

Application of the AA1000 Assurance standard for the verification of green house gas emissions and related disclosures

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23 September 2025



Agenda

This presentation will consider the application of the AA1000 Assurance standard for verification of green house gas emissions and related disclosures.

1. Introductions, Vysus Group and our legacy
2. Requirement for reporting and verification of GHG emissions
3. Reporting standards
4. Verification and assurance standards
5. Application of AA1000 standard with guidance for assuring GHG Emissions:
 - General requirements
 - Assurance levels
 - Method
 - Information requirements
 - Assurance statement
 - Registration with AccountAbility Organisation
6. Example applications and use cases



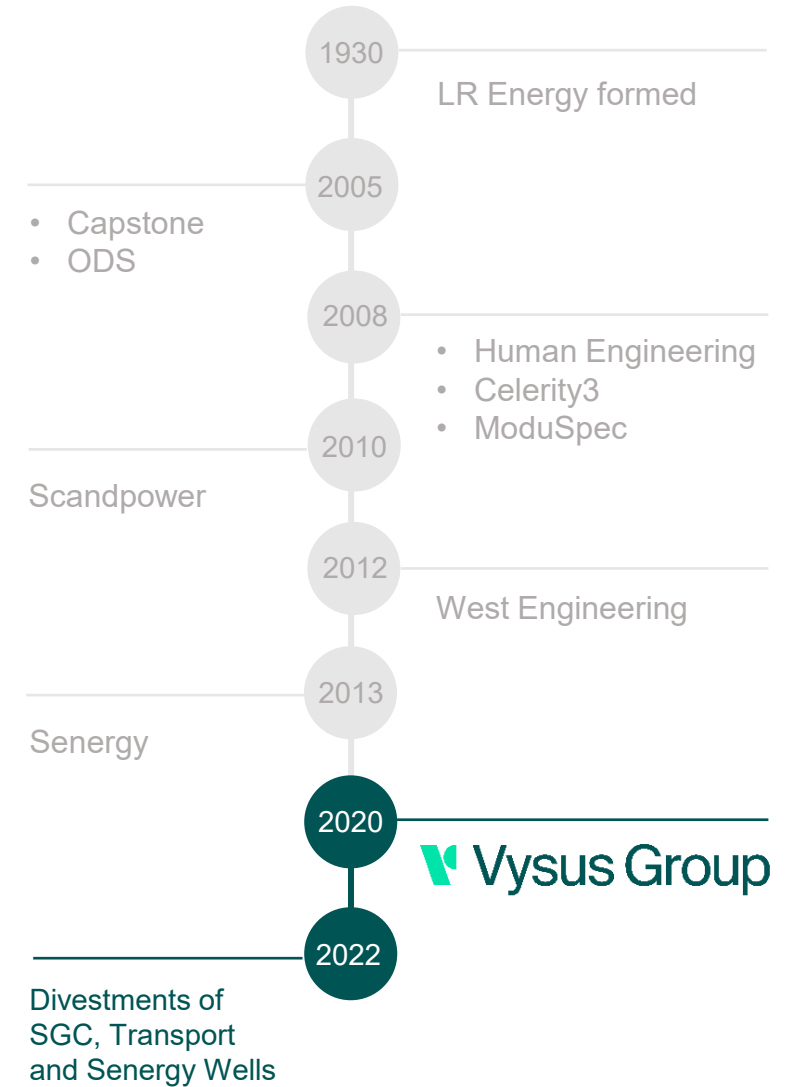
Significant footprint and legacy

80+ years

Heritage

400+

Employees worldwide



Requirement for reporting and verification of GHG emissions

Since the introduction of the EU Emissions Trading Scheme, Carbon Reduction Commitment and related industry sector schemes in the mid 2000s to reduce emissions the requirement for verifiable GHG emission figures has grown significantly for both private and public sector organisations.

Key reasons for this growth, to:

- Maintain or gain a licence to operate
- Inform investment decision making process
- Drive operating efficiencies
- Ensure compliance with public procurement regulations



Requirement for reliable / verifiable emissions data



Sustainability reporting guidance for the oil and gas industry



5th edition 2025

Advancing environmental and social performance across the energy transition

www.ipieca.org





Environmental Reporting Guidelines:
Including streamlined energy and carbon reporting guidance
March 2019 (Updated Introduction and Chapters 1 and 2)



ConstructZERO
The Construction Industry's Zero carbon change programme

CO₂nstructZero




Procurement Policy Note
Taking account of Carbon Reduction Plans in the procurement of major government contracts

Action Note: 006
Previously issued: June 2021
Updated: February 2025

Issue

1. The UK government amended the Climate Change Act 2008¹ in 2019 by introducing a target of at least a 100% reduction in the net UK carbon account (i.e. reduction of greenhouse gas (GHG) emissions, compared to 1990 levels) by 2050.² This is otherwise known as the net zero target. This Procurement Policy Note (PPN) sets out how to take account of suppliers' Net Zero Carbon Reduction Plans (CRRP) in the procurement of major government contracts.
2. This Procurement Policy Note (PPN) applies to all central government departments, their executive agencies and non-departmental public bodies. Such bodies are referred to as 'in-scope organisations'. Please circulate this PPN within your organisation, drawing it to the attention of those with a commercial and procurement role.
3. In-scope organisations should take action to apply this PPN when awarding public contracts³ for goods and/or services and/or works, other than special regime.

¹ Climate Change Act 2008: <https://www.legislation.gov.uk/ukpga/2008/27/section/1>
² Where the reporting of GHG emissions is mandatory, it is often done so in carbon dioxide equivalent units (CO₂e). The use of CO₂e allows for more consistent reporting and streamlined tracking and reporting of emissions over time. CO₂e includes all of the greenhouse gases within the Kyoto protocol: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride. Each of these greenhouse gases has a conversion factor as determined by the UK.
³ <https://www.gov.uk/government/consultations/procurement-policy-note-taking-account-of-carbon-reduction-plans>
⁴ See section 2 of the Procurement Act 2023



Emissions Reduction Action Plan

Guideline

Issue 01
July 2024

The Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013
UK Statutory Instruments > 2013 No. 1970 > PART 2





Sustainability Disclosure Requirements: Implementation Update 2024

Reporting schemes (standards and specifications)



CSRD / ESRS

Sustainability Reporting
Guidance:
2024-25



Greenhouse gases
Part 1: Specification with guidance at the organization level for
quantification and reporting of greenhouse gas emissions and removals



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

July 2024



Alignment of reporting schemes (standards and specifications)

Table 2. Links between the likely material topics for the oil and gas sector and the SDGs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Topic 11.1 GHG Emissions																	
Topic 11.2 Climate adaptation, resilience, and transition																	
Topic 11.3 Air emissions																	
Topic 11.4 Biodiversity																	
Topic 11.5 Waste																	
Topic 11.6 Water and effluents																	
Topic 11.7 Closure and rehabilitation																	
Topic 11.8 Asset integrity and critical incident management																	
Topic 11.9 Occupational health and safety																	

CDP framework alignment

CDP's corporate questionnaire also supports disclosures in line with the:

- GHG Protocol
- Afi for forests
- CEO Water Mandate

International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures

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European Sustainability Reporting Standards (ESRS)

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Task Force on Nature-Related Financial Disclosures (TNFD) recommendations

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Task Force on Climate-related Financial Disclosures (TCFD)

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Global Reporting Initiative (GRI) standards

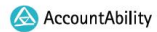
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Sustainable finance taxonomies

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GRI STANDARDS	GRI DISCLOSURES AND REQUIREMENTS	ESRS DISCLOSURE REQUIREMENTS	NOTES	EXPLANATION
GRI 305: Emissions 2016	3-3 Management of material topics and GRI 305 1.2	ESRS E1 E1-2 §24; E1-3 §28; E1-4 §32, §33 and §34 (b); E1-7 §56 §58 (a); §59 (a); §61 (a) and (c); §AR 61; §AR 62 (b); ESRS E2 §AR 9 (b); E2-1 §14; E2-2 §18 and §19; E2-3 §22	(2a)	GRI 305 requirement 1.2 requires reporting the type and scheme of which offsets are part.
	305-1 Direct (Scope 1) GHG emissions	ESRS E1 E1-4 §34 (c); E1-6 §44 (a); §46; §48 (a); §50; §AR 25 (b) and (c); §AR 39 (a) to (d); §AR 40; AR §43 (c) to (d)		
	305-2 Energy indirect (Scope 2) GHG emissions	ESRS E1 E1-4 §34 (c); E1-6 §44 (b); §46; §49; §50; §AR 25 (b) and (c); §AR 39 (a) to (d); §AR 40; §AR 45 (a), (c), (d), and (f)		
	305-3 Other indirect (Scope 3) GHG emissions	ESRS E1 E1-4 §34 (c); E1-6 §44 (c); §51; §AR 25 (b) and (c); §AR 39 (a) to (d); §AR 46 (a) (i) to (k)		
	305-4 GHG emissions intensity	ESRS E1 E1-6 §53; §AR 39 (c)	(1a)	GRI 305-4 requires reporting the intensity ratio for Scope 3 GHG emissions separately from Scope 1 and Scope 2. ESRS requires reporting the intensity ratio for the total GHG emissions.
	305-5 Reduction of GHG emissions (305-5-a, c, d and 2.9.5)	ESRS E1 E1-3 §29 (b); E1-4 §34 (a) to (c); §AR 25 (b) and (c); E1-7 §56 (b)		
	305-6 Emissions of ozone-depleting substances (ODS) (305-6-a)	ESRS E2 E2-5 §34		
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	ESRS E2 E2-4 §28 (a); §30 (b) and (c); §31; §AR 21		

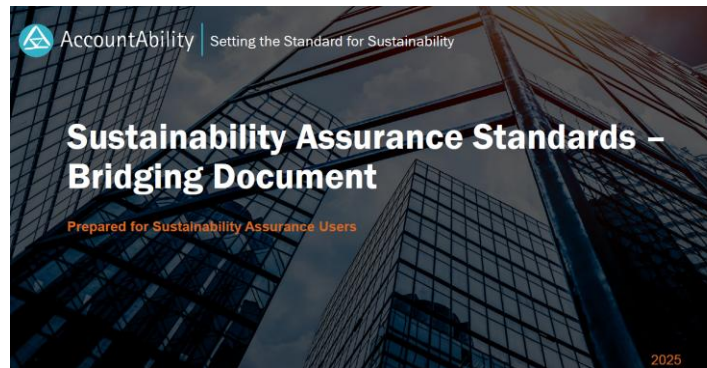
Assurance principles and standards



AA1000 ASSURANCE STANDARD v3



AA1000 ACCOUNTABILITY PRINCIPLES 2018



Final Pronouncement
December 2013

*International Standard on Assurance
Engagements*

ISAE 3000 (Revised),
Assurance Engagements Other
than Audits or Reviews of
Historical Financial Information

International Framework for
Assurance Engagements

and

Related Conforming
Amendments

FINAL STANDARD | IAASB

IAASB International Auditing
and Assurance
Standards Board™

Final Pronouncement

*International Standard on Sustainability Assurance
5000*

ISSA 5000
General Requirements for
Sustainability Assurance
Engagements

and

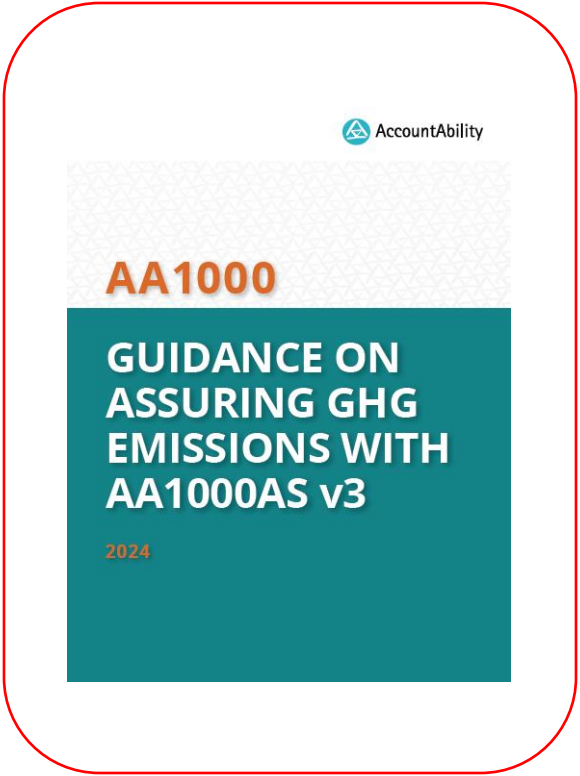
Conforming and Consequential
Amendments to Other IAASB
Standard Arising from
ISSA 5000

NOVEMBER 2024



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GHG Assurance



BS EN ISO 14064-3:2019

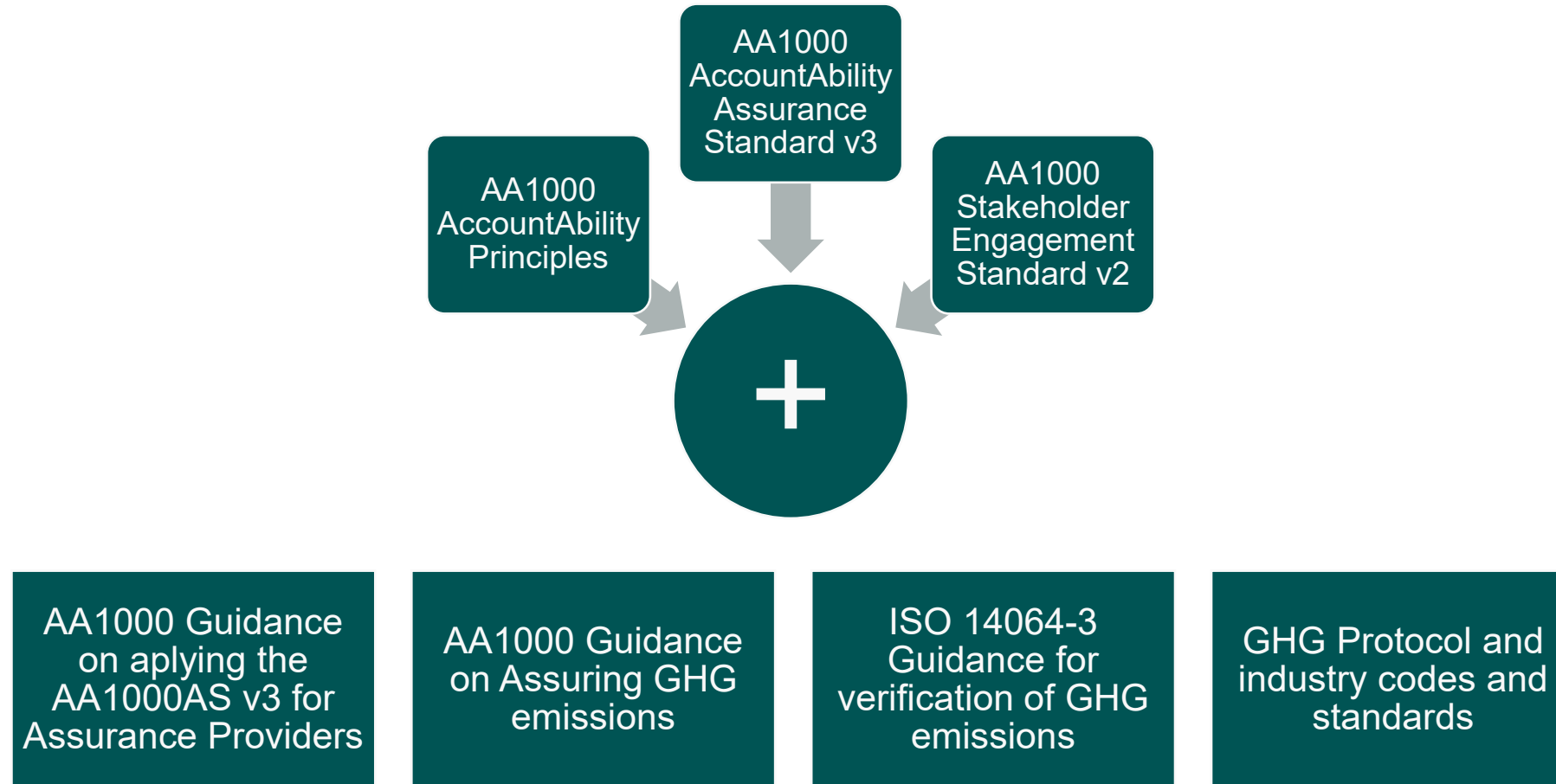


Greenhouse gases

Part 3: Specification with guidance for the verification and validation of greenhouse gas statements (ISO 14064-3:2019)



Application of AA1000 Assurance Principles and Standards



Information requirements for GHG verification

RELIABILITY AND QUALITY	ACCURACY	COMPARABILITY
<ul style="list-style-type: none"> ▶ 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? 	<ul style="list-style-type: none"> ▶ 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 emission) 	<ul style="list-style-type: none"> ▶ 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?

Data request

We will send a request for information to be provided by client. This request will reflect the level of assurance required, **Type 2, moderate**.

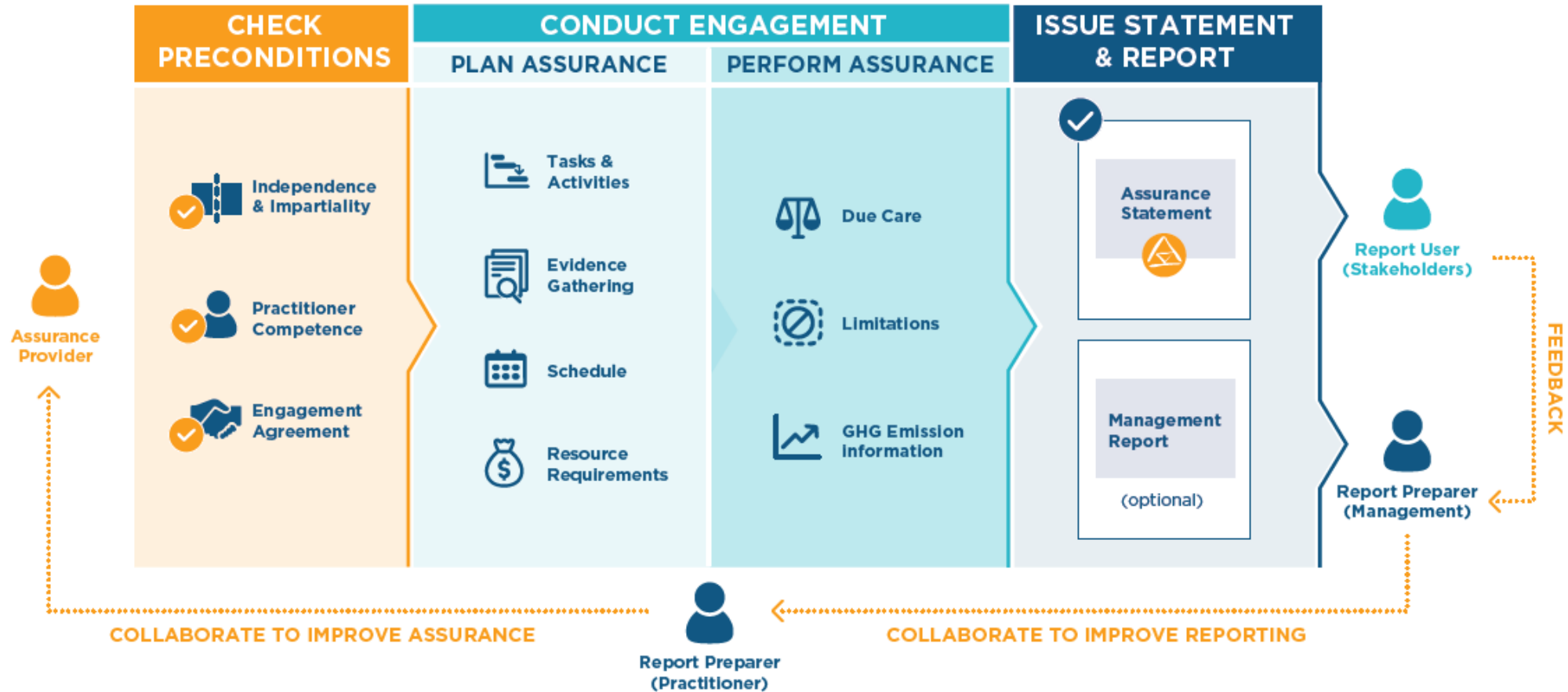
- It is expected that we shall receive one data pack for each company site / office.
- Each data pack is expected to address each of the metrics being assessed (Scope 1 and 2 GHGs).

As this information will be used to plan the data review this information must be provided to us in advance of the assessment.

Indicative information to be provided on behalf of each retail site:

- Details of scheme being followed (e.g. GRESB, CDP, SBT), including country of application and identity of regulator, where applicable e.g. Environment Agency, other.
- Reporting year for which the assurance is required (2024)
- Description and complexity of reporting entity (Office based advisory business)
- Reporting procedure, describing key elements of the quantification and reporting process
- Metrics being reported (GHG emissions)
- Energy use reported (gas, electricity, oil, renewable, other (e.g. kWh, Therms, m³))
- GHG Species reported, e.g. CO₂, CH₄, N₂O, CO₂eq
- Monitoring and reporting plan with specified data collection points (meters, invoices, consignment notes etc)
- Spreadsheet with data record (activity data) and calculations (traceable to industry standards where calculations are used) covering emissions
- Uncertainty report / analysis for measurement equipment (metering)
- Calibration reports (metering)
- Conversion factors including emission factors and units e.g. imperial to metric
- Responsible person and competency requirements
- Emission sources including fuel (major and de minimis)
- Laboratory accreditation where a lab is used to generate an emission factor
- Level of materiality required.
- Level of assurance required (AA1000 Type 1 (Limited Assurance) or **Type 2 (moderate)**)

Deployment of AA1000 Assurance Principles and Standards



Deliverables

INDEPENDENT ASSURANCE STATEMENT OF

To:

Scope

This is an illustrative assurance statement example. All registration specific text has been redacted. See the following questions for further guidance on the independent assurance statement. [View questions and answers](#)

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ASSURANCE INFORMATION	
3.1.1	Intended users of the Assurance Statement
3.1.2	Responsibilities of the reporting organisation 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 <i>Inclusivity, Materiality, Responsiveness, and Impact</i> (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

STANDARDS

Reports Assured with AA1000AS

Transparency and accountability through assurance.

AA1000AS reports demonstrate that an organization has undergone an independent assessment by an AccountAbility-licensed assurance provider, ensuring the organization adheres to the principles of *Inclusivity, Materiality, Responsiveness, and Impact*. Each report evaluates the credibility, reliability, and transparency of an organization's sustainability performance.



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 |

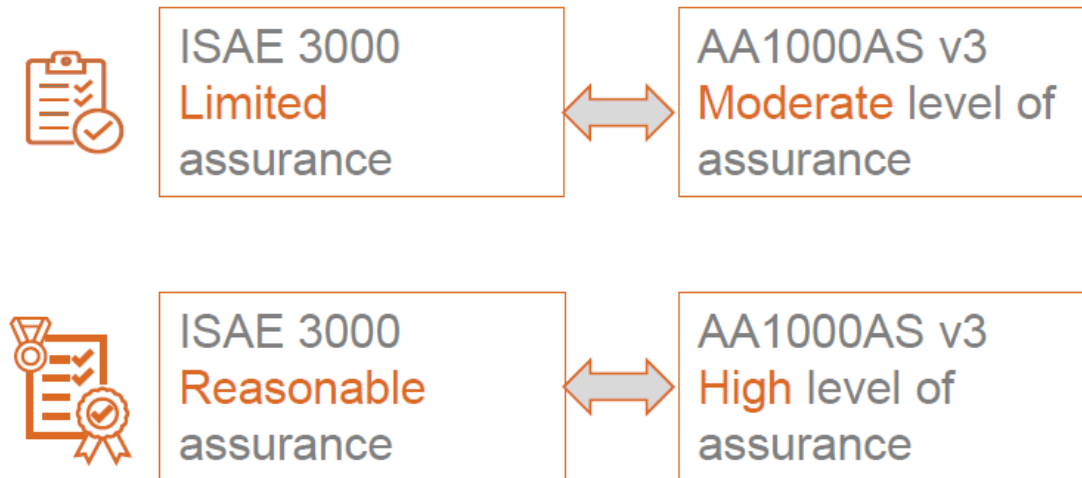
Organization	Country	Disclosure Title	Industry	Disclosure Year	Accountability CSAP Involvement
Endeavour Mining	United Kingdom of Great Britain and Northern Ireland	2024 Responsible Gold Mining Principles Report	Metals & Mining	2025	TRUE
Allsop LLP	United Kingdom of Great Britain and Northern Ireland	FY24 Scope 1 & 2 GHG Emissions Inventory	Real Estate	2025	TRUE
Tullow Oil	United Kingdom of Great Britain and Northern Ireland	Tullow Oil 2024 Sustainability Report	Oil & Gas	2025	TRUE
Anglo American Plc	United Kingdom of Great Britain and Northern Ireland	Sustainability Report 2024	Metals & Mining	2025	TRUE
Shurgard Self Storage Ltd	United Kingdom of Great Britain and Northern Ireland	Shurgard Assurance Statement EPRA and GRESB 2024-25	Real Estate	2025	TRUE
Hines Master Fund Management Company S.Ä. r.l	United Kingdom of Great Britain and Northern Ireland	Hines HECF INREV Assurance Statement 2024-25	Real Estate	2025	TRUE
Hines European Property Partners SCSp	United Kingdom of Great Britain and Northern Ireland	Hines HEPP INREV Assurance Statement 2024-25	Real Estate	2025	TRUE
Endeavour Mining Corporation	United Kingdom of Great Britain and Northern Ireland	Endeavour Mining Conflict Free Gold Report for the fiscal year ending 31 December 2024	Metals & Mining	2025	TRUE
Endeavour Mining Corporation	United Kingdom of Great Britain and Northern Ireland	Creating Meaningful Value. Sustainability Report 2024.	Metals & Mining	2025	TRUE
Exscientia plc	United Kingdom of Great Britain and Northern Ireland	Exscientia 2024 Greenhouse Gas Inventory	Medical Technology	2025	TRUE
Trident Energy	United Kingdom of Great Britain and Northern Ireland	Trident Energy 2024 Sustainability Report	Oil & Gas	2025	TRUE
The Hill Group	United Kingdom of Great Britain and Northern Ireland	2024/25 Sustainability Key Performance Indicators	Real Estate	2025	TRUE

Comparing confidence “levels” of assurance

Assuring Sustainability Reports based on ISAE 3000 – Confidence “Level” of Assurance

ISAE 3000 uses "reasonable" and "limited" assurance to reflect the “level of engagement” in reported information, similar to AA1000's High and Moderate levels.

- **Reasonable Assurance:** High, but not absolute, confidence in reported information.
- **Limited Assurance:** Moderate level of confidence in reported information.



Examples of AA1000 deployment methodology for reduction and verification of GHG emissions (Principles and Figures)



Verified over 20 Million Tonnes refinery emissions



Verified GHG, Energy, Waste and Water for over £10bn Real Estate Investments



Verified GHG emissions for fleet of offshore drilling rigs



Verified GHG emissions for fleet of land drilling rigs



Verified GHG emissions disclosure for global biotech & pharma business

Other use case



Asset integrity and critical incident management reporting.



HSE governance and performance reporting



EIA / ESIA / EMP reporting (Biodiversity)



Raw materials reporting



BAT justification



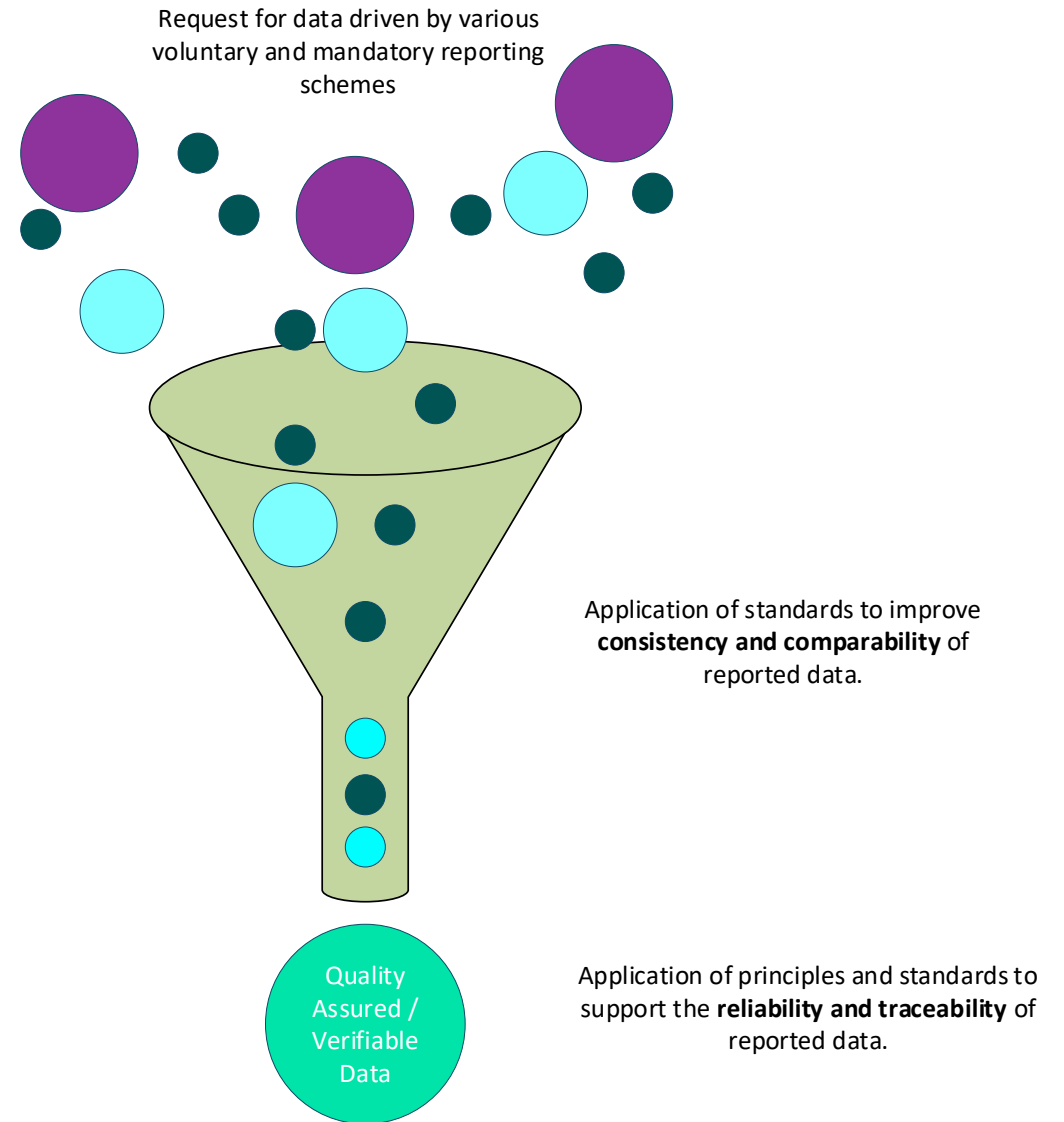
Supply chain sustainability reporting.



Decommissioning / waste reporting (Closure and rehabilitation)

Conclusion

- There has been a massive increase in the need for reliable emissions / sustainability data over the years to satisfy stakeholder requirements regarding decision making, licence to operate, finance, anti greenwashing purposes.
- Schemes are developing to align standards to promote reliability and consistency of reported data.
- There are tools out there to support the reporting and verification of data to satisfy needs of stakeholders covering a range of disparate sectors and applications.



23 September
2025



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Thank you



AA1000
Licensed Assurance Provider
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