RC7).

Where this issue is of ‘High’ relevance, this indicator will be weighted highly and where this issue is of ‘Medium’ relevance, it will be weighted moderately. If materiality for this issue is set at ‘No’ or ‘Low’ relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each

participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green is used for scoring. The only scored metric for Air Pollution is “Non-compliances”.

For the scored metric, all columns (“Reporting-year performance”, “Reporting-year target” and “Future-year target”) should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in “Reporting-year performance”.
- 20% of the indicator score will be based on the reporting of a target in “Reporting-year target”. For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in “Future-year target”. For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Air pollution: Air pollutants are particles and gases released into the atmosphere that may adversely affect living organisms. Additionally, some pollutants contribute to climate change or exacerbate the effects of climate change locally.

Lead (Pb): Lead emissions can result from industrial process or the use of fuel that contains lead. Exposure to lead has adverse effects on human health and ecosystems.

Mercury (Hg): Mercury can enter the environment in elemental or inorganic forms. Burning of fossil fuels can result of emissions of mercury into the air. Mercury is harmful to humans and ecosystems.

Nitrogen oxides (NO_x): A group of gases that are harmful to human health and the environment by contributing to smog and acid rain. They can also lead to nutrient pollution in ecosystems and cause the formation of ozone, another pollutant. NO_x are mainly released to the air via the burning of fuels.

Non-compliances: Failure to comply with covenants, environmental permits, laws and/or regulation due to the performance of air pollutant emissions or discharges to bodies of water.

Ozone (O₃): Ground-level ozone can result in health problems and affect people with lung conditions. It can also harm vegetation growth.

Particulate matter (PM): Particulate matter are any solid particles or small droplets in the air, such as smoke or dust. They are measured based on their diameter. PM₁₀ are any particles with a diameter of 10 micrometers or smaller; PM_{2.5} are any particles that are 2.5 micrometers or smaller. Particulate matter can result from the burning of fuels or directly from industrial processes and/or construction. Inhalation of particulates may cause adverse health effects.

Sulfur oxides (SO_x): A group of gases that are harmful to human health and the environment. They can contribute to acid rain and can increase particulate matter concentrations in the air. SO_x are mainly released to the air via the burning of fuels.

References

[Eurostat - Environment Glossary](#)

[US EPA - Criteria Air Pollutants](#)

[Alignment with External Frameworks](#)

[GRI Standards 2016 - 307-1: Non-compliance with environmental laws and regulations](#)

[GRI Standards 2016 - 305-7: Nitrogen oxides \(NO_x\), sulfur oxides \(SO_x\), and other significant air emissions](#)

[Relevant UN Sustainable Development Goals](#)

[SDG 3 - Good Health and Well-being](#)

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

[SDG 11 - Sustainable Cities and Communities](#)

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

SDG 12 - Responsible Consumption and Production

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment



Performance: Water

Intent and Overview

The intent of this Aspect is to provide metrics that describe the Entity's water withdrawals and discharges during the reporting year.

Water

2019 Indicator

Can the entity report on water inflows/withdrawals?

Yes

Source	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Groundwater	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Rainwater	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Seawater / brackish water	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Surface water	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Produced water	Megaliters (ML)	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Third-party non-potable water	Megaliters (ML)	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Third-party potable water	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total withdrawals	Megaliters (ML)	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
% Potable water	%	<i>N/A</i>	Calculated	<input type="text"/>	<input type="text"/>
Total HWS withdrawals	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Water withdrawal intensity (/GAV)	Megaliters/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Water withdrawal intensity (/revenue)	Megaliters/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Water withdrawal intensity (/output)	Megaliters/[output]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

External review

Has the entity’s water withdrawal data been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using

Externally assured

Using

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity’s data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS Sustainability Issues
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET) ■ ISAE 3000
- Airport Carbon Accreditation (ACA) des Airports Council International Europe ■ ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- Alberta Specified Gas Emitters Regulation ■ ISO14064-3
- ASAE3000 ■ JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101) ■ Korean GHG and energy target management system
- Australia National Greenhouse and Energy Regulations (NGER Act) ■ NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations) ■ RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025 ■ RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Carbon Trust Standard ■ Saitama Prefecture Target-Setting Emissions Trading Program
- Chicago Climate Exchange verification standard ■ SGS Sustainability Report Assurance
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR)) ■ Spanish Institute of Registered Auditors (ICJCE)
- Compagnie Nationale des Commissaires aux Comptes (CNCC) ■ Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- Corporate GHG Verification Guidelines from ERT ■ State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting ■ Swiss Climate CO2 label
- Earthcheck Certified ■ Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard ■ Tokyo Emissions Trading Scheme
- ERM GHG Performance Data Assurance Methodology ■ Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on

Determined by materiality , E

Intent

The intent of this indicator is to assess the entity's measurement of water resource impacts. The inflow/withdrawal of water can have significant impacts on the environment and communities. Relatively high levels of water withdrawals can potentially create liabilities or regulatory risk.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: New metrics have been added ("Produced water" and "% potable water"). Several other metrics have been renamed to improve alignment with external frameworks ("Potable water supply" to "Third-party potable water"; "Surface water/river" to "Surface water"; "Seawater" to "Seawater/brackish water"; "Recycled water (from external suppliers)" to "Third-party non-potable water").

Prefill: The cells in the column "Previous-year performance" have been prefilled with the 2019 Assessment response where metrics have remained the same. Data has not been prefilled for new metrics or metrics that have substantially changed relative to the 2019 Assessment.

Performance Tables

Water inflows/withdrawals table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.

- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for all metrics highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
 - Calculated cells: Certain performance cells are automatically calculated based on inputs to other performance cells within the table or inputs to another indicator. Totals are the sum of all metrics in that table. The equation for the other calculated cell is:
 - $\% \text{ Potable water} = \text{"Third-party potable water"} / \text{"Total withdrawals"} * 100$
 - Total HWS withdrawals: These are withdrawals from areas with High or Extremely High Baseline Water Stress (also see: Terminology). "Total HWS withdrawals" is a subset of the "Total withdrawals"
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Water withdrawal intensities table: Intensity metrics provide a basis for comparing and benchmarking ESG performance. Intensity metrics are not mandatory and not scored in 2020. The table should be completed as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Intensity performance metrics are calculated automatically as follows:
 - Water withdrawal intensity (/GAV) = Total withdrawals/GAV. GAV is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Water withdrawal intensity (/Revenue) = Total withdrawals/Revenue. Revenue is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Water withdrawal intensity (/Output) = Total withdrawals/Output. Output is reported in OI1 and is specific to the entity's primary sector as reported in RC3 (Sector & geography).

In some cases, the calculated cells may show as 'Not applicable'. This is either due to:

- i. the participant not reporting the input data (within the indicator);
 - ii. the participant not reporting on the relevant denominator (GAV/Revenue/Output);
 - iii. there being no output metric applicable to the entity's primary sector.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting period for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set the target at least internally and has implemented or is preparing actions to achieve the target.
 - Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

External review

Select Yes or No: If selecting "Yes", state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the

dropdown.

- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to water withdrawal data. As such, a standard initially designed to verify/assure other types of ESG data (e.g. energy) can be selected as long as the same thoroughness and review criteria are applied to data reported in WT1.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the ‘Water inflows/withdrawal’ issue in the GRESB Materiality Assessment (RC7).

Where this issue is of ‘High’ relevance, this indicator will be weighted highly and where this issue is of ‘Medium’ relevance, it will be weighted moderately. If materiality for this issue is set at ‘No’ or ‘Low’ relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green is used for scoring. The only scored metric for Water inflows/withdrawals is “Total withdrawals”.

For the scored metric, all columns (“Reporting-year performance”, “Reporting-year target” and “Future-year target”) should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in “Reporting-year performance”.
- 20% of the indicator score will be based on the reporting of a target in “Reporting-year target”. For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in “Future-year target”. For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Groundwater: Freshwater that is found beneath the Earth's surface that supplies wells and springs.

Potable water: Also known as drinking water. Potable water is any water that is safe for human consumption or food preparation.

Produced water: Water that enters the Entity's boundaries as a result of a production process, such as extraction of fossil fuels or processing of raw materials (definition based on CDP Water Security 2020).

Rainwater: Water that has fallen as, or been obtained from, rain.

Seawater/brackish water: Water obtained from seas, oceans or estuaries that has a salinity level of over 0.05%.

Surface water: Surface water is any freshwater occurring naturally on the Earth's surface, such as in lakes, rivers, ice sheets, glaciers or peatlands.

Total HWS withdrawals: All withdrawals from areas that have High or Extremely High Baseline Water Stress (HWS) as classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct.

Water inflows/withdrawals: Water drawn into the boundaries of the entity from all sources (including surface water, ground water, rainwater, and municipal water supply) as well as water reuse, efficiency, and recycling, including the entity's consideration of whether water sources are significantly affected by withdrawal of water.

References

[Eurostat - Environment Glossary](#)

[WRI - Aqueduct Water Risk Atlas](#)

[WWF - Water Risk Filter](#)

Alignment with External Frameworks

[CDP Water Security 2020 - W1.2 Company accounting](#)

[CDP Water Security 2020 - W5 Facility-level accounting](#)

[CDP Water Security 2020 - W8 Targets](#)

[DJSI CSA 2019 - 4.2.5 EP - Water](#)

[DJSI CSA 2019 - 4.2.6 EP - Water Consumption](#)

[GRI Standards 2018 - 303-3: Water discharge](#)

[GRI Standards 2018 - 303-5: Water consumption](#)

Relevant UN Sustainable Development Goals

[SDG 3 - Good Health and Well-being](#)

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

[SDG 6 - Clean Water and Sanitation](#)

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

Can the entity report on water outflows/discharges?

Yes

Destination	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Groundwater	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Seawater / brackish water	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Surface water	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Third-party reuse	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Third-party treatment	Megaliters (ML)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total water discharged	Megaliters (ML)	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Total sensitive discharge	Megaliters (ML)	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Non-compliances	Number	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>
% Recycled	%	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Water discharge intensity (/GAV)	Megaliters/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Water discharge intensity (/revenue)	Megaliters/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Water discharge intensity (/output)	Megaliters/[output]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

External review

Has the data reported above been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using

Externally assured

Using

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Determined by materiality , E

Intent

The intent of this indicator is to assess the entity's measurement of water outflows and discharge impacts. The discharge of water can have significant impacts on human health and the environment. Relatively high levels of discharge can potentially create liabilities or regulatory risk.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: Changes: "Non-compliances" has been added as a new metric. Several other metrics have been renamed to improve alignment with external frameworks ("Municipal treatment plant" to "Third-party treatment"; "Surface water/river" to "Surface water"; "Seawater" to "Seawater/brackish water"; "Recycled water scheme" to "Third-party re-use").

Prefill: The cells in the column "Previous-year performance" have been prefilled with the 2019 Assessment response where metrics have remained the same. Data has not been prefilled for new metrics or metrics that have substantially changed relative to the 2019 Assessment.

Performance Tables

Water outflows/discharges table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.

- It is mandatory to enter data for all metrics highlighted with a green border.
- 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
- Calculated cells: Certain performance cells are automatically calculated based on inputs to other performance cells within the table or inputs to another indicator. Totals are the sum of all metrics in that table. The equation for the other calculated cell is:
 - Total sensitive discharge = "Groundwater" + "Seawater/brackish water" + "Surface water"
 - % Recycled = "Third-party reuse" / "Total water discharged" * 100
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Water discharge intensities table: Intensity metrics provide a basis for comparing and benchmarking ESG performance. Intensity metrics are not mandatory and not scored in 2020. The table should be completed as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Intensity performance metrics are calculated automatically as follows:
 - Water discharge intensity (/GAV) = Total water discharged/GAV. GAV is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Water discharge intensity (/Revenue) = Total water discharged/Revenue. Revenue is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Water discharge intensity (/Output) = Total water discharged/Output. Output is reported in O11 and is specific to the entity's primary sector as reported in RC3 (Sector & geography).

In some cases, the calculated cells may show as 'Not applicable'. This is either due to:

- i. the participant not reporting the input data (within the indicator);
 - ii. the participant not reporting on the relevant denominator (GAV/Revenue/Output);
 - iii. there being no output metric applicable to the entity's primary sector.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting period for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set the target at least internally and has implemented or is preparing actions to achieve the target.
 - Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

External review

Select Yes or No: If selecting "Yes", state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to water discharge data. As such, a standard initially designed to verify/assure other types of ESG data (e.g. energy) can be selected as long as the same thoroughness and review criteria are applied to data reported in WT2.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the ‘Water outflows/discharge’ issue in the GRESB Materiality Assessment (RC7).

Where this issue is of ‘High’ relevance, this indicator will be weighted highly and where this issue is of ‘Medium’ relevance, it will be weighted moderately. If materiality for this issue is set at ‘No’ or ‘Low’ relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green is used for scoring. The only scored metric for Water outflows/discharges is “Total sensitive discharge”.

For the scored metric, all columns (“Reporting-year performance”, “Reporting-year target” and “Future-year target”) should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in “Reporting-year performance”.
- 20% of the indicator score will be based on the reporting of a target in “Reporting-year target”. For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in “Future-year target”. For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the

target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Groundwater: Freshwater that is found beneath the Earth's surface that supplies wells and springs.

Non-compliances: Failure to comply with covenants, environmental permits, laws and/or regulation due to the performance of air pollutant emissions or discharges to bodies of water.

Potable water: Also known as drinking water. Potable water is any water that is safe for human consumption or food preparation.

Recycled water: Water that has been reused before discharge to final treatment or the environment. This can include water that was treated prior to reuse and water that was not treated prior to reuse. It can also include collected rainwater and wastewater generated by household processes such as washing dishes, laundry, and bathing (grey water).

Seawater/brackish water: Water obtained from seas, oceans or estuaries that has a salinity level of over 0.05%.

Surface water: Surface water is any freshwater occurring naturally on the Earth's surface, such as in lakes, rivers, ice sheets, glaciers or peatlands.

Third-party reuse: Reuse or recycling of water supplied by the Entity to a third party.

Third-party treatment: Treatment of municipal or industrial wastewater by a third party. The treatment can be primary, secondary or tertiary.

Water outflows/discharges: Discharge of water to water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater) or to third-parties for treatment or use.

References

[Eurostat - Environment Glossary](#)

[WRI - Aqueduct Water Risk Atlas](#)

[WWF - Water Risk Filter](#)

Alignment with External Frameworks

[CDP Water Security 2020 - W1.2 Company accounting](#)

[CDP Water Security 2020 - W5 Facility-level accounting](#)

[CDP Water Security 2020 - W8 Targets](#)

[DJSI CSA 2019 - 4.2.5 EP - Water](#)

[DJSI CSA 2019 - 4.2.6 EP - Water Consumption](#)

[GRI Standards 2018 - 303-4: Water discharge](#)

[GRI Standards 2016 - 306-3: Significant spills](#)

[GRI Standards 2016 - 307-1: Non-compliance with environmental laws and regulations](#)

Relevant UN Sustainable Development Goals

[SDG 3 - Good Health and Well-being](#)

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

[SDG 6 - Clean Water and Sanitation](#)

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

<https://sustainabledevelopment.un.org/sdg12>

12.2 By 2030, achieve the sustainable management and efficient use of natural resources

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air,

water and soil in order to minimize their adverse impacts on human health and the environment

SDG 14 - Life Below Water

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution



Performance: Waste

Intent and Overview

The intent of this Aspect is to provide metrics that describe the Entity's generation and disposal of waste during the reporting year.

Waste

2019 Indicator

Can the entity report on waste generated and disposed?

Yes

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Hazardous	Tonnes (t)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-hazardous	Tonnes (t)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total generated	Tonnes (t)	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Re-use	Tonnes (t)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Recycling	Tonnes (t)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Composting	Tonnes (t)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Waste-to-energy	Tonnes (t)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Incineration	Tonnes (t)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Landfill	Tonnes (t)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Third-party processing	Tonnes (t)	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total disposed	Tonnes (t)	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Total diverted from landfill/incineration	%	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Waste intensity (/GAV)	Tonnes/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Waste intensity (/revenue)	Tonnes/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Waste intensity (/output)	Tonnes/[output]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

External review

Has the data reported above been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using

Externally assured

Using

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

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Intent

The intent of this indicator is to assess the entity's management of solid waste generation and disposal. Waste management represents a significant financial cost, environmental impact, but also an opportunity. Waste streams have both direct and indirect impacts, such as surface water pollution and greenhouse gas emissions. In some cases, waste streams may be monetized (e.g. waste-to-energy, recycling).

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: "Third-party processing" has been added as a metric. The metric "Other [enter metric]" has been removed. The metric "Total diverted from landfill" has been renamed to "Total diverted from landfill and incineration".

Prefill: The cells in the column "Previous-year performance" have been prefilled with the 2019 Assessment response where metrics have remained the same. Data has not been prefilled for new metrics or metrics that have substantially changed relative to the 2019 Assessment.

Performance Tables

Generation/import table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for all metrics highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
 - Calculated cells: Certain performance cells are automatically calculated based on inputs to other performance cells within the table or inputs to another indicator. Totals are the sum of all metrics in that table.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Disposal/export table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year or is new, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for all metrics highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
 - Calculated cells: Certain performance cells are automatically calculated based on inputs to other performance cells within the table or inputs to another indicator. Totals are the sum of all metrics in that table. The equation for the other calculated cell is:
 - $\text{Total diverted from landfill/incineration} = \frac{(\text{"Re-use"} + \text{"Recycling"} + \text{"Composting"} + \text{"Waste-to-energy"})}{(\text{"Re-use"} + \text{"Recycling"} + \text{"Composting"} + \text{"Waste-to-energy"} + \text{"Incineration"} + \text{"Landfill"})} * 100$
- Reporting-year performance (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Waste intensities table: Intensity metrics provide a basis for comparing and benchmarking ESG performance. Intensity metrics are not mandatory and not scored in 2020. The table should be completed as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Intensity performance metrics are calculated automatically as follows:
 - Waste intensity (/GAV) = Total disposed/GAV. GAV is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Waste intensity (/Revenue) = Total disposed/Revenue. Revenue is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.

- Waste intensity (/Output) = Total disposed/Output. Output is reported in OI1 and is specific to the entity's primary sector as reported in RC3 (Sector & geography).

In some cases, the calculated cells may show as 'Not applicable'. This is either due to:

- i. the participant not reporting the input data (within the indicator);
 - ii. the participant not reporting on the relevant denominator (GAV/Revenue/Output);
 - iii. there being no output metric applicable to the entity's primary sector.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting period for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set the target at least internally and has implemented or is preparing actions to achieve the target.
 - Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

External review

Select Yes or No: If selecting "Yes", state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to waste data. As such, a standard initially designed to verify/assure other types of ESG data (e.g. water) can be selected as long as the same thoroughness and review criteria are applied to data reported in WS1.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in "Entity and Reporting Characteristics" (EC3, RC3, RC4), then answer 'No' to this question and describe these exceptions in the "Exceptions" text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the 'Waste' issue in the GRESB Materiality Assessment (RC7).

Where this issue is of 'High' relevance, this indicator will be weighted highly and where this issue is of 'Medium' relevance, it will be weighted moderately. If materiality for this issue is set at 'No' or 'Low' relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green is used for scoring. The only scored metric for Waste is "Total diverted from landfill/incineration".

For the scored metric, all columns ("Reporting-year performance", "Reporting-year target" and "Future-year target") should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in "Reporting-year performance".
- 20% of the indicator score will be based on the reporting of a target in "Reporting-year target". For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in "Future-year target". For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Composting: A process to decompose organic matter. The process recycles various organic materials otherwise regarded as waste products.

Diverted from landfill/incineration: The percentage of total waste that is diverted from landfill and incineration.

Hazardous waste: A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical/chemical/infectious characteristics may either cause, or significantly contribute to, an increase in mortality/serious irreversible illness. Hazardous waste might also pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Incineration: The destruction of waste material by burning it.

Landfill: The disposal of waste into, or onto, land.

Non-hazardous waste: Any solid waste that is not hazardous waste. This includes construction and demolition waste, municipal solid waste (trash or garbage), commercial and industrial waste (a wide variety of non-hazardous materials resulting from the production of goods and products).

Re-use: Any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.

Recycling: Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

Third-party processing: The treatment of waste by a third party before final disposal of the waste, for example for cleaning or treatment of hazardous waste that cannot be recycled or sent to landfill.

Waste to energy: The process of generating energy from the primary treatment of waste.

References

[Eurostat - Environment Glossary](#)

[New South Wales Environmental Protection Authority - The Waste Hierarchy](#)

[USA Environmental Protection Agency - Hazardous & Non-Hazardous Waste](#)

Alignment with External Frameworks

[DJSI CSA 2019 - 4.2.7 EP - Waste](#)

[GRI Standards 2016 - 306-2: Waste by type and disposal method](#)

[GRI Standards 2016 - 306-4: Transport of hazardous waste](#)

Relevant UN Sustainable Development Goals

[SDG 3 - Good Health and Well-being](#)

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

[SDG 8 - Decent Work and Economic Growth](#)

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead

[SDG 11 - Sustainable Cities and Communities](#)

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

[SDG 12 - Responsible Consumption and Production](#)

12.2 By 2030, achieve the sustainable management and efficient use of natural resources

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

[SDG 14 - Life Below Water](#)

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution



Performance: Biodiversity & Habitat

Intent and Overview

The intent of this Aspect is to provide metrics that describe the Entity's impact on biodiversity and habitat during the reporting year.

Biodiversity & Habitat

2019 Indicator

Can the entity report on biodiversity and habitat?

Yes

		Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
Metrics	Units	2018	2019	2019	[enter year]
Wildlife fatalities	Number	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
T&E species fatalities	Number	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

		Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
Metrics	Units	2018	2019	2019	[enter year]
Habitat removed	Hectares (ha)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Habitat enhanced or restored	Hectares (ha)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Habitat protected (on-site)	Hectares (ha)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Habitat protected (off-site)	Hectares (ha)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Net habitat gain	Hectares (ha)	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Habitat maintained	Hectares (ha)	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

		Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
Metrics	Units	2018	2019	2019	[enter year]
Habitat gain intensity (/GAV)	Hectares/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Habitat gain intensity (/revenue)	Hectares/[currency]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>
Habitat gain intensity (/output)	Hectares/[output]	<i>Prefilled 2018</i>	Calculated	<input type="text"/>	<input type="text"/>

External review

Has the data reported above been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using ▼

Externally assured

Using ▼

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or

excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS Sustainability Issues
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET) ■ ISAE 3000
- Airport Carbon Accreditation (ACA) des Airports Council International Europe ■ ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- Alberta Specified Gas Emitters Regulation ■ ISO14064-3
- ASAE3000 ■ JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101) ■ Korean GHG and energy target management system
- Australia National Greenhouse and Energy Regulations (NGER Act) ■ NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations) ■ RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025 ■ RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Carbon Trust Standard ■ Saitama Prefecture Target-Setting Emissions Trading Program
- Chicago Climate Exchange verification standard ■ SGS Sustainability Report Assurance
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR)) ■ Spanish Institute of Registered Auditors (ICJCE)
- Compagnie Nationale des Commissaires aux Comptes (CNCC) ■ Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- Corporate GHG Verification Guidelines from ERT ■ State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting ■ Swiss Climate CO2 label
- Earthcheck Certified ■ Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard ■ Tokyo Emissions Trading Scheme
- ERM GHG Performance Data Assurance Methodology ■ Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on

Determined by materiality , E

Intent

The intent of this indicator is to assess the entity's measurement of impact on biodiversity wildlife and habitat. Impacts on biodiversity and habitat management may affect risks with respect to regulation, liabilities, or social license to operate.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: The metric "Other [enter metric]" has been removed. The metric "Net habitat improved" has been renamed to "Net habitat gain". The calculation for "Net habitat gain" has been changed to "Net habitat gain = "Habitat enhanced or restored" + "Habitat protected (onsite)" + "Habitat protected (offsite)" - "Habitat removed". "Habitat maintained" is now reported outside of the "Net habitat gain" equation.

Prefill: The metrics in the column "Previous-year performance" have been prefilled with the 2019 Assessment response.

Performance Tables

Wildlife table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.

- It is mandatory to enter data for all metrics highlighted with a green border.
- 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Habitat management table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for all metrics highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
 - Calculated cells: Certain performance cells are automatically calculated based on inputs to other performance cells within the table or inputs to another indicator. The equation for the calculated cell is:
 - Net habitat gain = "Habitat enhanced or restored" + "Habitat protected (on-site)" + "Habitat protected (off-site)" - "Habitat removed"
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Habitat gain intensities table: Intensity metrics provide a basis for comparing and benchmarking ESG performance. Intensity metrics are not mandatory and not scored in 2020. The table should be completed as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year's Assessment, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Intensity performance metrics are calculated automatically as follows:
 - Habitat gain intensity (/GAV) = Net habitat gain/GAV. GAV is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Habitat gain intensity (/Revenue) = Net habitat gain/Revenue. Revenue is reported in RC2 (Economic Size) and is converted from millions to units within the calculation.
 - Habitat gain intensity (/Output) = Net habitat gain/Output. Output is reported in O11 and is specific to the entity's primary sector as reported in RC3 (Sector & geography).

In some cases, the calculated cells may show as 'Not applicable'. This is either due to:

- i. the participant not reporting the input data (within the indicator);
 - ii. the participant not reporting on the relevant denominator (GAV/Revenue/Output);
 - iii. there being no output metric applicable to the entity's primary sector.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting period for each metric, where available.
 - A target can be interpolated from a future-year target.

- A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set the target at least internally and has implemented or is preparing actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

External review

Select Yes or No: If selecting “Yes”, state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to biodiversity and habitat data. As such, a standard initially designed to verify/assure other types of ESG data (e.g. water) can be selected as long as the same thoroughness and review criteria are applied to data reported in BI1.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the 'Biodiversity & Habitat' issue in the GRESB Materiality Assessment (RC7).

Where this issue is of 'High' relevance, this indicator will be weighted highly and where this issue is of 'Medium' relevance, it will be weighted moderately. If materiality for this issue is set at 'No' or 'Low' relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green is used for scoring. The only scored metric for Biodiversity & Habitat is "Net habitat gain".

For the scored metric, all columns ("Reporting-year performance", "Reporting-year target" and "Future-year target") should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in "Reporting-year performance".
- 20% of the indicator score will be based on the reporting of a target in "Reporting-year target". For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in "Future-year target". For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Habitat: The natural home or environment of an animal, plant, or other organism.

Habitat enhanced or restored: Disturbed habitat that is identified and improved for the benefit of native animal and plant species that occur there.

Habitat maintained: Habitat retained in its current condition through management practices, but excluding protection, enhancement or restoration e.g. weeding and pest control.

Habitat protected: Habitat that is secured from impacts to prevent fragmentation, species extinction or reduction in range.

Habitat removed: Destruction, removal or displacement of natural habitat.

Threatened & Endangered (T&E) species: Animal and plant species that are either on the IUCN Red list, or have been designated as threatened, endangered, or protected, by local or national governments.

Wildlife fatality: The death of wildlife occurring in the current reporting period.

References

[Eurostat - Environment Glossary](#)

[IUCN - The IUCN Red List of Threatened Species](#)

[IUCN - Guidelines for Applying Protected Area Management Categories](#)

[Alignment with External Frameworks](#)

[GRI Standards 2016 - 304: Biodiversity](#)

[Relevant UN Sustainable Development Goals](#)

[SDG 6 - Clean Water and Sanitation](#)

6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

[SDG 11 - Sustainable Cities and Communities](#)

11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage

[SDG 14 - Life Below Water](#)

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

14.5 By 2020, conserve at least 10 percent of coastal and marine areas, consistent with national and international law and based on the best available scientific information

SDG 15 - Life on Land

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species



Performance: Health & Safety

Intent and Overview

The intent of this Aspect is to provide metrics that describe the Entity's health and safety performance during the reporting year.

Health & Safety

2019 Indicator

Can the entity report on the health and safety performance of their employees?

Yes

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Fatalities	Number	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lost time injuries	Number	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total recordable injuries	Number	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Near miss incidents	Number	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hours worked	Number	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Lost time injury frequency rate (LTIFR)	Number/hrs*1 million	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total recordable injury frequency rate (TRIFR)	Number/hrs*1 million	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

External review

Has the data reported above been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using

Externally assured

Using

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Determined by materiality , S

Intent

The intent of this indicator is to assess health and safety performance associated with the entity's employees. The health and safety of employees is a common key performance indicator for infrastructure operators.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: New metrics "Near miss incidents" and "Hours worked" have been added. "Reportable injuries" have been changed to "Total recordable injuries". The metric "Other [enter value]" has been removed. The LTIFR and TRIFR are now calculated automatically in a separate intensities table.

Prefill: The cells in the column "Previous-year performance" have been prefilled with the 2019 Assessment response where metrics have remained the same. Data has not been prefilled for new metrics or metrics that have substantially changed relative to the 2019 Assessment.

Performance Tables

Employees table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year or is new, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for the metric "Fatalities", highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.

- A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Employee intensities table: In Health & Safety, intensity metrics in the form of frequency rates provide a basis for comparing and benchmarking ESG performance. The table should be completed as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). It is not possible to enter any data into this column.
- Reporting-year performance (2019): Frequency rates are calculated automatically as follows:
 - Lost time injury frequency rate (LTIFR) = “Lost time injuries”/”Hours worked” * 1,000,000
 - Total recordable injury frequency rate (TRIFR) = “Total recordable injuries”/”Hours worked” * 1,000,000
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

External review

Select Yes or No: If selecting “Yes”, state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to health and safety data. As such, a standard initially designed to verify/assure other types of ESG data can be selected as long as the same thoroughness and review criteria are applied to data reported in HS1.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- **Hyperlink:** If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- **Document upload:** Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the 'Health and Safety: employees' issue in the GRESB Materiality Assessment (RC7).

Where this issue is of 'High' relevance, this indicator will be weighted highly and where this issue is of 'Medium' relevance, it will be weighted moderately. If materiality for this issue is set at 'No' or 'Low' relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green is used for scoring. The scored metrics for Health & Safety: Employees are "Lost Time Injury Frequency Rate" (LTIFR) and "Total Recordable Injury Frequency Rate" (TRIFR). These scored metrics are calculated cells and will automatically populate once their respective cells in the table that precedes them has been completed

For the scored metric, all columns ("Reporting-year performance", "Reporting-year target" and "Future-year target") should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in "Reporting-year performance". 30% is awarded for both LTIFR and TRIFR, respectively.
- 20% of the indicator score will be based on the reporting of a target in "Reporting-year target". 10% is awarded for both LTIFR and TRIFR, respectively. For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in "Future-year target". 10% is awarded for both LTIFR and TRIFR, respectively. For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Employee: Individual who is in an employment relationship with the entity, according to national law or its application.

Fatality: Any deaths that occurred during or as a result of a disease or injury that occurred at or through work.

Lost Time Injury: Any injury, arising in the course of work, that results in temporary or permanent time away from work. Includes fatalities, permanent disabilities and injuries that have led to absence from work.

Lost Time Injury Frequency Rate (LTIFR): The number of lost time injuries occurring in a workplace per million hours worked.

Recordable injury: Any injury, arising in the course of work, that is a Lost Time Injury or that has required medical treatment beyond first aid or that have led to cancer, chronic disease, fractured bones or punctured eardrums.

Total Recordable Injury Frequency Rate (TRIFR): The number of recordable injuries per million hours worked.

References

[European Agency for Safety and Health at Work](#)

[ILO - International Labour Standards on Occupational Safety and Health](#)

[USA OSHA - Using Leading Indicators](#)

Alignment with External Frameworks

[GRI Standards \(2018\) 403: Occupational Health & Safety](#)

Relevant UN Sustainable Development Goals

[SDG 8 - Decent Work and Economic Growth](#)

8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

[SDG 3-Good Health and Well-being](#)

Can the entity report on the health and safety performance of their contractors?

Yes

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Fatalities	Number	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lost time injuries	Number	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total recordable injuries	Number	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Near miss incidents	Number	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hours worked	Number	<i>N/A</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Lost time injury frequency rate (LTIFR)	Number/hrs*1 million	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total recordable injury frequency rate (TRIFR)	Number/hrs*1 million	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>

External review

Has the data reported above been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using ▼

Externally assured

Using ▼

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Determined by materiality , S

Intent

The intent of this indicator is to assess health and safety performance associated with the entity's contractors. The health and safety of contractors is a common key performance indicator for infrastructure operators.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: New metrics "Near miss incidents" and "Hours worked" have been added. "Reportable injuries" have been changed to "Total recordable injuries". The metric "Other [enter value]" has been removed. The LTIFR and TRIFR are now calculated automatically in a separate intensities table.

Prefill: The cells in the column "Previous-year performance" have been prefilled with the 2019 Assessment response where metrics have remained the same. Data has not been prefilled for new metrics or metrics that have substantially changed relative to the 2019 Assessment.

Performance Tables

Contractors table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). If a metric is new or has changed substantially compared to last year or is new, or if there is no data available for the entity for the previous year, 'N/A' is shown. It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for the metric "Fatalities", highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.

- A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

Contractor intensities table: In Health & Safety, intensity metrics in the form of frequency rates provide a basis for comparing and benchmarking ESG performance. The table should be completed as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). It is not possible to enter any data into this column.
- Reporting-year performance (2019): Frequency rates are calculated automatically as follows:
 - Lost time injury frequency rate (LTIFR) = “Lost time injuries”/”Hours worked” * 1,000,000
 - Total recordable injury frequency rate (TRIFR) = “Total recordable injuries”/”Hours worked” * 1,000,000
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

External review

Select Yes or No: If selecting “Yes”, state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to health and safety data. As such, a standard initially designed to verify/assure other types of ESG data can be selected as long as the same thoroughness and review criteria are applied to data reported in HS2.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- **Hyperlink:** If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- **Document upload:** Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the 'Health and Safety: contractors' issue in the GRESB Materiality Assessment (RC7).

Where this issue is of 'High' relevance, this indicator will be weighted highly and where this issue is of 'Medium' relevance, it will be weighted moderately. If materiality for this issue is set at 'No' or 'Low' relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green is used for scoring. The scored metrics for Health & Safety: Contractors are "Lost Time Injury Frequency Rate" and "Total Recordable Injury Frequency Rate".

For the scored metric, all columns ("Reporting-year performance", "Reporting-year target" and "Future-year target") should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in "Reporting-year performance".
- 20% of the indicator score will be based on the reporting of a target in "Reporting-year target". For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in "Future-year target". For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Contractor: Person or organization working onsite or offsite on behalf of an entity. A contractor can contract their own workers directly, or contract subcontractors or independent contractors. Suppliers are not considered contractors for the purpose of this indicator.

Fatality: Any deaths that occurred during or as a result of a disease or injury that occurred at or through work.

Lost Time Injury: Any injury, arising in the course of work, that results in temporary or permanent time away from work. Includes fatalities, permanent disabilities and injuries that have led to absence from work.

Lost Time Injury Frequency Rate (LTIFR): The number of lost time injuries occurring in a workplace per million hours worked.

Recordable injury: Any injury, arising in the course of work, that is a Lost Time Injury or that has required medical treatment beyond first aid or that have led to cancer, chronic disease, fractured bones or punctured eardrums.

Total Recordable Injury Frequency Rate (TRIFR): The number of recordable injuries per million hours worked.

References

European Agency for Safety and Health at Work

ILO - International Labour Standards on Occupational Safety and Health

USA OSHA - Using Leading Indicators

Alignment with External Frameworks

GRI Standards (2018) 403: Occupational Health & Safety

Relevant UN Sustainable Development Goals

SDG 8 - Decent Work and Economic Growth

8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

SDG 3-Good Health and Well-being

Can the entity report on the health and safety performance of their users?

Yes

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Fatalities	Number	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total recordable injuries	Number	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>

External review

Has the data reported above been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using

Externally assured

Using

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard

- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Determined by materiality , S

Intent

The intent of this indicator is to assess health and safety performance associated with the entity's users. The health and safety of users is a common key performance indicator for infrastructure operators.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: The name of this indicator has been changed from "Health & Safety: Customers" to "Health & Safety: Users". The metric "Reportable injuries" has been changed to "Total recordable injuries". The metric "Other [enter value]" has been removed.

Prefill: The cells in the column "Previous-year performance" have been prefilled with the 2019 Assessment response where metrics have remained the same. Data has not been prefilled for new metrics or metrics that have substantially changed relative to the 2019 Assessment.

Performance Tables

Users table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for the metric "Fatalities", highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

External review

Select Yes or No: If selecting "Yes", state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to health and safety data. As such, a standard initially designed to verify/assure other types of ESG data can be selected as long as the same thoroughness and review criteria are applied to data reported in HS3.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the ‘Health and Safety: users’ issue in the GRESB Materiality Assessment (RC7).

Where this issue is of ‘High’ relevance, this indicator will be weighted highly and where this issue is of ‘Medium’ relevance, it will be weighted moderately. If materiality for this issue is set at ‘No’ or ‘Low’ relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green is used for scoring. The only scored metric for Health & Safety: Users is “Total recordable injuries”.

For the scored metric, all columns (“Reporting-year performance”, “Reporting-year target” and “Future-year target”) should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in “Reporting-year performance”.
- 20% of the indicator score will be based on the reporting of a target in “Reporting-year target”. For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in “Future-year target”. For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Fatality: Any deaths that occurred during or as a result of a disease or injury that occurred at or through work.

Recordable injury: Any injury, arising in the course of work, that is a Lost Time Injury or that has required medical treatment beyond first aid or that have led to cancer, chronic disease, fractured bones or punctured eardrums.

User: Users are people that interact physically with the asset when they use its services.

References

[European Agency for Safety and Health at Work](#)

[ILO - International Labour Standards on Occupational Safety and Health](#)

[USA OSHA - Using Leading Indicators](#)

Alignment with External Frameworks

[GRI Standards \(2018\) 403: Occupational Health & Safety](#)

Relevant UN Sustainable Development Goals

[SDG 3 - Good Health and Well-being](#)

3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents

[SDG 11 - Sustainable Cities and Communities](#)

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

Can the entity report on the health and safety performance of their community?

Yes

Metrics	Units	Previous-year performance	Reporting-year performance	Reporting-year target	Future-year target
		2018	2019	2019	[enter year]
Fatalities	Number	<i>Prefilled 2018</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total recordable injuries	Number	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>

External review

Has the data reported above been reviewed by an independent third party?

Yes

Externally checked

Externally verified

Using ▼

Externally assured

Using ▼

Please provide applicable evidence

UPLOAD or URL _____

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

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme name

- AA1000AS
- Advanced technologies promotion Subsidy Scheme with Emission reduction Target (ASSET)
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory GHG Reporting Regulations (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025
- Carbon Trust Standard
- Chicago Climate Exchange verification standard

- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and energy target management system
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR 6 Bestyrkande av hållbarhetsredovisning (RevR 6 Assurance of Sustainability)
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A.
- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Determined by materiality , S

Intent

The intent of this indicator is to assess health and safety performance associated with the entity's community. The health and safety of the community is a common key performance indicator for infrastructure operators.

Requirements

Select Yes or No: If selecting "Yes", the entity must be actively tracking and reporting on all of the mandatory reporting metrics (indicated by the dark green cell outline).

Changes: The metric "Reportable injuries" has been changed to "Total recordable injuries". The metric "Other [enter value]" has been removed.

Prefill: The metrics in the column "Previous-year performance" have been prefilled with the 2019 Assessment response.

Performance Tables

Users table: Complete the table as follows:

- Previous-year performance (2018): This column shows the reported performance for the previous year (2018). It is not possible to enter any data into this column.
- Reporting-year performance (2019): Enter data for the performance during the reporting year for each metric where available.
 - It is mandatory to enter data for the metric "Fatalities", highlighted with a green border.
 - 'Zero' is an acceptable answer if it is true and accurate. If the entity cannot provide all of the mandatory data then it must select "No" for the overall indicator.
- Reporting-year target (2019): Enter the targets that were applicable for the reporting year for each metric, where available.
 - A target can be interpolated from a future-year target.
 - A target (or the future-year target from which it is derived) must be formally adopted. This means that the entity must have set and communicated the target at least internally, and has implemented, or is preparing, actions to achieve the target.
- Future-year targets: Enter the relevant year for which the targets are set at the top of the column and enter the future-year targets for each metric where available.
 - A target must be formally adopted.
 - The target must be set for any future year that is not the reporting year.

External review

Select Yes or No: If selecting "Yes", state whether the data submitted has been checked, verified or assured (select one option; the most detailed level of scrutiny to which the data was subjected). Participants should select the appropriate checkbox(es):

- Externally checked: should be selected when a third party has reviewed the data in a structured and consistent process.
- Externally verified: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.
- Externally assured: applies to instances where a third party has reviewed the data against an existing scheme. When this checkbox is ticked, participants should select the scheme name from the dropdown.

GRESB does not require the selected standard to be specific to health and safety data. As such, a standard initially designed to verify/assure other types of ESG data can be selected as long as the same thoroughness and review criteria are applied to data reported in HS4.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof of the existence of third-party review of the data;
- Clear indication that the reviewed data reflects the reported data;
- A description of the type of third-party review (checked, verified or assured) and the used assurance standard (if applicable);
- Proof that the data review applies to the entity.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the ‘Health and Safety: community’ issue in the GRESB Materiality Assessment (RC7).

Where this issue is of ‘High’ relevance, this indicator will be weighted highly and where this issue is of ‘Medium’ relevance, it will be weighted moderately. If materiality for this issue is set at ‘No’ or ‘Low’ relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored as a one-section indicator where evidence is optional. Only the metric in the performance table cells shaded in light green is used for scoring. The only scored metric for Health & Safety: Community is “Total recordable injuries”.

For the scored metric, all columns (“Reporting-year performance”, “Reporting-year target” and “Future-year target”) should be completed to obtain points as follows:

- 60% of the indicator score will be based on the reporting of a value in “Reporting-year performance”.
- 20% of the indicator score will be based on the reporting of a target in “Reporting-year target”. For 2020, scoring is based on whether a target was set, not on whether the target was achieved.
- 20% of the indicator score will be based on the reporting of a target in “Future-year target”. For 2020, scoring will be based on whether a target was set, not on whether the entity is on track to achieve the target.

Reporting of external data review and exceptions are not scored in 2020.

Terminology

Fatality: Any deaths that occurred during or as a result of a disease or injury that occurred at or through work.

Recordable injury: Any injury, arising in the course of work, that is a Lost Time Injury or that has required medical treatment beyond first aid or that have led to cancer, chronic disease, fractured bones or punctured eardrums.

Community: Persons or groups of people living and/or working in any areas that are economically, socially or environmentally impacted (positively or negatively) by the operations.

References

[European Agency for Safety and Health at Work](#)

[ILO - International Labour Standards on Occupational Safety and Health](#)

[USA OSHA - Using Leading Indicators](#)

Alignment with External Frameworks

[GRI Standards \(2018\) 403: Occupational Health & Safety](#)

Relevant UN Sustainable Development Goals

[SDG 3 - Good Health and Well-being](#)

3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents

[SDG 11 - Sustainable Cities and Communities](#)

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons



Performance: Employees

Intent and Overview

The intent of this Aspect is to assess the entity's ESG performance in relation to its employees in terms of engagement and diversity and inclusion.

Employees

2019 Indicator

Does the entity engage with its employees through training or satisfaction monitoring?

Yes

Does the entity provide training and development for employees?

Yes

Average amount spent per FTE on training and development: _____

Percentage of employees who received professional training in the reporting year

Percentage of employees who received ESG-related training in the reporting year

The ESG-related training focuses on the following elements (multiple answers possible)

Environmental issues

Social issues

Governance issues

No

Has the entity undertaken employee satisfaction surveys within the last three years?

Yes

The survey is undertaken (multiple answers possible):

Internally

Percentage of employees covered: _____%

Survey response rate: _____%

By an independent third party

Percentage of employees covered: _____%

Survey response rate: _____%

Does the survey include quantitative metrics?

Yes

Metrics include:

Net Promoter Score

Overall satisfaction score

Other: _____

No

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Determined by materiality , S

Intent

The intent of this indicator is to assess the coverage and scope of the entity's engagement with its employees through training and satisfaction surveys.

ESG training reflects the entity's commitment to building its employees' capacity to manage complex ESG issues. A more skilled and aware workforce enhances the entity's human capital and may help to improve employee satisfaction. Employee training and development contribute to improved business performance.

Employee satisfaction surveys help organizations understand critical issues within the business, engage with their staff and increase employee satisfaction, which may contribute to improving retention rates and overall productivity. Using widely applied employee satisfaction surveys should be translated into easily interpretable metrics that can help analyze and compare the outcomes, despite the many variations between firms.

Requirements

Select Yes or No: If selecting "Yes", select all applicable checkbox(es).

Changes: Moved from MA7 to Performance Component to be included in the new aspect "Employees". New metrics have been added: "Average amount spent per FTE", "% of employees who received training", "% of employees who received ESG training".

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been prefilled from the 2019 Assessment. Review the response and/or evidence carefully.

Checkbox(es): Multiple answers are possible. Select all applicable answers.

Reporting level: Answers should be applicable at the entity, operator and/or manager level.

Percentage of employees who received training: the percentage of employees that have received any training, out of the total number of employees, in the reporting year.

- The calculation should be: $\text{Number of employees receiving training} / \text{Total number of employees} \times 100$

Percentage of employees who received ESG-related training: the percentage of employees that have received ESG-training, out of the total number of employees, in the reporting year.

- The calculation should be: $\text{Number of employees receiving ESG-specific training} / \text{Total number of employees} \times 100$
- Examples of ESG-related training include, but are not limited to, training on environmental awareness, health and safety, handling of hazardous materials, data confidentiality or code of conduct.

Percentage of employees covered: the percentage of employees covered based on Full Time Equivalents (FTE) or headcount. If the number of employees changed during the reporting year, the percentage should be calculated based on the average number. This is a scored metric.

Survey response rate: The percentage of employees that received and completed the survey, compared to the total number of employees that received the survey. For example, if the survey was sent to 100 employees and 40 responded, the response rate would be 40%.

Other: If the entity has conducted a survey that included different metrics from the ones currently listed, they can add these. The 'other' metric should be distinct and different from the ones already listed.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in "Entity and Reporting Characteristics" (EC3, RC3, RC4), then answer 'No' to this question and describe these exceptions in the "Exceptions" text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Other: State the other employee satisfaction metric used. The answer should only refer to the department or governance body of which the senior decision maker is part of. Report only one other answer.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the 'Employee engagement' issue in the GRESB Materiality Assessment (RC7).

Where this issue is of 'High' relevance, this indicator will be weighted highly and where this issue is of 'Medium' relevance, it will be weighted moderately. If materiality for this issue is set at 'No' or 'Low' relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator comprises two equally weighted parts, each scored like one-section indicators (i.e. Section 1: 'Elements' response). Each part is scored based on the selected options and suboptions.

For the first part of the indicator, Employee training, fractional scores are awarded for whether the training covers Environmental, Social and/or Governance issues. All three must be covered to achieve the full score for this part.

The second part of the indicator, employee satisfaction monitoring, has two elements that are scored - employee satisfaction survey (fractionally $\frac{2}{3}$ of this part) and using quantitative metrics within the survey ($\frac{1}{3}$). It is not necessary to select all options to achieve the maximum score. For the employee satisfaction survey, points are awarded for providing the percentage of employees covered by the survey for those undertaken internally or independently respectively. Full fractional score is obtained if the survey is undertaken by an independent third party versus internally. In regard to quantitative metrics (in the survey) full fractional score is obtained for using Net Promoter Score, with lesser score for other metrics.

Reporting of exceptions is not scored in 2020.

Terminology

Employee Satisfaction Survey: Survey measuring overall and work-specific employee satisfaction at the individual and organizational levels. The survey should directly address employee concerns and include the opportunity to provide recommendations for improvement.

Employee (s): Either the entity's employees or the organization's employees whose primary responsibilities include the operation or support of the entity.

Environmental issues: The impact on living and non-living natural systems, including land, air, water and ecosystems. This includes, but is not limited to, biodiversity, transport and product and service-related impacts, as well as environmental compliance and expenditures. Full reference to listed environmental issues can be found in Appendix 2.

ESG-specific training: Training related to environmental, social and governance (ESG) issues.

Governance issues: Governance structure and composition of the organization. This includes how the highest governance body is established and structured in support of the organization's purpose, and how this purpose relates to economic, environmental and social dimensions. Full reference to listed governance issues can be found in the Appendix 2.

Net Promoter Score: The Net Promoter Score® (NPS) is a customer loyalty metric developed by Bain & Company, Fred Reichheld, and Satmetrix.

Overall satisfaction score: An overarching metric in a satisfaction survey, with no prescribed scale, that measures how happy an employee or customer is with the entity and/or services provided.

Quantitative metric: Any measure or parameter that can be represented numerically.

Social issues: Concerns the impacts the organization has on the social systems within which it operates. Full reference to listed social issues can be found in Appendix 2.

Survey response rate: The proportion of submitted surveys as a percentage of the total number of people or organizations that received a request to complete a survey.

Training: A formal and structured training program addressing ESG-related issues and opportunities for action.

References

[Bain & Company, Introducing: The Net Promoter System®](#)

[Alignment with External Frameworks](#)

[DJSI 2019 - 5.3.1 Training & Development Inputs](#)

[DJSI 2019 - 5.4.4 Trend of Employee Engagement](#)

[GRI Standard 102-43: Approach to stakeholder engagement](#)

[GRI Standard 404-1: Average hours of training per year per employee](#)

[Relevant UN Sustainable Development Goals](#)

[SDG 8 - Decent Work and Economic Growth](#)

8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training

[SDG 12 - Responsible Consumption and Production](#)

12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

[SDG 13 - Climate Action](#)

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Does the entity report on inclusion and diversity? Yes Diversity of the entity's governance bodies

Select all diversity metrics (multiple answers possible)

 Age group distribution Board tenure Gender pay gap Gender ratio

Percentage of individuals that identify as:

Women: _____%

Men: _____%

 International background Racial diversity Socioeconomic background Diversity of the entity's employees

Select all diversity metrics (multiple answers possible)

 Age group distribution

Percentage of employees that are:

Under 30 years old: _____%

Between 30 and 50 years old: _____%

Over 50 years old: _____%

 Gender pay gap Gender ratio

Percentage of employees that identify as:

Women: _____%

Men: _____%

 International background Racial diversity Socioeconomic background

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

 Yes No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Determined by materiality , S

Intent

This indicator identifies the metrics used by the organization to monitor inclusion and diversity in governance bodies and at employee level. Diversity on boards has become a clear priority for investors and is considered to positively impact investment decisions and organizational competitiveness.

Requirements

Select Yes or No: If selecting “Yes”, select all applicable checkbox(es).

Changes: Indicator is now covered under the new aspect “Employees”. Indicator has been renamed, from “Gender & Diversity” to “Inclusion & Diversity”. Gender ratio is now a scored metric.

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been prefilled from the 2019 Assessment. Review the response and/or evidence carefully.

Checkbox(es): Multiple answers are possible. Select all applicable answers.

Numerical text boxes: Participants should indicate the percentages for the relevant employee groups.

Reporting level: Answers should be applicable at the entity, operator and/or manager level.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

This indicator is not subject to manual validation.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the ‘Inclusion and diversity’ issue in the GRESB Materiality Assessment (RC7).

Where this issue is of ‘High’ relevance, this indicator will be weighted highly and where this issue is of ‘Medium’ relevance, it will be weighted moderately. If materiality for this issue is set at ‘No’ or ‘Low’ relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#)

Scoring of Metrics: This indicator is scored as a one-section indicator (i.e. Section 1: 'Elements' response). Points are awarded depending on providing information for the scored metrics.

Two options are scored:

- Gender ratio of governance bodies
- Gender ratio of all employees

For each provided metric, 1/2 points are provided. Entities can therefore only obtain maximum points for this indicator if they provide values for both metrics.

Reporting of exceptions is not scored in 2020.

Terminology

Employee: Individual who is in an employment relationship with the entity, according to national law or its application.

Gender pay gap: Percentage difference of average hourly earnings between men and women.

Gender ratio: Proportion of one gender to another in a given population.

Governance body: Committee or board responsible for the strategic guidance of the organization, the effective monitoring of management, and the accountability of management to the broader organization and its stakeholders. Examples of governance bodies may include Board of Directors and Non-Executive Directors.

Socioeconomic background: Combined measure of sociological and economic background of a person.

References

[ILO - Equality and Discrimination](#)

Alignment with External Frameworks

[DJSI CSA 2019 - 3.1.4 Gender Diversity](#)

[EPRA Best Practices Recommendations on Sustainability Reporting 2017 - 5.1, Diversity-Employee gender diversity](#)

[EPRA Best Practices Recommendations on Sustainability Reporting 2017: 5.2, Diversity- Pay Gender pay ratio](#)

[GRI Standards 2016 - 102-22 - Composition of the highest governance body and its committees](#)

[GRI Standards 2016 - 405-1 - Diversity of governance bodies and employees](#)

Relevant UN Sustainable Development Goals

[SDG 5 - Gender Equality](#)

5.1 End all forms of discrimination against all women and girls everywhere

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

[SDG 8 - Decent Work and Economic Growth](#)

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

[SDG 10 - Reduced Inequalities](#)

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard



Performance: Customers

Intent and Overview

The intent of this Aspect is to assess the entity's ESG performance in relation to its customer satisfaction monitoring.

Customers

2019 Indicator

Has the entity undertaken customer satisfaction surveys within the last three years?

Yes

The survey is undertaken (multiple answers possible):

Internally

Percentage of customers covered: _____ %

Survey response rate: _____ %

By an independent third party

Percentage of customers covered: _____ %

Survey response rate: _____ %

Does the survey include quantitative metrics?

Yes

Metrics include (multiple answers possible)

Net Promoter Score

Overall satisfaction score

Satisfaction with communication

Satisfaction with responsiveness

Satisfaction with asset management

Understanding customer needs

Value for money

Other: _____

No

Exceptions

Does the entity's data reported above cover all, and only, the facilities (as reported in RC3) and activities (RC4) for the entire reporting year (EC4)? (for reporting purposes only)

Yes

No

Please indicate which facilities, activities and/or time periods are additional or excluded from the data reported above

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Intent

This indicator assesses whether and to what extent the organization engages with customers regarding their satisfaction with the services provided by the asset. Using consistently applied metrics can help analyze and compare the outcomes, despite the many variations between entities.

Requirements

Select Yes or No: If selecting “Yes”, tick select all applicable checkbox(es).

Changes: This indicator now falls under the aspect “Customers”.

Prefill: This indicator is similar to the one included in the 2019 Assessment and some sections have been prefilled from the 2019 Assessment. Review the response and/or evidence carefully.

Percentage of customers covered: The percentage of customers covered is based on the number of customers (e.g. organizations) that received the customer satisfaction survey during the reporting year. If the number of customers changed during the reporting year, use the number at the end of the reporting year. The denominator is the total number of customers in the reporting year.

Survey response rate: The percentage of customers that received and completed the survey, compared to the total number of customers that received the survey. For example, if the survey was sent to 100 customers and 40 responded, the response rate would be 40%.

Other: If the entity has conducted a survey that included different metrics from the ones currently listed, they can add these. The ‘other’ metric should be distinct and different from the ones already listed.

Reporting level: Answers should be applicable at entity level.

Exceptions

Select Yes or No: GRESB is seeking to standardize the scope and boundaries of reporting to allow for more accurate benchmarking and to progressively move towards scoring of performance. If the scope of the data reported for this indicator does not exactly match the reporting scope (facilities, ancillary activities and time period) as reported in “Entity and Reporting Characteristics” (EC3, RC3, RC4), then answer ‘No’ to this question and describe these exceptions in the “Exceptions” text box.

Examples are:

- Temporal - A toll road includes data on energy consumption from its street lighting within its boundary but due to a data glitch, it lost this data for a two month period during the reporting year.
- Physical - A power plant includes a switchyard facility within its reporting boundary but does not have data on water discharge for this facility.
- Operational - An airport includes the operation of mobile equipment within its reporting boundary but not for aircraft since these are operated by airlines.

Validation

Other: State the other customer satisfaction metric used. The answer should only refer to the department or governance body of which the senior decision maker is part of. Report only one other answer.

Scoring

Materiality-based Scoring: This indicator applies materiality-based scoring. The materiality weighting for this indicator is determined by the materiality level of the ‘Customer satisfaction’ issue in the GRESB Materiality Assessment (RC7).

Where this issue is of ‘High’ relevance, this indicator will be weighted highly and where this issue is of ‘Medium’ relevance, it will be weighted moderately. If materiality for this issue is set at ‘No’ or ‘Low’ relevance for the entity, this indicator will not be scored. As a result, the weight of this indicator may differ for each participant based on its materiality profile. The weighting of the material (scored) indicators in the Performance Component is automatically redistributed to ensure that the Component retains its overall weighting of 50% of the Asset Assessment. For more details refer to the section on Materiality Based Scoring in this Reference Guide or download the [GRESB Materiality & Scoring Tool](#).

Scoring of Metrics: This indicator is scored like a one-section indicator (i.e. Section 1: 'Elements' response), with the score depending on the selected options and suboptions.

There are two elements that are scored - customer satisfaction survey (fractionally $\frac{2}{3}$ of the total score) and using quantitative metrics within the survey ($\frac{1}{3}$). It is not necessary to select all options to achieve the maximum score. For the customer satisfaction survey, full fractional score is obtained if the survey is undertaken by an independent third party versus internally. In regard to quantitative metrics (in the survey) full fractional score is obtained for using Net Promoter Score, with lesser score for other metrics.

Reporting of exceptions is not scored in 2020.

Terminology

Customer satisfaction survey: A written survey conducted by the entity, or by a third party on its behalf, that gives the customer the opportunity to provide feedback on the services provided.

Net Promoter Score: The Net Promoter Score® (NPS) is a customer loyalty metric developed by Bain & Company, Fred Reichheld, and Satmetrix.

Overall satisfaction score: An overarching metric in a satisfaction survey, with no prescribed scale, that measures how happy an employee or customer is with the entity and/or services provided.

Quantitative metric: Any measure or parameter that can be represented numerically.

Survey response rate: The proportion of submitted surveys as a percentage of the total number of people or organizations that received a request to complete a survey.

References

[Bain & Company, Introducing: The Net Promoter System®](#)

Alignment with External Frameworks

[GRI Standard 102-43: Approach to stakeholder engagement](#)

Relevant UN Sustainable Development Goals



Performance: Certifications & Awards

Intent and Overview

The intent of this Aspect is to assess the entity's achievement and/or maintenance of ESG-related certifications and awards. Certifications provide recognition for a certain level of ESG performance.

Certifications and Awards

2019 Indicator

Did the entity maintain or achieve asset-level certifications for ESG-related performance?

Yes

List certifications achieved

Project name	Date of award	Scheme name/Sub-scheme name/Level	Phase
		Scheme / sub-scheme ▼	Phase ▼
+ Add a project			

UPLOAD or URL _____

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

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Scheme Name/Sub-scheme Name

A list of provisionally validated certification schemes is provided in Appendix of the Reference Guide.

Phase

- Planning and design
- Construction
- Operations

2.4 points , G

Intent

The intent of this indicator is to assess whether there has been any certified recognition for ESG-related practices or performance. Certification of an entity's ESG management and/or performance provides robust assurance that is of interest to investors.

Requirements

Select Yes or No: If you select “Yes”, provide at least one certification to complete the table.

Changes: No changes.

No prefill: This indicator has remained the same as CA1 the 2019 Assessment but has not been pre-filled with 2019 Assessment answers.

List certifications received: Describe all ESG certifications achieved by the asset. For each of the certifications added to the table, it is mandatory to:

1. In column 1, “Project name”, provide the name of the project, facility or asset that obtained the certification;
2. In column 2, “Date of award”, provide the date the certification was awarded;
3. In column 3, “Certification scheme / subscheme”, select the scheme/sub-scheme name from the dropdown menu. The list of validated certification schemes is provided in Appendix 9 of the Reference Guide. If you wish to add a new scheme, please contact

[GRESB Helpdesk](#)

and you will be asked to complete the Certification Validation Template (see Reference Guide Appendix 10);

4. In column 4, “Phase”, select the phase of the project to which the certification applies.

Validation

This indicator is not subject to automatic or manual validation.

Evidence

It is mandatory to provide evidence of certification. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- Proof that the certification applies to the entity;
- Proof of the award date of the certification.

Scoring

This indicator is not subject to materiality-based scoring.

Supporting evidence is mandatory but not scored. The evidence piece itself is not subject to manual validation. Maximum points are awarded when a participant completes the table for at least one certification.

References

Good practice example: [Link](#)

Did the entity receive awards for ESG-related actions, performance, or achievements? (for reporting purposes only)

Yes

Information about third-party awards

Award name	Organization issuing award	Date of award	Basis for award
+ Add a project			

No

Provide additional context for the answer provided (not validated, for reporting purposes only)

Not scored , G

Intent

The intent of this indicator is to assess third-party awards received by the entity for ESG management or performance. Awards provide a potentially useful indicator of entity performance. This indicator is not scored and is for reporting purposes only.

Requirements

Select Yes or No: If you select “Yes”, provide at least one example to complete the table.

Changes: No changes.

No prefill: This indicator has remained the same as the 2019 Assessment but has not been prefilled with 2019 Assessment answers.

List certifications received: Describe all ESG awards achieved during the reporting year by completing the table as follows for each award:

1. In column 1, “Award name”, provide the name of the award;
2. In column 2, “Organization issuing award”, provide the name of the organization or body that issued the award;
3. In column 3, “Date of award”, indicate when the award was obtained;
4. In column 4, “Basis for award”, describe why the award was obtained, for which ESG issue(s) it was given and what part or aspect of the asset achieved the award.

Validation

This indicator is not subject to automatic or manual validation.

Evidence

It is optional to provide evidence of external review in the form of a third-party letter or certificate. Evidence will not be subject to manual validation for this indicator in 2020. Evidence can be provided by a hyperlink or through a document.

- Hyperlink: If a hyperlink (or deep link) is provided, ensure that the relevant page can be accessed within two steps.
- Document upload: Participants may upload several documents. When providing a document upload, it is mandatory to indicate where relevant information can be found within the document (e.g. for evidence relating to issue x, see section y on page z; for evidence relating to issue a, etc.).

Evidence should include:

- The name of the award and the issuing body or organization;
- The date of the award;

- The basis for the award;
- Proof that the award applies to the entity.

The entity should provide sufficient information to allow investors to access case studies, research or other supplemental materials.

Scoring

This indicator is not scored and is for reporting purposes only.

Asset Appendix

Appendix 1

2020 Infrastructure GRESB Asset Assessment Changes

An important outcome of the 2020 Assessment development process has been a reconfirmation that the Assessments address material ESG topics for the real estate and infrastructure industry. As a result, the 2020 development process was focused on making structural changes to the Assessments and refinements to indicators rather than making extensive content changes with an impact on scoring.

The structural changes mainly arise from splitting the Assessment into separate Management and Performance Components. This new split allows entities to complete either or both components, and enables entities starting off on their sustainability journey to develop their data collection processes first before reporting performance data.

On the content side, several indicators have been removed and others have been simplified or modified to better suit reporting for various sectors. This is most notable in the Performance Component.

Overall, the 2020 Assessments provide more consistency between real estate and infrastructure and an improved alignment with other reporting standards and frameworks. The Assessments also lay the groundwork for us to provide new data and analytical tools in the portal and support a further evolution in data quality.

The starting point for the Assessment development process was the 2019 Assessments. The 2019 indicators have been allocated to the new Management and Performance Components on the basis that:

- The Management Component measures the entity's strategy and leadership management, policies and processes, risk management and stakeholder engagement approach, comprising of information collected at the organizational level.
- The Performance Component measures the entity's performance, comprising of information collected at the asset level. It is suitable for any infrastructure company with operational assets.

Management Component

High-level comments

1. Divide the assessment into 5 aspects

With the restructure of the assessment, and the division into Management and Performance Components in particular, it is appropriate to modify the aspects within the Management Component. The new aspects align with the Real Estate Assessment and external sustainability frameworks where practical. The new aspects have been mapped to the 2019 indicators and aspects, enabling comparisons over time. The new aspects are as follows:

- Leadership
- Policies
- Reporting
- Risk Management
- Stakeholder Engagement

2. Materiality approach refined

A thorough review of the materiality approach has been undertaken based on analysis of 2019 results and stakeholder feedback. As a result, new ESG issues, new materiality factors and new sectors have been added and weightings have been refined for certain ESG issues.

The materiality threshold has been lifted from 'No relevance' to 'Low relevance' so that issues deemed of 'No relevance' or 'Low relevance' will no longer be scored (previously 'Low relevance' issues were scored). This reduces the number of indicators that need to be addressed by participants and thus lowers the reporting burden.

[2020 GRESB Infrastructure Materiality Matrix](#)

3. Add indicator titles

Each indicator has been assigned a title, which will facilitate referencing in different documents and data download tools.

4. Moved Implementation indicator from Management Component to Performance Component

Indicator RO4 on implementation of mitigation and improvement measures has been moved from the Management Component to the Performance Component.

5. Removed indicators and metrics

The indicator EC4 (Industry associations) has been removed as this information was not used.

6. Added indicators

A new indicator on ESG Leadership commitment has been added to recognise commitments to ESG standards or principles.

An indicator on ancillary activities (RC4) has been added. This allows entities to indicate which activities they engage in, in addition to their core sector activity, and whether these activities have been included in their reporting. Exceptions to these reporting boundaries should be reported in new text boxes within the Performance Component indicators.

7. Several changes to indicators to increase alignment

Several changes have been made to indicators to increase alignment with external frameworks like CDP, DJSI and SASB and the GRESB Real Estate Assessment. These changes reduce reporting burden for participants overall and aim to provide respondents with better opportunities to report data that they may already be collecting.

8. "Yes" sections of indicators no longer scored

Selecting "Yes" to a scored indicator will no longer award the participant any points. In 2019, 10% of the maximum score for an indicator was awarded for selecting "Yes".

Indicator Level Changes

<p>EC2</p>	<p><u>Nature of ownership - Ticker and exchange information removed</u></p> <p>Description: Ticker and exchange information removed.</p> <p>Rationale for change: This was redundant information that was covered by the entity's ISIN in any case.</p> <p>Impact of change: Reduce reporting burden.</p>
<p>EC4</p>	<p><u>Reporting Period - Asset's reporting year</u></p> <p>Description: Add year of reporting (on top of month) where it is not calendar year.</p> <p>Rationale for change: To clarify the precise reporting year.</p> <p>Impact of change: Greater clarity for reporting.</p>
<p>Former EC4</p>	<p><u>Industry associations - Indicator removed</u></p> <p>Description: Indicator on industry associations removed.</p> <p>Rationale for change: This information was not used by GRESB.</p> <p>Impact of change: Reduce reporting burden.</p>
<p>RC2</p>	<p><u>Economic size - Indicator structure change</u></p> <p>Description: 'Other' option removed and Number of full time equivalent employees and contractors added.</p> <p>Rationale for change: Economic size has been standardised to the mandatory metrics of Gross Asset Value (GAV) and Revenue so there is no need for 'Other' answer. Number of FTE employees and contractors has been added as new size metrics relevant to materiality, peer grouping and insights.</p> <p>Impact of change: Increase in reporting burden in exchange for enhanced materiality and insights.</p>
<p>RC3</p>	<p><u>Sector and geography - Describe the lifecycle stage for facilities</u></p> <p>Description: added to describe the lifecycle stage of each facility i.e. whether in Operation or in Development.</p> <p>Rationale for change: This information is useful, particularly as we move to improve the usefulness of the assessment for development projects.</p> <p>Impact of change: Minor increase in reporting.</p>

Address/GPS coordinates - Embed Google Maps

Description: Embedded google maps software in the address bar for facility locations.

Rationale for change: Enable more accurate geocoding of facilities.

Impact of change: Better data quality.

RC4 Ancillary Activities - New indicator

Description: Added new indicator on ancillary activities.

Rationale for change: To better understand the entity's reporting boundaries and allow for the reporting of exceptions against these boundaries throughout the Performance Component.

Impact of change: Slightly increased reporting burden.

RC5 (Former EC2)

Nature of entity's business

Description: Section of former EC2 indicator moved to form RC4.

Rationale for change: More logical to separate out this section of the indicator from what remains in EC2. The information relates to business and revenue characteristics as compared to ownership.

Impact of change: Clearer reporting logic for participants.

RC6 Asset entity's logo

Description: Logo of the asset entity.

Rationale for change: To align with Fund and Real Estate Assessments and allow for logos to be added to Scorecards, Benchmark Reports and the GRESB website.

Impact of change: Slightly increased reporting burden in exchange for increased recognition of participating.

RC7 (Former MA2)

Materiality - New factors added

Description: Materiality approach refined.

- New factors: New factors have been added on Number of customers, Number of users, Number of employees, Number of contractors, Number of workers, Number of employees and Scope of service.
- New ESG issues: New ESG issues have been added on Hazardous substances, Local employment, Conflicts of interest, Delegating authority, Shareholder rights and Board ESG oversight.
- Renamed ESG issues: the following ESG issues have been renamed - Health and safety: users (formerly - Health and safety: customers), Climate/climate change adaptation (formerly - Resilience (adaptation) to climate change), Inclusion and diversity (formerly - Gender and diversity).
- Removed ESG issue: Fiduciary duty has been removed as it has been deemed non-material as an ESG issue.
- New sectors: New sectors have been added on Fibre networks, Smart meters, Electric vehicle charging and Landlord port.
- Materiality changes:

The materiality of the following ESG issues have been changed:

- Health and safety: community has been increased for most sectors.
- Data protection has been increased for sectors considered to handle sensitive information.
- Cybersecurity increased for sectors with activities prone to cyber attacks.

- Conflicts of interest, Delegating authority, Shareholder rights, Board ESG oversight are set to Medium relevance for all entities.
- Audit committee structure/ independence Audit committee structure/ independence.
- Compensation committee structure/ independence, Independence of board chair” are now driven by the factors Numbers of employees and Scope of service.
- The factors Resilience to catastrophe/disaster and Climate/Climate change adaptation have been amended to provide an additional answer option.

Rationale for change: To provide a clearer and more accurate materiality assessment based on sector and entity specific characteristics.

Impact of change: Clearer and more tailored assessment. [2020 GRESB Infrastructure Materiality Matrix](#)

Materiality - Materiality threshold increase

Description: The materiality threshold has been lifted from ‘No relevance’ to ‘Low relevance’ so that issues deemed of ‘No relevance’ or ‘Low relevance’ will no longer be scored. Previously ‘Low relevance’ issues were scored but ‘No relevance’ issues were not.

Rationale for change: Participants and investors have requested more focus on just the material ESG issues.

Impact of change: Significantly lower reporting burden. [2020 GRESB Infrastructure Materiality Matrix](#)

LE2 ESG leadership commitments - New indicator

Description: Added new indicator on commitments to ESG standards or principles.

Rationale for change: To align with the Fund Assessment and Real Estate Assessment and to capture information on this important trend.

Impact of change: Increased reporting burden in exchange for useful information for investors.

LE4 (Former MA5) ESG senior decision maker - Remove email and LinkedIn

Description: Removed options to fill in E-mail and LinkedIn profiles.

Rationale for change: These were optional and not used for any purpose.

Impact of change: Reduce reporting burden.

ESG senior-decision maker - New decision-maker options

Description: Added sub-options for ‘the individual’s most senior role’.

Rationale for change: Reduce overlap between the previous options, to align with the Real Estate Assessment.

Impact of change: Increased standardization and granularity.

LE6 (Former MA6) Personnel ESG performance targets - Separate financial and non-financial incentives

Description: The incentives are split into financial and non-financial sections, with the applicable employees list applying to each.

Rationale for change: Adds more granularity and aligns with the Real Estate Assessment.

Impact of change: Slightly increased reporting burden in exchange for useful data for investors.

Personnel ESG performance targets - New employee options

	<p>Description: Modified sub-options for 'employees to whom these targets apply'.</p> <p>Rationale for change: To align with Real Estate Assessment and DJSI.</p> <p>Impact of change: Reduced reporting burden.</p>
Former MA7	<p>ESG related training - Component shift</p> <hr/> <p>Description: Moved to Performance Component.</p> <p>Rationale for change: Aligns with Real Estate and fits with other Performance Indicators on employee satisfaction etc.</p> <p>Impact of change: Clearer structure.</p>
Former P01-3	<p>Policies - Applicable stakeholder group options removed</p> <hr/> <p>Description: Removed section of indicator on which stakeholder groups the policies apply to.</p> <p>Rationale for change: Alignment with Real Estate Assessment. Additionally the topic is covered in Stakeholder Engagement section of the assessment and hence considered an overlap.</p> <p>Impact of change: Reduce reporting burden.</p>
RP1 (Former PD4 and PD5)	<p>ESG Reporting - Merging of PD4 and PD5</p> <hr/> <p>Description: The two indicators have been merged together, forming a combined indicator on ESG disclosure and third-party reporting review.</p> <p>Rationale for change: Combining these two indicators together will simplify the reporting and validation process.</p> <p>Impact of change: Simplified reporting.</p> <p>ESG Reporting - Remove reporting of name of Service Provider</p> <hr/> <p>Description: Remove reporting of the name of the Service Provider used for external check / verification / assurance.</p> <p>Rationale for change: GRESB does not use this information.</p> <p>Impact of change: Reduced reporting burden.</p> <p>Description: Publishing year of the reports(s) can now be in the year after the reporting year if they refer to actions undertaken during the reporting year. For example, disclosures published in 2020 referencing 2019 actions and/or performance are now valid.</p> <p>Rationale for change: Many participants were previously confused by the requirement and led to misreporting.</p> <p>Impact of change: Clearer requirements in line with understanding of the reporting participants.</p>
RP2.1 (Former PD6)	<p>ESG incident monitoring - Change in scope of indicator</p> <hr/> <p>Description: Added 'breaches against the code of conduct/ethics' to question.</p> <p>Rationale for change: Alignment with DJSI.</p> <p>Impact of change: Reduce reporting burden.</p>
RP2.2 (Former PD7)	<p>ESG Incident occurrences - Added pending investigations</p> <hr/> <p>Description: Added 'Specify the total number of currently pending investigations'.</p>

	<p>Rationale for change: Alignment with Real Estate and useful information.</p> <p>Impact of change: Slight increase in reporting burden in exchange for useful investor information.</p>
Former RO4	<p>Implementation Actions moved to Performance Component</p> <hr/> <p>Description: Indicator RO4 moved to Performance Component.</p> <p>Rationale for change: Aligns with Real Estate and is more focused on Performance than Management.</p> <p>Impact of change: Clearer structure.</p>
SE1	<p>Stakeholder engagement program - Removal of stakeholder options</p> <hr/> <p>Description: Removal of sub-options 'Employees', 'Suppliers' and 'Supply Chain (beyond Tier 1 suppliers and contractors)'.</p> <p>Rationale for change: The indicator SE5 already covers supply chain stakeholders. Employee engagement is covered by Employee satisfaction and Training and development indicators in the Performance Component.</p> <p>Impact of change: Greater clarity and reduced reporting burden.</p> <p>Stakeholder engagement program - Added stakeholder program elements</p> <hr/> <p>Description: Added some elements.</p> <p>Rationale for change: Alignment with Real Estate and better reflects good practice.</p> <p>Impact of change: Slight increase in reporting burden.</p>
SE2	<p>Actions to implement stakeholder engagement program - Removed indicator</p> <hr/> <p>Description: Removed indicator.</p> <p>Rationale for change: This information can be reported in the Implementation indicators in the Performance Component.</p> <p>Impact of change: Reduced reporting burden.</p>
SE2 (Former SE5 and SE6)	<p>Supply chain engagement program - Elements change</p> <hr/> <p>Description: Added a section on 'elements of the supply chain engagement program' which replaces the former SE6 indicator.</p> <p>Rationale for change: Alignment with the Real Estate Assessment and clearer structure.</p> <p>Impact of change: Clearer reporting.</p> <p>Supply chain engagement program - Issues in process changed</p> <hr/> <p>Description: Removal of 'ESG specific requirements for sub contractors' and addition of 'Child labour' and 'Labour standards and working conditions' from issues covered by the procurement process.</p> <p>Rationale for change: Alignment with the Real Estate Assessment.</p> <p>Impact of change: Reduced reporting burden.</p>
Various	<p>New structure for governance issues across assessment</p> <hr/>

Description: Description: Governance issues no longer split at indicator level into board-level and operational issues.

Rationale for change: Alignment with Real Estate.

Impact of change: Clearer structure.

Performance Component

High-level comments

1. Divide the Performance Component into aspects

With the restructuring of the assessment, and the division into Management and Performance Components in particular, it is appropriate to divide the Performance Component into aspects (previously it was comprised of just two aspects – Performance and Certifications). The new aspects align with the Real Estate Assessment and external sustainability frameworks where practical. The new aspects have been mapped to the 2019 indicators and aspects, enabling comparisons over time.

The aspects are:

- Implementation
- Output & Impact
- Health & Safety
- Energy
- Greenhouse Gas Emissions
- Air Pollution
- Water
- Waste
- Biodiversity & Habitat
- Employees
- Customers
- Certifications & Awards

2. Materiality approach refined

With the materiality threshold being lifted from 'No relevance' to 'Low relevance', Low relevance indicators will no longer be scored (see RC7). These indicators will still be available for reporting only. [2020 GRESB Infrastructure Materiality Matrix](#)

3. Moved Implementation indicator from Management Component to Performance Component

Indicator RO4 on implementation of mitigation and improvement measures has been moved from the Management Component to the Performance Component and split into three indicators for E, S and G. These indicators are now for reporting only and no longer scored.

4. Removed indicators and metrics

Indicators PI9.1 (Customer satisfaction program) and PI10.1 (Employee satisfaction program) have been removed as these measures can be covered by the Implementation indicators.

Many indicators will request fewer metrics, by removing some little used metrics and 'Other' input boxes.

Reporting of boundaries has moved to a 'by exception' basis reducing reporting burden and providing greater clarity and comparability.

5. Added metrics

Some new metrics have been added to provide additional valuable data on leading indicators, and to simplify entry and calculations for users.

6. Several changes to indicators to increase alignment

Several changes have been made to indicators to increase alignment with external frameworks like CDP, DJSI and SASB and the GRESB Real Estate Assessment. These changes reduce reporting burden for participants

overall and aim to provide respondents with better opportunities to report data that they may already be collecting.

7. Removal of baseline data

Reporting of baseline data is no longer requested, thereby reducing reporting burden. Instead, previous year data will be pre-filled where available.

8. Improved clarity of scored, mandatory and optional input boxes

To reduce reporting burden, tables in the Performance Component have been redesigned to provide a clearer distinction between scored, mandatory and optional inputs. The mandatory cells have been marked with a thick, dark green border. The scored cells have been shaded in green. The cells shaded in light green are scored only for entities in a certain sector. All cells with a light grey border are optional.

9. Outliers in Performance Data

Functionality to detect outliers in the quantitative data has been added. Where an outlier is detected, a warning will show in the portal. Although the system will not prevent participants from submitting outlier data, the notification will allow them to provide clarification on their data in the text areas below each question.

10. Evidence uploads for target data removed.

The option to provide evidence where this is not scored or mandatory has been removed. This reduces participants' reporting burdens and simplifies validation processes.

11. External third-party review

Assurance and independent third-party review of data can be useful in the quest to improve data quality. A question on external review of data has been added to each of the quantitative (table based) indicators. These questions will not be used for scoring in 2020.

12. Reporting boundaries reported on exception basis

The question on reporting boundaries that is part of each quantitative indicator has been amended and aligned with the new RC4 question on ancillary activities. Entities must indicate that all activities and facilities as reported in RC3 and RC4 are reported for the full reporting period as indicated in EC4. This gives a better understanding what is included in reporting boundaries and allows for better benchmarking of data.

13. "Yes" sections of indicators no longer scored

Selecting "Yes" to a scored indicator will no longer award the participant any points. In 2019, 10% of the maximum score for an indicator was awarded for selecting "Yes".

Indicator Level Changes

HS1-BI1

Performance Indicators - Reporting boundaries

Description: Reporting of boundaries has moved to a 'by exception basis', where exceptions can be noted against the facilities, activities and timeframes reported in RC3, RC4 and EC4.

Rationale for change: Last year, participants struggled to report their reporting boundaries. The new approach is clearer and easier to use. Additionally, the question has been aligned to the new indicator RC4 on ancillary activities.

Impact of change: Reduced reporting burden and improved clarity and comparability.

Performance Indicators - Assurance and third-party review

Description: Added a question on external third-party review of data to each of the quantitative (table based) indicators. These questions will not be used for scoring in 2020.

Rationale for change: Assurance and independent third-party review of data can be useful in the quest to improve data quality. This approach aligns with the GRESB Real Estate Assessment.

Impact of change: Increased reporting burden in exchange for improved data quality.

Performance Indicators - Removal of baseline data

Description: Removal of reporting of baseline data. Instead, previous year data will be pre-filled where available.

Rationale for change: This data was not used by GRESB and was not deemed to be useful to investors.

Impact of change: Reduced reporting burden.

Performance Indicators - Data tables redesigned

Description: Data tables have been redesigned to provide a clearer distinction between scored, mandatory and optional inputs

Rationale for change: Last year some participants did not fully understand which inputs which were scored, mandatory and optional leading to some misreporting. This new approach should be clearer and easier for participants.

Impact of change: Greater clarity and accuracy of data.

**IM1 IM2 IM3
(former
RO4)**

Implementation

Description: Indicator RO4 (2019) was moved to the Performance Component and restructured. It has also been split into environmental, social and governance indicators. These indicators are now for reporting only and no longer scored.

Rationale for change: Actions are more a reflection of performance than management, so the indicator fits well in the Performance Component. Validation of this indicator was previously difficult and it was hard to score. More structured inputs provide more useful data for investor.

Impact of change: Reduced reporting burden and more useful data.

**O11 (former
PI1.0)**

Output and impact

Description: The metric Output has been made mandatory.

Rationale for change: To facilitate sector-specific intensity metrics to be used in scoring performance beyond 2020.

Impact of change: Slight increase in reporting burden in exchange for more standardized, useful and comparable data.

Description: Removal of metrics on GAV, revenue and input.

Rationale for change: GAV and revenue are already provided in RC2. Input was little used in 2019 and is now considered unnecessary.

Impact of change: Reduced reporting burden.

HS1 (former PI2.0)

Health and safety: Employees

Description: Added new metric on 'Near miss incidents' – not scored.

Rationale for change: Recording and investigating near misses is regarded as good practice to prevent similar – or more serious – incidents from happening in the future. Several participants reported this as the 'Other' metric in the past.

Impact of change: Increase in reporting burden in exchange for better indication of good practices.

Description: Added new metric on 'Hours worked' and automatic calculation of LTIFR and TRIFR

Rationale for change: There has been variability in the ability of, and methods used by, participants in calculating injury and incident rates. By adding 'hours worked' as a metric, the rates can be calculated in a standardized fashion.

Impact of change: Reduced reporting burden and improved accuracy and comparability.

Description: Change metric 'Reportable injuries' to 'Total recordable injuries'

Rationale for change: Reporting of both Reportable injuries and Recordable injury rates was inconsistent and confusing. Simply reporting Total recordable injuries allows the TRIFR to be calculated in a standardized fashion.

Impact of change: Reduced reporting burden and improved accuracy and comparability.

Description: Removed metric on 'Other [enter value]'

Rationale for change: Many participants reported the metric already listed or metric that are highly specific, therefore making this metric of limited value in benchmarking.

Impact of change: Reduced reporting burden.

HS2 (former PI2.1)

Health and safety: Contractors/strong

Description: Added new metric on 'Near miss incidents' – not scored.

Rationale for change: Recording and investigating near misses is regarded as good practice to prevent similar – or more serious – incidents from happening in the future. Several participants reported this as the 'Other' metric in the past.

Impact of change: Increase in reporting burden in exchange for better indication of good practices.

Description: Added new metric on 'Hours worked' and automatic calculation of LTIFR and TRIFR

Rationale for change: There has been variability in the ability of, and methods used by, participants in calculating injury and incident rates. By adding 'hours worked' as a metric, the rates can be calculated in a standardized fashion.

Impact of change: Reduced reporting burden and improved accuracy and comparability.

Description: Change metric 'Reportable injuries' to 'Total recordable injuries'

Rationale for change: Reporting of both Reportable injuries and Recordable injury rates was inconsistent and confusing. Simply reporting Total recordable injuries allows the TRIFR to be calculated in a standardized fashion.

Impact of change: Reduced reporting burden and improved accuracy and comparability.

Description: Removed metric on 'Other [enter value]'

Rationale for change: Many participants reported the metrics already listed or metrics that are highly specific, therefore making this metric of limited value in benchmarking.

Impact of change: Reduced reporting burden.

HS3 (former PI2.2)

Health and safety: Customers

Description: Change metric 'Reportable injuries' to 'Total recordable injuries'.

Rationale for change: Reporting of both Reportable injuries and Recordable injury rates was inconsistent and confusing. This has been changed to align with health and safety reporting for employees and contractors.

Impact of change: Reduced reporting burden and improved accuracy and comparability.

Description: Removed metric on 'Other [enter value]'

Rationale for change: Many participants reported the metrics already listed or metrics that are highly specific, therefore making this metric of limited value in benchmarking.

Impact of change: Reduced reporting burden.

HS4 (former PI2.3)

Health and safety: Community

Description: Change metric 'Reportable injuries' to 'Total recordable injuries'.

Rationale for change: Rationale for change: Reporting of both Reportable injuries and Recordable injury rates was inconsistent and confusing. This has been changed to align with health and safety reporting for employees and contractors.

Impact of change: Reduced reporting burden and improved accuracy and comparability.

Description: Removed metric on 'Other [enter value]'

Rationale for change: Many participants reported the metrics already listed or metrics that are highly specific, therefore making this metric of limited value in benchmarking.

Impact of change: Reduced reporting burden.

EN1 (former P3)

Energy

Description: Modified indicator structure providing a clearer step by step reporting process.

Rationale for change: Some participants have found reporting on energy confusing and this has led to some misreporting in the past.

Impact of change: Reduced reporting burden and improved accuracy and comparability.

Energy imported/purchased

Description: Splitting of electricity and steam, heating and cooling into renewable and non-renewable sources.

Rationale for change: Allows % renewable to be calculated.

Impact of change: Increase in reporting burden in exchange for data useful to investors.

Description: Added new metrics on 'Biofuels' and 'Waste (non-biomass)'.

Rationale for change: These metrics were not allowed for previously so would have been reported as 'Other fuels'. Reporting accuracy and alignment with external frameworks is improved by adding these metrics.

Impact of change: Improved reporting accuracy.

Description: Amendment of metric "Other fuels" to "Other [enter metric]".

Rationale for change: Allows participants to indicate what metric they are reporting. As there are many fuels that can be reported, this open box allows respondents to present a complete picture of their real consumption.

Impact of change: Improved reporting accuracy.

Energy generation

Description: Added new tables and metrics on energy generated by fuel source and from non-combustible sources.

Rationale for change: These tables enable an energy balance to be created allowing % renewables to be calculated and energy consumption and export to be more accurately calculated.

Impact of change: Increase in reporting burden in exchange for data useful to investors and improved reporting accuracy.

Energy exported

Description: Added new metrics to provide a breakdown of energy exported into various energy types.

Rationale for change: This aligns to the energy imported and energy generated tables allowing % renewables to be calculated and energy consumption and export to be more accurately calculated.

Impact of change: Increase in reporting burden in exchange for data useful to investors and improved reporting accuracy.

Energy consumed

Description: Added new metrics to provide a breakdown of energy exported into renewable and non-renewable.

Rationale for change: Previously only total energy consumption was calculated. This breakdown will provide useful to information for investors. As the totals are calculated automatically, there is no increase in reporting burden.

Impact of change: Better data useful to investors.

**GH1
(formerP4)**

Greenhouse gas emission

Description: Breakdown of scope 1 emissions sources in alignment with GHG Protocol and CDP.

Rationale for change: Adding this breakdown allows participants to better account for their scope 1 emissions and it aligns with external frameworks.

Impact of change: Slight increase in reporting burden in exchange for data useful to investors.

Description: Added a table providing a breakdown of Scope 3 emissions in alignment with the GHG Protocol and CDP.

Rationale for change: Reporting of relevant scope 3 emissions is becoming more important globally. While reporting of scope 3 emissions will remain unscored in 2020, adding this breakdown allows participants to better account for their scope 3 emissions and provides the building blocks for standardized reporting of scope 3 emissions in the future.

Impact of change: Increase in reporting burden in exchange for data useful to investors.

Description: Added a calculated metric on “Net GHG emissions (Scope 1, 2 + 3).

Rationale for change: Reporting of relevant scope 3 emissions is becoming more important globally. While reporting of scope 3 emissions will remain unscored in 2020, adding the calculation provides the building blocks for standardized reporting including scope 3 emissions in the future.

Impact of change: Useful data for investors.

Description: Added a question on scope 2 calculation methodology – Location or Market based.

Rationale for change: This aligns with several external frameworks and the GRESB Real Estate Assessment and allows for greater comparability of data in the future.

Impact of change: Slight increase in reporting burden in exchange for greater comparability.

Description: Added a question on science-based targets approved by SBTi.

Rationale for change: Science-based targets provide high credibility in terms of contributing to international agreements and goals. This question allows participants who have taken this step to be recognized.

Impact of change: Slight increase in reporting burden in exchange for credibility and recognition.

**WT1 (former
PI6.0)**

Water inflows/withdrawals

Description: Added metric: “Produced Water”.

Rationale for change: To align with external frameworks.

Impact of change: Reduced reporting burden.

Description: Renamed metrics:

- 'Potable water supply' to 'Third-party potable water'
- 'Surface water/river' to 'Surface water'.
- 'Seawater' to 'Seawater / brackish water'
- 'Recycled water (from external suppliers)' to 'Third-party non-potable water'

Rationale for change: These terms align better with external frameworks.

Impact of change: Reduced reporting burden.

Description: New calculated metric: "% potable water".

Rationale for change: This data is useful to investors.

Impact of change: More useful data for investors.

WT2 (former PI6.1)

Water outflows/discharges

Description: Renamed metrics:

- 'Municipal Treatment Plant' to 'Third-party treatment'
- 'Surface water/river' to 'Surface water'.
- 'Seawater' to 'Sea-water / brackish water'
- 'Recycled water scheme' to 'Third-party re-use'

Rationale for change: These terms align better with external frameworks.

Impact of change: Reduced reporting burden.

Description: Added metric on 'Non-compliances' similar to the existing metric in the Air Pollution indicator. This metric will be unscored in 2020.

Rationale for change: The addition of this metric provides greater insight into the quality of water discharges, whereas the other metrics in this indicator focus on quantity and destination.

Impact of change: Increase in reporting burden in exchange for more useful data for investors.

WS1 (former PI7)

Waste

Description: Removal of metric: "Other [enter metric]".

Rationale for change: The metrics "hazardous" and "non-hazardous" capture all generated waste.

Impact of change: Reduced reporting burden.

Disposal/export

Description: Added metric on 'Third party processing'.

Rationale for change: This allows reporting of wastes that are sent for third party processing before reaching their final disposal destination as these were previously not reported.

Impact of change: Improved accuracy.

	<p>Description: Renamed calculated metric from ‘Total diverted from landfill’ to ‘Total diverted from landfill and incineration’.</p> <p>Rationale for change: This better reflects the details of the calculation (the calculation itself does not change).</p> <p>Impact of change: Greater clarity.</p>
<p>BI1 (former PI8)</p>	<p>Biodiversity and habitat</p> <hr/> <p>Description: Removed metric on ‘Other [enter metric]’.</p> <p>Rationale for change: This metric was rarely used.</p> <p>Impact of change: Reduced reporting burden.</p> <p>Description: Rename metric from ‘Net habitat improved’ to ‘Net habitat gain’.</p> <p>Rationale for change: This aligns with external frameworks and better allows for cases where the gain is negative (i.e. a loss being a negative gain).</p> <p>Impact of change: Greater clarity.</p> <p>Description: Modified the ‘Net habitat gain’ calculation to remove ‘Habitat maintained’ which is now reported separately further down the table. The calculation becomes ‘Net habitat gain’ = ‘Habitat enhanced or restored’+ ‘Habitat protected (onsite)’ + ‘Habitat protected (offsite)’ – ‘Habitat removed’.</p> <p>Rationale for change: Maintaining habitat does not positively or negatively impact the Net habitat gain and so should not have been included in the calculation.</p> <p>Impact of change: Improved data accuracy.</p>
<p>EM1/EM2 (MA7/PI10.0)</p>	<p>Employees</p> <hr/> <p>Description: Moved from MA7 to Performance Component.</p> <p>Rationale for change: The indicator has changed to include more quantitative data and therefore better fits within the Performance Component. This also aligns with the GRESB Real Estate Assessment.</p> <p>Impact of change: Greater clarity.</p> <p>Description: Added metrics on ‘Average amount spent per FTE’, ‘% of employees who received training’, ‘% of employees who received ESG training’.</p> <p>Rationale for change: These new metrics align with the GRESB Real Estate Assessment and provide useful quantitative data. The scope of the indicator is broadened to also include general training on top of ESG training.</p> <p>Impact of change: Increase in reporting burden in exchange for more useful data for investors.</p>
<p>EM2 (former PI11)</p>	<p>Inclusion and diversity</p> <hr/> <p>Description: Renamed indicator from ‘Gender and Diversity’ to ‘Inclusion and Diversity’.</p>

Rationale for change: This better reflects the scope of the indicator and aligns better with industry terminology.

Impact of change: Greater clarity.

Description: Gender ratio is now a scored metric.

Rationale for change: Many participants reported on this metric in 2019 showing that it is good practice to report. Investors confirmed that this data is very useful.

Impact of change: Increase in reporting burden in exchange for more useful data for investors.

Appendix 2

Terminology

The below list identifies terminology that is frequently referenced throughout the GRESB Infrastructure Assessment. Indicator specific terminology is referenced within the guidance notes, for each indicator.

Environmental issues:

Air pollution: Air pollutants are particles and gases released into the atmosphere that may adversely affect living organisms. Additionally, some pollutants contribute to climate change or exacerbate the effects of climate change locally.

Biodiversity and habitat: Issues related to wildlife, endangered species, ecosystem services, habitat management, and invasive species. Biodiversity refers to the variety of all plant and animal species. Habitat refers to the natural environment in which these plant and animal species live and function.

Contaminated land: Land that contains substances in or under it that are actually or potentially hazardous to human health or the environment.

Energy: Energy refers to energy consumption and generation from non-renewable and renewable sources (e.g. electricity, heating, cooling, steam).

Environmental issues: The impact on living and non-living natural systems, including land, air, water and ecosystems. This includes, but is not limited to, biodiversity, transport and product and service-related impacts, as well as environmental compliance and expenditures.

Greenhouse gas emissions: GHGs refers to the seven gases listed in the Kyoto Protocol: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); nitrogen trifluoride (NF₃) and sulphur hexafluoride (SF₆).

Hazardous substances: Also known as dangerous goods. Any substances that can pose a health or physical hazard to humans or the environment, such as carcinogens, toxic agents, irritants, corrosives, combustibles or explosives.

Light pollution: Excessive or obtrusive artificial light also known as photo pollution or luminous pollution. Examples of light pollution and reflection include: spilled light from construction zones and parking lots which may impact breeding grounds or resting areas; highly reflective towers which may affect bird flight.

Materials sourcing and resource efficiency: Responsible sourcing of materials considers the environmental, social and economic impacts of the procurement and production of products and materials. Resource efficiency means using those products and materials in an efficient and sustainable manner while minimizing impacts on the environment and society.

Noise pollution: Refers to noise pollution, also known as environmental noise, which is the propagation of noise with harmful impact on the activity of human or animal life.

Physical risk: The risks associated with the potential negative direct and/or indirect impacts of physical hazards, natural disasters, catastrophes, as well as physical climate-related hazards, which may be event-driven (acute) or driven by longer-term shifts in climatic patterns (chronic). The physical risk associated with a particular real asset may be described in terms of elements including hazard exposure, sensitivity, vulnerability, and adaptive capacity. Decreasing the sensitivity of an asset to particular physical risks, increasing its adaptive capacity, and planning are all ways of increasing the resilience of the built environment against physical risks, climate-driven or otherwise. In practice, these objectives may be promoted by various actions including the establishment of appropriate management policies; the utilisation of informational technologies for disaster response; the education of employees, the community, and suppliers; and implementing physical measures at the asset level.

Waste: Entity's consideration of waste disposal methods and whether waste minimization strategies emphasize prioritizing options for reuse, recycling, and then recovery over other disposal options to minimize ecological impact.

Water outflows/discharges: Discharge of water to water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater) or to third-parties for treatment or use.

Water inflows/withdrawals: Water drawn into the boundaries of the entity from all sources (including surface water, ground water, rainwater, and municipal water supply) as well as water reuse, efficiency, and recycling, including the entity's consideration of whether water sources are significantly affected by withdrawal of water.

Social issues:

Child labor: Work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical or mental development including by interfering with their education. Specifically, it means types of work that are not permitted for children below the relevant minimum age.

Community development: A process where community members come together to take collective action and generate solutions to common problems.

Customer satisfaction: Customer satisfaction is one measure of an entity's sensitivity to its customers' needs and preferences and, from an organizational perspective, is essential for long-term success. In the context of sustainability, customer satisfaction provides insight into how the entity approaches its relationship with one stakeholder group (customers).

Employee engagement: An employee's involvement with, commitment to and satisfaction with the entity.

Forced or compulsory labor: All work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered themselves voluntarily.

Freedom of association: Right of employers and workers to form, to join and to run their own organizations without prior authorization or interference by the state or any other entity.

Inclusion and diversity: Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity including discrimination.

Health and safety: The principles of occupational health and safety management systems include developing a policy, analyzing and controlling health and safety risks, providing training, and recording and investigating health and safety incidents.

Labor standards and working conditions: Labor standards and working conditions are at the core of paid work and employment relationships. Working conditions cover a broad range of topics and issues, from working time (hours of work, rest periods, and work schedules) to remuneration, as well as the physical conditions and mental demands that exist in the workplace.

Local employment: Providing jobs and skills to local people as employees, and to local contractors.

Social enterprise partnering: An entity's partnerships with organizations that have social objectives that serve as the primary purpose of the organization.

Stakeholder relations: The practice of forging mutually beneficial connections with third-party groups and individuals that have a stake in common interest.

Governance issues:

Audit committee structure/independence: A corporate board of directors establishes an audit committee to assist in discharging its fiduciary responsibility. An effective audit committee is an important feature of a strong corporate governance culture, and should have a clear description of duties and responsibilities.

Board composition: Composition of the board and its committees by (i) Executive or non-executive, (ii) Independence, (iii) Tenure on the governance body, (iv) Number of each individual's other significant positions and commitments, and the nature of the commitments, (v) Gender, (vi) Membership of under-represented social groups, (vii) Competences relating to economic, environmental and social impacts, (viii) Stakeholder representation.

Board ESG oversight: The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material topics are covered (definition based on GRI102-32).

Board-level issues: Governance issues that should be recognized at board-level by the entity.

Bribery: The offering, giving, receiving or soliciting an item of value to influence the actions of an official or other person in charge of a public or legal fiduciary duty.

Corruption: Abuse of entrusted power for private gain.

Compensation committee structure/independence: Compensation decisions are central to the governance of many entities. Compensation committees or analogous organizations are established to govern employee compensation and ensure employee remuneration decisions are made in a fair, consistent, and independent manner. An independent compensation committee may be one indicator of effective governance.

Conflicts of interest: Situations where an individual is confronted with choosing between the requirements of his or her function and his or her own private interests (definition based on GRI102-25).

Cybersecurity: The protection of internet-connected systems, including hardware, software and data, from any unauthorised use or access. Malicious attacks in particular can pose a significant threat to infrastructure assets.

Data protection and privacy: Customer privacy includes matters such as the protection of data; the use of information or data for their original intended purpose only, unless specifically agreed otherwise; the obligation to observe confidentiality; and the protection of information or data from misuse or theft.

Delegating authority: The process for delegating authority for economic, environmental, and social topics from the highest governance (definition based on GRI102-19).

Executive compensation: The financial and non-financial compensation of executives, in a manner that motivates executives to perform their roles in alignment with the entities objectives and risk tolerance.

Fraud: Wrongful deception intended to result in financial or personal gain.

Independence of Board chair: A non-executive member of the board is considered independent if they are not under any other undue influence, internal or external, political or ownership, that would impede their exercise of objective judgment.

Lobbying activities: Any activity carried out to influence a government or institution's policies and decisions in favor of a specific cause or outcome.

Operational issues: Governance issues that should be recognized on operational-level by the entity.

Political contributions: Disclosure of and guidelines for political contributions, such as the amounts and recipients of all monetary and non-monetary contributions made by an organization, which include political contributions made through third parties.

Shareholder rights: Assessing the potential risk of breaking or working against the entity's contractual shareholder rights. Shareholder rights are defined in the company's charter and bylaws.

Whistle-blower mechanism: A process that offers protection for individuals that want to reveal illegal, unethical or dangerous practices. An efficient whistle-blower mechanism prescribes clear procedures and channels to facilitate the reporting of wrongdoing and corruption, defines the protected disclosures, outlines the remedies and sanctions for retaliation.

Stakeholder group list:

Clients/Customers: A customer is understood to include end-customers (consumer) as well as business-to-business customers.

Community/Public: Persons or groups of persons living and/or working in any areas that are economically, socially or environmentally impacted (positively or negatively) by an entity's operations.

Contractors: Persons or organizations working onsite or offsite on behalf of an entity. A contractor can contract their own workers directly, or contract sub-contractors or independent contractors.

Employee(s): Either the entity's employees or the organization's employees whose primary responsibilities include the operation or support of the entity.

Investors/shareholders: The entity's current investors and/or equity stake owners in the entity.

Regulators/Government: The state and/or local authoritative and administrative governing body.

Special interest groups: Organization with a shared interest or characteristic (e.g. trade unions, non-governmental organizations).

Suppliers: Organizations that have a direct commercial relationship with the entity to provide a product or service. Note that here, suppliers only include tier 1 suppliers.

Supply chain (beyond Tier 1 suppliers and contractors): Organizations that have an indirect commercial relationship with the entity to provide a product or service somewhere in the entity's supply chain.

Users: Users are people that interact physically with the asset when they use its services.

Appendix 3

The list of sectors aligns to the EDHECInfra TICCS™ standard Industrial Classifications.

Sector Definitions

Superclass	Superclass Description	Class	Class Description
Data Infrastructure	Companies involved in the provision of telecommunication and data infrastructure.	Data Transmission	Data transmission companies involved in the construction, operation, and maintenance of data transmission assets including telecommunications towers, land or sea based long-distance communication cables, and communication satellites.
		Data Storage	Data storage companies involved in the development, operation, and maintenance of physical data storage infrastructure. This does not include companies that offer data storage in addition to other products.
Energy and Water Resources	Companies involved in the treatment and delivery of natural resources.	Natural Resources Transportation Companies	Natural Resources Transportation Companies develop and operate high-pressure transmission pipelines and natural resources transportation.
		Energy Resource Processing Companies	Energy natural resource processing companies transform crude oil, natural gas, and other commodities into various derivative or transformed products.
		Energy Resource Storage Companies	Energy natural resource storage companies provide storage services to private and public clients by exploiting large natural caverns or buildings and maintaining over- or underground tanks.
Environmental Services	Companies involved in the treatment of water, wastewater, and solid waste for sanitation and reuse purposes.	Waste Treatment	Waste treatment services include the collection and disposal of waste refuse from residential, commercial, or industrial sources.
		Water Supply and Treatment	Stand-alone water treatment companies produce water for various uses, including residential, commercial, and industrial end users.
		Wastewater Treatment	Stand-alone wastewater treatment companies treat wastewater from residential, commercial, and industrial sources to a certain discharge or reuse standard.
		Environmental Management	Environmental management companies invest in projects that conserve natural resources, protect habitats, and control hazards.

Superclass	Superclass Description	Class	Class Description
Network Utilities	Companies operating an infrastructure network with natural monopoly characteristics (barriers to entry, increasing returns to scale).	Electricity Distribution Companies	Electricity distribution companies distribute medium-voltage electricity to final consumers.
		Electricity Transmission Companies	Electricity transmission companies transmit relatively high-voltage electricity from the point of generation source to a distribution network.
		District Cooling/Heating Companies	Heating or cooling companies provide service in urban areas using combined heat and power to recycle or reuse waste heat.
		Water and Sewerage Companies	Water and sewerage companies provide potable water treatment and distribution services as well as the collection, treatment, and disposal of wastewater and sewerage.
		Gas Distribution Companies	Gas distribution companies operate low-pressure pipeline networks delivering natural gas to end residential, commercial, and industrial consumers.
		Data Distribution Companies	Data distribution companies involve in provision of essential data network especially to sectors of economy (e.g. financial systems, industrial supply chain, public utilities, etc) through utilisation of fiber networks, cell towers, data centers and other data infrastructure.
Power Generation x-Renewables	Stand-alone power generation using a range of technologies except wind, solar, and other renewable sources.	Independent Power Producers	Independent power producers (IPP) provide electricity to power distribution and transmission companies or directly to industrial or commercial clients.
		Independent Water and Power Producers	Independent water and power producers (IWPP) are power producers with a colocated water-desalination or filtration facility. Industrial, potable, or ultra-pure water is typically a by-product of the power generation process.
Renewable Power	Stand-alone power generation and transmission companies using wind, solar, hydro and other renewable energy sources. Also energy storage companies.	Wind Power Generation	Wind power companies produce electricity using wind power to operate various types of electromagnetic turbines.
		Solar Power Generation	Solar power companies produce electricity by capturing solar radiation using a range of solar-cell technologies.
		Hydroelectric Power Generation	Hydroelectric power generating companies use water to produce electricity. This can either be from a dam or from a river.

Superclass	Superclass Description	Class	Class Description
		Other Renewable Power Generation	Other renewable power generation companies using various physical phenomena or alternative renewable fuels (other than the wind, sun, or hydro) to generate electricity.
		Other Renewable Technologies	Other renewables technology companies use a variety of different methods to provide, store and transmit renewable energy.
Social Infrastructure	Companies involved in the delivery of support and accommodation services for public or other services.	Defence Services	Defence infrastructure companies provide noncombatant support services to public-sector military organisations, including strategic transport, training facilities, and telecommunications.
		Education Services	Infrastructure companies providing education services through the development and maintenance of school and university buildings and related facilities for the use of public or private institutions.
		Government Services	Infrastructure companies providing support and accommodation services to government departments and other public-sector organisations and agencies.
		Health and Social Care Services	Healthcare infrastructure companies provide support service and facilities to public- or private-sector medical treatment units.
		Recreational Facilities	Convention, entertainment, and recreational facilities infrastructure companies deliver and maintain various large-scale leisure facilities typically requiring a bespoke structural-engineering component.
Transport	Companies involved in the provision of transportation infrastructure services.	Airport Companies	Airport companies build, maintain, and operate airport terminals, runways, and associated support and logistical services. Large airports also lease property for commercial and retail purposes.
		Car Park Companies	Car park service companies provide individual and commercial end users with vehicle-parking facilities. They are relatively small-scale structures built over and underground mostly within large urban areas.
		Port Companies	Port infrastructure companies build, maintain, and operate port jetties, passenger terminals, and freight transit and storage facilities.
		Rail Companies	Rail companies provide long-distance, intercity passenger and freight services.

Superclass	Superclass Description	Class	Class Description
		Road Companies	Road companies build, maintain, and operate roads and motorways including bridges and tunnels.
		Urban Commuter Companies	Urban commuter companies build, maintain, and operate urban rail routes from light (tramway) to mass-transit rail tracks, including over- and underground rail lines.

Appendix 4

Asset Validation

2021 GRESB Data Validation Process

Data validation is an important part of GRESB's annual benchmarking process. The purpose of data validation is to encourage best practices in data collection and reporting. It provides the basis for GRESB's continued efforts to provide investment grade data to its investor members.

GRESB validation is a check on the existence, accuracy, and logic of data submitted through the GRESB Assessments. The validation process includes both automatic and manual validation.

Automatic Validation

Automatic validation is integrated into the portal as participants fill out their Assessments, and consists of errors and warnings displayed in the portal to ensure that Assessment submissions are complete and accurate.

The automatic validation process reviews all quantitative data points requested in the Portal and includes:

- Checks on information completeness, i.e.:
 - Mandatory evidence uploads are present
 - Mandatory open text boxes are completed
 - Answers are present for all indicators
- Checks on data types, i.e.:
 - Fields that should contain numbers, percentages, text, etc. only contain those data types
- Checks on information accuracy, i.e.:
 - Percentages must be between 0 and 100
 - Several metrics are restricted to absolute values

The automatic validation process generates:

- Errors - marked in red. Participants cannot submit the Assessment unless all errors are resolved
- Warnings - marked in grey. Participants are strongly encouraged to review all warnings, but they can still submit the Assessment without any follow up actions.

Participants cannot submit their Assessments unless all errors are resolved.

Manual Validation

Manual validation takes place after submission, and consists of document and text review to check that the answers provided in Assessment are supported by sufficient evidence. The manual validation process reviews the content of all Assessment submissions for accuracy and consistency. SRI Quality System Registrar (SRI) provides third-party validation services for GRESB. SRI is an accredited, independent certification body, and its subject matter experts will conduct the independent assessments of self-reported ESG data in the GRESB manual validation process. SRI, a Certified B Corporation and a JUST™ Labeled organization, is headquartered in Seven Fields, PA, with offices in Pittsburgh, PA (HQ); Portland, OR; Ann Arbor, MI; Dublin, Ireland; and Tokyo, Japan. Founded in 1991, SRI is accredited by ANAB, RvA, IATF, AA1000, USGBC (GBCI), WELL (IWBI), and Cradle to Cradle Products Innovation Institute (C2CPII), and ResponsibleSteel™ (in process) to assess and assist in conformance to quality, environmental, health and safety, information security.

During manual validation, the following data are checked for their content:

- All indicators where evidence uploads are mandatory, to ensure that the evidence supports the claims made by participants
- All scored "other" answers, to ensure they are relevant to indicator and are not duplicates of standard answers
- All scored open text boxes, to ensure answers meet the specific indicator requirements
- Additionally provided information related to third parties such as organization names, assurance, audit, certification and verification standards.

Indicator-specific validation requirements can be found after each indicator’s description, under the header “Validation”.

Evidence validation

Evidence uploads and provided hyperlinks are validated based on the content of the documents relative to both the requirements stated in the guidance for the indicator and the specific answer choices selected by the participant.

Evidence uploads and Other answers that were accepted in previous GRESB Assessment submissions may not be accepted in subsequent submissions. Enhanced validation checks, a change in indicator content and requirements, and/or a change in the level of validation may result in different validation outcomes. In order to be accepted, the provided evidence should meet the requirements as stipulated in this Reference Guide.

The 2021 list of indicators selected for manual validation and that request evidence upload is:

Asset Manually Validated Items

Indicator Code	Indicator Title	Component
LE3	ESG Objectives	Management
LE6	Personnel ESG performance targets	Management
PO1	Policies on environmental issues	Management
PO2	Policies on social issues	Management
PO3	Policies on governance issues	Management
RP1	ESG Reporting	Management
RM1	Management systems	Management
RM2.1	Monitoring of environmental performance	Management
RM2.2	Monitoring of social performance	Management
RM2.3	Monitoring of governance performance	Management

Ensuring accuracy and consistency in validation decisions

GRESB works with GBCI to ensure that validation decisions accurately reflect the requirements set out in the reference guides, and that decisions are consistent across indicators and submissions. The GBCI validation team uses the same requirements described in the reference guides as their main source of validation guidance when reviewing submission answers. The validation process also includes a review of selected decisions by a second validator.

Additionally, GRESB checks a sample of all validation decisions to ensure that the requirements are being interpreted correctly by the GBCI validators.

To ensure consistency across answers, the GBCI validators review all answers for a given indicator at a time, and are typically assigned to validate related sets of indicators. It is important to note that validators are not assigned to validate a participant’s entire Assessment, but rather a consistent set of indicators across all submitted Assessments. This means that individual validators become “experts” on their set of indicators and can ensure that their decisions are consistent across all submissions. Moreover, GRESB runs additional consistency checks using a model that verifies the similarity between provided answers per indicator, and flags any answers that have inconsistent validation decisions.

This means that all information relevant for validating for one indicator variable must be uploaded next to that indicator. There is no cross checking of information across other indicators.

Validation Statuses

Each indicator component has specific set of validation decisions that could be assigned dependent on the indicator requirements. The list of these validation decisions are described below:

Component	Validation	Explanation	Scoring impact
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status

'Other'	Accepted	Provided other answer falls outside the provided options and fulfills indicator requirements.	Full points will be awarded for this answer.
	Duplicate	Provided answer fulfills indicator requirements but duplicates already selected answer.	No points will be awarded for this answer.
	Not accepted	Provided answer does not fulfill indicator requirements.	No points will be awarded for this answer.
Evidence and open text boxes	Accepted	Provided evidence fully supports answer and fulfills indicator requirements.	Points based on answer that are covered by evidence are fully awarded.
	Partially accepted	Provided evidence only supports some of the selected answer choices and/or only partially fulfills indicator requirements.	Points based on answer covered by evidence are multiplied by 0.5.
	Not accepted	Provided evidence does not support answer and/or does not meet the indicator requirements.	No points are awarded for the section of the answer covered by evidence.

Appendix 5

Review Period

With the increased importance given to GRESB Scores and rankings by investors, lenders using GRESB Scores in Sustainability Linked Loans (SLLs), indices based on our results/data, and managers having financial incentives based on their GRESB results, providing accurate, credible and investment-grade data has become even more crucial. In 2020, GRESB introduced a Review Period in the Assessment timeline to further strengthen the reliability of the Assessments and benchmark results.

Timeline and process for 2021:

Timeline	Item
1 April - 1 July	<ul style="list-style-type: none"> Reporting period
1 July - 1 August	<ul style="list-style-type: none"> SRI Validation period
1 August – 1 September	<ul style="list-style-type: none"> GRESB data checks on items with frequent mistakes (e.g. ISIN, Nature of Ownership, reporting scope documentation, etc) GRESB quality and consistency checks on SRI validation process Finalization of the scoring model, scoring, generation of reports and in-house testing
1 September	<ul style="list-style-type: none"> Release of preliminary 2021 Real Estate and Infrastructure Assessment results for review by Participants Note: Preliminary reports do not include rankings or peer group comparisons
1 - 15 September	<ul style="list-style-type: none"> Participants can file official requests for validation or scoring reviews. Requests are made at entity level and are charged a 4,000 EUR fee (similar to the participation fee), regardless of the scope of request. GRESB reviews each case individually and communicates the resolution path to the participant. If the request relates to inaccurate input data or evidence, GRESB will reopen the relevant Assessments to enable participants to make amendments to their original response. Updated data will be validated by GRESB. The fee is payable in all instances, including in situations where the corrected data or evidence is not accepted and there is no change in scoring. If the request relates to an erroneous validation or scoring decision, GRESB will evaluate the request and communicate the final outcome to the participant. If GRESB identifies an error made in the original validation process, the 4,000 EUR fee is reimbursed. Official review requests can be filed using a standard form – see Appendix 4b below. Requests filed outside the standard process will not be reviewed. Note: Participants cannot use the Review Period to add data, information and documentation not available to them at the moment of Assessment submission. If the request covers multiple Assessment items (e.g. a validation decision deemed a GRESB error, and an incorrect data input by the participant), the fee is payable in full.
15 September - 22 September (1 week)	<ul style="list-style-type: none"> The Assessments are reopened for participants that submitted a Review Period form to correct mistakes in their input data. Updated data will be validated by

	<p>GRESB. The fee is payable in all instances, including if the corrected data is not accepted and there has not been any change in scoring.</p> <ul style="list-style-type: none"> • GRESB reserves the right to make any corrections in scoring or validation. • All re-submissions must be finalized and submitted by 11:59pm PDT on September 26. Failure to meet this deadline will result in the exclusion of any intended updates.
22 September - 29 September (1 week)	<ul style="list-style-type: none"> • GRESB solves any pending validation items and reruns scoring. • Final testing round and preparation of sector leaders.
1 October	<ul style="list-style-type: none"> • Release of final 2021 Real Estate and Infrastructure Assessment results to Participants and Investors. These are the official results and they cannot change after this date.

Appendix 6

Review Period Form

[Click to download](#)



Appendix 7

Peer Group Allocation Logic

Trial #	Sector				Location				Scope of Service
	Min size	Subclass	Class	Superclass / Diversified	Country	Subregion	Region	Super-region / Global	
1	6	✓			✓				✓
2	6	✓				✓			✓
3	6	✓					✓		✓
4	6	✓						✓	✓
5	6	✓							✓
6	6	✓			✓				
7	6	✓				✓			
8	6	✓					✓		
9	6	✓						✓	
10	6	✓							
11	6		✓		✓				✓
12	6		✓			✓			✓
13	6		✓				✓		✓
14	6		✓					✓	✓
15	6		✓						✓
16	6		✓		✓				
17	6		✓			✓			
18	6		✓				✓		
19	6		✓					✓	
20	6		✓						
21	6			✓	✓				✓
22	6			✓		✓			✓
23	6			✓			✓		✓
24	6			✓				✓	✓
25	6			✓					✓
26	6			✓	✓				
27	6			✓		✓			
28	6			✓			✓		

Sector

Location

29	6			✓				✓	
30	6			✓					
31	6				✓				✓
32	6					✓			✓
33	6						✓		✓
34	6							✓	✓
35	6								✓
36	6				✓				
37	6					✓			
38	6						✓		
39	6							✓	
40	6								

Appendix 8

Measures of Capacity and Output

[Download the Full Sector Metrics List](#)

Cold storage and logistics

Sector Metrics OI1

Sector			Capacity		Output	
Superclass	Class	Subclass	Metrics	Units	Metrics	Units
Diversified			N/A	N/A	N/A	N/A
Data Infrastructure			N/A	N/A	Data Transmitted	Terabits (Tb)
Data Infrastructure	Data Transmission		Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Data Infrastructure	Data Transmission	Communication Satellites	Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Data Infrastructure	Data Transmission	Telecom Towers	Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Data Infrastructure	Data Transmission	Long-Distance Cables	Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Data Infrastructure	Data Transmission	Other	Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Data Infrastructure	Data Storage		Area	m2	Data Stored	Terabits (Tb)
Data Infrastructure	Data Storage	Data Centers	Area	m2	Data Stored	Terabits (Tb)
Data Infrastructure	Data Storage	Other	Area	m2	Data Stored	Terabits (Tb)
Data Infrastructure	Data Transmission	Fibre networks	Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Data Infrastructure	Other		N/A	Revenue	US\$	N/A
Other			N/A	N/A	N/A	N/A
Energy and Water Resources			N/A	N/A	N/A	N/A
Energy and Water Resources	Natural Resources Transportation Companies		Maximum throughput	Tonnes/year	Mass transferred	Tonnes
Energy and Water Resources	Natural Resources Transportation Companies	Gas Pipeline	Maximum energy throughput	GJ/day	Energy transmitted	MWh

Sector Metrics OI1

Energy and Water Resources	Natural Resources Transportation Companies	Oil Pipeline	Maximum throughput	Tonnes/year	Energy transmitted	MWh
Energy and Water Resources	Natural Resources Transportation Companies	Water Pipeline	Maximum throughput	Megaliters/year	Water transferred	Megaliters (ML)
Energy and Water Resources	Natural Resources Transportation Companies	Wastewater Pipeline	Maximum throughput	Megaliters/year	Water transferred	Megaliters (ML)
Energy and Water Resources	Natural Resources Transportation Companies	Other Pipeline	Maximum throughput	Tonnes/year	Mass transferred	Tonnes
Energy and Water Resources	Natural Resources Transportation Companies	LNG Ships	Maximum energy capacity	GJ	Energy transported	GJ
Energy and Water Resources	Natural Resources Transportation Companies	Other	N/A	N/A	Revenue	US\$
Energy and Water Resources	Energy Resource Processing Companies		Maximum throughput	Tonnes/year	Energy exported	MWh
Energy and Water Resources	Energy Resource Processing Companies	Crude Oil Refinery	Maximum throughput	Tonnes/year	Energy exported	MWh
Energy and Water Resources	Energy Resource Processing Companies	LNG - Liquefaction	Maximum throughput	GJ/day	Energy exported	MWh
Energy and Water Resources	Energy Resource Processing Companies	LNG - Regasification	Maximum throughput	GJ/day	Energy exported	MWh
Energy and Water Resources	Energy Resource Processing Companies	Other	Maximum throughput	Tonnes/year	Energy exported	MWh
Energy and Water Resources	Energy Resource Processing Companies	Manufacture of biogas and biofuels for use in transport	Maximum throughput	Tonnes/year	Energy exported	MWh
Energy and Water Resources	Energy Resource Storage Companies		Maximum volume capacity	m3	Throughput	m3

Sector Metrics OI1

Energy and Water Resources	Energy Resource Storage Companies	Gas Storage	Maximum energy capacity	GJ	Throughput	GJ
Energy and Water Resources	Energy Resource Storage Companies	Liquid Storage	Maximum volume capacity	m3	Throughput	m3
Energy and Water Resources	Energy Resource Storage Companies	Other Storage	Maximum volume capacity	m3	Throughput	m3
Energy and Water Resources	Energy Resource Storage Companies	Floating Storage Units - FSU	Maximum energy capacity	GJ	Energy stored	GJ
Energy and Water Resources	Other		N/A	N/A	Revenue	US\$
Environmental Services			Maximum throughput	Tonnes/year	N/A	N/A
Environmental Services	Waste Treatment		Maximum throughput	Tonnes/year	Waste treated	Tonnes
Environmental Services	Waste Treatment	Anaerobic digestion of bio-waste	Maximum throughput	Tonnes/year	Waste treated	Tonnes
Environmental Services	Waste Treatment	Anaerobic digestion of sewage sludge	Maximum throughput	Tonnes/year	Waste treated	Tonnes
Environmental Services	Waste Treatment	Composting of bio-waste	Maximum throughput	Tonnes/year	Waste treated	Tonnes
Environmental Services	Waste Treatment	Gaseous Waste Treatment	Maximum throughput	m3/hr	Volume treated	m3
Environmental Services	Waste Treatment	Hazardous Waste Treatment	Maximum throughput	Tonnes/year	Waste treated	Tonnes
Environmental Services	Waste Treatment	Landfill gas capture and utilization	Maximum throughput	tCO2e/year	Volume captured	tCO2e
Environmental Services	Waste Treatment	Non-Hazardous Waste Treatment	Maximum throughput	Tonnes/year	Waste treated	Tonnes
Environmental Services	Waste Treatment	Waste-to-Power Generation	Maximum throughput	Tonnes/year	Waste treated	Tonnes
Environmental Services	Waste Treatment	Waste Incineration	Maximum throughput	Tonnes/year	Waste treated	Tonnes
Environmental Services	Waste Treatment	Other	Maximum throughput	Tonnes/year	Waste treated	Tonnes
Environmental Services	Water Supply and Treatment		Maximum throughput	Megaliters/year	Water treated	Megaliters (ML)

Sector Metrics OI1

Environmental Services	Water Supply and Treatment	Industrial Water Treatment	Maximum throughput	Megaliters/year	Water treated	Megaliters (ML)
Environmental Services	Water Supply and Treatment	Potable Water Treatment	Maximum throughput	Megaliters/year	Water treated	Megaliters (ML)
Environmental Services	Water Supply and Treatment	Sea Water Desalination	Maximum throughput	Megaliters/year	Water treated	Megaliters (ML)
Environmental Services	Water Supply and Treatment	Water Supply Dams	Maximum capacity	Megaliters	Water supplied	Megaliters (ML)
Environmental Services	Water Supply and Treatment	Other	Maximum throughput	Megaliters/year	Water treated	Megaliters (ML)
Environmental Services	Wastewater Treatment		Maximum throughput	Megaliters/year	Waste water treated	Megaliters (ML)
Environmental Services	Wastewater Treatment	Industrial Wastewater Treatment and Reuse	Maximum throughput	Megaliters/year	Waste water treated	Megaliters (ML)
Environmental Services	Wastewater Treatment	Residential Wastewater Treatment and Reuse	Maximum throughput	Megaliters/year	Waste water treated	Megaliters (ML)
Environmental Services	Wastewater Treatment	Other	Maximum throughput	Megaliters/year	Waste water treated	Megaliters (ML)
Environmental Services	Environmental Management		N/A	N/A	N/A	N/A
Environmental Services	Environmental Management	Carbon Capture	Maximum throughput	tCO2e/year	Volume captured	tCO2e
Environmental Services	Environmental Management	Coastal and Riverine Locks	Maximum vessel movements	Number/day	Vessels moved	Number
Environmental Services	Environmental Management	Energy Efficiency	Maximum energy savings	MWh/year	Energy savings	MWh
Environmental Services	Environmental Management	Flood Control	Maximum volume capacity	Megaliters	Water contained	Megaliters (ML)
Environmental Services	Environmental Management	Underground permanent geological storage of CO2	Maximum throughput	tCO2e/year	Volume captured	tCO2e
Environmental Services	Environmental Management	Transport of CO2	Maximum throughput	tCO2e/year	Volume captured	tCO2e
Environmental Services	Environmental Management	Other	N/A	N/A	Revenue	US\$
Environmental Services	Other		N/A	N/A	N/A	N/A
Network Utilities	Electricity Distribution Companies	Electric vehicle charging	Power capacity	kW	Energy distributed	MWh

Sector Metrics OI1

Network Utilities			N/A	N/A	N/A	N/A
Network Utilities	Data Distribution Companies		Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Network Utilities	Data Distribution Companies	Data Distribution Network	Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Network Utilities	Data Distribution Companies	Smart meters	Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Network Utilities	Data Distribution Companies	Other	Bandwidth	Megabits/second	Data Transmitted	Terabits (Tb)
Network Utilities	Electricity Distribution Companies		Power capacity	kVA	Energy distributed	MWh
Network Utilities	Electricity Distribution Companies	Electricity Distribution Network	Power capacity	kVA	Energy distributed	MWh
Network Utilities	Electricity Distribution Companies	Other	Power capacity	kVA	Energy distributed	MWh
Network Utilities	Electricity Transmission Companies		Power capacity	kVA	Energy transmitted	MWh
Network Utilities	Electricity Transmission Companies	Electricity Transmission Network	Power capacity	kVA	Energy transmitted	MWh
Network Utilities	Electricity Transmission Companies	Other	Power capacity	kVA	Energy transmitted	MWh
Network Utilities	District Cooling/Heating Companies		Maximum energy capacity	MW	Energy distributed	MWh
Network Utilities	District Cooling/Heating Companies	District Cooling/Heating Network	Maximum energy capacity	MW	Energy distributed	MWh
Network Utilities	District Cooling/Heating Companies	Other	Maximum energy capacity	MW	Energy distributed	MWh
Network Utilities	Water and Sewerage Companies		Maximum throughput	Megaliters/year	Water distributed	Megaliters (ML)
Network Utilities	Water and Sewerage Companies	Water and Sewerage Network	Maximum throughput	Megaliters/year	Water distributed	Megaliters (ML)
Network Utilities	Water and Sewerage Companies	Other	Maximum throughput	Megaliters/year	Water distributed	Megaliters (ML)

Sector Metrics OI1

Network Utilities	Gas Distribution Companies		Maximum energy distributed	GJ/day	Energy distributed	MWh
Network Utilities	Gas Distribution Companies	Gas Distribution Network	Maximum energy distributed	GJ/day	Energy distributed	MWh
Network Utilities	Gas Distribution Companies	Other	Maximum energy distributed	GJ/day	Energy distributed	MWh
Network Utilities	Other		N/A	N/A	N/A	N/A
Power Generation x-Renewables			Installed capacity	MW	Energy generated	MWh
Power Generation x-Renewables	Independent Power Producers		Installed capacity	MW	Energy generated	MWh
Power Generation x-Renewables	Independent Power Producers	Coal-Fired Power Generation	Installed capacity	MW	Energy generated	MWh
Power Generation x-Renewables	Independent Power Producers	Combined Heat and Power Generation	Installed capacity	MW	Energy generated	MWh
Power Generation x-Renewables	Independent Power Producers	Gas-Fired Power Generation	Installed capacity	MW	Energy generated	MWh
Power Generation x-Renewables	Independent Power Producers	Nuclear Power Generation	Installed capacity	MW	Energy generated	MWh
Power Generation x-Renewables	Independent Power Producers	Other Fossil-Fuel-Fired Power Generation	Installed capacity	MW	Energy generated	MWh
Power Generation x-Renewables	Independent Power Producers	Other	N/A	N/A	N/A	N/A
Power Generation x-Renewables	Independent Water and Power Producers		Installed capacity	MW	Energy generated	MWh
Power Generation x-Renewables	Independent Water and Power Producers	Power and Water Production	Installed capacity	MW	Energy generated	MWh
Power Generation x-Renewables	Other		N/A	N/A	Revenue	US\$
Renewable Power			Installed capacity	MW	Energy generated	MWh
Renewable Power	Wind Power Generation		Installed capacity	MW	Energy generated	MWh

Sector Metrics OI1

Renewable Power	Wind Power Generation	On-Shore Wind Power Generation	Installed capacity	MW	Energy generated	MWh
Renewable Power	Wind Power Generation	Off-Shore Wind Power Generation	Installed capacity	MW	Energy generated	MWh
Renewable Power	Wind Power Generation	Other	Installed capacity	MW	Energy generated	MWh
Renewable Power	Solar Power Generation		Installed capacity	MW	Energy generated	MWh
Renewable Power	Solar Power Generation	Photovoltaic Power Generation	Installed capacity	MW	Energy generated	MWh
Renewable Power	Solar Power Generation	Thermal Solar Power	Installed capacity	MW	Energy generated	MWh
Renewable Power	Solar Power Generation	Other	Installed capacity	MW	Energy generated	MWh
Renewable Power	Hydroelectric Power Generation		Installed capacity	MW	Energy generated	MWh
Renewable Power	Hydroelectric Power Generation	Hydroelectric Dam Power Generation	Installed capacity	MW	Energy generated	MWh
Renewable Power	Hydroelectric Power Generation	Hydroelectric Run-of-River Power Generation	Installed capacity	MW	Energy generated	MWh
Renewable Power	Hydroelectric Power Generation	Pumped Hydroelectric storage	Installed capacity	MW	Energy generated	MWh
Renewable Power	Hydroelectric Power Generation	Other	Installed capacity	MW	Energy generated	MWh
Renewable Power	Other Renewable Power Generation		Installed capacity	MW	Energy generated	MWh
Renewable Power	Other Renewable Power Generation	Biomass Power Generation	Installed capacity	MW	Energy generated	MWh
Renewable Power	Other Renewable Power Generation	Geothermal Power Generation	Installed capacity	MW	Energy generated	MWh
Renewable Power	Other Renewable Power Generation	Wave Power Generation	Installed capacity	MW	Energy generated	MWh

Sector Metrics OI1

Renewable Power	Other Renewable Power Generation	Other	Installed capacity	MW	Energy generated	MWh
Renewable Power	Other Renewable Technologies		Maximum energy capacity	MWh	Energy discharged	MWh
Renewable Power	Other Renewable Technologies	Battery Storage	Maximum energy capacity	MWh	Energy discharged	MWh
Renewable Power	Other Renewable Technologies	Off-Shore Transmission (OFTO)	Power capacity	kVA	Energy transmitted	MWh
Renewable Power	Other Renewable Technologies	Other Storage	Maximum energy capacity	MWh	Energy discharged	MWh
Renewable Power	Other Renewable Technologies	Other	Maximum energy capacity	MWh	Energy discharged	MWh
Renewable Power	Other		N/A	N/A	N/A	N/A
Social Infrastructure			N/A	N/A	N/A	N/A
Social Infrastructure	Defence Services		N/A	N/A	N/A	N/A
Social Infrastructure	Defence Services	Barracks and Accommodation	Accommodation capacity	Beds	Bed days available	Bed days
Social Infrastructure	Defence Services	Strategic Transport and Refuelling	N/A	N/A	N/A	N/A
Social Infrastructure	Defence Services	Training Facilities	Maximum capacity	Trainees	Trainee days available	Trainee days
Social Infrastructure	Defence Services	Other	N/A	N/A	Revenue	US\$
Social Infrastructure	Education Services		Maximum student capacity	Number	Average student attendance	Number
Social Infrastructure	Education Services	Schools (Classes and Sports Facilities)	Maximum student capacity	Number	Average student attendance	Number
Social Infrastructure	Education Services	Student Accommodation	Accommodation capacity	Beds	Bed days available	Bed days
Social Infrastructure	Education Services	Universities (Classes, Labs, Administration Buildings)	Maximum student capacity	Number	Average student attendance	Number

Sector Metrics OI1

Social Infrastructure	Education Services	Other	Maximum student capacity	Number	Average student attendance	Number
Social Infrastructure	Government Services		Maximum staff capacity	Number	N/A	N/A
Social Infrastructure	Government Services	Courts of Justice	Floor area	m2	Floor area	m2
Social Infrastructure	Government Services	Government Buildings and Office Accommodation	Maximum staff capacity	Number	Average staff attendance	Number
Social Infrastructure	Government Services	Police Stations and Facilities	Maximum staff capacity	Number	Average staff attendance	Number
Social Infrastructure	Government Services	Prisons	Maximum prisoner capacity	Number	Average prisoner attendance	Number
Social Infrastructure	Government Services	Social Accommodation	Accommodation capacity	Beds	Bed days available	Bed days
Social Infrastructure	Government Services	Street Lighting	Maximum light output	Lumens	Light output	Lumen hours
Social Infrastructure	Government Services	Other	Maximum staff capacity	Number	Average staff attendance	Number
Social Infrastructure	Recreational Facilities		Maximum visitor capacity	Number	Number of visitors	Number
Social Infrastructure	Recreational Facilities	Amusement Parks	Maximum visitor capacity	Number	Number of visitors	Number
Social Infrastructure	Recreational Facilities	Arts, Libraries and Museums	Maximum visitor capacity	Number	Number of visitors	Number
Social Infrastructure	Recreational Facilities	Convention and Exhibition Centers	Maximum visitor capacity	Number	Number of visitors	Number
Social Infrastructure	Recreational Facilities	Public Parks and gardens	Area	Hectares	Area	Hectares
Social Infrastructure	Recreational Facilities	Stadiums and Sports Centers	Maximum visitor capacity	Number	Number of visitors	Number
Social Infrastructure	Recreational Facilities	Other	Maximum visitor capacity	Number	Number of visitors	Number
Social Infrastructure	Health and Social Care Services		Maximum capacity	Beds	Bed days available	Bed days
Social Infrastructure	Health and Social Care Services	Clinics	Consultation rooms	Rooms	Number of customers	Number
Social Infrastructure	Health and Social Care Services	Crematorium	Maximum throughput	Ceremonies/year	Number of ceremonies	Number

Sector Metrics OI1

Social Infrastructure	Health and Social Care Services	Hospitals	Maximum capacity	Beds	Bed days available	Bed days
Social Infrastructure	Health and Social Care Services	Residential and Assisted Living	Maximum resident capacity	Number	Number of residents	Number
Social Infrastructure	Health and Social Care Services	Other	Maximum capacity	Beds	Bed days available	Bed days
Social Infrastructure	Other		N/A	N/A	N/A	N/A
Transport	Port Companies	Landlord port	Maximum annual total tonnage	Tonnes/year	Freight volume moved	Tonnes
Transport			N/A	N/A	N/A	N/A
Transport	Airport Companies		Maximum throughput	Traffic units/day	Traffic Units	Number
Transport	Airport Companies	Airport	Maximum throughput	Traffic units/day	Traffic Units	Number
Transport	Airport Companies	Other	Maximum throughput	Traffic units/day	Traffic Units	Number
Transport	Car Park Companies		Parking spaces	Number	Vehicle hours parked	Vehicle hours
Transport	Car Park Companies	Car Park	Parking spaces	Number	Vehicle hours parked	Vehicle hours
Transport	Car Park Companies	Other	Parking spaces	Number	Vehicle hours parked	Vehicle hours
Transport	Port Companies		Maximum annual total tonnage	Tonnes/year	Freight volume moved	Tonnes
Transport	Port Companies	Bulk Goods Port	Maximum annual total tonnage	Tonnes/year	Freight volume moved	Tonnes
Transport	Port Companies	Container Port	Maximum annual container throughput	TEU/year	Container volume moved	TEU
Transport	Port Companies	Tool Port	Maximum annual total tonnage	Tonnes/year	Freight volume moved	Tonnes
Transport	Port Companies	Other Port	Maximum annual total tonnage	Tonnes/year	Freight volume moved	Tonnes
Transport	Rail Companies		N/A	N/A	Train days available	Train days

Sector Metrics OI1

Transport	Rail Companies	High Speed Rail Lines	Peak capacity	Passengers/hour	Passenger kilometres travelled	Passenger km
Transport	Rail Companies	Heavy Rail Lines	Length of network	km	Train kilometres travelled	train km
Transport	Rail Companies	Freight Rail Rolling Stock	Rolling stock units	number	Train kilometres travelled	train km
Transport	Rail Companies	Passenger Rail Rolling Stock	Rolling stock units	number	Train kilometres travelled	train km
Transport	Rail Companies	Rolling Stock	Rolling stock units	number	Train kilometres travelled	train km
Transport	Rail Companies	Rail Freight	Maximum capacity	Tonnes/day	Freight kilometres travelled	Tonne km
Transport	Rail Companies	Other	N/A	N/A	N/A	N/A
Transport	Road Companies		Peak capacity	Vehicles/hour	Vehicle kilometres travelled	Vehicle km
Transport	Road Companies	Stand-Alone Tunnels	Peak capacity	Vehicles/hour	Vehicle kilometres travelled	Vehicle km
Transport	Road Companies	Stand-Alone Bridges	Peak capacity	Vehicles/hour	Vehicle kilometres travelled	Vehicle km
Transport	Road Companies	Motorways	Peak capacity	Vehicles/hour	Vehicle kilometres travelled	Vehicle km
Transport	Road Companies	Motorway Network	Peak capacity	Vehicles/hour	Vehicle kilometres travelled	Vehicle km
Transport	Road Companies	Dual-Carriage Way Roads	Peak capacity	Vehicles/hour	Vehicle kilometres travelled	Vehicle km
Transport	Road Companies	Other	Peak capacity	Vehicles/hour	Vehicle kilometres travelled	Vehicle km
Transport	Urban Commuter Companies		Peak capacity	Passengers/hour	Passenger kilometres travelled	Passenger km
Transport	Urban Commuter Companies	Urban Light-Rail	Peak capacity	Passengers/hour	Passenger kilometres travelled	Passenger km
Transport	Urban Commuter Companies	Underground Mass Transit	Peak capacity	Passengers/hour	Passenger kilometres travelled	Passenger km

Sector Metrics O11

Transport	Urban Commuter Companies	Overground Mass Transit	Peak capacity	Passengers/hour	Passenger kilometres travelled	Passenger km
Transport	Urban Commuter Companies	Bus Transportation	Peak capacity	Passengers/hour	Passenger kilometres travelled	Passenger km
Transport	Urban Commuter Companies	Other	Peak capacity	Passengers/hour	Passenger kilometres travelled	Passenger km
Transport	Other Transport		Maximum annual total tonnage	Tonnes/year	Freight kilometres travelled	Tonne km
Transport	Other Transport		Floor area	m2	Floor area	m2
Transport	Other Transport	Sea and Coastal Shipping	Maximum annual total tonnage	Tonnes/year	Freight kilometres travelled	Tonne km
Transport	Other Transport	Inland Freight Water Transport	Maximum annual total tonnage	Tonnes/year	Freight kilometres travelled	Tonne km
Transport	Other Transport	Inland passenger water transport	Maximum passengers	Number	Passenger kilometres travelled	Passenger km
Transport	Other Transport	Intermodal	Maximum annual total tonnage	Tonnes/year	Freight volume move	Tonne
Transport	Other Transport	Transport hub/depot	Parking spaces	Number	Vehicle hours parked	Vehicle hours
Transport	Other Transport	Sea and Coastal Freight Water Transport Shipping	Maximum annual total tonnage	Tonnes/year	Freight kilometres travelled	Tonne km
Transport	Other Transport	Sea and Coastal Passenger Water Transport	Maximum passengers	Number	Passenger kilometres travelled	Passenger km
Transport	Other Transport	Warehouse	Floor area	m2	Floor area	m2
Transport	Other Transport	Inland Water Transport	Maximum annual total tonnage	Tonnes/year	Freight kilometres travelled	Tonne km
Transport	Other Transport	Intermodal	Maximum annual total tonnage	Tonnes/year	Freight volume moved	Tonnes
Transport	Other Transport	Other	Maximum annual total tonnage	Tonnes/year	Freight kilometres travelled	Tonne km
Transport	Other		N/A	N/A	N/A	N/A

Appendix 9

Infrastructure Certifications

Select the certification scheme for CA1 :

- Accreditation Standards (Residential Aged Care)
- Airport Carbon Accreditation
- BREEAM New Construction: Infrastructure
- CEEQUAL
- Combined Heat and Power Quality Assurance Programme
- DGNB Certification System
- Enterprise Green Communities
- Fitwel
- Florida Green Building Certification
- Fortified (Commercial)
- Greenroads Rating System
- HQE Certification (Haute Qualité Environnementale)
- Infrastructure Sustainability (IS) Rating Scheme
- LEED (Leadership in Energy and Environmental Design)
- PEER
- SITES
- SuRe Standard
- Sustainability Council of Australia (ISCA)/Operational Pilot
- IS Design & As Built v1.2
- IS Design & As Built v2.0
- IS Operations v1.2
- Sustainable Transport Appraisal Rating (STAR)
- The Investor Confidence Project (ICP)
- US Resiliency Council Rating System (Seismic)
- WELL Building Standard

This list indicates certifications that have been submitted to GRESB as part of participation and accepted for full or partial recognition. Additional schemes may also receive recognition if they meet GRESB's criteria found in [Appendix 10](#).

Appendix 10

2021 GRESB Infrastructure Certification Validation Process

GRESB established the current evaluation process over four years ago, and with the certification market continually evolving, the process is no longer sufficient to maintain the certification database. Therefore, the GRESB team intends to simplify the process and has re-evaluated all existing schemes in the database for the 2021 assessment.

For a certification scheme to be recognized by GRESB, the scheme must first meet the following 5 minimum requirements.

- Infrastructure and sustainability focused, and certified at asset-level.
- The assessment process and criteria documents/information are available and robust.
- The technical development of the scheme is overseen by a governance body.
- The certification is based on a technical documentation review and/or on-site assessment.
- The certification process is conducted by an independent and qualified professional.

Minimum Requirements

1	Infrastructure and sustainability focus, certified at asset-level	The certification must be relevant to infrastructure and sustainability and must be certified at the asset-level wherein the certification is based on attributes/performance of the facility itself. The facility itself must hold the certification.
2	The assessment process and criteria document/information are available and robust	Includes an overview of the certification process, requirements, prerequisites, credits, topics, criteria, etc. The information must be either publicly published (online) or readily available upon request.
3	The technical development of the scheme is overseen by a governance body	A governance body ensures the quality and relevance of the scheme. This entity can be an advisory board, steering committee, accreditation, etc.
4	The certification is based on a technical documentation review and/or on-site assessment	Documentation review & verification and/or on-site assessment ensures compliance with the technical requirements of the scheme.
5	Assessment is conducted by an independent professional/third-party reviewer (assessor/auditor)	The professional/third-party reviewer must be qualified for providing the certification. The qualification can be a scheme-specific training program, qualification requirements, designated credential, etc. Schemes that are solely based on self-assessment are not valid.

Appendix 11

Assurance and Verification Schemes

- AA1000 Assurance Standard
- Airport Carbon Accreditation (ACA) des Airports Council International Europe
- Alberta Specified Gas Emitters Regulation
- ASAE 3000
- Attestation Standards established by the American Institute of Certified Public Accountants/AICPA (AT101)
- Australia National Greenhouse and Energy Regulations (NGER Act)
- California Mandatory Greenhouse Gas Reporting Regulation (NGER Act) (also known as California Air Resources Board regulations)
- Canadian Institute of Chartered Accountants (CICA) Handbook: Assurance Section 5025 Carbon Trust Standard
- Carbon Trust Standard
- Chicago Climate Exchange verification standard
- Climate Registry General Verification Protocol (also known as California Climate Action Registry (CCAR))
- Compagnie Nationale des Commissaires aux Comptes (CNCC)
- Corporate GHG Verification Guidelines from ERT
- DNV Verisustain Protocol/ Verification Protocol for Sustainability Reporting
- Earthcheck Certified
- Enviro-Mark Solutions' CEMARS (Certified Emissions Measurement And Reduction Scheme) standard
- ERM GHG Performance Data Assurance Methodology
- IDW PS 821: IDW Prüfungsstandard: Grundsätze ordnungsmäßiger Prüfung oder prüferischer Durchsicht von Berichten im Bereich der Nachhaltigkeit
- IDW AsS 821: IDW Assurance Standard: Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues
- ISAE 3000
- ISAE 3410, Assurance Engagements on Greenhouse Gas Statements
- ISO 14064-3
- JVETS (Japanese Voluntary Emissions Trading Scheme) Guideline for verification
- Korean GHG and Energy Target Management System
- NMX-SAA-14064-3-IMNC: Instituto Mexicano de Normalización y Certificación A.C
- RevR6 Procedure for assurance of sustainability report from Far, the Swedish auditors professional body
- Saitama Prefecture Target-Setting Emissions Trading Program
- SGS Sustainability Report Assurance
- Spanish Institute of Registered Auditors (ICJCE)
- Standard 3810N Assurance engagements relating to sustainability reports of the Royal Netherlands Institute of Registered Accountants
- State of Israel Ministry of Environmental Protection, VERIFICATION OF GREENHOUSE GAS EMISSIONS AND EMISSIONS REDUCTION IN ISRAEL GUIDANCE DOCUMENT FOR CONDUCTING VERIFICATIONS, Process A
- Swiss Climate CO2 label
- Thai Greenhouse Gas Management Organisation (TGO) Greenhouse Gas (GHG) Verification Protocol
- Tokyo Emissions Trading Scheme
- Verification under the EU Emissions Trading Scheme (EU ETS) Directive and EU ETS related national implementation laws

Appendix 12

GRESB Evidence Cover Page

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Appendix 13

GRESB Infrastructure Partners

WSP



[/www.wsp.com](http://www.wsp.com)

Josh Nothwang, Practice Leader, Sustainability, Energy and Climate Change

josh.nothwang@wsp.com

Boulder, USA

WSP is one of the world's leading engineering professional services consulting firms. They provideservices to transform the built environment and restore the natural environment. Their expertise rangesfrom environmental remediation to urban planning, from engineering iconic buildings to designingsustainable transport networks, and from developing the energy sources of the future to creatinginnovations that reduce environmental impact. WSP has approximately 34,000 employees, includingengineers, technicians, scientists, architects, planners, surveyors, program and construction managementprofessionals, and various sustainability experts, in more than 500 offices across 40 countries worldwide.

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