



Program Verification and Validation

Greenhouse Gas Inventories of Organiza- tions, Projects and Products

Supplement to the **qualityaustria** General Terms and Conditions, as amended

Introduction

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Content

1	Scope	4
1.1	Standards	4
1.2	Terms and Definitions	5
2	Principles of Verification and Validation	6
2.1	Confidence through impartial and competent evaluation	6
2.2	Interested Parties	6
3	Intended Users or Target Groups of GHG Statements	7
4	Declaration or Statement	7
5	Level of Assurance in case of Verification	8
6	Materiality Assessment / Materiality Thresholds	9
7	Verification / Validation Process	10
7.1	Feasibility Check	13
7.2	Engagement	14
7.3	Planning and Preparation – Verification / Validation Stage 1	14
7.4	Verification / Validation Execution	19
7.5	Independent review by the veto examiner	23
8	Facts Discovered after the Issue of the Validation / Verification	24
9	Communication with the Client	24
10	Appeals and Complaints	25
11	Further Obligations of Client Organizations	26
12	Rules Governing the Use of Marks	28

1 Scope

The present verification and validation program refers to the **verification and validation of greenhouse gas inventories of organizations and products**.

The normative basis for accreditation includes:

- **EN ISO/IEC 17029** Edition: 2020-02-15; Conformity Assessment — General principles and requirements for validation and verification bodies
- **ÖNORM EN ISO 14065** Edition: 2022-02-15, General principles and requirements for bodies validating and verifying environmental information (ISO 14065:2020)
- **ÖNORM EN ISO 14064-3** Edition: 2019-11-15 Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements (ISO 14064-3:2019)

1.1 STANDARDS

The normative basis for organizations and projects includes:

- **ISO 14064-1:2018**: Specification with guidance at the **organization level** for quantification and reporting of greenhouse gas emissions and removals
- **ISO 14064-2:2019** Greenhouse gases — Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements
- **ISO 14066-2023** Greenhouse gases – Competence requirements for greenhouse gas validation teams and verification teams

The ISO 14064 series of standards consists of three parts. ISO 14064-1 builds the **basis for evaluating for a company's own greenhouse gas emissions**, i.e. for establishing its **Corporate Carbon Footprints (CCF)**. The standard provides information on the **principles and requirements** for planning, developing and reporting of GHG inventories in a company.

ISO 14064-1 promotes the structured reporting of an organization's greenhouse gas emissions and its efforts to reduce its carbon footprint. The standard provides the framework for GHG balance and its verification. At the same time, ISO 14064-1 is the **basis for reliable reporting**. This creates the necessary foundation for demonstrating and communicating an organization's efforts and successes in climate protection.

The content of ISO 14064-1 builds on the **Greenhouse Gas Protocol (GHG Protocol)**. The **World Business Council for Sustainable Development (WBCSD)** and the World Resources Institute (WRI) for standardizing carbon accounting have published this Standard in 1998.

ISO 14064-2 provides guidance at the **project level** for quantifying the **reduction or removal of greenhouse gas emissions**.

ISO 14064-3 defines the **requirements for verifying GHG statements (carbon footprint)**. According to this Standard, Quality Austria certifies after successful verification that the corresponding specifications for the emissions balance have been met.

The normative basis for products includes:

- **ISO 14067:2018** Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification

1.2 TERMS AND DEFINITIONS

Carbon Footprint of a product, CFP: sum of GHG emissions (3.1.2.5) and GHG removals (3.1.2.6) in a product system (3.1.3.2), expressed as CO₂ equivalents (3.1.2.2) and based on a life cycle assessment (3.1.4.3) using the single impact category (3.1.4.8) of climate change

Greenhouse gas activity data, GHG activity data

quantitative measure of activity that results in GHG emission (3.1.5) or GHG removal (3.1.6)
EXAMPLE: Amount of energy, fuels or electricity consumed, material produced, service provided, area of land affected

Greenhouse gas inventory, GHG inventory: list of GHG sources (3.1.2) and GHG sinks (3.1.3), and their quantified GHG emissions (3.1.5) and *GHG removals* (3.1.6)

Greenhouse gas report, GHG report: standalone **document** intended to communicate an **organization's** (3.4.2) or **GHG project's** (3.2.7) **GHG-related information to its intended users** (3.4.4)

Note 1 to entry: A GHG report can include a **GHG statement** (3.2.5)

Intended use of GHG inventory: main purpose set by the organization (3.4.2), or a program, to quantify its GHG emissions (3.1.5) and GHG removals (3.1.6) consistent with the needs of the intended user (3.4.4)

Intended user: individual or organization (3.4.2) identified by those reporting GHG-related information as being the one who relies on that information to make decisions.
Note 1 to entry: the intended user can be the client (3.4.5), the responsible party (3.4.3), the organization itself, GHG program (3.2.8) administrators, regulators, the financial community or other affected interested parties, **such as local communities, government departments, general public or non-governmental organizations.**

Base year: specific, historical period identified for the purpose of comparing GHG emissions (3.1.5) or GHG removals (3.1.6) or other GHG-related information over time.

Verification: process for **evaluating a statement of historical data and information** to determine if the statement is materially **correct** and conforms to **criteria**.

Validation: process for **evaluating the reasonableness of the assumptions, limitations and methods** that support a **statement** about the **outcome of future activities**.

Note: Conclusion: while verification refers to historical data, validation makes a statement about the results of future activities.

Verifier: competent and impartial person with **responsibility for performing and reporting on a verification** (3.4.9)

Validator: competent and impartial person with **responsibility for performing and reporting on a validation** (3.4.10)

Uncertainty: parameter associated with the result of quantification that characterizes the **dispersion of the values** that could be reasonably attributed to the quantified amount

Level of assurance: degree of **confidence** in the GHG statement (3.2.5)

Reasonable assurance: level of assurance (3.6.5) where the nature and extent of the verification (3.6.2) activities have been designed to provide a **high but not absolute level of assurance on historical data and information**

Limited assurance: level of assurance (3.6.5) where the nature and extent of the verification (3.6.2) have been designed to provide a **reduced level of assurance on historical data and information**

Materiality: concept that individual misstatements (3.6.15) or the aggregation of misstatements could influence the intended users' (3.2.4) decisions

Misstatements: error, omission or misrepresentation in the environmental information statement (3.1.5)

Note 1 to entry: Misstatement can be **qualitative or quantitative**

ÖNORM EN ISO 14065:2022 3.3.21; [SOURCE: ISO 14064-3:2019, 3.6.15, modified – “environmental information statement” has replaced “GHG statement”]

Material misstatement: individual misstatement (3.3.21) or the aggregate of actual misstatements in the environmental information statement (3.1.5) that **could affect the decisions of the intended users (3.2.4)**, ÖNORM EN ISO 14065:2022 3.3.22 [SOURCE: ISO 14064-3:2019, 3.6.17, modified]

Verification / validation opinion: formal written declaration to the **intended user** (3.2.4) that provides confidence on the GHG statement (3.4.3) in the responsible party's (3.2.3) GHG report (3.4.2) and confirms conformity with the criteria (3.6.10).

Intended user (ÖNORM EN ISO 14064-3:2019): Individual or organization (3.2.2) identified by those reporting GHG-related information as being the one who relies on that information to make decisions.

An opinion must be drawn up for the user based on the evidence collected.

2 Principles of Verification and Validation

2.1 CONFIDENCE THROUGH IMPARTIAL AND COMPETENT EVALUATION

The overall objective of validation and verification is to provide confidence to all parties that a validated / verified claim complies with the requirements. The value of validation or verification is the level of **confidence** established by an **impartial and competent evaluation** by the validation / verification body.

To promote this confidence, the process of verification or validation is based on the following principles:

- evidence-gathering activities, based on objective evidence;
- critical review of data, information, accounting or assumptions;
- careful preparation and conduct of the verification / validation activities;
- reliable presentation of findings and conclusions;
- identification of nonconformities and open points; initiating actions;
- ensuring the impartiality of the persons involved in the process. This also means no conflict of interest, e.g. in the form of direct or indirect financial benefits, intimidation or familiarity (personal closeness).

2.2 INTERESTED PARTIES

Possible interested parties may include:

- Companies seeking verification or validation
- Clients and partners of clients
- Accreditation Austria
- Standardization institutes such as ASI, ISO
- Authorities such as BMF, BMWD, BMJ
- Financial institutions
- NGOs
- Audit firms or statutory (financial) auditor

3 Intended Users or Target Groups of GHG Statements

The client shall specify in the **feasibility check** for which target group the GHG statement is intended.

Target groups can include:

- reader of the report of the non-financial indicators;
- key account customers in the value chain;
- banks or investors who have to provide information on climate protection acc. to the EU Taxonomy Regulation (Environmental Goal 1), cf. ISO 14030-1 and 2 (green bonds and credits);
- program owners of a GHG program;
- municipalities;
- authorities;
- NGOs, e.g. "Klimaaktiv" partners;
- bodies awarding the Eco-Label, e.g. VKI.

4 Declaration or Statement

The client specifies in the feasibility check which **factual and objective declaration** he/she would like to make. The statement could be presented at a point in time or could cover a **period of time**. This statement could be provided in the **GHG report** or **GHG project plan**.

The following declarations are possible:

- The client has prepared a GHG inventory of the direct CO₂ emissions and would like to have the results of the inventory checked / verified.
- The client has prepared a GHG inventory of the direct and indirect CO₂ emissions and would like to have the results of the inventory checked / verified.
- The client has prepared a Scope 1, 2 and 3 GHG inventory and would like to have the **accuracy of the results** checked / verified.
- The client is planning an investment. According to the **EU Taxonomy Regulation**, a GHG inventory acc. to ISO 14064-2 has to be prepared for this climate protection investment. This has to be validated (ex-ante).

- The client produces **climate neutral**. (Note: Risk of greenwashing, if the focus is on offsetting CO₂ equivalents. What is the percentage of carbon offset?)

5 Level of Assurance in case of Verification

For verification, the verifier and the client shall **agree on the level of assurance to be applied** and shall consider the **needs of the intended user**. The verifier shall assess the **appropriateness of the level of assurance**.

The verifier **shall not change the level of assurance during the verification**, but may terminate the engagement and start a new engagement with a different level of assurance.

The level of assurance shall be specified prior to the start of the verification because the level of assurance establishes the nature, extent and timing (the design) of the evidence-gathering activities.

Definition: Level of assurance: degree of confidence in the GHG statement (ÖNORM EN ISO 14063-3; 3.6.5)

Possible levels of assurance:

Reasonable level of assurance (the general part of ISO 14064-3:2019 normatively describes the approach to sufficient level of assurance)

- **Reasonable assurance:** level of assurance (3.6.5) where the nature and extent of the verification (3.6.2) activities have been designed to provide a high but not absolute level of assurance on historical data and information;
- **Limited level of assurance:** level of assurance (3.6.5) where the nature and extent of the verification (3.6.2) activities have been designed to provide a **reduced level of assurance on historical data and information**;

(See also Annex A ÖNORM ISO 14064-3:2019): A limited level of assurance verification allows the verifier to conclude that **nothing has come to his/her attention** to cause him/her to believe that the GHG statement is misstated (**negative form of conclusion**). The limited level of assurance follows the same general process as the reasonable level of assurance verification including clarifications such as strategic analysis, risk assessment and evidence-gathering activities.

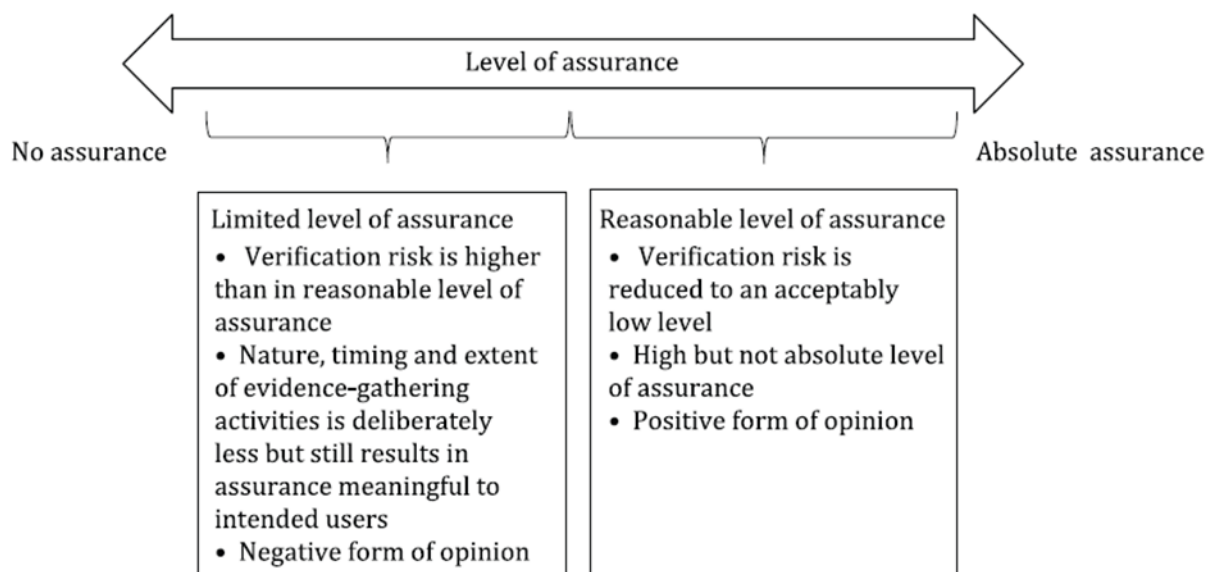


Figure: Level of assurance (degree of confidence), Source ÖNORM EN ISO 14064-3:2019, A.1

Notes on the limited level of assurance verification process

Source ISO 14064-3:2019, A.3 (normative Annex)

The limited level of assurance verification follows the same general process as the reasonable level of assurance verification with the **following clarifications**:

Strategic analysis: Limited level of assurance verifications **do not require a detailed assessment of the design, existence and effectiveness of controls** because of the underlying assumption that the controls are reliable.

Risk assessment: For a limited level of assurance, the **risk assessment is performed on the GHG statement as a whole** and is not as detailed as a reasonable level of assurance engagement. "Limited level of assurance verifications" do not require that **the risks identified in the risk assessment be identified at the detailed level** of:

- occurrence, completeness, accuracy, cut-off and classification for emissions and removals; or
- existence, rights and obligations, completeness, and accuracy and allocation for storage.

The verifier shall categorize risks as **inherent, control and detection risks**.

Verification plan: (Source A4.3.3) In the limited level of assurance, **the facility or site** that conducts the aggregation for the GHG statement **shall** be visited, unless the verifier has prior knowledge of the facility or site's aggregation process. Other facility or site visits shall be determined based on the risk assessment and designed evidence-gathering activities.

Evidence-gathering plan (Source A.4.3.4): In **reasonable level of assurance verifications**, the **evidence-gathering plan is continually updated** until sufficient and appropriate evidence is gathered to allow the verifier to reach a conclusion.

In **limited level of assurance verifications**, the verifier **updates the evidence-gathering plan primarily for potentially material misstatements**.

6 Materiality Assessment / Materiality Thresholds

The verifier / validator shall confirm the materiality threshold required by the intended users. If intended users have specified no materiality threshold, the verifier / validator shall set (a) materiality threshold(s) and communicate them to the client.

The **Greenhouse gas program can establish a threshold for materiality**. Materiality has **qualitative and quantitative components**.

Quantitative materiality refers to error in value in the GHG statement. Examples include:

- misstatements;
- incomplete inventories (e.g. processes have been forgotten or excluded);
- misclassified GHG emissions, or
- misapplication of calculations (e.g. incorrect formulas, incorrect or obsolete conversion factors etc.).

Qualitative materiality refers to intangible issues that affect the GHG statement. Examples include:

- control issues that erode the verifier's confidence in the reported data;
- poorly managed documented information;

- difficulty in locating requested information;
- noncompliance with regulations indirectly related to GHG emissions, removals or storage.

The concept of materiality is used in designing the verification / validation and in assessing the evidence to come to a conclusion.

7 Verification / Validation Process

The process is divided into the following steps:

1. Feasibility check (Pre-engagement)
2. Engagement
3. Planning
4. Validation / Verification execution
5. Review
6. Decision and issue of the validation / verification statement
7. Handling of appeals
8. Handling of complaints
9. Records

The following figures show the verification and validation process (source ÖNORM EN ISO 14064-3 figure 3, page 13 and figure 4, page 14).

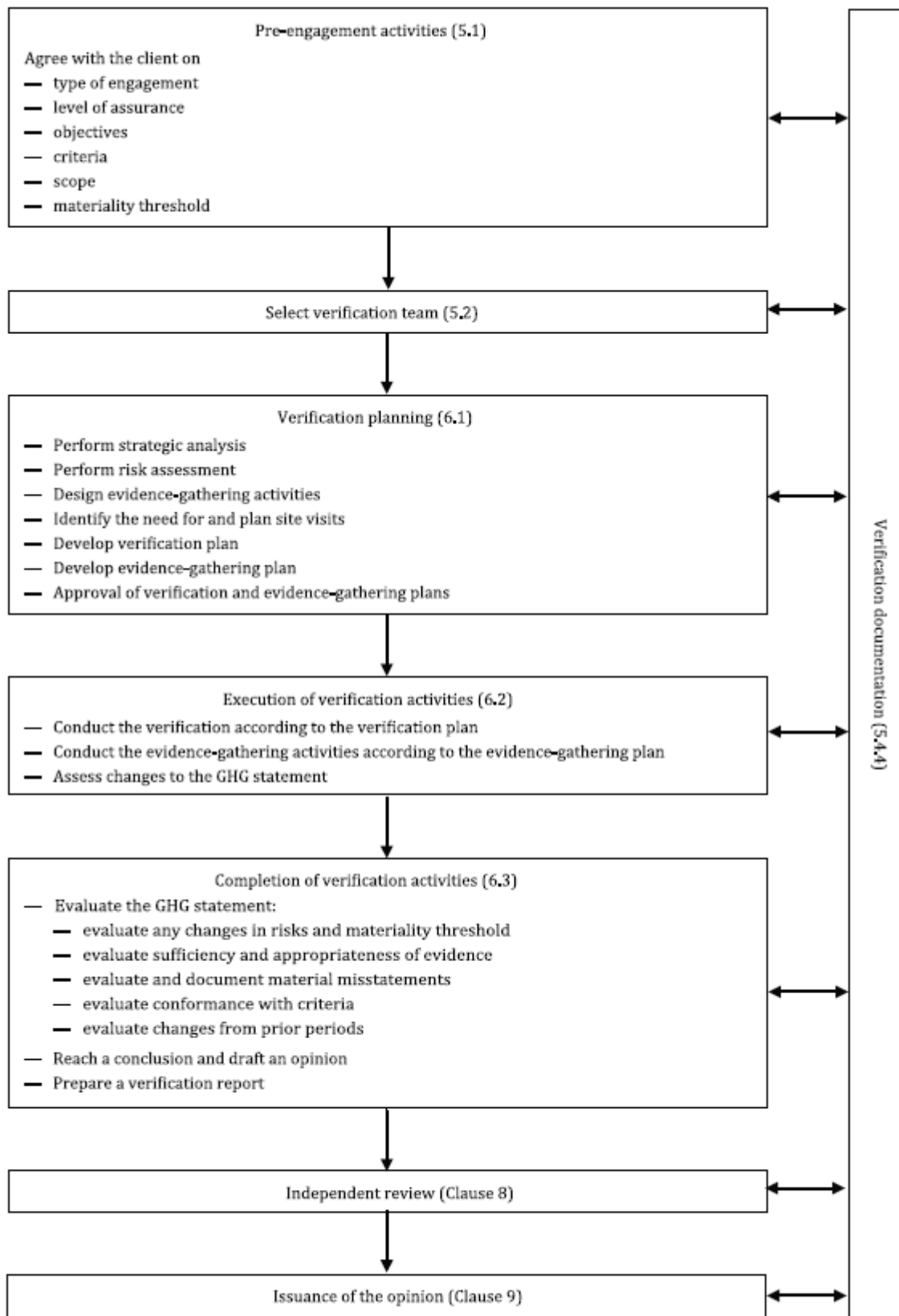


Figure 3 — Verification process

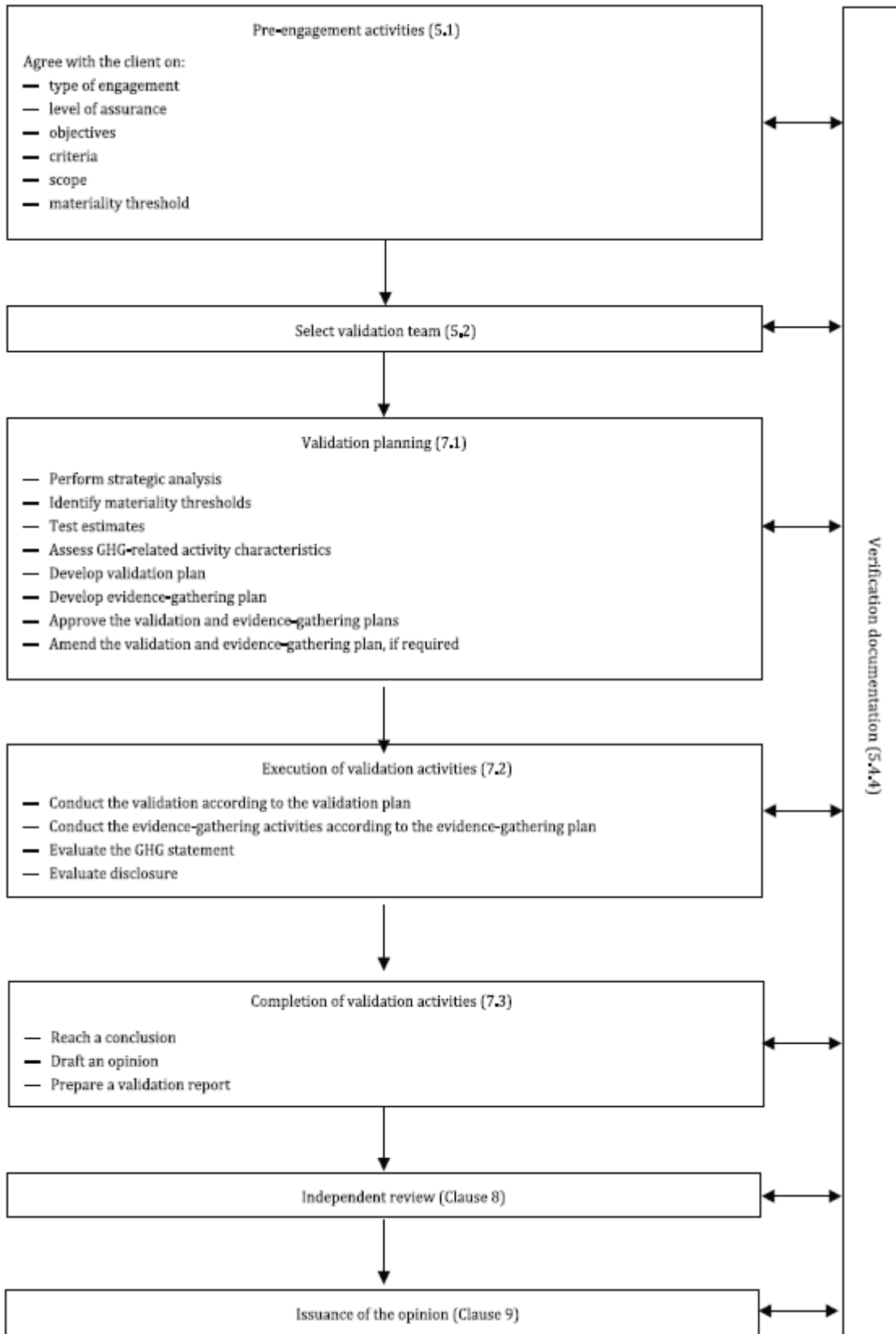


Figure 4 — Validation process

7.1 FEASIBILITY CHECK

The client provides the following information in advance using the form FO_25_03_27e_Information_offer_making_ISO14064-1, ISO 14064-2 and ISO 14067 Verification/Validation:

- Name of the client
- Contact details
- Contact person
- Overview of sites incl. possible country information
- Valid certificates, e.g. acc. to ISO 14001, EMAS, ISO 50001
- Industry (sector)
- Main activities
- Main facilities, technologies
- Products, product groups
- Indication whether a **verification, validation or a combination (ex-ante and ex-post assessment)** thereof has to be performed (see ISO 14065:22 9.2)
- **Statement** to be verified
- **Normative basis:** ISO 14064-1, -2 ISO 14067 or possibly a specific GHG program
- Any previous reports for validation or verification?
- Information on **materiality**,
 - Inventory boundaries (site; corporate group or product)
 - Scope level (1, 2, 3)
 - Sources, sinks and reservoirs (SSR)
 - **Types of GHG:**
 - Carbon dioxide (CO₂)
 - Methane (CH₄)
 - Nitrous oxide (N₂O)
 - Hydrofluorocarbons (HFCs)
 - Perfluorocarbons (PFCs),
 - Sulphur hexafluoride (SF₆)
 - Significant energy sources incl. quantities
 - Significant energy users, significant facilities or share of energy consumption for products
 - Energy suppliers (electricity purchase, electricity labeling ...)
 - Data basis (period of time)
 - Potential omissions, exclusions from the inventory
- **GHG report or GHG plan**
 - **With regard to ISO 14067, additional questions are relevant:**
 - Are comparative product statements planned?

- Is an internal or external critical review of the product carbon footprint planned?
- Information on the **level of assurance**
 - Objective: Reasonable level of assurance or
 - Limited level of assurance

Quality Austria reviews this information for completeness, accuracy and plausibility (pre-engagement). The outcome of the pre-engagement covers the following:

- Determination of feasibility
 - NO: Rejection of validation / verification → information to the client
 - YES: Preparation of the engagement
- Timing of the validation / verification activity as the basis of engagement
- Determination of materiality
- Definition of the level of assurance
- List of possible questions for the initial site visit (risks)

7.2 ENGAGEMENT

The applicant receives the offer for validation or verification including the GTCs, as amended, as well as supplementary requirements for validation / verification (validation / verification programs of GHG inventory or Product Carbon Footprints).

The offer contains the following statements under point "Miscellaneous" in the offer cover sheet:

- scope of verification / validation;
- specification of the standard;
- possible exclusions;
- declaration;
- **level of assurance.**

In addition to the requirements stated in ISO/IEC 17029:2019, 9.3.2, the client shall inform **Quality Austria of all facts** that may affect the **validity of an issued opinion**.

The offer refers to the applicable documents. When the offer is signed, the contract is concluded and a confirmation of assignment including the date and duration is sent to the client.

7.3 PLANNING AND PREPARATION – VERIFICATION / VALIDATION STAGE 1

Depending on the complexity and scope, a team is formed or an individual validator / verifier is assigned in the WIS. A team leader ("Lead-V") is appointed. The **responsibility for planning, approval or possible changes lies with the Lead-V**.

The Lead-V receives all information from the CSC (feasibility check) for preparation. Verification / validation can be an **iterative process**.

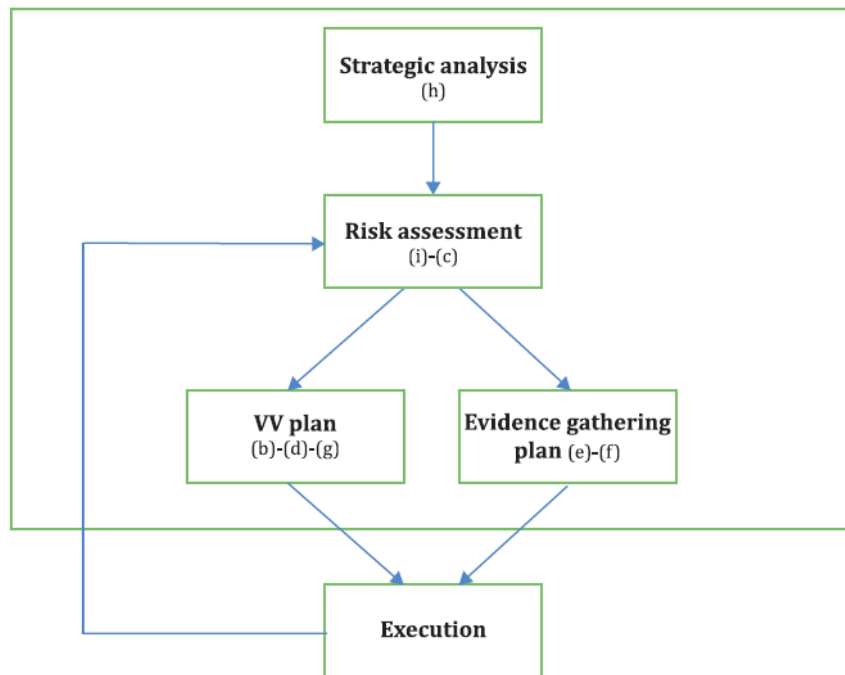


Figure 1 — Steps of a planning process

Figure: Steps of a planning process, Source: ISO 14065:2022, page 13

In a **first stage of validation / verification** (if possible, on site) the planning and preparation are discussed in detail with the client:

■ **Strategic analysis**

- review of information from the **feasibility data sheet**;
- inventory **objectives**;
- clarification of **inventory boundaries** (ownership regarding CO₂ emissions, locations, site boundaries; scope of inventory);
- **materiality threshold**: may still need to be defined with the client organization, see chapter 8;
- **responsibilities** at the client organization (key personnel, competences, tasks);
- **declaration** / statement;
- review of the **GHG report** or previous V-reports;
- GHG relevant **processes** (activities, operations);
- relevant **sector** information;
- **overview of facilities**;
- potential relevant legal basics including climate protection obligations;
- **energy and material flows** (Sankey diagrams incl. source, sinks and possible reservoirs);
- types of sources of **information and data** incl. potential estimate methodology;
- review of the data collection process (measurement, monitoring, evaluation, periods) and potential statements on the accuracy of data;

- determination of emission factors including references.

- *Validation:*
 - What **requirements** does the intended **user** of the validation report specify?
 - Is a proper disclosure of the GHG statement available?
 - What are the results of the sensitivity and uncertainty analysis?
 - Appropriateness and quality of the estimate methodology
 - Could **possible side effects or shifts** of emissions occur? If the GHG-related activity has to consider side effects, the validator has to assess the completeness and accuracy of these modifications.
 - **Functional equivalence:** the validator shall assess whether the project and the baseline scenario are functionally equivalent.
 - **Sensitivity:** The validator shall identify **assumptions with high potential for change** and assess whether these **changes** are material to the GHG statement.

- **Site visit** (material facilities, storages)

- **Risk analysis and risk assessment:**
 - complexity of the organization;
 - clear specifications in the organization;
 - recognition of potential misstatements;
 - Are all SSRs identified? To what extent is the data complete and accurate?
 - clarification of possible influencing factors that could affect the outcome;
 - materiality threshold;
 - exclusions;
 - identification of possible uncertainties and their relative effect on the GHG statement;
 - calibration of measuring equipment;
 - type and frequency of data collection, e.g. automated data collection vs. point-by-point manual data collection;
 - level of detail of available information: measurement concept at different levels (main meter, sub-meter, or mobile meter?);
 - data monitoring: continuous measurement or punctual / time-limited measurements;
 - evaluation of data incl. calculations, conversions and use of suitable databases or emission factors;
 - potential risks and inaccuracies in the data management process;
 - especially in validation: estimate methodology (appropriateness, applicability of assumptions, quality of estimates and data on which they are based; calculations or models based on them, forecasts). The verifier shall develop his/her own point

estimate or range of estimates to assess the assumptions of the responsible party (client organization, client).

- identification of possible nonconformities;
- Do any significant or unusual emissions exist outside of operations?
- Are there legal risks?
- Is an improvement process incl. root cause analysis, corrections and corrective actions established?
- type of quality assurance in the inventory;

Additional requirements for project GHG statement verification

The **strategic analysis** shall consider the following (cf. ISO 14064-3 6.1.1.2):

- the project plan;
- the results of the validation report;
- the requirements of the monitoring plan;
- the applied monitoring methodology;
- the monitoring report.

The **risk assessment** shall consider the following (cf. ISO 14064-3 6.1.2.5):

- whether the current operating conditions reflect the assumptions, limitations, methods and uncertainties in the project plan or criteria;
- the complexity and data availability of the baseline calculations;
- a comparison of actual versus expected emission reductions or removal enhancements

Additional requirements for product GHG statement verification

The **strategic analysis** shall consider the following (cf. ISO 14064-3 6.1.1.3):

- the results of the life cycle interpretation, including conclusions and limitations;
NOTE See ISO 14044:2006, 3.5.
- the functional or declared unit (see ISO 14067);
- the characteristics of unit processes;
- the life-cycle stages;
- cut-offs.

The **risk assessment** shall consider the following (cf. ISO 14064-3 6.1.2.6):

- the degree of product complexity and system boundaries;
- the contributions of emissions and removals at different life stages;
- the allocation procedures;
- the availability of life-cycle results from comparable products;
- the representativeness of use and end of life scenarios;

- the reliability of any carbon footprint studies used;
- the results of any critical review.

Result of planning and preparation

- confirmation of the **engagement type(s)** (validation / verification / combination);
- common understanding of the **declaration / statement**;
- confirmation of **scope / inventory boundaries**;
- confirmation of the **timing** of verification / validation activities; timing may be subject to change;
- documentation of misstatements, exclusions, inaccurate representations, and uncertainties as inputs for determining the **level of assurance**;
- **V-planning**: inputs for planning the validation or verification are included in the **v-plan**. **Contact persons** (client, responsible party) are assigned;
- **Evidence-gathering plan**: planning and definition of essential specific **evidence documents**;
- possible open points (possible nonconformities) concerning the implementation in compliance with the standard shall be communicated to the client;

- **Approval of validation**: The validators shall determine whether the **intended user** recognizes the GHG-related activity. In assessing recognition, the validator shall:
 - determine whether the GHG-related activity is **acceptable to the intended user**, including whether the GHG-related activity meets any **eligibility criteria** specified by the intended user;
 - assess whether there are **geographic or temporal restrictions** specified by the intended user and whether the GHG-related activity complies with these restrictions;
 - assess whether the GHG-related activity is **real, quantifiable, verifiable, permanent and enforceable**;
 - after the confirmation of the calculations used in the GHG statement, re-assess whether the GHG-related activity will still be recognized.

The planning and preparation of the verification or validation is 6 to 8 hours depending on the size and complexity of the organization, as well as the scope of the GHG report or plan.

The **report draft** may already include the following:

- declaration / statement;
- scope, boundaries and objectives;
- documentation of uncertainties.

Furthermore, a **verification or validation plan (V-plan)** is prepared and submitted to the client at least 2 weeks before the scheduled date.

For documentation, at least 4 to 8 hours are calculated.

7.4 VERIFICATION / VALIDATION EXECUTION

The previous information, findings, the GHG report / GHG plan and the V-plan form the basis. Possible changes in the implementation of the V-plan are documented and the V-plan is updated accordingly.

When conducting the verification or validation, the focus is on:

- collecting **objective evidence** by reviewing documented information (controlled specifications, records), interviews, on-site visits.
- In the collection of evidence, attention shall be paid to **traceability** from measurements, invoices, and **referencing** of sources.
- Identification and documentation of possible **misstatements** and **uncertainties**.

Validation / verification can also be an **iterative process** in its execution.

Execution may include the following steps:

- **desk review** of transmitted documents;
- **remote verification / validation** if appropriate ICT and experience is available;
- **on-site visits**;
- **verification / validation of corrections**.

The verifier shall **plan and perform a site or facility visit** under any of the following circumstances:

- **an initial verification**;
- a subsequent verification for which the verifier does not have knowledge of the prior verification activities and results, e.g. as a result of a change of persons;
- a **change of ownership** of a site or facility;
- when **misstatements** are identified;
- there are **unexplained material changes in emissions**, removal and storage since the previous verified GHG statement;
- the **addition of a site or facility** of GHG SSRs that are material to the GHG statement;
- material changes in **scope** or boundary of reporting;
- significant changes in the **data management**.

If a verifier determines that a site or facility visit is not necessary, the verifier shall **justify and document the rationale for the decision**.

Possible changes in the planning or the procedure

Possible reasons for amendments to the verification / validation planning may include:

- changes in the **scope** (e.g. sites);
- changes in the **availability of client / responsible party contact** (e.g. due to illness);

- changes in the **access to the location** (e.g. no on-site visits possible due to pandemic);
- changes in the time schedule;
- changes in **evidence-gathering procedures** (e.g. data must be recalculated, new data must be collected);
- changes in **sources of information**;
- identification of **new risks**;
- identification of **misstatements**;
- identification of **nonconformities** in relation to ISO 14064-1, -2 or ISO 14067.

The **Lead-V** is **responsible** for approving any amendments to the plans.

Results of verification or validation

There are two types of documented information:

- **a report** including a potential action protocol;
- **an opinion** for users.

Report

The client receives a verification or validation report with a brief description of the scope, the statement, the level of assurance and an assessment of materiality. Disclosures for the data quality, about possible uncertainties, referencing of samples and notes on the standard clauses complete the report. Nonconformities are documented separately in an action plan and sent to the client for processing (root cause analysis, correction, corrective actions) within a specified period.

Opinion

ISO 14064-3 differentiates three types of opinions:

- **Unmodified opinion** – in short: standard requirements are met, there is sufficient and appropriate evidence;
- **Modified opinion** – in short: deficiencies or possible deficiencies;
- **Adverse opinion** – in short: no correction of nonconformities, material misstatement(s), insufficient or inappropriate evidence;

This differentiation also expresses the quality of the GHG inventory. Quality criteria are summarized in the following table according to the requirements of ISO 14064-3, clause 6.3.2.2ff:

Unmodified opinion	Modified (dissenting) opinion	Adverse opinion
There is sufficient and appropriate evidence to support material emissions, removals or storage.	In order to draft a modified opinion, the verifier shall ensure that there is no material misstatement at the level of the GHG statement.	There is insufficient or inappropriate evidence to support an unmodified or modified opinion; or

The criteria are applied appropriately for material emissions, removals or storage;	A modified verification opinion, when read in conjunction with the GHG statement, normally will serve adequately to inform the intended user(s) of any deficiencies or possible deficiencies in the GHG statement.	criteria are not appropriately applied for material emissions, removals or storage; or
The effectiveness of controls has been evaluated when the verifier intends to rely on those controls.	There are requirements in case of non-material misstatements : see ISO 14064-3 6.3.2.3	the effectiveness of controls cannot be determined when the verifier intends to rely on those controls;
		If the responsible party (client) does not correct any material misstatement or nonconformity in an arranged period of time , the verifier shall take this into consideration when reaching the conclusion.

With regard to misstatements, the following opinion types could be issued:

Type of misstatement	Extent of misstatement	Opinion type
There is no misstatement .	None	Unmodified
The misstatement is not material	Not pervasive	Unmodified/Modified
The misstatement is material	Not pervasive	Modified
	Pervasive	Adverse
There is a misstatement , but the type is unknown	Not pervasive	Modified
	Pervasive	Disclaimed

Note 1 When misstatement is not material and not pervasive, opinions may be modified when program requirements dictate.

NOTE 2 Pervasive misstatements, individually or aggregate, are those that are:

- not confined to specific elements, classifications or line items of the environmental information statement;
- even if confined, representative of a substantial portion of the environmental information statement;
- fundamental to the intended user's understanding of the environmental information statement.

Quality Austria may choose **not to issue an opinion** when the engagement is terminated prior to completion (see ÖNORM EN ISO 14065:2022, clause 9.7.1.5).

Quality Austria may disclaim the issuance of an opinion when it is **unable to obtain sufficient and appropriate evidence** to come to a conclusion. In this case, **Quality Austria shall ensure that it has been unable to obtain sufficient appropriate evidence** and can conclude that the **possible effects on the environmental information statement of undetected material misstatement(s) are material and pervasive**.

At the conclusion of an engagement to **verify statements of historical information**, Quality Austria shall **issue an opinion**, unless it has disclaimed the issuance of an opinion or the engagement type is AUP (agreed-upon procedure). An **opinion** providing **assurance to intended users** shall be based upon the **verification of sufficient and appropriate historical evidence**. Only unmodified or modified opinions provide assurance to intended users.

At the conclusion of an engagement to **validate statements about the outcome of future activities**, **Quality Austria shall issue an opinion**, unless it has disclaimed the issuance of an opinion. A validation opinion on the **reasonableness of the assumptions, limitations and methods used to forecast** information shall be based upon the **evaluation of sufficient and appropriate information**.

The opinion may contain statements that **limit the liability of Quality Austria**.

A **modified opinion** shall contain a description of the **reason for the modification**. If the reason for the modified opinion is **quantitative**, Quality Austria shall indicate the **value of the material misstatement** and its effect on the environmental information statement.

An **adverse opinion** shall include the **reason(s)** for the adverse opinion.

When **disclaiming** the issuance of an opinion, Quality Austria shall provide an **explanation**.

Intentional misstatement (ÖNORM EN ISO 14064-3 5.4.3): If a matter comes to the verifiers / validators attention that causes the verifier / validator to believe in the existence of intentional misstatement or noncompliance by the responsible party with laws and regulations, the verifier / validator shall communicate the matter to the appropriate parties as soon as practicable.

Opinion (Verification or validation opinion)

Possible deviations (nonconformities to ISO 14064 or ISO 14067) must be **closed prior to issuance of the opinion**. The evaluation can be performed via desk review, remotely, or on-site. The Lead-V chooses on the approach depending on the risk.

The opinion refers to the order of the client, including referencing of the standard, the statement as well as the GHG report or GHG plan; it briefly describes the scope as well as the materiality. The client organization is solely responsible for providing the GHG report / GHG plan, including the collection and evaluation of data, taking into account legal requirements. The client is also responsible for the internal quality control of the inventory. Quality Austria maintains its impartiality, independence, objectivity and ensures confidentiality in its verification / validation process. All information is critically reflected in the verification / validation process. Quality Austria had access to the site, interview partners and evidence documents and was able to collect sufficient data and information to obtain appropriate and sufficient evidence for validating / verifying the GHG emissions statement. Quality Austria had unrestricted access to the documents. The GHG report / GHG plan was reviewed for completeness, coherence and plausibility. Quantity structures, calculations and conversion and the emission factors used were checked for comprehensibility and traceability. The opinion contains a statement on the level of assurance:

- **Verification – reasonable level of assurance**: Quality Austria concludes with **reasonable assurance** that the data and information in the GHG Statement were fairly stated.

- **Verification – limited level of assurance:** Quality Austria **found no evidence to indicate** that the data and information in the GHG statement were not fairly stated.

In the case of validation, the opinion contains an additional note: Quality Austria concludes that **it has not found any evidence** to indicate that the **assumptions, methods and limitations** did not provide a reasonable basis for the forecast.

Furthermore, the assessment of the opinion is included as an unmodified, modified or negative opinion and, if applicable, the reasons for this are stated.

The **Lead-V signs** the opinion. In case of **accreditation**, the opinion must bear the **accreditation mark**.

7.5 INDEPENDENT REVIEW BY THE VETO EXAMINER

The veto examiner acts **impartially, independently, objectively**. A person, who is **not a member of the verification / validation team** and **not involved in the planning**, shall conduct the review.

Review activities

Based on the documents uploaded in WIS, a competent and appointed person (veto examiner) reviews at least whether:

- the V-team competencies are appropriate;
- the **V-plan** has been designed appropriately and the **documented evidence** is sufficient and appropriate;
- **all activities** were performed according to the program and level of assurance;
- the objective, duration and materiality are appropriate;
- the **risk assessment** is available and comprehensible;
- **documentation** is complete and plausible;
- the data cited are plausible;
- the **opinion** is conclusive and meaningful;
- the **report** is meaningful;
- the **GHG statement** is factually and fairly presented;
- **material misstatements** or **factual findings** (for example, nonconformities) could be clarified and corrected; see closed action protocol;
- the **conclusion in the opinion** can be approved.

Possible Need for Clarification

If points in the review are unclear, incomplete or contradictory, the veto examiner asks the verifier / validator to provide sufficient information for these points in the documentation in order to be able to make a final review (decision).

8 Facts Discovered after the Issue of the Validation / Verification

If facts and new information that could materially affect the verification or validation opinion are discovered after this date, the verifier or validator shall:

- communicate the matter as soon as practicable to the client and the GHG program owner;
- take appropriate action, including:
 - communicating the matter to the client;
 - consider whether the validation / verification opinion needs to be revised or withdrawn.

If the validation / verification opinion needs to be **revised**, Quality Austria has to implement processes for issuing a new opinion and **indicate the reasons for revision**. This could imply that relevant steps of the validation / verification process have to be repeated. Quality Austria may also communicate to other interested parties the fact that reliance of the original opinion may now be compromised given the discovered facts or new information.

Sources of possible new facts may include:

- client reports significant changes;
- appeals;
- complaints;
- inquiries from interested parties; or
- critical press reports.

The verifier / validator may also communicate to other interested parties, e.g. program owner, environmental program, the fact that reliance of the original opinion may now be compromised given the discovered facts or new information.

9 Communication with the Client

- Clarification of feasibility upon request
- Contractual agreement including the General Terms and Conditions and program-specific requirements
- Planning of the verification / validation incl. introduction of the team
- Execution of the verification / validation
- In the closing meeting, the client receives an initial feedback regarding the verification / validation results.
- The client receives the verification / validation report.
- In case of noncompliance with standard requirements, the client receives an action protocol to correct the nonconformities.
- In case of a need for clarification of open points in the course of the review, the verifier / validator communicates these points in order to obtain sufficient information.
- If the review is completed, the client also receives the signed opinion.

- If facts or new information that could materially affect the validation / verification opinion are discovered after the date of issue, Quality Austria shall as soon as practicable inform the client and, if applicable, the program owner and discuss this matter with the client and, if necessary, take appropriate actions.

10 Appeals and Complaints

At this point, it is referred to the regulation RE_10_01_01e_Appeals_and_Complaints. The document is publicly available on the Website: <https://www.qualityaustria.com/en/service/complaints/>

Possible appeals or complaints can also be sent directly to the following e-mail address: reklamationen@qualityaustria.com

11 Further Obligations of Client Organizations

In addition to the **qualityaustria** General Terms and Conditions, as amended, the following applies to point **VIII**:

- The client organization shall be **responsible for providing the environmental information statement**, as well as the **GHG report or GHG plan**.
- The client organization shall communicate to Quality Austria the **opinion or reports on actual findings in their entirety**.
- The client organization shall submit **sufficient and appropriate evidence** to Quality Austria.
- The client organization shall inform Quality Austria about **possible uncertainties and limitations**.
- The client organization shall immediately communicate **any facts** to Quality Austria that can **affect the validity of an issued opinion**.
- The client organization shall immediately inform Quality Austria about **material changes** in the inventory in order to clarify whether the verification / validation has to be updated. Significant changes may also concern the product design, material composition or the database used for impact factors.
- **Misstatements** in the environmental information statement, the GHG report or GHG plan shall be corrected within an agreed period of time.
- **Identified nonconformities** shall be closed by taking appropriate corrections / corrective actions within an agreed period of time and submitted to Quality Austria for a review of effectiveness.

In addition to the **qualityaustria** General Terms and Conditions, as amended, the following applies to **point XIII**:

- The client organization shall only use references or marks that are directly related to the verified / validated claim and shall not be misleading with regard to product certification. An exception would be the verification of the carbon footprint of products acc. to ISO 14067, as amended.
- The client organization shall not to use the environmental information statement, opinion, report, marks, logos or labels in a manner that could **mislead intended users** or **impair the reputation of Quality Austria**.
- If the verification includes ISO 14064-1, the organization shall make available to the public a GHG report prepared in accordance with ISO 14064-1 or verification statement of Quality Austria related to the GHG assertion. If the organization's GHG assertion has been independently verified, the verification statement shall be made **available to intended users**.
- The client organization may not use the mark to imply that statements not subject to validation or verification have been validated or verified.
- It is **not permitted** to use the **qualityaustria** mark on environmental information statements which contain information that has not been validated or verified.
- The client organization should distinguish between "short-form" and "long-form" references to validated or verified environmental information statements. The client shall ensure that any use of a short-form reference include or make reference to a long-term reference. **Acceptable references** for validated or verified environmental information statements include (see also Annex B ÖNOEM EN ISO 14065:2022):

Subject matter is	Short form	Long form
Historical in nature¹	"Verified at the reasonable level of assurance "	"In its opinion dated 20xx-xx-xx, Quality Austria ² concluded with reasonable assurance that the data and information in our statement were fairly stated ."
Historical in nature¹	"Verified at the limited level of assurance "	"In its opinion dated 20xx-xx-xx, Quality Austria found no evidence to indicate that the data and information in our statement were not fairly stated."
Projected or forecast	"Validated"	"In its opinion dated 20xx-xx-xx, Quality Austria ² stated that it had not found any evidence to indicate that the assumptions, methods and limitations that we cited in our statement did not provide a reasonable basis for our projections or forecasts."
<p>1) Historical data and information submitted for verification may be monitored, estimated or modelled.</p> <p>2) When a responsible party (Note = organization) refers to a statement as "verified", the long-form reference applies to any reference implying verification, e.g. by using words such as "verified", "third-party verified" or "verified by Quality Austria".</p>		

- References to verification and agreed-upon procedure (AUP) for statements that are based on the **life cycle assessment of products**

Type of reference	Short form	Long form
Functional or declared units	"Confirmed"	<p>"The upstream and the core data and information in our statement were verified and the downstream data and information were tested in AUP by Quality Austria, which did not find any evidence to indicate that our statement was not fairly stated.</p> <p><i>The verification opinion of Quality Austria and the report of factual findings were issued on 20xx-xx-xx.</i>"</p>
<p>Note: When a responsible party refers to subject matter as "verified", the long-form reference applies to any reference implying verification, e.g. by using words such as "verifier", "third-party verifier" or Quality Austria.</p>		

12 Rules Governing the Use of Marks

Example of an <u>acceptable use</u> of a mark	
Logo Quality Austria ISO 14064-1 specific client number	<i>"Our inventory of greenhouse gas data and information was verified by Quality Austria. In its opinion dated 20xx-xx-xx, Quality Austria concluded [with reasonable assurance] that the data and information in our statement were fairly stated."</i>
Example of an <u>unacceptable use</u> of a mark	
Logo Quality Austria ISO 14064-1 client number	<i>"Our inventory of greenhouse gas data and information demonstrated that Organization xy had achieved its sustainability goals and had realized science-based targets that put us on a path to transitioning to a low carbon economy in alignment with the objectives of the Paris Agreement."</i>



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