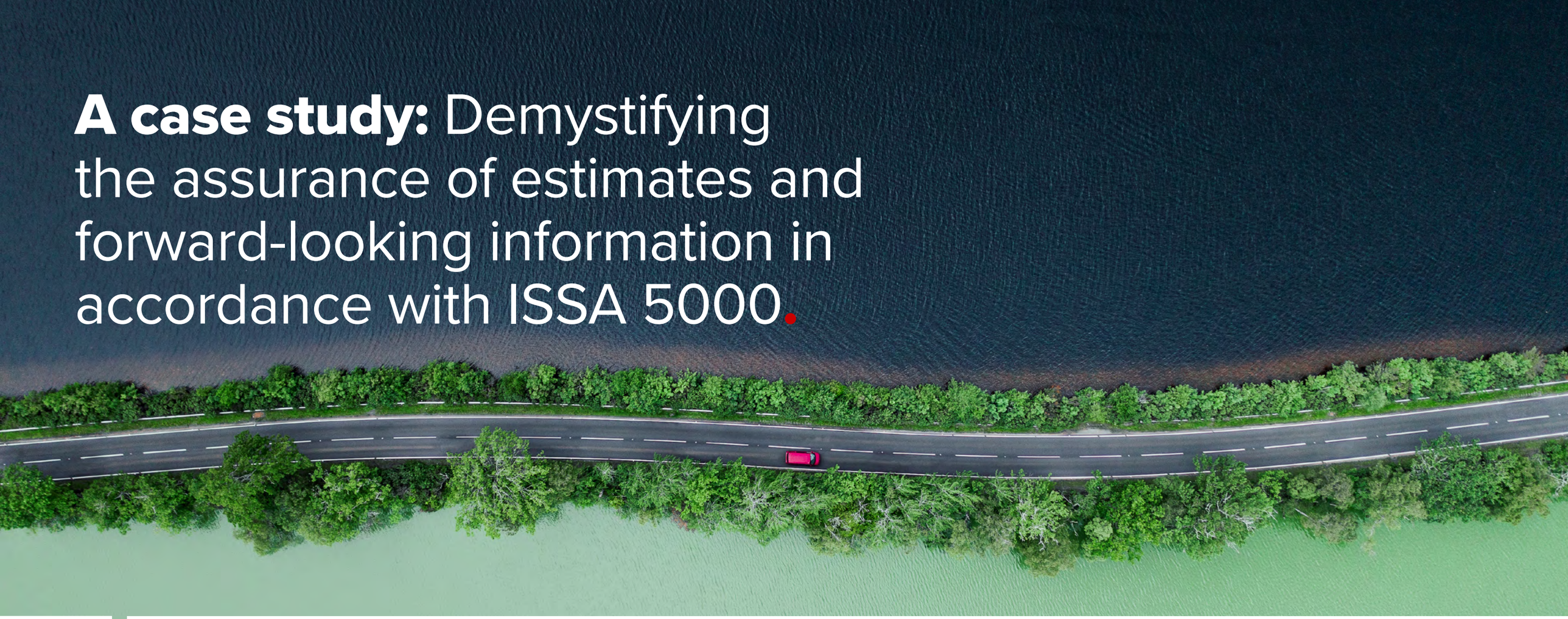
A case study: Demystifying the assurance of estimates and forward-looking information in accordance with ISSA 5000.



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About this report.

Using a practical case study, this report provides guidance on how to apply the ISSA 5000 requirements with respect to estimates and forward-looking information under both limited and reasonable assurance in a Sustainability Assurance Engagement. Additionally, the report explains why estimates and forward-looking information present particular challenges for sustainability assurance engagements. It explores the nature of uncertainty, evidence limitations and the expectation gap that practitioners must navigate when applying ISSA 5000. The report concludes with some practical considerations and recommendations that our members and stakeholders should take into account when applying the ISSA 5000 requirements relating to estimates and forward-looking information.

Foreword.

Claire Lindridge
Director – Policy & Insights, ACCA

Geraldine Magarey FCA, Group Executive Policy and International, CA ANZ

Estimates and forward-looking information are central to sustainability reporting. Targets, transition plans and projections now play a key role in informing decisions by investors and other stakeholders. At the same time, such information is inherently uncertain and dependent on professional judgement, assumptions and future events that may not be within an organisation's control.

As sustainability reporting continues to evolve, so too does the need for credible, decision-useful assurance over this information. The introduction of ISSA 5000 *General Requirements for Sustainability Assurance Engagements* (hereafter 'the Standard') provides a global framework for assurance over sustainability information, including estimates and forward-looking information. Applying this framework effectively requires careful professional judgement, particularly where evidence is forward-looking and outcomes cannot be verified at the reporting date.

This report has been developed to support the application of that professional judgement in practice. It focuses on how assurance practitioners can respond to this inherent uncertainty in estimates and forward-looking information when performing engagements in accordance with ISSA 5000. In doing so, it reinforces a critical distinction: assurance over such information relates to its preparation and disclosure, not to whether future outcomes will ultimately be achieved.

This report forms the second part of a series exploring the application of ISSA 5000 in practice, following an earlier report focusing on materiality (ACCA and CA ANZ 2025). By bringing together key ISSA 5000 requirements and practical illustrations, it aims to promote a consistent and proportionate approach to assurance in this evolving area. It is intended to assist assurance practitioners, preparers and users in understanding what assurance over estimates and forward-looking information can and cannot provide.

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Antonis previously served as a technical advisor of the IAASB and the IFAC SMP Advisory Group and is a member of the Audit and Assurance Policy Group at Accountancy Europe. Before joining ACCA, Antonis worked as an auditor for EY in London and the Channel Islands specialising in financial services. He also worked for KPMG in Cyprus.

Antonis holds an LLB (Hons) Law degree from the University of Essex, the CFA Certificate in ESG investing and is a fellow member of the Association of Chartered Certified Accountants. He is also a member of the Institute of Certified Public Accountants of Cyprus.

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Natalie Lonyai is a Senior Policy Advocate in the Reporting and Assurance team at Chartered Accountants ANZ. In her role, Natalie works closely with key bodies across Australia, New Zealand and internationally, collaborating with stakeholders to provide technical insights, develop thought leadership, and promote the consistent and effective application of financial reporting and assurance standards that reflect the evolving needs of the profession.

Before joining Chartered Accountants ANZ, Natalie worked in financial reporting and accounting policy roles within the Australian State Government, where she specialised in the application of Australian Accounting Standards and the development of accounting and reporting policies in the public sector.

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Contents.

executive summary.

ACCA and CA ANZ present the second report in the ISSA 5000 series, focusing on assurance over estimates and forward-looking information in sustainability reporting. This report is intended to support practitioners when performing sustainability assurance engagements under ISSA 5000, particularly where information is subject to inherent uncertainty and reliance on assumptions.

The report explores the key challenges in providing assurance over estimates and forward-looking information (Section 1), clarifies common misconceptions that contribute to an expectation gap (1.4) and outlines the inherent limitations involved (1.5). It also summarises the relevant ISSA 5000 requirements relating to estimates and forward-looking information (Section 2).

The underlying case study of this report continues with the same fictional entity, ABC plc, building on the scenario introduced in the first guide (Section 3). It illustrates how practitioners apply ISSA 5000 when assuring estimates and forward-looking information, demonstrating both limited and reasonable assurance procedures and highlighting key areas where professional judgement is required.

The case study:

- Outlines the applicable ISSA 5000 requirements and the professional judgement points involved in assuring:
  - an estimate (market-based Scope 2 emissions); and
  - forward-looking information (net zero target for Scope 1 and Scope 2 emissions).
- Demonstrates how the practitioner differentiates limited assurance procedures (designed and performed to respond to risks at the disclosure level) from reasonable assurance procedures (designed and performed to respond to risks at the assertion level).
- Illustrates practitioner considerations when responding to risks of material misstatement arising from methodology changes, estimation uncertainty and potential management bias.
- Supports practitioners in evaluating the relevance and reliability of evidence, including internal data, external sources and expert input.
- Provides guidance on evaluating whether uncertainty is communicated clearly and proportionately to intended users in both the sustainability report and the assurance report.
- Reinforces the importance of obtaining sufficient and appropriate evidence, maintaining reliable documentation of the basis for professional judgements, and clearly linking those judgements to the evidence-obtaining approach and the evaluation of misstatements.

The case study emphasises that assurance over estimates and forward-looking information:

- **does not** provide a guarantee that targets, pathways or projections will be achieved
- **does not** eliminate inherent uncertainty, but
- **does** provide confidence that information has been prepared in accordance with suitable criteria and that key assumptions and uncertainties are appropriately disclosed and explained.

Introduction.

This report has been prepared to support the understanding of how ISSA 5000 may be applied when providing assurance over estimates and forward-looking information in sustainability reporting.

The report does not seek to interpret or extend the requirements of ISSA 5000. Instead, it brings together some of the key requirements relating to estimates and forward-looking information and illustrates their application through a practical case study. The report should therefore be read alongside ISSA 5000 and does not replace the need for professional judgement in individual engagements.

For clarity, the case study discussed in Section 3 of this report does not follow the full end-to-end sequence of an assurance engagement. Matters such as engagement acceptance and continuance, confirmation of preconditions, determination of scope, assessment of the suitability and availability of criteria, and a detailed risk assessment are assumed to have been completed in accordance with ISSA 5000 and are not illustrated in detail.

The case study focuses instead on how practitioners respond to identified risks, perform procedures appropriate to the level of assurance, whether limited or reasonable, and evaluate evidence and uncertainty, and it highlights how issues identified in relation to the underlying estimates and forward-looking information may affect the overall assurance conclusion.

‘This report brings together some of the key requirements relating to estimates and forward-looking information and illustrates their application through a practical case study.’

Disclaimer: *This guide is designed to help those interested in applying ISSA 5000 and, more specifically, its requirements in relation to estimates and forward-looking information, but it is not a substitute for the requirements of the Standard or the implementation guidance issued by the International Auditing and Assurance Standards Board (IAASB). Under no circumstances shall ACCA and CA ANZ be liable for any loss or damage suffered, either directly or indirectly, as result of reliance on any contents of this guide.*

1. The assurance challenges of estimates and forward-looking information

This section explains why estimates and forward-looking information present particular challenges for sustainability assurance engagements. It introduces the nature of uncertainty, evidence limitations and the expectation gap that practitioners must navigate when applying ISSA 5000.

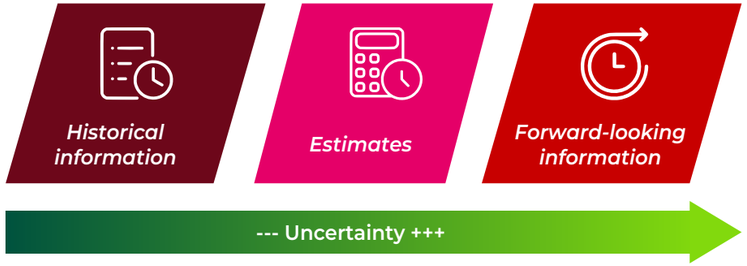
Estimates and forward-looking information are addressed jointly in ISSA 5000, recognising that while they are conceptually distinct, the approach to testing them often involves similar assurance procedures. Both involve a degree of uncertainty and judgement.

Sustainability reporting, including the use of estimates and forward-looking information, is increasingly undertaken by a wide range of organisations, including companies, governments and other public sector bodies.

Unlike historical information, which reflects actual events or outcomes, estimates and forward-looking information are based on assumptions about future conditions and events that may or may not occur. They are therefore subject to greater measurement or evaluation uncertainty (Figure 1.1 and Table 1.1)

For assurance practitioners, this means that estimates and forward-looking information cannot be evaluated with the same level of precision as historical information. As uncertainty increases, the focus of assurance moves away from simple verification of outcomes and towards assessing the reasonableness of assumptions, methods and disclosures.

Figure 1.1: Spectrum of sustainability information



Information can be considered on a continuum from **historical** to **forward-looking**, and uncertainty typically shifts along this spectrum.

The increasing use of estimates in sustainability reporting is not unusual. As highlighted in ACCA's publication *Sustainability reporting: working with estimates* (ACCA, 2026), organisations frequently rely on reasonable and supportable estimates where direct measurement is not feasible, and this may include projections and targets that depend on assumptions and judgement.

For the purposes of assurance under ISSA 5000, however, it is helpful to distinguish between estimates relating to past or current conditions and forward-looking information, which involves assumptions about future events and therefore gives rise to a distinct form of uncertainty.

Table 1.1: Types of subject matter and their characteristics

SUBJECT MATTER	CHARACTERISTICS
Historical information	The least uncertain because it relates to events that have already occurred and are therefore supported by factual evidence
Estimates	Introduce some uncertainty because they involve assumptions; nonetheless, they are typically less uncertain than forward-looking information since these assumptions often draw on historical data and current conditions
Forward-looking information	Carries the greatest uncertainty because it is based on predictions, assumptions and, often, on hypothetical events or conditions

As information becomes progressively forward-looking, the challenges for assurance practitioners become more complex owing to the factors below.

- **Inherent uncertainty:** outcomes increasingly depend on future developments that are unknown at the time of reporting, making it difficult to assess accuracy or reliability.
- **Reliance on assumptions:** a high degree of management judgement is involved, and assumptions are by nature subjective and harder to support.
- **Lack of verifiable data:** unlike historical information, forward-looking information cannot be substantiated through objective evidence or past transactions.
- **Expectation gap:** users may mistakenly interpret estimates or forward-looking information as predictive or guaranteed, despite their inherent limitations and qualifying statements in the disclosures and assurance report.

Clear disclosure of assumptions, methods and inherent uncertainties is essential to help users understand the context and limitations of estimates and forward-looking information.

1.1 Key differences between estimates and forward-looking information

While estimates are a familiar concept in accounting, forward-looking information introduces a different dimension. It encompasses forecasts, projections, potential scenarios and other hypothetical events or conditions that reflect an entity's expectations or intentions. These often involve assumptions about future actions or circumstances and therefore carry greater uncertainty. Hence, although estimates and forward-looking information are sometimes discussed together, they differ in important ways that affect how assurance procedures are designed and performed. The distinctions between estimates and forward-looking information are further explored in Table 1.2.

Table 1.2: Differences between estimates and forward-looking information

	ESTIMATES	FORWARD-LOOKING INFORMATION
Definition	Approximations of the value of an item where exact amounts cannot be determined, typically related to current or past events or conditions.	Information relating to events and conditions that have not yet occurred or are still evolving in unpredictable ways.
Nature	Quantitative	Qualitative or quantitative
Basis	Based on historical data, current conditions, and reasonable assumptions.	Based on assumptions, hypothetical scenarios, or judgements about future developments that may or may not materialise.
Level of uncertainty	Involve some level of uncertainty but are generally grounded in more immediate and observable data than forward-looking information.	Involves a higher degree of uncertainty as it deals with future events that are inherently unpredictable. Uncertainty is likely to increase the further into the future is the period to which the disclosures relate.
Examples	• Current financial effects of climate-related risks and opportunities (IFRS S2.15(a)) • Greenhouse gas emissions (IFRS S2.29(a))	• Climate-related risks and opportunities (IFRS S2.10) • Transition plan (IFRS S2.14(a)(iv)) • Anticipated financial effects of climate-related risks and opportunities (IFRS S2.15(b)) • Climate-related scenario analysis (IFRS S2.22) • Greenhouse gas emissions reduction targets (IFRS S2.33)

1.2 IFRS Sustainability Disclosure Standards

Paragraph 74 of IFRS S1 requires an entity to disclose information to enable users to understand the **judgements** that the entity has made in the process of preparing its sustainability-related financial disclosures and those that have the most significant effect on the information included in the disclosures.

Paragraph 77 of IFRS S1 requires an entity to disclose information to enable users to understand the most significant **uncertainties** affecting the amounts reported in its sustainability-related financial disclosures.

Paragraph A522(d) of ISSA 5000 states that *'the evaluation of evidence obtained may include consideration of whether the sustainability information provides adequate disclosure of the applicable criteria, and other matters, including **uncertainties**, such that intended users can understand the significant **judgements** made in its preparation.'*

IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* focuses broadly on sustainability-related financial disclosures, including estimates about future risks and opportunities.

IFRS S2 *Climate-related Disclosures* adds climate-specific disclosures, such as transition plans, targets and scenario analysis, all of which inherently involve estimates and forward-looking information.

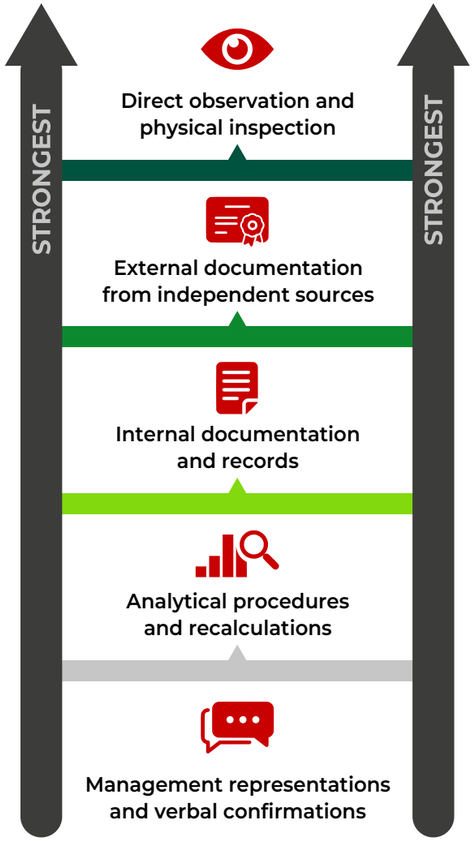
1.3 Evidence and documentation

Obtaining sufficient appropriate evidence and documenting all procedures is fundamental to sustainability assurance engagements, as for any other assurance engagement (Figure 1.2). Documentation demonstrates compliance with standards, supports transparency and fulfils the requirement of allowing another experienced practitioner not familiar with the client to re-perform the procedures and come to the same conclusion. Paragraphs 69–71 and A171–A173 of ISSA 5000 cover overarching documentation requirements in a sustainability assurance engagement.

Under ISSA 5000, when providing assurance over sustainability information, the practitioner needs to consider what constitutes ***sufficient and appropriate evidence***, given the inherent uncertainty and judgement involved. This is particularly relevant in the case of estimates and forward-looking disclosures, given their exposure to greater measurement or evaluation uncertainty.

Paragraphs A225–A276 of ISSA 5000 provide guidance on procedures for obtaining sufficient and appropriate evidence, while paragraphs A242–A244 address the specific challenges of obtaining such evidence for forward-looking information.

Figure 1.2: Hierarchy of evidence in sustainability assurance



Robust evidence helps the practitioner evaluate whether the information is prepared in accordance with the applicable criteria and whether ***significant assumptions*** are reasonable.

The practitioner must also evaluate (and document) whether judgements and decisions of management in the estimates made and assumptions used in preparing the sustainability information, even if they are individually reasonable, are indicators of possible management bias (IAASB 2025a: para 179).

External experts often have an important role in sustainability assurance. Complex sustainability matters often require the expertise of specialists such as climate scientists, engineers or other subject-matter experts. Their specialised knowledge can provide independent and credible evidence to support estimates and forward-looking information.

Examples of evidence and considerations for documentation are explored in the case study (Section 3).

‘Robust evidence helps the practitioner evaluate whether the information is prepared in accordance with the applicable criteria and whether *significant assumptions* are reasonable.’

Paragraph A456R(d) of ISSA 5000

*Assumptions used in determining an estimate or forward-looking information are referred to as **significant assumptions** when a reasonable variation in the assumption would **materially affect** the estimate or forward-looking information.*

Reliability of evidence

Consider whether the evidence is:

- **accurate** (free from error)
- **complete** (reflecting all applicable events, conditions and circumstances)
- **authentic** (genuine, authorised and not inappropriately altered)
- **free from bias** (whether intentional or unintentional)
- **credible** (generated by a competent, capable and trustworthy source).

(paragraph A260 of ISSA 5000)

1.4 Expectation gap

The expectation gap reflects the difference between what users often believe assurance can deliver and what it is actually designed to provide under professional standards. This gap has the potential to be particularly significant for sustainability-related information, and even more so for estimates and forward-looking information, because such information is inherently less grounded in objective, observable data than historical financial information. For that reason, the practitioner has a responsibility to be transparent about what assurance over this type of information means, including its scope and limitations.

Table 1.3 addresses some common myths and misconceptions of users of assured sustainability reports, while Table 1.4 clarifies what assurance can and cannot do.

Table 1.3: Differences between myth and reality in sustainability disclosures

MYTH	REALITY
'All sustainability disclosures are rigorously tested and verified. The entity has stated a target of achieving net zero by 2050. If it's in their report and the practitioner has provided assurance over that report, this must mean that the entity will achieve this target'.	Forward-looking information, such as targets, are hypothetical assumptions based on a potential outcome that may or may not occur depending on several unknown factors. The fact that the entity has stated this as its target does not constitute a guarantee that the target will be achieved. Assurance focuses on whether information is prepared in accordance with criteria and transparently discloses assumptions. Practitioners are not required to obtain evidence or conclude whether the forward-looking information includes objectives that will be achieved or occur in practice (IAASB 2025a: para A452).
'Estimates undermine the usefulness of the information; assumptions about possible future events with uncertain outcomes cannot be relied upon'.	'The use of reasonable estimates is an essential part of preparing sustainability-related financial disclosures and does not undermine the usefulness of the information if the estimates are accurately described and explained' (IFRS Foundation, 2025a: para 79). 'Even a high level of measurement uncertainty would not necessarily prevent such an estimate from providing useful information' (IFRS Foundation, 2025a: para 79).
'Limited assurance doesn't provide meaningful confidence compared with reasonable assurance'.	Limited assurance still delivers a credible, standards-based conclusion. The difference lies in the depth and extent of testing, not in the credibility of the conclusion. In some instances, limited assurance is often chosen because the sustainability information is evolving, involves estimates and may not yet have the maturity for reasonable assurance without disproportionate cost or effort.

Table 1.4: What assurance over sustainability information can and cannot do

CAN DO	CANNOT DO
Assess reasonableness of assumptions used	Guarantee future performance or outcomes
Evaluate quality of forecasting processes	Eliminate inherent uncertainty in projections or forecasts
Assess and question real and perceived management bias	Predict future external factors or market conditions
Determine whether the information is grounded in evidence and reasonable assumptions	Validate subjective judgements about future strategies or targets

'This gap has the potential to be particularly significant for sustainability-related information, and even more so for estimates and forward-looking information, because such information is inherently less grounded in objective, observable data than historical financial information.'

1.5 Inherent limitations

It is critical for practitioners to meet their communication responsibilities to avoid misleading users and to manage expectations. Through the assurance report, the practitioner communicates directly to users about the scope of work performed, the level of assurance provided and the reliability of the information.

Paragraphs A558–A560 of ISSA 5000 include considerations relating to inherent limitations in preparing the sustainability information. Paragraph A494 of ISSA 5000 acknowledges that without supporting disclosures to help the intended users understand the uncertainty, the applicable criteria may not be suitable and the sustainability information may not be presented appropriately. Uncertainty in sustainability information influences the nature and extent of assurance procedures the practitioner performs. It does not mean that the sustainability information is not an appropriate subject matter or affect whether suitable criteria exist (IAASB 2025b: para 181).

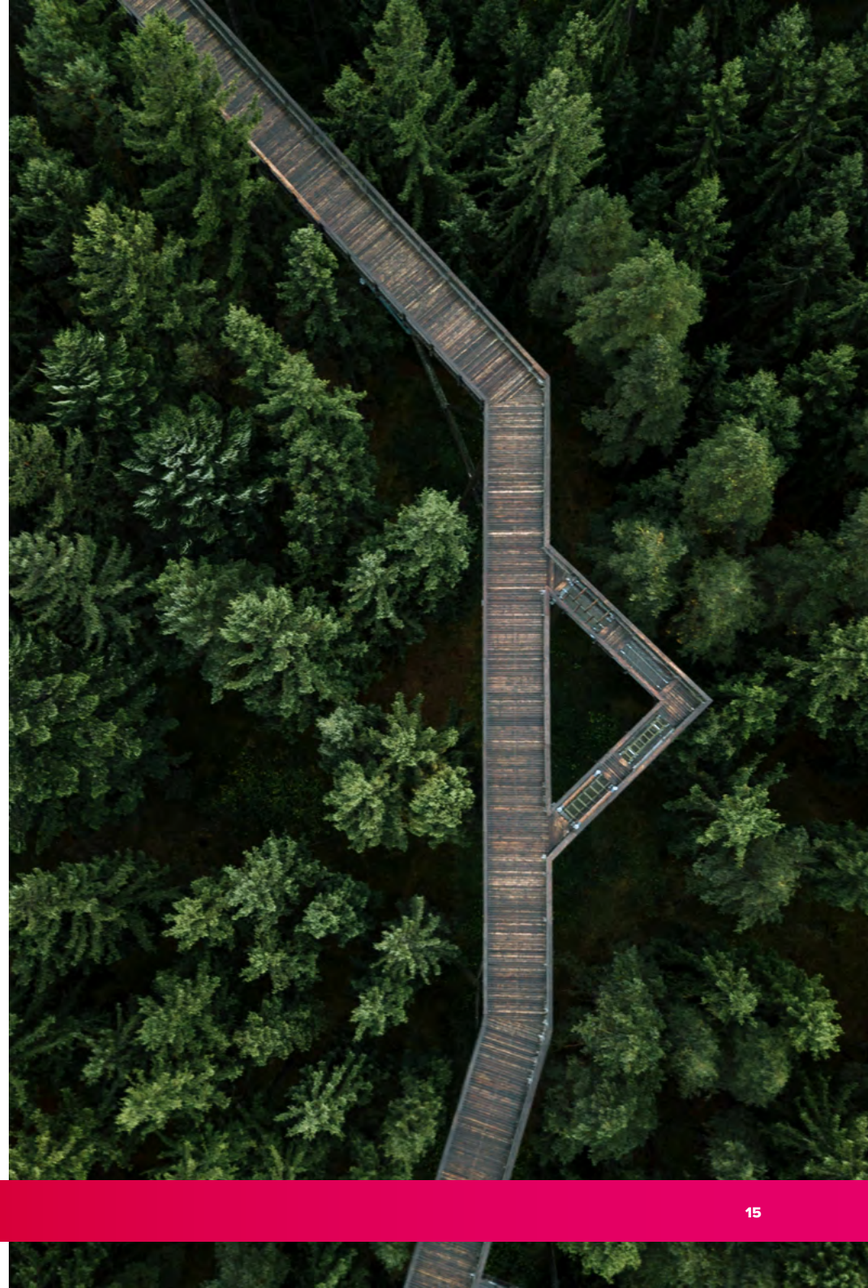
To ensure that users are informed, paragraph 190(g) of ISSA 5000 requires the practitioner, if applicable, to include a section in the assurance report with the heading ***Inherent Limitations in Preparing the Sustainability Information***, describing any significant inherent limitations associated with the measurement or evaluation of the sustainability matters against the applicable criteria, including inherent limitations relating to forward-looking information included in the sustainability information. In some cases, these uncertainties may be fundamental to the users' understanding of the sustainability information.

It is important to note that this section is **not akin** to an 'Emphasis of Matter' paragraph or an 'Other Matter' paragraph. The distinction is detailed in paragraph A579 of ISSA 5000.

Paragraph A569(b) of ISSA 5000 notes that, in addition to the basic elements described in paragraph 190, practitioners may choose to include additional details in the assurance report to address the inherent subjectivity or uncertainties involved in measurement or evaluation.

Understanding the nature of estimates and forward-looking information is essential to applying ISSA 5000 effectively. The next section discusses the relevant requirements in detail, including the practitioner's responsibilities under limited and reasonable assurance engagements.

'Uncertainty in sustainability information influences the nature and extent of assurance procedures the practitioner performs. It does not mean that the sustainability information is not an appropriate subject matter or affect whether suitable criteria exist.'



2. The relevant key requirements under ISSA 5000

This section highlights the key requirements of ISSA 5000 that are particularly relevant when providing assurance over estimates and forward-looking information. It explains how these requirements apply in practice, and where professional judgement is essential when addressing inherent uncertainty.

2.1 Determining whether estimates and forward-looking information are capable of assurance

Paragraphs 75 and 76 of ISSA 5000 require the practitioner to establish whether the preconditions for an assurance engagement are present, including obtaining preliminary knowledge of the engagement circumstances.

A key requirement is then to evaluate whether the sustainability matters are appropriate, which means whether they are identifiable and capable of consistent measurement or evaluation against the criteria, such that the resulting information can be subjected to procedures to obtain sufficient appropriate evidence (IAASB 2025a: para 77).

Furthermore, the practitioner is also required to evaluate whether the criteria are suitable and available to intended users, including whether they exhibit the characteristics of relevance, completeness, reliability, neutrality and understandability (IAASB 2025a: para 78).

Finally, the practitioner must determine whether the evidence needed to support the conclusion is obtainable (IAASB 2025a: para 79) and whether the engagement has a rational purpose (including that a meaningful level of assurance is expected for limited assurance) (IAASB 2025a: para 80).

2.2 Identifying and assessing risks of material misstatement

ISSA 5000 requires the practitioner to design and perform risk-assessment procedures sufficient to identify and assess risks of material misstatement and to design further procedures (IAASB 2025a: paras 103L, 103R). The assessment is:

- at the disclosure level for limited assurance, and
- at the assertion level for reasonable assurance.

For estimates and forward-looking information, this requirement typically directs attention to risks arising from:

- significant assumptions, methods and data
- internal consistency of disclosures, and
- potential management bias (professional scepticism and judgement under IAASB 2025a: paras 39–40).

2.3 Responding to identified risks under limited and reasonable assurance

Once risks are assessed, ISSA 5000 requires the practitioner to design and perform further procedures responsive to the assessed risks (IAASB 2025a: paras 126L–127L, 126R–127R).

Limited assurance

For limited assurance, ISSA 5000 includes specific requirements for estimates and forward-looking information (IAASB 2025a: para 146L). The practitioner shall evaluate whether:

- the criteria have been applied appropriately
- the methods used are appropriate and applied consistently
- changes from prior periods are appropriate, and
- additional procedures are necessary.

Reasonable assurance

For reasonable assurance, the practitioner's work extends beyond evaluation and inquiry (IAASB, 2025a, para 146R). In addition to evaluating the appropriate application of criteria, the practitioner shall undertake one or more of the following:

- test how management developed the estimate/forward-looking information (methods, assumptions, data)
- develop an independent point estimate or range, or
- use evidence from events up to the report date, where relevant.

2.4 Evaluating disclosure, including uncertainty and neutrality

ISSA 5000 then requires the practitioner to evaluate the relevance and reliability of information intended to be used as evidence, which includes external sources and, where information is produced by the entity, to evaluate its reliability, including accuracy and completeness as necessary (IAASB 2025a: paras 90–91).

In addition, the practitioner is required to evaluate the description of the applicable criteria (IAASB 2025a: para 162).

In the context of estimates and forward-looking information, these requirements are closely connected to whether disclosures are:

- neutral and complete (as characteristics of suitable criteria), and
- sufficiently transparent for intended users to understand key judgements and uncertainty (IAASB 2025a: para 162).

2.5 Forming the assurance conclusion and communicating limitations

ISSA 5000 requires the practitioner to form the assurance conclusion based on the evidence obtained (IAASB 2025a: paras 178–187).

Where relevant, ISSA 5000 includes requirements addressing subsequent events up to the assurance report date, which can be particularly relevant when evaluating estimates and forward-looking information (IAASB 2025a: paras 163–164).

2.6 Summary of key requirements

Table 2.1 summarises the key requirements for estimates and forward-looking information under ISSA 5000 discussed in this section.

Table 2.1: Summary of key requirements

KEY REQUIREMENTS
■ Confirm preconditions, appropriateness of subject matter, and suitability/availability of criteria
■ Assess risks of material misstatement (limited: disclosure level; reasonable: assertion level)
■ Respond to assessed risks with procedures appropriate to the level of assurance
■ Apply the dedicated requirements for estimates/forward-looking information (limited vs reasonable)
■ Evaluate evidence reliability and the description of criteria, which are central to transparency about uncertainty
■ Form the assurance conclusion on the basis of sufficient appropriate evidence

3. Case study

Firm XYZ is appointed as the sustainability assurance practitioner to provide assurance services on the sustainability report of ABC plc, a multinational producer of high-volume packaged goods for daily consumer use, including hygiene, nutrition and home products, for the year ended 30 June 2024.

For clarity and readability, the case study does not follow the full end-to-end engagement sequence set out in ISSA 5000. In particular, it does not illustrate engagement acceptance and continuance, confirmation of preconditions, determination of scope, assessment of the suitability and availability of criteria, the detailed risk-assessment process, or the formation of the assurance conclusion. These matters are assumed to have been completed in accordance with ISSA 5000.

The case study focuses on how the practitioner responds to identified risks of material misstatement and applies professional judgement when performing procedures and evaluating evidence relating to underlying estimates and forward-looking information. In doing so, it illustrates how the practitioner evaluates the relevance and reliability of evidence, assesses whether the related disclosures are clear and neutral, and appropriately convey uncertainty, and obtains either limited or reasonable assurance.

As discussed in our initial publication, *A Case Study: Demystifying Materiality in accordance with ISSA 5000* (ACCA and CA ANZ 2025), materiality is foundational to planning and performing a sustainability assurance engagement. Although the case study below focuses on estimates and forward-looking information, the practitioner's materiality assessment continues to inform the identification of significant assumptions, the assessment of risks of material misstatement and the design of further procedures.

In practice, as illustrated in our initial publication, disclosures with common attributes can be grouped for the purposes of planning and performing the engagement, including the basis chosen for considering or determining materiality or setting performance materiality. For the purposes of this case study, however, these disclosures are analysed individually in order to illustrate more clearly the application of ISSA 5000 requirements to estimates and forward-looking information. The approach illustrated below should therefore be read in conjunction with the materiality considerations explored in our initial publication.

3.1 Estimate

The estimate used in this case study is ABC plc's estimated Scope 2 emissions

ABC plc's Scope 2 emissions consist of emissions from the generation of purchased electricity, heating, cooling and steam – emissions that occur at the facility where the energy is produced, not where it is consumed.

Paragraphs B30–B31 of IFRS S2 state that entities should report on the location-based emissions' value as well as details relating to the market-based method, as relevant.

ABC plc's location-based and market-based Scope 2 emissions, relevant inputs to the estimates and additional information are detailed in Table 3.1.

In assessing these matters, the practitioner also considers whether the identified uncertainties and methodological changes could reasonably be expected to influence the decisions of intended users and therefore give rise to a risk of material misstatement. As discussed in our earlier publication on materiality (ACCA and CA ANZ 2025), user-relevance and users' tolerance for misstatement inform the identification of significant assumptions and the extent of procedures performed. In the context of ABC plc, the 15% increase resulting from the discontinuation of RECs and the reliance on extrapolated data (see Table 3.2) are considered potentially material owing to their impact on trend comparability and the interpretation of renewable electricity claims.

Table 3.1: Relationships between disclosures, inputs and additional information

DISCLOSURE	INPUTS	ADDITIONAL INFORMATION
*Location-based Scope 2 emissions are estimated at **1.25 Mt CO2e***	Average grid emission factors for the region where the facility is located	For sites not in central systems, ABC plc assumes non-renewable electricity use. This assumption increases reported location-based emissions because non-renewable electricity has a higher emission factor than renewable sources
*Market-based Scope 2 emissions are estimated at **0.20 Mt CO2e***	Actual supplier-specific emissions data The Renewable Electricity Certificates (RECs) were discontinued in 2024, and data was extrapolated for the reporting period	ABC plc calculates its market-based Scope 2 emissions using Greenhouse Gas (GHG) Protocol guidance and RE100 criteria (Climate Group RE100 2026) 80% of ABC plc's electricity is sourced from renewables, which significantly lowers its market-based estimate Discontinuation of RECs in 2024 was a material change in methodology that caused a 15% increase in what were considered Scope 2 emissions Timely acquisition of Energy Attribute Certificates (EACs) is key to substantiating market-based accounting. Delays, such as purchasing EACs for a prior year in Q1 2025, may undermine confidence in the integrity of reported Scope 2 emissions

STEP 1: Identify risks of material misstatement

In planning the engagement, the practitioner identifies and assesses risks of material misstatement relating to the Scope 2 estimate in accordance with ISSA 5000. This assessment is informed by an understanding of the methodology applied, the data sources used and the assumptions underpinning the estimate. Particular attention is given to areas involving estimation uncertainty, changes in methodology and reliance on extrapolated or third-party data.

In the context of ABC plc, the discontinuation of RECs, the resulting 15% increase in reported emissions and the use of extrapolated data introduce potential risks affecting comparability, completeness and the interpretation of performance trends. The key risks identified are summarised in the table below.

STEP 2: Perform procedures in response to the risks identified

Table 3.2 illustrates example procedures the practitioner may perform in response to the identified risks relating to the estimated Scope 2 emissions.

For a reasonable assurance engagement, the procedures listed under ‘Reasonable assurance’ are in addition to those listed under ‘Limited assurance’.

Table 3.2: Identified risks and procedures for addressing them

STEP 1: IDENTIFIED RISKS	STEP 2: LIMITED ASSURANCE – DISCLOSURE-LEVEL PROCEDURES (PARA 146L)	STEP 2: REASONABLE ASSURANCE – ASSERTION-LEVEL PROCEDURES (PARA 146R)
Material change in methodology resulting from discontinuing RECs, causing a 15% rise in Scope 2 emissions	• Enquire about the rationale for the methodological change • Compare emission factors against known ranges	• Test how management developed the estimation methods, assumptions and data, and assess appropriateness in the context of the criteria • Review board minutes and internal documentation supporting the decision of discontinuing RECs • Extend testing where estimation uncertainty is high or unexpected variances occur
Extrapolated data introduces estimation uncertainty	• Enquire about the basis of extrapolation • Evaluate whether the methods of extrapolation are appropriate and have been applied consistently • Review workpapers and supporting documentation for consistency • Perform high-level analytical procedures (e.g. energy intensity trends), assessing model logic and mathematical accuracy	• Assess whether the supplier-specific data used as the basis for extrapolation provides sufficiently reliable evidence • Recalculate the estimate and investigate any material variances • Compare management’s key assumptions to authoritative third-party sources • Test the design and operating effectiveness of controls over the estimate
Delayed acquisition of EAC may undermine integrity of market-based accounting	• Enquire about timing and completeness of EAC purchases • Assess disclosure of delayed acquisition where relevant	• Compare prior period EAC acquisitions to assess whether current period acquisitions are timely • Test controls over EAC acquisition process

STEP 1: IDENTIFIED RISKS	STEP 2: LIMITED ASSURANCE – DISCLOSURE-LEVEL PROCEDURES (PARA 146L)	STEP 2: REASONABLE ASSURANCE – ASSERTION-LEVEL PROCEDURES (PARA 146R)
Management bias	• Enquire of management and apply professional scepticism • Compare renewable energy claims to those of comparable entities	• Inspect model logic and re-perform calculations to confirm mathematical accuracy • Analyse trends of comparable entities to identify indicators of optimistic or selective assumptions • Sample invoices or meter logs to substantiate renewable energy sourcing claims • Evaluate whether management's assumptions remain reasonable when challenged
Inadequate disclosure of inherent uncertainty	• Evaluate whether uncertainty is clearly and prominently disclosed, including appropriate detail of challenges, dependencies and limitations • Assess whether the discontinuation of use of RECs and any delays in obtaining EACs acquisition, if applicable, are clearly disclosed and the impact is understandable to the intended users • Assess whether the language avoids implying certainty and appropriately conveys the extent of estimation uncertainty	• Assess whether uncertainty is appropriately reflected in the assumptions, underlying data and conclusions • Evaluate the presentation and understandability of the disclosures, including whether the level of detail is proportionate to the degree of estimation uncertainty and the associated risk of material misstatement • Assess whether uncertainty relating to all relevant events and conditions has been captured
Disclosures contain inconsistencies or conflict with other reported information	• Review disclosures for internal consistency • Evaluate consistency with other sustainability and annual report disclosures • Evaluate whether the criteria are clearly described and understandable for intended users	• Evaluate the presentation, classification and understandability of the disclosures • Ensure consistency with those applied in prior periods, or that any changes are justified and adequately disclosed

Professional judgement considerations – estimates

- In practice, Step 2 involves exercising professional judgement and should not be perceived as a mechanical checklist.
- The practitioner's response to the identified risks will depend on the specific facts and circumstances of the engagement.
- To illustrate this, in the context of ABC plc, particular attention is given to the material change in methodology resulting from the discontinuation of RECs, which led to a 15% increase in reported Scope 2 emissions, as well as the reliance on extrapolated data introducing estimation uncertainty.
- In initially assessing the material change in methodology, the practitioner considers whether the increase in reported emissions could be viewed primarily as a presentational comparability matter rather than a risk of material misstatement. Given the prominence of renewable electricity claims within ABC plc's sustainability narrative and the potential impact on users' interpretation of performance trends, the practitioner determines that the change warrants further scrutiny.
- The practitioner therefore performs additional procedures to assess the consistency of application with the GHG Protocol and evaluates whether enhanced disclosure of the material change in methodology and its effect on comparability is necessary.

STEP 3: Evaluate the relevance and reliability of evidence

While performing the procedures, the practitioner evaluates the relevance and reliability of information used as evidence, whether it is produced by the entity or prepared by an external expert (IAASB 2025a: paras 90–92).

Where there are doubts about the relevance and reliability of the information intended to be used as evidence, the practitioner will investigate further and determine the effect on the rest of the evidence obtained (IAASB 2025a: paras 93–94).

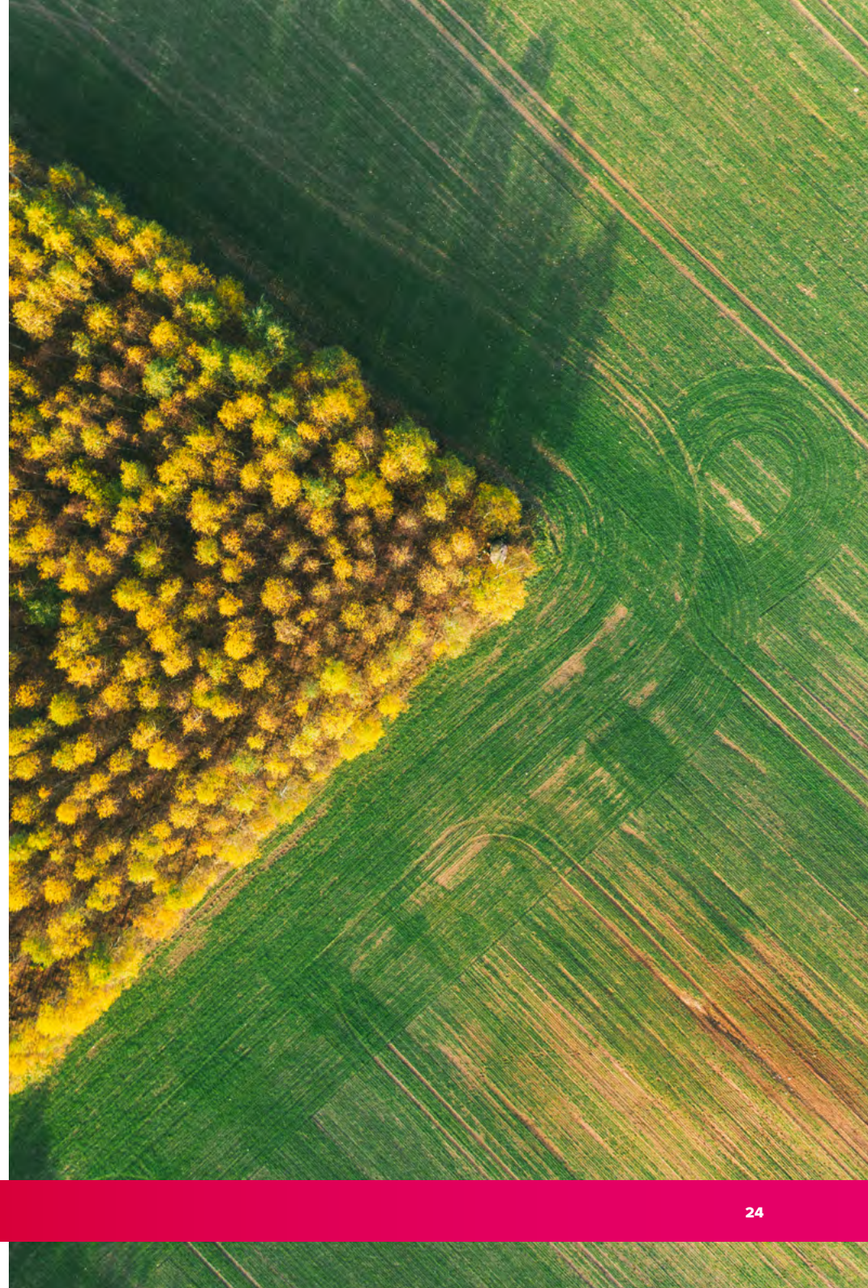
Table 3.3 summarises the procedures performed in evaluating the relevance and reliability of evidence for both limited and reasonable assurance engagements. For a reasonable assurance engagement, the procedures listed under 'Reasonable assurance' are in addition to those listed under 'Limited assurance'.

In practice, as part of this evaluation, the practitioner will also consider whether the nature and extent of any matters identified in relation to the estimate had implications for the sufficiency and appropriateness of evidence obtained for the assurance engagement as a whole. This includes considering whether additional procedures were necessary, and the implications, where relevant, for the assurance conclusion.

Table 3.3: Procedures for evaluating relevance and reliability of evidence

EVIDENCE FOCUS AREA	LIMITED ASSURANCE – DISCLOSURE-LEVEL EVALUATION (PARAS 90-91)	REASONABLE ASSURANCE – ASSERTION-LEVEL EVALUATION (PARAS 90-91, 162)
Information produced by the entity (para 91)	• Evaluate whether internally generated information, including supplier-specific data and extrapolation methodologies, appear reasonable and consistent • Obtain a written representation from management that they believe the significant assumptions used in making the estimates are appropriate, and assess their claims for reasonableness	• Evaluate internally generated information against accuracy, completeness and consistency assertions • Corroborate internal records with reliable third-party documents

EVIDENCE FOCUS AREA	LIMITED ASSURANCE – DISCLOSURE-LEVEL EVALUATION (PARAS 90-91)	REASONABLE ASSURANCE – ASSERTION-LEVEL EVALUATION (PARAS 90-91, 162)
Work performed by management's expert (para 92)	• Evaluate whether management's use of experts appears appropriate in the context of the estimate • Assess the competence, capabilities and objectivity of management's experts	• Evaluate whether the expert's methods, assumptions and data are appropriate and consistently applied
Work performed by the practitioner's external expert (para 57)	• Evaluate whether the involvement of a practitioner's external expert is appropriate in the circumstances, given the technical complexity of emission factors, extrapolation techniques or energy attribute accounting • Evaluate, at a high level, whether the expert appears to have appropriate competence, capabilities and objectivity for the practitioner's purposes • Consider whether the conclusions of the expert's work are consistent with other evidence obtained	• Evaluate the competence, capabilities and objectivity of the practitioner's external expert • Obtain a sufficient understanding of the expert's field of expertise to evaluate the relevance and reasonableness of the expert's work • Evaluate the methods, assumptions and source data used by the expert, including whether they are appropriate and consistently applied • Assess whether the expert's work provides sufficient appropriate evidence to support relevant assertions relating to the Scope 2 emissions estimate
Potential doubts about relevance or reliability of information (para 93)	• Remain alert for indicators of inconsistency, missing information or unexplained changes	• Investigate suspected issues such as inconsistencies, authenticity concerns or undisclosed modifications • Determine whether additional procedures are required to resolve doubts, and evaluate the impact on other aspects of the engagement, including any indication of a risk of material misstatement due to fraud



3.2 Forward-looking information

The forward-looking information used in this case study is ABC plc's 2030 net zero target for Scope 1 and Scope 2 emissions.

The assurance engagement covers the preparation and disclosure of this forward-looking information, not whether the target will ultimately be achieved (IAASB 2025a: para A242).

Entities are required to disclose GHG targets in accordance with paragraphs 33–36 of IFRS S2.

ABC plc's disclosure of its 2030 net zero target and additional information is detailed in Table 3.4

Table 3.4: ABC's 2030 target and additional information

DISCLOSURE	ADDITIONAL INFORMATION
*A commitment to **eliminate all greenhouse gas emissions from its direct operations (Scope 1 and Scope 2) by 2030**, using 2016 emissions of **2.10 Mt CO2e** as the reference point.*	The disclosure is supported by: • a historical emissions baseline; • a forward-looking emissions reduction pathway to 2030; and • narrative disclosures describing the actions expected to achieve the target, including renewable electricity sourcing, energy efficiency measures and electrification.

Given the strategic prominence of the net zero target and the reliance on it by investors, regulators and other stakeholders, the practitioner considers the disclosure to have a low tolerance for misstatement. As explored in our earlier publication on materiality (ACCA and CA ANZ 2025), disclosures that are central to an entity's sustainability narrative may be material even where the quantitative impact of individual assumptions appears limited. This assessment informs the identification of significant assumptions and the design of procedures responsive to the risks identified.

STEP 1: Identify risks of material misstatement

In planning the engagement, the practitioner identifies and assesses risks of material misstatement relating to the net zero target in accordance with ISSA 5000. This involves obtaining an understanding of the key assumptions underpinning the target, the methodology used to develop the emissions pathway and the governance processes supporting its preparation. Particular attention is given to the degree of estimation uncertainty involved, the reliance on future operational changes and capital investment, and the potential for management bias in presenting strategic commitments.

In the context of ABC plc, the achievability of the transition pathway, the dependency on future investment decisions and the clarity of related disclosures give rise to the key risks summarised below.

STEP 2: Perform procedures in response to the risks identified

Table 3.5 illustrates example procedures that the practitioner may perform in response to the identified risks for the net zero target for Scope 1 and Scope 2 emissions. For a reasonable assurance engagement, the procedures listed under 'Reasonable assurance' are in addition to those listed under 'Limited assurance'.

Table 3.5: Identified risks and procedures for addressing them

STEP 1: IDENTIFIED RISKS	STEP 2: LIMITED ASSURANCE – DISCLOSURE-LEVEL PROCEDURES (PARA 146L)	STEP 2: REASONABLE ASSURANCE – ASSERTION-LEVEL PROCEDURES (PARA 146R)
Key assumptions underpinning the emissions reduction pathway are inappropriate or unsupported	• Ask ABC plc's management about the key assumptions underpinning the pathway to eliminate Scope 1 and Scope 2 emissions, including assumptions relating to energy sourcing, operational efficiency improvements, and the timing of planned initiatives • Evaluate whether key assumptions are explicitly identified in the disclosure and clearly linked to ABC plc's stated climate strategy • Consider whether the assumptions appear reasonable in the context of ABC plc's operations, scale and historical emissions performance	• Test how ABC plc's management developed key assumptions, including reviewing internal analyses, models and documentation supporting future emissions reductions • Evaluate assumptions against relevant assertions (accuracy, completeness and neutrality), including whether assumptions appropriately reflect known operational constraints and external dependencies • Develop an independent expectation or range for emissions reductions, using relevant external benchmarks and available internal data, to assess whether management's assumptions fall within a reasonable range
Methods used to develop the emissions pathway are inappropriate or inconsistently applied	• Evaluate whether the methods used to develop the emissions reduction pathway are described sufficiently clearly for intended users to understand how the pathway was developed • Consider whether the methods appear appropriate for the nature of ABC plc's operations and whether they are applied consistently across the organisation, including by considering relevant publicly available information about the entity and its industry • Consider whether changes from prior periods are clearly explained	• Test the application of the emissions modelling methodology by recalculating selected elements of the pathway • Evaluate whether any changes in methods are appropriately justified, consistently applied and aligned with disclosures in other parts of the sustainability or annual report
Baseline Scope 1 and Scope 2 emissions data may be inaccurate or incomplete	• Evaluate whether the baseline emissions year, scope boundaries and measurement basis for the net zero are clearly described and internally consistent within the disclosure • Consider whether the basis of preparation for the baseline emissions data is adequately explained • Obtain an understanding of the systems and processes used to generate the baseline emissions data, including how the data was captured and aggregated	• Test baseline emissions data by tracing selected data points to underlying source information • Evaluate baseline data against occurrence, completeness and accuracy assertions, including consideration of controls over the preparation of emissions data

STEP 1: IDENTIFIED RISKS	STEP 2: LIMITED ASSURANCE – DISCLOSURE-LEVEL PROCEDURES (PARA 146L)	STEP 2: REASONABLE ASSURANCE – ASSERTION-LEVEL PROCEDURES (PARA 146R)
Planned actions are described as implemented or committed when they are not	• Evaluate whether ABC plc's disclosure clearly distinguishes between actions already implemented and actions that are planned or subject to future decisions • Consider whether progress toward the target is described in a balanced and neutral manner, without overstating the degree of commitment or implementation	• Inspect supporting documentation for selected actions described as implemented or committed, such as internal approvals or contractual arrangements • Assess whether evidence obtained contradicts management's narrative or indicates overstatement of progress
Management bias influences assumptions or presentation of the target	• Consider whether the disclosure is presented in a balanced and neutral manner, including appropriate discussion of challenges, dependencies and limitations • Evaluate whether positive aspects of the target are appropriately balanced with disclosure of risks and uncertainties	• Evaluate assumptions for indicators of management bias, such as overly optimistic assumptions or selective omission of constraints • Consider alternative assumptions and assess whether management's assumptions remain reasonable when challenged
Inadequate disclosure of inherent uncertainty	• Evaluate whether uncertainty relating to future conditions, external dependencies and execution risks is clearly and prominently disclosed • Consider whether the language used avoids implying that achievement of the net zero target is guaranteed	• Assess whether uncertainty is appropriately reflected across assumptions, methods and conclusions • Evaluate whether presentation and understandability assertions are met, including whether uncertainty disclosures are proportionate to the long-term and forward-looking nature of the target
Disclosures contain inconsistencies or conflict with other reported information	• Read the disclosure for internal consistency, including consistency between narrative explanations, quantitative information and stated targets • Evaluate consistency with other sustainability and annual report disclosures	• Investigate identified inconsistencies through corroborating evidence, including reconciling emissions disclosures with operational and strategic information elsewhere in the report • Evaluate consistency as part of assertion-level testing, including completeness, accuracy and presentation assertions

Professional judgement considerations – forward-looking information

- In practice, the procedures performed in response to risks relating to forward-looking information require exercising professional judgement. The practitioner's response will depend on the nature of the assumptions underpinning the target, the degree of estimation uncertainty involved and the prominence of the disclosure within the entity's sustainability reporting.
- In the context of ABC plc's net zero target for Scope 1 and Scope 2 emissions, the practitioner focuses on key assumptions relating to electrification, renewable energy sourcing and operational improvements. Particular consideration is given to whether these assumptions are within management's control and whether they are supported by sufficiently robust implementation plans.
- While management presents the net zero pathway as achievable through planned operational changes, the practitioner notes that certain elements of the transition plan depend on future capital investment approvals and technological developments that remain subject to uncertainty. The practitioner therefore considers whether the level of certainty implied by the disclosure is appropriate. As a result, the practitioner challenges management to clarify the dependency of the target on future investment decisions and to enhance the transparency of disclosure about the associated estimation uncertainty.
- Although the preceding considerations relate to ABC plc, similar dependencies may arise in public sector sustainability commitments, where the achievement of long-term targets may depend on policy decisions, funding allocations or infrastructure programmes.

STEP 3: Evaluate the relevance and reliability of evidence

Table 3.6 summarises the procedures performed in evaluating the relevance and reliability of evidence for both limited and reasonable assurance engagements. For a reasonable assurance engagement, the procedures listed under 'Reasonable assurance' are in addition to those listed under 'Limited assurance'.

In practice, as part of this evaluation, the practitioner will also consider whether the nature and extent of any matters identified in relation to the forward-looking information had implications for the sufficiency and appropriateness of evidence obtained for the assurance engagement as a whole. This includes considering whether additional procedures were necessary, and the implications, where relevant, for the assurance conclusion.

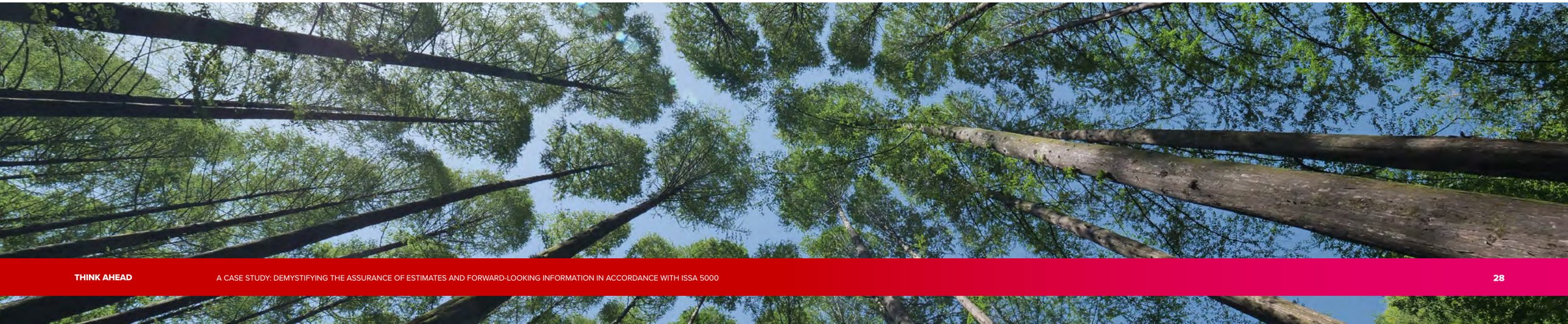
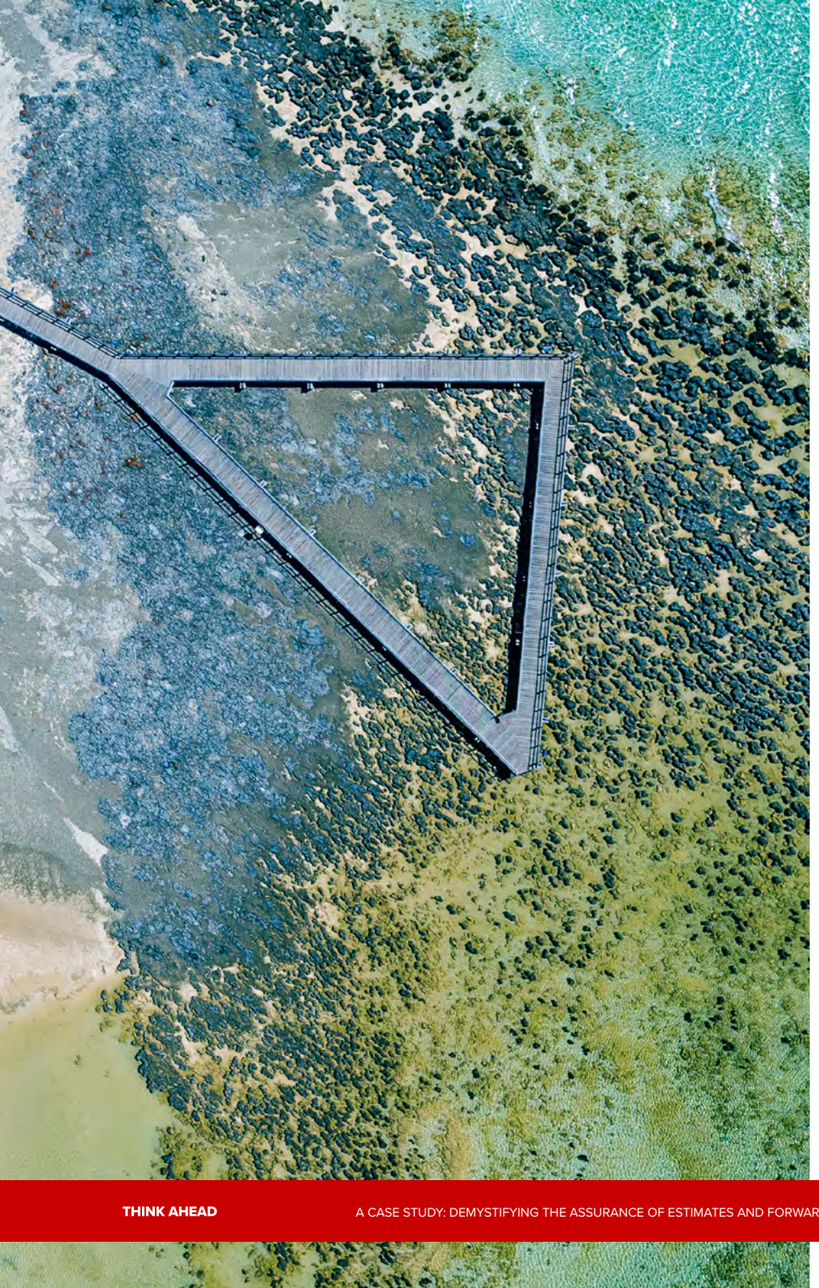


Table 3.6: Procedures for evaluating the relevance and reliability of evidence

EVIDENCE FOCUS AREA	LIMITED ASSURANCE – DISCLOSURE-LEVEL EVALUATION (PARAS 90–91)	REASONABLE ASSURANCE – ASSERTION-LEVEL EVALUATION (PARAS 90–91, 162)
Reliability of information produced by the entity	• Evaluate whether internally generated information supporting ABC plc's forward-looking emissions pathway (e.g. historical Scope 1 and Scope 2 emissions data, internal projections and supporting analyses) appears reasonable and consistent • Consider whether the judgement-dependent nature of this information is appropriately reflected in the disclosure	• Evaluate the reliability of internally generated information by reference to relevant assertions (accuracy, completeness and occurrence/existence) • Assess how the information was generated, reviewed and approved, including consideration of relevant controls over non-financial data and modelling processes • Evaluate consistency of internally generated information with corroborating evidence elsewhere in the sustainability or annual report
Reliability of external information supporting key assumptions	• Evaluate whether external information used by ABC plc to support key assumptions (e.g. market outlooks, technology readiness assessments, industry benchmarks) appears relevant and credible at a high level • Consider whether such information is used appropriately to support assumptions rather than to overstate certainty of future outcomes	• Evaluate the relevance and reliability of external sources by assessing their independence, reputation and consistency with other available evidence • Where appropriate, corroborate key assumptions using independent external information and assess whether management's use of external data is balanced and not selectively applied
Baseline emissions and key quantitative inputs	• Evaluate whether baseline Scope 1 and Scope 2 emissions and other key quantitative inputs are clearly described, consistently presented and understandable by intended users • Consider whether the baseline is internally consistent with other emissions disclosures	• Evaluate baseline emissions data and key quantitative inputs against accuracy, completeness and consistency assertions • Perform testing of selected data points by tracing to underlying source information and recalculating, where appropriate
Description of applicable criteria	• Evaluate whether the criteria used by ABC plc in preparing the forward-looking emissions pathway (including scope definitions, boundaries and interpretation of the target) are clearly described and understandable by intended users	• Evaluate whether the criteria are clearly described, consistently applied and aligned with the applicable reporting framework • Assess whether any departures or interpretations are adequately justified and explained

EVIDENCE FOCUS AREA	LIMITED ASSURANCE – DISCLOSURE-LEVEL EVALUATION (PARAS 90–91)	REASONABLE ASSURANCE – ASSERTION-LEVEL EVALUATION (PARAS 90–91, 162)
Disclosure of key assumptions	• Evaluate whether key assumptions underpinning the emissions pathway are clearly identified and explained at the disclosure level, rather than implied or embedded within narrative descriptions • Obtain a written representation from management that they believe the significant assumptions used in preparing forward-looking information are appropriate, and assess for reasonableness	• Evaluate whether assumptions are complete, internally consistent and appropriately supported by evidence • Assess whether assumptions are applied consistently across different parts of the disclosure and related information
Disclosure of uncertainty and limitations	• Evaluate whether uncertainty and limitations associated with ABC plc's net zero target are clearly and prominently disclosed • Consider whether the language used avoids implying certainty of achievement and appropriately reflects the forward-looking nature of the information	• Evaluate whether uncertainty is appropriately reflected across assumptions, methods and conclusions • Assess whether presentation and understandability assertions are met, including whether uncertainty disclosures are proportionate to the long-term horizon of the target
Neutrality and balance of disclosures	• Evaluate whether the disclosures present a balanced view of the emissions pathway, including both planned actions and material dependencies or constraints • Consider whether the overall presentation is neutral and not misleading	• Evaluate whether disclosures are free from bias, including consideration of alternative assumptions or outcomes • Assess whether evidence obtained contradicts management's narrative or indicates selective emphasis
Consistency with other information	• Evaluate whether the forward-looking emissions disclosures are internally consistent and consistent with other sustainability and annual report information	• Investigate identified inconsistencies through corroborating evidence • Evaluate consistency as part of assertion-level testing, including completeness, accuracy and presentation assertions



4. Limitations of our approach

This report has been developed to support understanding of how the requirements of ISSA 5000 may be applied when providing assurance over estimates and forward-looking information. It is intended as practical guidance, rather than as a comprehensive or prescriptive interpretation of the Standard, and does not replace the need for professional judgement in individual engagements.

As with the first publication in this series (ACCA and CA ANZ 2025), this report was prepared at an early stage in the implementation of ISSA 5000. This Standard has only recently been issued, and its effective date applies to assurance engagements on sustainability information reported for periods beginning on or after 15 December 2026, or as at a specific date on or after that date. Earlier application is permitted. Consequently, practical experience with the application of ISSA 5000 in this area remains limited, and approaches to applying the Standard are expected to continue to evolve as assurance practitioners, firms and regulators gain experience.

To support clarity and accessibility, the present report adopts a simplified and illustrative approach. In particular, the case study (Section 3) does not follow the full end-to-end sequence of an assurance engagement as set out in ISSA 5000. Steps relating to engagement acceptance and continuance, confirmation of preconditions, determination of scope, assessment of the suitability and availability of criteria, and detailed risk assessment are not illustrated.

The case study also focuses on selected requirements and professional judgement considerations that are most relevant to estimates and forward-looking information. It does not attempt to illustrate all procedures that may be performed in practice, or all circumstances that may arise in real-world engagements. Accordingly, the illustrative procedures should not be interpreted as minimum or required procedures, nor as suggesting that the same approach would be appropriate in all cases.

In addition, the case study uses simplified fact patterns to aid explanation and comparability. While inspired by real-world disclosures, it is illustrative in nature and should not be read as commentary on any specific entity or assurance engagement.

Finally, assurance over estimates and forward-looking information is subject to inherent limitations. Such information is based on assumptions about future events and conditions, which are subject to change. In accordance with ISSA 5000, assurance engagements address the preparation and disclosure of that information, rather than the achievement of future outcomes. This report does not advice how to reduce or eliminate that inherent uncertainty, but to support transparent and proportionate assurance in its presence.

5. Practical considerations and recommendations

Estimates and forward-looking information are central to sustainability reporting and involve significant judgement. Providing assurance over such information requires practitioners to navigate inherent uncertainty and assumptions in the absence of verifiable future outcomes.

Practitioners therefore need to apply robust planning, maintain strong professional scepticism throughout the engagement, and clearly communicate the basis, limitations and nature of the information being assured, to support users' understanding.

As with all IAASB standards, ISSA 5000 is principles-based. While it provides guidance to practitioners responding to risks relating to estimates and forward-looking information, its effective application relies on professional judgement. Practitioners should be mindful of how assurance conclusions are framed, ensuring that users understand what assurance can and cannot provide in relation to targets, projections and transition plans.

Sustainability disclosures increasingly extend beyond historical data and incorporate estimation uncertainty, methodology choices, scenario assumptions and strategic commitments such as emissions reduction targets and transition plans. As demonstrated in the case study (Section 3), such subject matter requires careful consideration of underlying assumptions, changes in methodology, comparability and transparency of disclosures. Transparency about uncertainty is essential. Practitioners should be mindful of how assurance conclusions are framed, ensuring that users understand what assurance can and cannot provide in relation to targets, projections and transition plans.

The case study illustrates the distinctions between limited and reasonable assurance engagements when addressing estimates and forward-looking information. Limited assurance procedures respond to risks at the disclosure level, whereas reasonable assurance procedures require a more detailed response at the assertion level, including testing how management developed the estimate or forward-looking information.

Particular attention is required for significant assumptions, especially where a reasonable variation could materially affect the estimate or forward-looking information. In the case study, this included assumptions relating to renewable electricity sourcing, extrapolated data following the discontinuation of RECs, and the achievability of emissions reduction pathways. Practitioners should consider whether such assumptions are consistent with external evidence, internally consistent across disclosures, and free from indicators of management bias. We also emphasise that, by nature, the use of experts is often more prevalent in sustainability assurance engagements than in financial statement audits, and this has direct implications for the nature, timing and extent of the assurance procedures.

Transparency about uncertainty is essential. As discussed earlier in this report, assurance over forward-looking information does not provide a guarantee that targets will be achieved (see e.g. subsection 1.4). The practitioner's responsibility is to evaluate whether the information has been prepared in accordance with suitable criteria and whether key assumptions and uncertainties are clearly and proportionately disclosed. Where uncertainty is fundamental to users' understanding, practitioners should ensure that it is appropriately communicated, including through the 'Inherent Limitations' section of the assurance report, where required.

Practitioners should be mindful of how assurance conclusions are framed, ensuring that users understand what assurance can and cannot provide in relation to targets, projections and transition plans.

Finally, ISSA 5000 includes overarching documentation requirements (as applied in subsection 1.3 of this report). In the context of estimates and forward-looking information, practitioners should document the identified risks of material misstatement, the significant assumptions considered, the procedures performed (whether at disclosure or assertion level), the evidence obtained, and the rationale for conclusions reached. Documentation should enable an experienced practitioner, having no previous connection with the engagement, to understand the basis for the assurance conclusion.

Importantly, assurance over estimates and forward-looking information demands careful planning, thoughtful evaluation and professional judgement. Practitioners should allocate sufficient time to understanding significant assumptions, assessing estimation uncertainty, and evaluating whether disclosures clearly communicate uncertainty and limitations. This approach supports the practitioner in determining how to obtain sufficient appropriate evidence and in forming a conclusion that enhances confidence in the sustainability information without overstating what assurance is intended to provide.

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THINK AHEAD