AccountAbility

AA1000

GUIDANCE ON ASSURING GHG EMISSIONS WITH AA1000AS v3

2024

A MESSAGE FROM OUR CEO

For decades, regulatory bodies have taken measures to limit and prohibit certain industrial pollutants in an effort to protect public health and natural resources. Recently, attention has turned to greenhouse gas (GHG) emissions, with growing concerns about the environmental, social, and economic implications of managing climate risks.

The air up there in the clouds is very pure and fine, bracing and delicious. And why shouldn't it be?..... it is the same the angels breathe.

MARK TWAIN – WRITER AND HUMORIST (1835-1910)

LETTER TO STAKEHOLDERS

Critical stakeholders, including regulators, investors and engaged citizen groups have taken new measures to hold corporations accountable for the GHG emissions they generate through their operations, products, and services:

- Institutional investors have integrated sustainability criteria into their valuation and fund management methodologies;
- ESG ratings and rankings scores have dominated the agendas of Investor Relations teams and C-level and Board discussions;
- The European Sustainability Reporting Standards (ESRS), require companies active in the EU to comply with the disclosure requirements mandated by the EU Corporate Sustainability Reporting Directive (CSRD), which includes data on GHG emissions;
- The widely debated US Securities and Exchange Commission (SEC) climate rule has required public companies to disclose climate-related risks that are likely to impact their business, including material Scope 1 and 2 GHG emissions;
- Under the guidance of the UN Sustainable Stock Exchanges (SSE) Initiative, stock exchanges worldwide are increasingly mandating listed companies to disclose their GHG emissions, aiming to bolster corporate ESG transparency and promote sustainable investment practices.

Consumers, and society as a whole, are experiencing, as a whole, are expecting more (and different) from business. In an environment of low trust and high expectations, there is an increasing scrutiny on corporate actions. This is compounded by a pace of change that can be dizzying, and sometimes confusing. Put simply, we are now in a world where ESG metrics are not only used to report and disclose on a company's health and performance, but, more importantly, to predict it.

He lives most life whoever breathes most air

ELIZABETH BARRETT BROWNING, POET (1806–1861)

AccountAbility's AA1000 Series of Standards are intended to equip business leaders, practitioners, and assurance providers with practical, principles-based, and user-friendly guidance. They provide a broader, holistic, and more inclusive view towards measuring, managing, disclosing, and assuring sustainability performance.

As the management of GHG emissions becomes increasingly recognized as central to business resilience, performance, and impact, expectations around the assurance of GHG disclosures by regulators are beginning to mirror the levels of rigor, robustness, and relevance that have long been standard practice for financial reporting.

We have developed this Guidance on Assuring GHG Emissions with AA1000AS v3 to support assurance providers and practitioners in applying our AA1000 Assurance Standard (AA1000AS v3) to this emerging area of ESG focus: the assurance of GHG emissions reporting and disclosure. It is our hope that this Guidance Document provides assurance providers and practitioners with the clarity needed, including easy-to-use frameworks, simple definitions, and relevant methodologies, to continue delivering the quality of assurance engagements that regulators, investors, and other stakeholders, globally, have come to expect.

Like the AA1000AS v3, this Guidance Document has been designed to be compatible with other widely applied global reporting standards and will remain adaptable as the landscape of sustainability rules, regulations, and assurance requirements continues to evolve.

We remain grateful to our many partners and advisors, who have generously invested their time, insights, and expertise to support the development of this resource. We are excited to share this Guidance Document as a demonstration of AccountAbility's sustained commitment to advancing the global sustainability agenda through responsible business practices, improved performance, and meaningful impact.

SUNIL (SUNNY) A. MISSER

Chief Executive Officer
AccountAbility

ABOUT ACCOUNTABILITY

AccountAbility is a leading global standards and consulting firm that works with businesses, investors, governments, and multilateral organizations to innovate and advance the global sustainability agenda by improving the practices, performance, and impact of organizations. We focus on delivering practical, effective, and enduring results that enable our clients and standards users to succeed. AccountAbility operates globally from offices in New York, London, Riyadh, and Dubai, through a highly qualified team that has received awards and recognition by the Financial Times, Forbes, and Capital Finance International.

AccountAbility's work is based on the AA1000 Series of Standards, which are founded on the Principles of:

- **Inclusivity** – People should have a say in the decisions that impact them.
- **Materiality** – Decision makers should identify and be clear about the sustainability topics that matter.
- **Responsiveness** – Organizations should act transparently on material sustainability topics and their related impacts.
- **Impact** – Organizations should monitor, measure, and be accountable for how their actions affect their broader ecosystems.

THE ACCOUNTABILITY STANDARDS BOARD

The AccountAbility Standards Board approves the standards strategy and oversees the ongoing development of the Standards used by institutions worldwide. The Board is composed to provide broad representation from the public, private, and civic sectors, as well as the global standards community.

The current members of the AccountAbility Standards Board are:

Ms. Amy Springsteel (Chair)	Chief Sustainability Officer, Bloomberg, USA
Mr. Dongsoo Kim	Director, Kim & Chang, South Korea
Dr. Glenn Frommer	Managing Partner, ESG Matters ApS, Denmark
Mr. Murray Sayce	Global Head of Sustainability Solutions, BSI Group, UK
Dr. Natasha M. Matic	Executive Director, Accountability Accelerator, Global Commons Alliance; Deputy CEO and Chief Strategy Officer, King Khalid Foundation (KKF), USA and Saudi Arabia

CONTRIBUTORS TO THE GUIDANCE ON ASSURING GHG EMISSIONS WITH AA1000AS V3

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INTRODUCTION

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1. INTRODUCTION

The AA1000 Assurance Standard (AA1000AS v3) is a leading standard used globally to provide assurance on sustainability-related information and processes, including the evaluation of the nature and extent to which an organization adheres to the **AccountAbility Principles (AA1000AP).**

This guidance document, ***Guidance on Assuring GHG Emissions with AA1000AS v3 for Assurance Providers*** **(GHG Guidance)**, is a new supplement for the Assurance Standard, designed to provide additional guidance for the application of the AA1000AS v3 in the assurance of greenhouse gas (GHG) emissions–related data, information, and processes.

The **AA1000AS v3** and this **GHG Guidance** can complement other internationally recognized assurance standards and frameworks to enhance a user's overall assurance process.

THE NEED FOR ASSURANCE OF GHG DISCLOSURES

The growing severity and public recognition of the risks and impacts posed by climate change to the security and stability of our infrastructure, economies, livelihoods, resources, and health have resulted in mounting pressure from governments, investors, and other stakeholders to hold organizations accountable for the greenhouse gas (GHG) emissions they are responsible for generating.

Measuring, monitoring, and disclosing GHG emissions demonstrates to stakeholders that an organization is responsive to these expectations and invested in providing visibility into its preparedness for physical and other transition risks that may impact business performance.

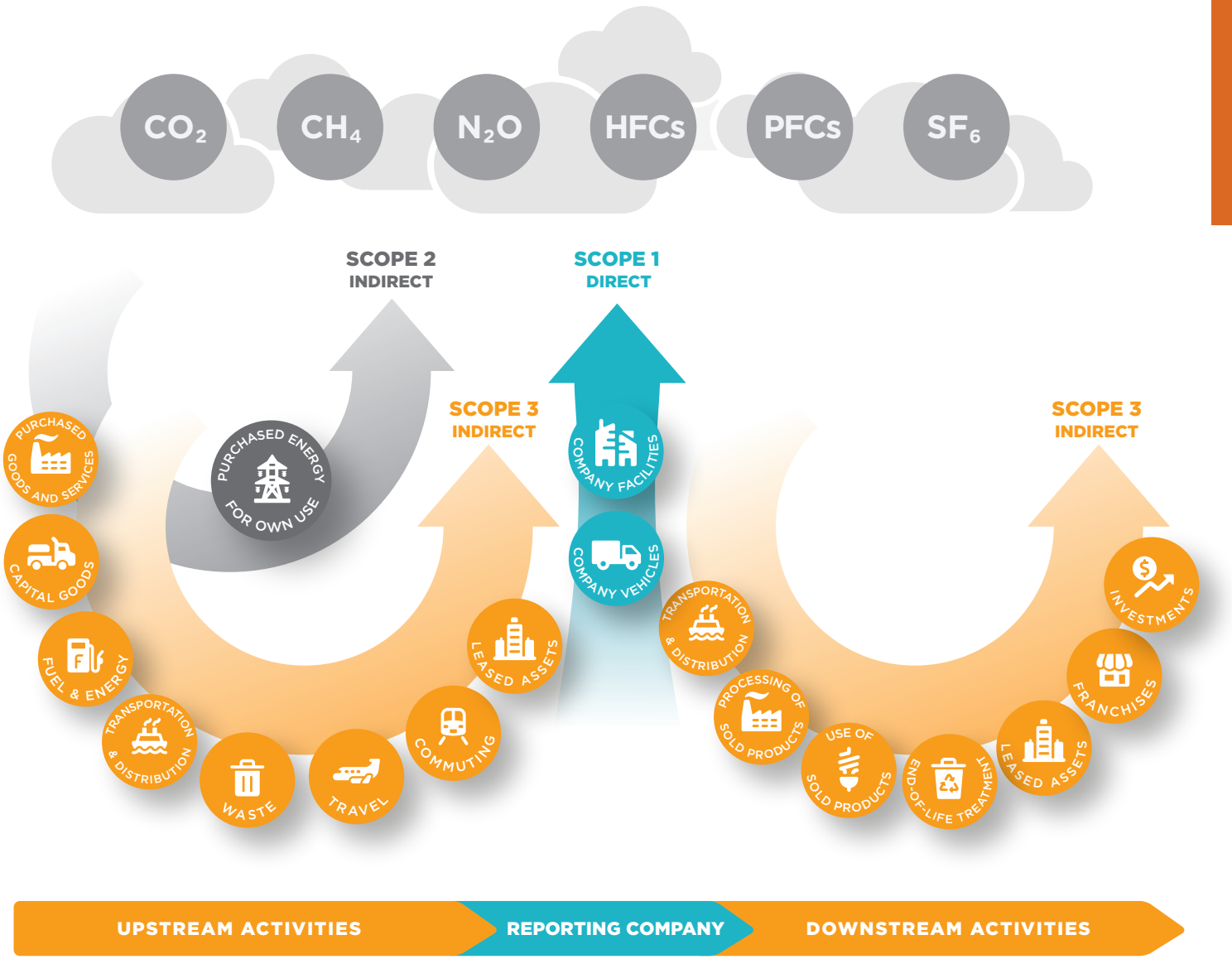
Due to the significant financial investment and risk implications of energy and sustainability initiatives, investors and other financial stakeholders are paying increasingly close attention to GHG emissions and reliable non-financial data to guide further investment decision-making. Various global jurisdictions are implementing new regulatory requirements for GHG reporting and verification based on the reporting frameworks set by groups such as the Carbon Disclosure Project (CDP),[1] the International Sustainability Standard Board (ISSB),[2] and others.

Transparency around emissions is expected across an organization's value chain, including what is known as Scope 1 (direct operational emissions), Scope 2 (indirect emissions resulting from purchased electricity, steam, heating, and cooling) and 3 emissions (indirect upstream and downstream emissions). ***See Figure 1.***

[1] The Carbon Disclosure Project (CDP) is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states, and regions to manage their environmental impacts. **Learn more: cdp.net.**

[2] The International Sustainability Standard Board (ISSB) was established as part of the International Financial Reporting Standards (IFRS) Foundation because of investor, company and international policymaker demand for decision-useful, comparable information, and supporting an efficient reporting landscape. In public interest, the ISSB develops standards that will result in a high-quality, comprehensive global baseline of sustainability disclosures focused on the needs of investors and the financial markets. **Learn more: ifrs.org.**

Figure 1: Scope 1, 2, and 3 Emission Sources



Source: GHG Protocol

GHG data and information, as with other non-financial information, is now being treated with the same rigor and robustness as financial disclosures. Many organizations are expected or required to independently verify their GHG data through third parties. This extra level of assurance builds confidence in the methods used by the organization to calculate GHG emissions, while also standardizing the data in a way that fosters comparability and transparency for carbon accounting and reporting.

KEY TERMS

GREENHOUSE GAS (GHG) EMISSIONS The direct and indirect generation and release of greenhouse gases into the atmosphere through an organization's operations, supply chain, and the development, distribution, use, and disposal of its products and/or services.

SCOPE 1 EMISSIONS GHG emissions that are released from sources that are owned or controlled by an organization, including but not limited to boilers, furnaces, vehicles, and other equipment.

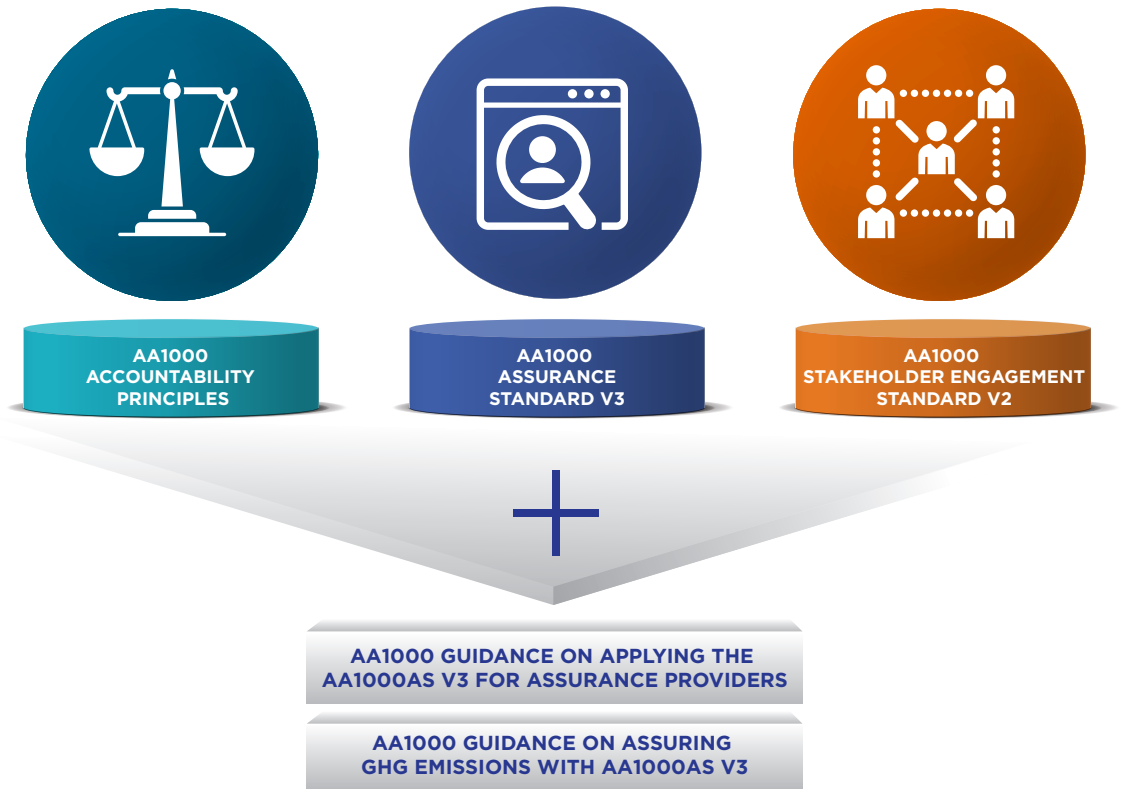
SCOPE 2 EMISSIONS GHG emissions generated from the production of purchased electricity, heat, or steam consumed by a company. These emissions are not generated directly by the reporting organization but are associated with the generation of energy that the organization consumes. .

SCOPE 3 EMISSIONS GHG emissions are generated from sources not owned or controlled by the company. These can include a wide range of sources, such as emissions associated with the production of raw materials, product use, and transportation.

UNDERSTANDING ACCOUNTABILITY'S GHG GUIDANCE

AccountAbility's internationally recognized AA1000AS v3 serves as a leading assurance benchmark. It outlines the methods and processes that external assurance providers should use for assessing and explaining an organization's overall sustainability performance, as well as underlying sustainability information such as GHG emissions.

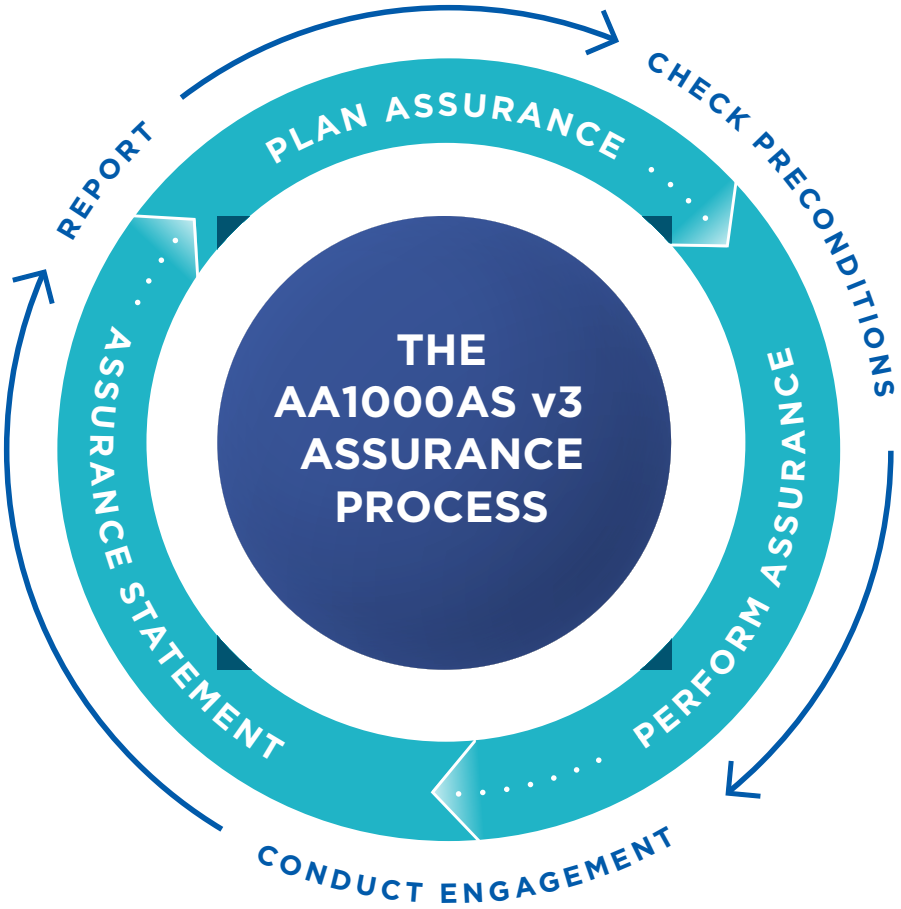
Figure 2: Foundations of Guidance on Assuring GHG Emissions



This document — ***Guidance on Assuring GHG Emissions with AA1000AS v3 for Assurance Providers*** —has been developed to provide AccountAbility's licensed assurance providers with guidance for applying the AA1000AS v3 to assure GHG-related information. This document offers guidance on the specific concerns assurance providers may face when assuring GHG emissions data, with the aim of helping providers to conduct a high-quality engagement from start to finish.[3]

This GHG Guidance Document provides specific assurance guidance following AccountAbility's Principles-based Assurance Process, not for the GHG accounting itself.[4]

Figure 3: The Assurance Cycle



Correspondent to the structure of the Assurance Cycle (Figure 3), this document is divided into three main sections, in alignment with AA1000AS v3:

- 1. **PRECONDITIONS:** Factors to be considered when accepting an AA1000AS v3 engagement
- 2. **ENGAGEMENT:** The proper mode of conduct in accordance with AA1000AS v3
- 3. **ASSURANCE:** Issuing the final Assurance Statement (and optional Report to Management)

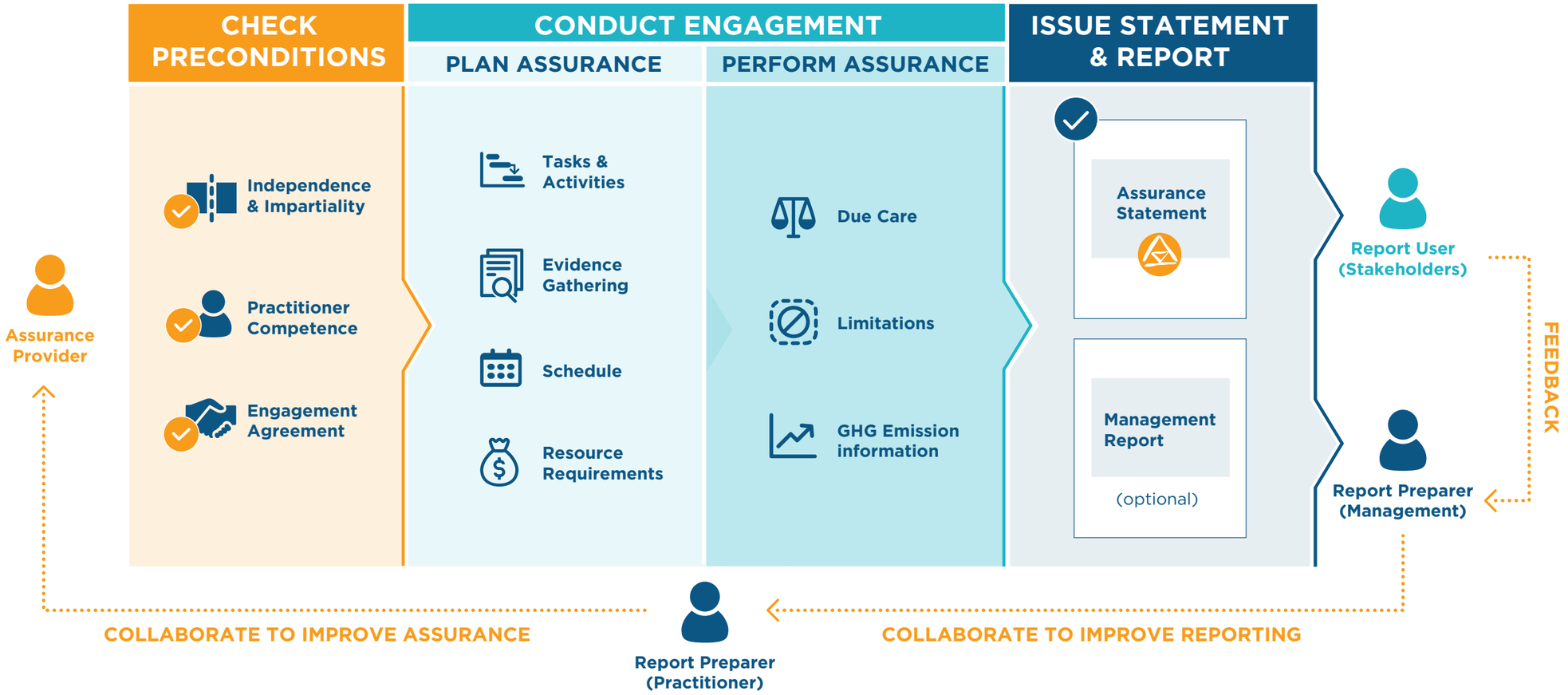
Each section provides practical guidance for conducting an assurance engagement and forming an opinion when the process requires GHG emissions data verification.

The AA1000AS v3 assurance process — including any related GHG emissions assurance — maintains a distinct relationship between report preparers, report users, and the assurance provider. Each engagement concludes with an Assurance Statement and optional Report to Management.

[3] All assurance providers who wish to use AA1000AS v3 commercially are required to complete a licensing agreement with AccountAbility. Each licensed assurance provider is assigned a license number with a specific logo. These can be used by the assurance provider to indicate their acceptance of all licensing requirements. The AA1000AS v3 is administered through an innovative e-licensing system for AccountAbility licensed assurance providers. **Learn more: elicensing.accountability.org.**

[4] More information on GHG accounting can be found in the World Resources Institute and World Business Council for Sustainable Development (WRI WBCSD) GHG Protocol. **Learn more: ghgprotocol.org.**

Figure 4: The AA1000AS v3 Assurance Process



Source: AA1000AS v3)

PRECONDITIONS FOR AN AA1000AS v3 ENGAGEMENT

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2. PRECONDITIONS FOR AN AA1000AS V3 ENGAGEMENT

Organizations and assurance providers must meet several preconditions before any GHG assurance can be conducted under AA1000AS v3.

During the assurance process, the assurance provider will need to assess relevant evidence, such as: documentation; systems and processes; internal controls; data; and interview records. Therefore, prior to the actual engagement, the assurance provider will need a plan for the breadth, depth, and time of the evidence required.

The assurance provider should also ensure (A) that the subject matter of the engagement is both appropriate and relevant to GHG information collection and (B) that there is access to a sufficient level of evidence that can support GHG-related findings and conclusions.

Accordingly, the **Scope** of the engagement, including boundary, type, and level, (and of the Assurance Statement and/or Report to Management) should be clearly defined.

2.1 SCOPE OF THE ENGAGEMENT

The scope of the assurance engagement must include the reporting boundary, which is used by the reporting company for financial reporting, as well as any other material impacts for other stakeholders beyond the financial reporting boundary (e.g., supply chain and ownership structure).

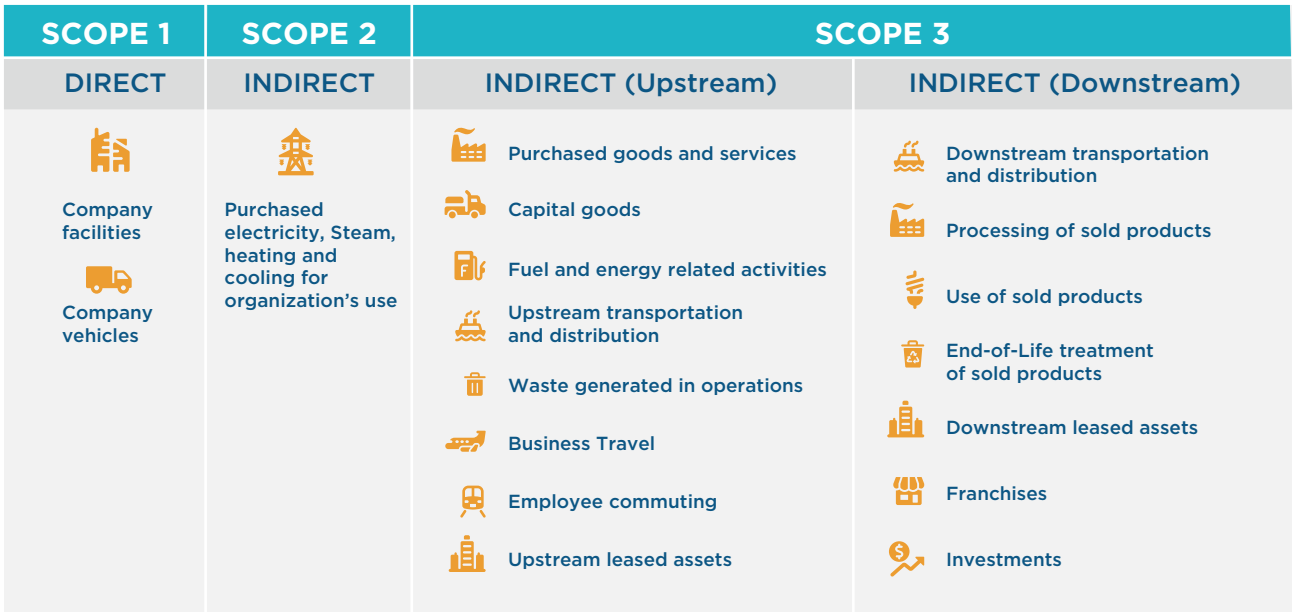
BOUNDARY

For the assurance scope, a boundary includes an organization's business sites and real assets with GHG emissions. Most emissions reporting requirements obligate organizations to report emissions from activities within their facilities (Scope 1 and Scope 2), including organizational boundaries, or those sites directly under the organization's control, and operational boundaries, which cover emissions generated directly or indirectly from business activities or processes.

For Scope 3 emissions, the assurance provider needs to assess (A) the categories included in the report and (B) the suitability of criteria for including GHG information for emissions not directly under an organization's control (e.g., joint ventures, suppliers, contractors, products).[5]

[5] See Figure 5 for the full description of Scopes 1 and 2. For additional information, please refer to the GHG Protocol.

Figure 5: Definitions of Scope 1, 2, and 3 GHG Emissions



LEVEL

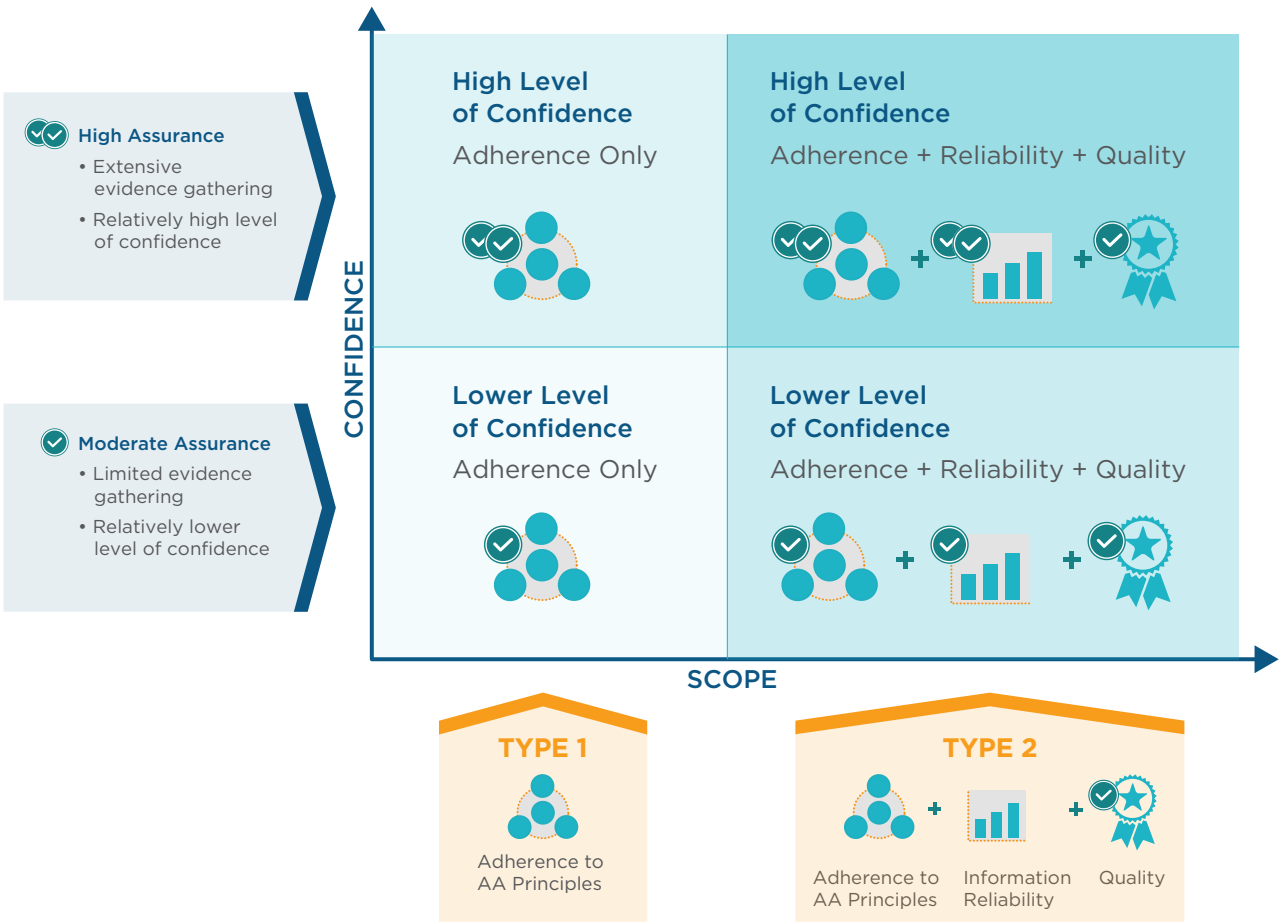
To determine what information and evidence should be included in the Scope, the assurance provider needs to determine the level of assurance—as either "High" or "Moderate" (see Figure 6).

TYPE

As shown in Figure 6, the assurance provider will also need to determine the type of assurance, as either Type 1 or Type 2. Type 1 occurs when the assurance provider assures adherence only to the AccountAbility Principles.

Type 2 is more expansive and rigorous in scope, requiring adherence to AccountAbility Principles as well as checks on both the quality and reliability of the information provided.

Figure 6: Types of AA1000AS v3 Engagement



Source: AA1000AS v3

2.2 AGREEING ON CRITERIA

The assurance provider should reach an agreement with the reporting organization on suitable criteria for sustainability performance information subject to Type 2 assurance. Preferred options for facilitating this agreement include generally accepted and publicly available GHG criteria (e.g., GHG Accounting and Reporting Principles provided by the GHG Protocol (WBCSD/WRI, 2015)), which will ensure comparability and relevance of GHG emissions data.

2.3 USE OF SUBCONTRACTORS OR EXPERTS ON ENVIRONMENTAL REPORTING

The criteria for GHG reporting assurance engagements may require specialized knowledge and skills for collecting and assessing technical evidence. In these situations, the assurance provider may decide to rely on competent subcontractors or external experts who have the required knowledge and skills related to environmental and emissions reporting. To ensure that there is no conflict of interest between an external expert and the reporting organization (and/or its significant stakeholders), the assurance provider should determine the expert's independence and impartiality prior to the beginning of the engagement.

CONDUCTING AN ENGAGEMENT

3

3. CONDUCTING AN ENGAGEMENT

Conducting an AA1000AS v3 assurance engagement with GHG information involves collecting and assessing evidence on the agreed-upon subject matter and criteria outlined in the engagement plan. Assurance providers must have a clear understanding of the subject matter, criteria, and evidence required, as these will ultimately be the basis for the provider's findings and conclusions.

Where relevant, accepted sampling protocols that are specific to GHG information; Scopes 1, 2 and 3; and internal procedures should be followed to determine what evidence is acceptable and sufficient. If the AA1000AS v3 is applied alongside other internationally recognized assurance frameworks in the same engagement, the assurance provider must ensure that any such frameworks have the appropriate methodology and rigor to be effectively complementary.

3.1 GHG INFORMATION FOR DIFFERENT TYPES OF ASSURANCE

3.1.1 TYPE 1 ASSURANCE

For a Type 1 assurance engagement, the assurance provider shall review and assess the extent of the organization's adherence to the AccountAbility Principles (Inclusivity, Materiality, Responsiveness, Impact) and provide relevant findings and conclusions. One of the goals of the Principles is to provide organizations with guidance for becoming and remaining accountable for their impact on the broader ecosystem. For engagements specific to GHG emissions-related disclosures and assurance, Type 1 assurance should correspond to the following principles:

INCLUSIVITY

Adherence to the principle of **Inclusivity** means that an organization actively identifies and engages with its stakeholders who are impacted by that organization. For GHG emissions, and adherence to inclusivity, these stakeholders can include:

- **Internal and external participants** involved in the organization's GHG-emitting activities.
- **Members of neighboring communities** impacted by the environmental and social changes derived from the consequences of the organization's GHG emissions.

STEPS FOR TESTING INCLUSIVITY

- **A list of the organization's GHG-emitting activities** to be included in the disclosure and the internal and external stakeholders involved in GHG accounting.
- **A list of communities neighboring the organization** who may be significantly impacted by the consequences of GHG emissions, with information on the actual and potential impact of those emissions.
- **Information on communications channels** for engaging with the internal and external stakeholders, including the methodology, frequency, and responsibility, with evidence of conducting the engagement.

MATERIALITY

In organizations that adhere to the principle of **Materiality**, decision makers need to identify and prioritize the most relevant sustainability topics, accounting for the effect each topic has on the organization and its stakeholders.

To demonstrate adherence to Materiality when disclosing its GHG emissions, the organization must provide the following information:

- Inventories of GHG-emitting activities and the external/internal stakeholders of those activities included in the disclosure.
- Associated amount of GHG emissions emitted by the activities of the organization, and the level of direct and potential impact of GHG emissions on the organization's business and stakeholders.
- A threshold for the amount of GHG emissions and the level of impact applied for defining material GHG-emitting activities and Scope 3 Emissions categories, with rationale for setting the threshold.

STEPS FOR TESTING MATERIALITY

- **Calculations of GHGs emitted** by the activities that are included in the disclosure.
- **Review and validate the selection and prioritization of material GHG emissions** included in the disclosure with the internal/external subject matter experts who have sufficient understanding of the organization's context regarding the GHG emissions.
- **Relevant Scope 3 categories** that the organization is choosing to disclose.

Additionally, in defining which subcategory of the Scope 3 GHG emissions are material, the reporting organization should consider additional context, such as:

- the organization's industry;
- emissions relevant to the company's operations;
- the type of leasing contract used for the organization's operating facilities;
- accessibility to information necessary for calculating emissions;
- the boundary of the organization's impact on activities of its broader supply chain;
- and other factors.

The assurance provider's role is to ensure that the reporting organization is reporting on relevant and material Scope 3 categories. Many resources could be used for this process, including the organization's industry, size, stakeholders, outsourcing activities, and peer-reported categories. It may also be useful for the assurance provider to review the value chain of the organization and map its activities to Scope 3 categories.

IMPORTANT: NOTE FOR ADHERENCE TO MATERIALITY

If the assurance provider cannot collect and verify the evidence of the organization's reasonable efforts to detail most of its material GHG-emitting activities in its disclosure, its adherence to the principle of Materiality cannot be assured without proper redress. Examples of acceptable redress efforts may include:

- **Contracting with external entities,** such as lessors, suppliers, or service providers, to provide information required for GHG calculations.
- **Applying international and/or regional standard data,** or data from comparable entities, as a proxy for inaccessible information.
- **Contracting with professional agencies of reasonable expertise,** such as consultancies or academic institutions, to research or develop estimation methodologies for inaccessible information.

RESPONSIVENESS

The principle of **Responsiveness** concerns timeliness and relevance of the actions that an organization takes to enhance performance, resolve concerns, or mitigate risks regarding its impact on internal and external stakeholders.

For GHG disclosures, the organization's Responsiveness can be implied by collecting information on any of the following (or more):

- How frequently the organization reviews its GHG emissions inventory and updates its materiality analysis.
- How frequently the organization reviews and updates its approach to calculating material GHG emissions (as technology is evolving frequently).
- How frequently the organization engages and communicates with internal and external stakeholders who contribute to, or are impacted by, its material GHG emissions.

STEPS FOR TESTING RESPONSIVENESS

- **The latest review** of the organization's GHG emissions inventory, with the summary or record of the changes made to the inventory as a result of the review.
- **Any resulting actions taken on the basis of the materiality analysis** related to the organization's GHG-emitting activities.
- **The report of the latest engagement** with stakeholders of material GHG-emitting activities, including the topic or agenda of that communication.

IMPACT

The principle of **Impact** refers to the consequences of the organization's behavior, performance, and outcomes on itself or its stakeholders.

The Impact of the organization's previous decisions—positive or negative; intended or accidental; and short- or long-term—forms the foundation of how the organization understands, plans, and executes its subsequent decisions. In disclosing its GHG emissions, the organization can demonstrate its adherence to the principle of Impact by providing information on how it is monitoring and measuring the impact of its GHG-emitting activities.

The assurance provider can test whether the organization understands its Impact by collecting evidence and assuring whether that information supports the organization's statement regarding its impact management. Examples of evidence might include, but are not limited to:

STEPS FOR TESTING IMPACT

- **The specified targets, goals, and milestones** of GHG emissions.
- **Approaches or actions to achieve targets** on GHG emissions, with mechanisms to test the effectiveness of such measures.
- **Metrics or other indicators to measure and track** the performance of the organization's GHG emissions.
- **Documented evidence of employee or contractor roles and responsibilities** in measuring, reviewing, and approving the organization's performance metrics.

3.1.2 TYPE 2 ASSURANCE

For a Type 2 assurance engagement, the assurance provider needs to identify evidence relevant to the performance claim in the disclosure for the purpose of assessing the reliability and quality of the specified GHG information. Usable evidence could demonstrate the organization's systems, processes, and performance; its data-gathering practices, and/or the accuracy of its calculations. The assurance provider must ensure that all collected evidence is balanced and comprehensive.

As a result, the assessment should cover the qualitative and quantitative assertions made by the organization about its sustainability performance, as well as its underlying systems, processes, information, and data. This means that the assurance provider needs to collate evidence from the organization (e.g., documents, files, software, databases.), and consider the levels within the organization from where the evidence originates (e.g., practitioners who prepare the information, mid-level managers who review the prepared information, and/or final approvers who are responsible for published information).

3.2 GHG INFORMATION FOR DIFFERENT LEVELS OF ASSURANCE

According to the AA1000AS v3, an assurance engagement can be conducted at either a ***High*** or ***Moderate*** level.

The assurance provider needs to obtain sufficient and appropriate evidence upon which to base conclusions. Sufficiency is the measure of the quantity of evidence, while appropriateness is the measure of the quality of evidence (relevance and reliability). This evidence is obtained as part of the iterative and systematic engagement process.

IMPORTANT: LIMITS ON HIGH OR MODERATE ASSURANCE

If agreed upon by the assurance provider and the reporting organization, a High level of assurance may be provided for **Scope 1 and 2** information, while a Moderate level of assurance may be provided for other subject matter in the same Assurance Statement. This differentiation should be noted in the Assurance Statement.

Scope 3 emissions, which take the emissions derived from business activities of third-party organizations into account, are often calculated **based on secondary or proxy information,** such as national or industry average data, and **can be provided only a Moderate level of assurance.**

Figure 7: Conducting Informational Tests

To ensure the completeness of the assessment, and the reliability and quality of GHG emissions information, the assurance provider should conduct a thorough set of informational tests, such as:

RELIABILITY AND QUALITY

- Has the information used to calculate GHG emissions (e.g., types and amount of energy consumed, number of cycles of activities that consume energy, emission factors for energies consumed, etc.) been created, archived, analyzed, and disclosed in a demonstrably reliable way?
- For Scope 3 GHG emissions, does the disclosure define and detail all material categories of emissions, and how these categories were identified? And if not, can the organization explain (in the disclosure or other publicly accessible channel) its reason for omitting these categories, and potential plans to include such information in the future?
- Can the original source of information be identified and archived?
- Are the assumptions applied to the reporting organization's GHG emission calculations (e.g., estimations on the number of cycles of activities that emit GHGs, emissions factors applied, etc.) reviewed by employees or management?
- Have the information owners confirmed that the accuracy of the reported data is within acceptable margins of error?

ACCURACY

- Are the data measurement techniques (e.g., directly extracted from the meters, extracted, or estimated based on the bills/receipts, estimated using national/industry average data, etc.) and bases (e.g., emission factors, external data used.) for calculations adequately described, and can they be replicated with similar results?
- Is the margin of error for quantitative data small enough that it will not substantially influence the ability of stakeholders to reach appropriate and informed conclusions on performance? Is it possible that the margin of error could be due to a rounding error or conversion between units?
- Is there any indication of which datasets have been estimated, and the underlying assumptions and techniques used to produce these estimates? Where can this information be found?
- Are qualitative information and justifications valid based on evidence provided? (i.e., claims of carbon offsetting impact should not guide the information takers to consider that the reporting organization is removing the claimed amount of carbon in the air)

COMPARABILITY

- Is the inventory of GHG emitting activities, the boundary of operations, and the basis of calculations constant and appropriately updated on a periodic basis?
- Can the inventory of GHG emitting activities, the boundary of operations, and the basis of calculations be compared to industry peers and/or other comparable organizations?
- Can the organization's GHG emissions performance (e.g., GHG intensity per unit of major business activity, per unit of sales or revenue, per employee headcount, etc.) be compared with appropriate benchmarks?
- Can any significant variations in the boundary, scope, length of reporting period, or information covered in the report, be identified and explained? Also, does the reporting organization restate the previously disclosed GHG emissions information based on the changed inventory, boundary, or calculation methodology?
- Are generally accepted standards and protocols (e.g., GHG Protocol) applied for compiling, measuring, and presenting the information used?

3.2.1 MODERATE ASSURANCE

The assurance provider achieves **Moderate** assurance when they can only obtain limited evidence supporting their statement. Moderate assurance provides users with a lower level of confidence than a High assurance level when disclosing GHG information and applying the AccountAbility Principles. Analytical procedures appropriate for Moderate assurance involve basic sampling that supports the plausibility of the information.

A Moderate level of assurance is required when the subject matter relates to "forward-looking" information. For example, Moderate assurance should be utilized if the engagement scope includes assurance on the validity of the organization's future emissions reduction targets, or the scenario-based analysis on the resilience of its strategy. While forward-looking information is useful in estimating GHG emissions, there is no guarantee of future performance, risks, and uncertainties that could affect those estimations.

When assuring the forward-looking information, the assurance provider should assess what methodologies (e.g., scenario analysis, risk analysis, future forecasting.) have been applied by the organization in developing its position, targets, metrics, and subsequent narrative.

3.2.2 HIGH ASSURANCE

A **High** level of assurance can be achieved where sufficient evidence has been obtained (based on suitable criteria) to support the statement that the percent risk of an incorrect conclusion is near zero.

Therefore, to provide a High level of assurance, the assurance provider should carry out accepted sampling and testing protocols on internal procedures and processes, systems, controls, and available performance information to the level that the percent risk of an incorrect conclusion is near zero.

The control environment and relevant controls at the organization (determined based on professional judgment) should be assessed using appropriate testing procedures to ensure the relevance of design and level of implementation. High-level assurance also involves interviews with the individuals responsible for controls within the reporting organization, which will support corroboration.

Analytical procedures conducted to establish a High level of assurance should be based on quantities or ratios in sampling that also support the risk of the conclusion being near zero. The specific analytical procedures would depend on the subject matter and established criteria. Accepted protocols should be applied depending on whether the data and information available is qualitative, quantitative, or monetized.

A **High** level of assurance should be able to provide expected readers of the disclosure with a high degree of certainty that the data is reliable and of good quality. As such, a High level of assurance should not be provided on Scope 3 GHG emissions information until the appropriate calculation methodologies are developed, as these will give the reporting organization more control and introduce additional ways to measure emissions (which are currently not available).

IMPORTANT:
By its nature, a **High** level of assurance cannot be provided for all GHG emissions-related information disclosed by an organization. This is due to various factors, especially those related to collecting and measuring Scope 3 emissions, where an organization cannot be fully certain that all GHG emissions have been accurately assessed.

For example, Scope 3 GHG emissions, which take the emissions derived from business activities of the third-party entities that are part of the reporting organization's supply chain, are often calculated based on secondary or proxy information, such as national average or industry average data. Because this process relies on proxy information, it cannot be subject to the same High level of review.

ISSUING AN AA1000AS v3 ASSURANCE STATEMENT AND OPTIONAL REPORT TO MANAGEMENT

4

4. ISSUING AN AA1000AS V3 ASSURANCE STATEMENT AND OPTIONAL REPORT TO MANAGEMENT

The AA1000AS v3 does not prescribe the language to be used in an Assurance Statement. However, to promote a level of consistency and comparability, the assurance provider should consider the audience and develop a statement that is clear, concise, and meaningful (See Figure 8).

An AccountAbility-licensed assurance provider is entitled to use the AA1000 v3 Assurance Statement Marking logo with unique number and letter combination for assurance statements adhering to the AA1000AS v3 and the terms and conditions set out in its license agreement with AccountAbility.

TITLE

In many cases, the title of the assurance statement follows the tone and manner of the rest of the corporate disclosure prepared by the reporting organization. Therefore, there are no strict requirements for the title.

INTENDED USERS

The assurance statements should clearly identify the expected users of the statement. Typically, these users are the stakeholders of the reporting organization.

Additionally, when specifying the intended users, assurance statements should introduce the name of the organization requiring assurance, if any and the subject matter being assured for the intended users' interest.

RESPONSIBILITIES

The assurance statements should clarify how the responsibilities of the reporting organization and assurance provider are divided. In general, reporting organizations are solely responsible for preparing the content of the disclosure, and assurance providers are responsible for providing their independent opinions of that disclosure.

Figure 8: A Sample Assurance Statement

INDEPENDENT ASSURANCE STATEMENT

3.1.1 To:_____

3.1.4 **Scope**

3.1.3 This is an illustrative assurance statement example. All organization-specific text has been redacted.Epe pro tem invellitas quiatecero tet fugitas is es iurepudaerum quos e minimendent fugiat exerem si ut aciuris eos qui dolum, volore dollectur, iust aut omni quam faciur, vid que quid quodi

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3.1.5 **Criteria**

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- Um quae restrum fugiaec tintio ipsandunt mincimpel et ut aborestem acias mo cullam et maioria nos exerovit, si

3.1.7 **Methodology**

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3.1.9 **Independence and competencies**

This is an illustrative assurance statement example. All organization-specific text has been redacted. Volore dollectur, iust aut omni quam faciur, vid que quid quodi

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- Harchil molo berum aliquis res prati int faccaborum earunt.
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3.1.8 **Limitations**

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3.1.12 **Conclusion**

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3.1.14 **Recommendations**

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Name of Assurance Provider 3.1.10

Date and Place 3.1.11

AA1000 Licensed Report 000-XXX / V3-XXXX 3.1.9

ASSURANCE INFORMATION

3.1.1 Intended users of the Assurance Statement

3.1.2 Responsibilities of the reporting organization and assurance provider

3.1.3 Reference to the AA1000AS v3 and other assurance standard(s), if used

3.1.4 Description of the scope, subject matter, the type, and level of assurance provided

3.1.5 Reference to criteria used

3.1.6 Description and sources of disclosures covered

3.1.7 Description of methodology

3.1.8 Limitations and approach used to mitigate limitations

3.1.9 Notes on the independence and competencies of the assurance provider

3.1.10 Name of the assurance provider

3.1.11 Date and place

PERFORMANCE RELATED INFORMATION

3.1.12 Findings and conclusions concerning adherence to the AA1000 AccountAbility Principles of *Inclusivity, Materiality, Responsiveness, and Impact* (in all instances)

3.1.13 For Type 2 assurance, findings and conclusions concerning the reliability and quality of specified performance information

3.1.14 Any Recommendations to address deficiencies, if included

INDEPENDENCE AND COMPETENCIES

The statement should briefly explain whether the assurance provider is an independent third party, how the assurance provider maintained its independence while planning, performing, and concluding the assurance process–including how the assurance provider prevented any conflict of interest during the engagement.

The assurance statement should identify AccountAbility CSAP-qualified individuals and their relevant levels. The statement should also detail the competence and experience of the assurance practitioners, including their relevant qualifications in GHG and related sustainability subject matter.

REFERENCE TO THE STANDARD(S)

When the assurance engagement has been conducted based on AA1000AS v3, this must be specified in the statement. Other assurance standards utilized by the provider should also be listed.

SCOPE

The assurance statements must specify the scope of the engagement, which includes the Type and Level of assurance provided (See Section 3.1 and 3.2 of this GHG Guidance).

Additionally, the description of the scope of the engagement should list the reporting boundary and subject matter reviewed by the assurance provider to test whether the agreed upon and identified criteria are met.

If more than one disclosure is included in a single assurance engagement, the assurance provider should clearly indicate the disclosures covered by the assurance statement.

CRITERIA

When providing information about the completed assurance engagement, the assurance provider should state which criteria have been applied to assure the subject matter listed in the statement.

IMPORTANT: NOTE ON TYPE 1 AND 2 ADHERENCE

In the subject matter of Type 1 assurances, adherence to the AccountAbility Principles must be included. In the subject matter of Type 2 assurances, in addition to including adherence to the AccountAbility Principles, the Reliability and Accuracy of selected performance information must also be included as a subject matter.

The criteria for assuring adherence to the principles of Inclusivity, Materiality, Responsiveness, and Impact are outlined in the AccountAbility Principles (See Section 3.1.1), which also establish the criteria for Reliability and Accuracy of sustainability performance information. Criteria may also be referenced from other standards, guidelines, or protocols that are identified and agreed upon between the assurance provider and reporting organizations. In any case, GHG-specific standards, guidelines, or protocols applied should be listed.

METHODOLOGY

The assurance statement should provide a summary of which approaches, activities, or tools have been applied to collect, review, and examine the information substantiating the statements made in the report.

If any methodologies from GHG-specific standards, guidelines, or protocols are applied, these should be listed.

LIMITATIONS

Assurance providers should describe any limitations they have encountered during engagement, whether those are regarding coverage of the reported topics or collecting the evidence and information. If assurance providers have applied any approaches to mitigate these limitations, those should be listed in the assurance statement.

CONCLUSIONS

For "Adherence to AccountAbility Principles," assurance providers should conclude whether the evidence and information provided by the reporting organization demonstrates that the report is prepared based on the principles of Inclusivity, Responsiveness, Materiality, and Impact.

For "Performance-Related Information," assurance conclusions should be on the quality and reliability of the information based on the level of assurance provided.

General templates for Moderate and High-level assurance statements relating to GHG emissions, which can be adapted to individual organizations, are as follows:

- **Moderate:** The assurance provider is satisfied that a Moderate level of assurance has been achieved for the information reported, as limited evidence has been obtained to support the statement.
- **High:** The assurance provider is satisfied that a High level of assurance has been achieved, as sufficient evidence has been obtained to determine that the risk of error is near zero.

RECOMMENDATIONS

In the assurance statement, assurance providers can include a summary of recommendations to help the reporting organization address deficiencies or improve reporting procedures that were flagged during the assurance engagement. This helps the reporting organization to effectively respond to the expected changes in future stakeholder demand. If the assurance provider is providing a management report as a deliverable of its engagement, these recommendations need to be aligned with the contents of that report.

IMPORTANT: NOTE ON EXCLUSIONS FOR HIGH-LEVEL ASSURANCE

Findings and Conclusions concerning the AccountAbility Principles at a High level of assurance should not include:

- **Subject matter related to "forward-looking" information.** For example, if the engagement scope includes assurance on the validity of the organization's future emissions reduction targets) or the scenario-based analysis on the resilience of its strategy (recommended by TCFD), only Moderate assurance can be provided.
- **Approaches - GHG emissions-related information from the reporting organization that cannot be assessed at a High level of assurance.** For example, Scope 3 emissions, which cannot be guaranteed to have been measured accurately.

ANNEXES

5

A. DEFINITIONS

ASSESSMENT
A systematic process of objective judgment.

ASSURANCE
The methods and processes employed by an assurer to assess an organization's disclosures about its performance, as well as underlying information, processes, and systems, using suitable criteria and standards to increase credibility. Assurance includes the communication of the results of the assurance process in an Assurance Statement.

ASSURANCE ENGAGEMENT
An engagement in which an assurance provider assesses and expresses a conclusion on an organization's disclosure about its performance and underlying processes, systems, and controls using suitable criteria to enhance the credibility and legitimacy of the information for the intended audience.

ASSURANCE PRACTITIONER
An individual who is qualified to provide assurance services.

ASSURANCE PROVIDER
An independent organization that assesses and expresses a conclusion on a reporting organization's disclosure about its performance and underlying processes, systems, and controls using suitable criteria.

EVALUATION
The process of measuring something for the purpose of determining its value.

FORWARD-LOOKING INFORMATION
Information that is progressive and future-oriented, and projects or positions targets, expectations, or possibilities.

GREENHOUSE GASES (GHGS)
Greenhouse gases (GHGs) are gases, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and water vapor (H_2O), that capture heat, resulting in a "greenhouse" or warming effect in the Earth's atmosphere.

GREENHOUSE GAS (GHG) EMISSIONS
The direct and indirect generation and release of greenhouse gases into the atmosphere through an organization's operations, supply chain, and the development, distribution, use, and disposal of its products and/or services.

MATERIALITY (IN TERMS OF GHG EMISSIONS)
The level of significance of GHG emissions sources or data to an organization's industry and products/services provided, and thus the determining factor as to whether that information should be measured, monitored, reported, and verified.

REPORTING BOUNDARY
The established limit of reported information related to organizational stakeholders and impacts.

REPORTING ORGANIZATION
An organization that is responsible for the preparation and publication of disclosures on sustainability topics and that engages an assurance provider to undertake an assurance engagement relating to the organization's sustainability reporting.

SCOPE 1 EMISSIONS
GHG emissions that are released from sources that are owned or controlled by an organization, including but not limited to boilers, furnaces, vehicles, and other equipment.

SCOPE 2 EMISSIONS
GHG emissions generated from the production of purchased electricity, heat, or steam consumed by a company. These emissions are not generated directly by the reporting organization but are associated with the generation of energy that the organization consumes.

SCOPE 3 EMISSIONS
GHG emissions generated from sources not owned or controlled by the company. These can include a wide range of sources, such as emissions associated with the production of raw materials, product use, and transportation.

SPECIFIED PERFORMANCE INFORMATION
Performance statements or information about sustainability topics or processes that can be included in the scope of a Type 2 assurance engagement.

STAKEHOLDERS
Groups or individuals who affect and/or could be affected by an organization's activities, products or services, and associated performance. This does not include everyone who may have knowledge of or views about an organization—it only concerns those who can be materially affected by the organization's actions.

STAKEHOLDER ENGAGEMENT
The process used by an organization to engage relevant stakeholders for the purpose of achieving agreed outcomes.

SUSTAINABILITY ASSURANCE
Assurance of disclosures on sustainability performance as well as underlying processes, systems, and controls using suitable criteria and standards.

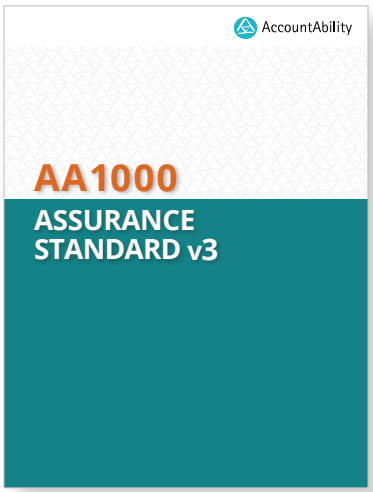
SUSTAINABILITY ASSURANCE ENGAGEMENT
An assurance engagement in relation to an organization's disclosure on sustainability performance.

SUSTAINABLE DEVELOPMENT
Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

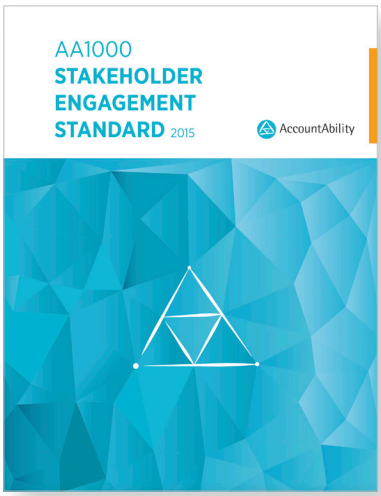
B. THE AA1000 SERIES OF STANDARDS

The AA1000 Series of Standards consists of one set of Guiding Principles and two Standards

AA1000 AccountAbility Principles (2018)



AA1000 Assurance Standard v3 (2020)



AA1000 Stakeholder Engagement Standard v3 (2015)

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