



qualityaustria
Certification

Program / Guide Verification and Validation

**Greenhouse gas inventories of
organizations, projects and products
and national emissions certificates
trading law (NEHG – EU ETS 2)**

**核查与确认规则：组织、项目、产品
温室气体盘查及国家排放交易法
(NEHG – EU ETS 2)**



Introduction

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引言

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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 适用范围

本核查与验证程序适用于组织和产品温室气体清单的核查与验证。

认可的规范依据包括：

- EN ISO/IEC 17029（2020-02-15 版）：合格评定——验证与验证机构的一般原则与要求
- ÖNORM EN ISO 14065（2022-02-15 版）：用于验证与核查环境信息机构的一般原则与要求（ISO 14065:2020）
- ÖNORM EN ISO 14064-3（2019-11-15 版）：温室气体—第 3 部分：温室气体声明核查与验证的规范与指南（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
- Federal Act on National Certificate Trading for Greenhouse Gas Emissions (National



Emissions Trading Act 2022 – **NEHG 2022**) StF: BGBl. I No. 10/2022 (NR: GP XXVII RV 1293 AB 1306 p. 139. BR: 10860 AB 10866 p. 937.)

- Monitoring and Reporting Regulation (MRR) 2018/2066 EU of the European Commission of 19 December 2018, last amended by EU Regulation 2023/2122/EU of 17 October 2023, is an implementing regulation that specifies the monitoring methodology and reporting methodology of the EU ETS 2.
- COMMISSION IMPLEMENTING REGULATION (EU) 2023/2122 of 17 October 2023 amending Implementing Regulation (EU) 2018/2066 as regards updating the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council
- EU ETS Directive: Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC.
- AVR: Commission Implementing Regulation (EU) 2018/2067 of 19 December 2018 on the verification of data and on the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council.
- RED II: Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast).
- EU Guidance Document, March 2024: Monitoring and Reporting Regulation – General guidance for ETS2 regulated entities, MRR Guidance document for ETS2, 26 March 2024
- EU Guidance Document, June 2025: Accreditation and Verification Regulation – ETS2 Verification Guidance, AVR Guidance on ETS 2, Final Version,
- Verification Report template, for the verification of regulated entity's reports, VR P4 ETS2_COM_en_130325.xls
- COMMISSION IMPLEMENTING REGULATION (EU) 2025/1192 of 18 June 2025 amending Implementing Regulation (EU) 2018/2067 as regards certain aspects on the verification of data and on the accreditation of verifiers
- Austrian Customs Office: National standard factors for fuels for European emissions trading 2 and the National Emissions Certificates Trading Act, March 2025

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 verification 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

1.1 标准

组织与项目的规范依据包括:

- **ISO 14064-1:2018**: 温室气体——第 1 部分: 组织层面温室气体排放与清除的量化与报告规范与指南
- **ISO 14064-2:2019**: 温室气体——第 2 部分: 项目层面温室气体减排或清除增强的量化、监测与报告规范与指南
- **ISO 14066:2023**: 温室气体——温室气体验证和确认小组的能力要求
- **国家温室气体排放配额交易联邦法 (NEHG 2022)**: 2022 年国家排放交易法, 联邦公报 I 第 10/2022 号
- **监测与报告条例 (MRR) 2018/2066/EU**: 欧盟委员会于 2018 年 12 月 19 日发布的执行条例, 最近由 2023/2122/EU 修订, 规定了 EU ETS 2 的监测与报告方法
- **欧盟委员会执行条例 (EU) 2023/2122**: 修订 2018/2066/EU, 关于更新根据指令 2003/87/EC 进行的温室气体排放监测与报告
- **EU ETS 指令 (2003/87/EC)**: 建立欧盟温室气体排放配额交易机制的指令
- **AVR (2018/2067/EU)**: 关于温室气体数据的核查与核查机构认证的执行条例
- **RED II (2018/2001/EU)**: 关于促进可再生能源使用的指令 (重铸版)
- **欧盟指导文件 (2024 年 3 月)**: ETS2 监管实体的一般监测与报告指导
- **欧盟指导文件 (2025 年 6 月)**: ETS2 核查指导 (最终版本)
- **核查报告模板 VR P4 ETS2_COM_en_130325.xls**: 用于受监管实体报告核查的模板
- **欧盟委员会执行条例 (EU) 2025/1192**: 修订 AVR (2018/2067/EU), 关于数据核查和认证
- **奥地利海关局标准因子 (2025 年 3 月)**: 用于 EU ETS 2 和国家排放交易法的燃料排放标准因子

ISO 14064 系列标准共分为三部分。其中 ISO 14064-1 是企业自身温室气体排放评估 (即企业碳足迹, CCF) 建立的基础。该标准提供了有关公司内部温室气体清单的规划、开发和报告的原则与要求。

ISO 14064-1 鼓励组织对温室气体排放和减排措施进行结构化报告, 构建了温室气体清单编制与核查的框架, 同时也是可信报告的基础。这为组织在气候保护方面的努力与成果提供了展示与沟通的平台。

ISO 14064-1 的内容基于“温室气体议定书 (GHG Protocol)”, 该议定书由世界可持续发展工商理事会 (WBCSD) 和世界资源研究所 (WRI) 于 1998 年发布。

ISO 14064-2 提供了项目层面温室气体减排或清除量化的指导。

ISO 14064-3 明确了对温室气体声明（碳足迹）进行核查的要求。根据该标准，Quality Austria 可在核查通过后颁发符合相关排放清单要求的认证。
产品的规范依据包括：

- ISO 14067:2018 —— 温室气体 —— 产品碳足迹 —— 量化的要求与指南

1.2 TERMS AND DEFINITIONS ACC. TO ISO

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]

1.2 根据 ISO 的术语与定义

产品碳足迹 (CFP): 产品系统中温室气体排放 (3.1.2.5) 与清除 (3.1.2.6) 之总和, 以二氧化碳当量 (3.1.2.2) 表示, 基于生命周期评价 (3.1.4.3), 采用气候变化这一单一影响类别 (3.1.4.8) 进行量化。

温室气体活动数据 (GHG activity data): 与温室气体排放 (3.1.5) 或清除 (3.1.6) 相关的活动数量衡量指标。

示例: 能源、燃料或电力消耗量, 生产的材料, 提供的服务, 受影响的土地面积等。

温室气体清单 (GHG inventory): 列出温室气体源 (3.1.2) 与汇 (3.1.3) 以及对应排放量 (3.1.5) 与清除量 (3.1.6) 的清单。

温室气体报告 (GHG report): 用于向目标用户 (3.4.4) 传达组织 (3.4.2) 或项目 (3.2.7) 温室气体相关信息的独立文件。

注: 温室气体报告可以包含温室气体声明 (3.2.5)。

温室气体清单的预期用途: 由组织 (3.4.2) 或某一项目设定的, 符合目标用户 (3.4.4) 需要的温室气体排放 (3.1.5) 与清除 (3.1.6) 量化目的。

目标用户 (Intended user): 报告方确定的依赖该温室气体相关信息进行决策的个人或组织。

注: 目标用户可以是客户 (3.4.5)、责任方 (3.4.3)、组织本身、温室气体项目 (3.2.8) 管理员、监管机构、金融机构或其他相关利益方, 如社区、政府部门、公众或非政府组织。

基准年 (Base year): 为对比温室气体排放 (3.1.5)、清除 (3.1.6) 或其他相关信息而确定的特定历史时期。

核查 (Verification): 对历史数据和信息声明的评估过程, 用以判断声明是否实质正确并符合相关标准。

验证 (Validation): 对未来活动结果声明所依据的假设、限制和方法进行合理性评估的过程。

注: 结论——核查针对的是历史数据, 验证则是对未来活动结果的判断。

核查员 (Verifier): 具备能力且公正, 负责执行并报告核查活动 (3.4.9) 的人。

验证员 (Validator): 具备能力且公正, 负责执行并报告验证活动 (3.4.10) 的人。

不确定性 (Uncertainty): 与量化结果相关的参数, 用于描述该结果可能出现的合理变化范围。

保证等级 (Level of assurance): 对温室气体声明 (3.2.5) 信任程度的衡量。

合理保证 (Reasonable assurance): 核查的性质和范围设计为可对历史数据和信息提供较高 (但非绝对) 信任的保证等级 (3.6.5)。

有限保证 (Limited assurance): 核查的性质和范围设计为对历史数据和信息提供有限信任的保证等



级 (3.6.5)。

重要性 (Materiality)：指个别错报 (3.6.15) 或多项错报合计可能影响目标用户 (3.2.4) 决策的概念。

错报 (Misstatements)：环境信息声明 (3.1.5) 中的错误、遗漏或误导性陈述。

注：错报可以是定性或定量的。

重大错报 (Material misstatement)：在环境信息声明中，个别或多项实际错报合计可能影响目标用户 (3.2.4) 决策的情况。

来源：ÖNORM EN ISO 14065:2022 3.3.22，修改自 ISO 14064-3:2019 3.6.17。

1.3 DEFINITIONS ACC. TO NEHG/ EU-ETS 2

1. "**Energy sources**" until 31. December 2024 means all fossil mineral oils, motor fuels and heating fuels, natural gases, and coal specified in **Annex 1 NEHG** to this Act, whereby § 3 (4) MinStG 2022 shall apply mutatis mutandis to specifications in liters and § 5 (3) of the Natural Gas Tax Act shall apply mutatis mutandis to specifications in cubic meters. From 1 January 2025, all energy products specified in **Annex 3 NEHG** shall also be included.

2. "**Greenhouse gas emissions**" means the amount of carbon dioxide released during the combustion of a specified amount of energy sources in accordance with **Annex 1 NEHG** and attributed to the trading participant as a result of placing the energy products on the market; for energy products in accordance with **Annex 3 NEHG**, greenhouse gas emissions shall be determined in accordance with IPCC guidelines; These can be found in the Appendix to this document

3. "**National emission allowance**" means an allowance to emit one ton of carbon dioxide equivalent during a specified period of the national emissions allowance trading

4. "**Trading participant**" means the natural or legal person or partnership that is defined as the taxpayer or duty debtor for the circumstances specified in § 2 (2) or (3), even if a tax exemption procedure follows.

5. "**Energy taxes**" means the mineral oil tax pursuant to MinStG 2022, the natural gas tax pursuant to the Natural Gas Tax Act, and the coal tax pursuant to the Coal Tax Act.

6. "**Carbon leakage**" means the risk of greenhouse gas emissions relevant to this federal law being relocated outside the federal territory.

7. "**Combined Nomenclature**" means the goods nomenclature referred to in Article 1 of Regulation (EEC) No. 2658/87 on the tariff and statistical nomenclature and the Common Customs Tariff, OJ No. L 256 of September 7, 1987, p. 1, as amended by the Annex to Implementing Regulation (EU) 2017/1925 amending Annex I to Regulation (EEC) No. 2658/87, OJ No. L 282 of October 31, 2017, p. 1, and the legal provisions adopted in this regard.

8. "**EU ETS I**" means the Union-wide system for the monitoring and limitation of greenhouse gas emissions, regulated by Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Union and amending Directive 96/61/EC, OJ No. L 275 of October 25, 2003, p. 32, last amended by Directive 2023/959/EU, OJ No. L 130 of May 10, 2023, p. 134, with the exception of Chapter IVa of Directive 2003/87/EC and the national implementation in Section 8 of the Emissions Certificates Trading Act 2011 – EZG 2011, Federal Law Gazette I No. 118/2011, as amended by Federal Law Gazette I No. 196/2023.

9. "**Competent authority**" means the Austrian Customs Office with the Office for National Emissions Trading pursuant to § 28.

10. "**Relief measure participant**" means the natural or legal person or partnership that is subject to the scope of a relief measure pursuant to Section 8 and wishes to make use of it



11. **"Exemption measures participant"** means the natural or legal person or partnership that is subject to the scope of an exemption pursuant to section 7.

12. **"EU ETS 2"** means the European emissions trading system for the building and road transport sectors and for other sectors pursuant to Chapter IVa of Directive 2003/87/EC and the national implementation in Section 8 of the Emissions Certificates Trading Act 2011 – EZG 2011, Federal Law Gazette I No. 118/2011, as amended by Federal Law Gazette I No. 196/2023.

13. **"IPCC Guidelines"** means the 2006 guidelines for national greenhouse gas reporting of the Intergovernmental Panel on Climate Change (IPCC) or subsequent updates to these guidelines.

14. **"AGVO"** Regulation (EU) No. 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty on the Functioning of the European Union, OJ No. L 187 of 26 June 2014, p. 1, last amended by Regulation (EU) 2023/1315, OJ No. L 167 p.

1.3 根据 NEHG / EU-ETS 2 的定义

1. **"能源产品"**: 截至 2024 年 12 月 31 日, 指《国家排放交易法》(NEHG) 附件一所列的所有化石矿物油、车用燃料和供暖燃料、天然气和煤炭。其中, 公升单位的换算应参照《2022 年矿物油税法》第 3 条第 4 款, 立方米单位的换算应参照《天然气税法》第 5 条第 3 款。从 2025 年 1 月 1 日起, 还包括《NEHG》附件三所列的所有能源产品。
2. **"温室气体排放"**: 指依据 NEHG 附件一中规定的能源产品燃烧过程中产生的二氧化碳排放量, 该排放因能源产品被投入市场而归属于交易参与方。对 NEHG 附件三中的能源产品, 其温室气体排放应依据 IPCC 指南确定 (本文件附录中提供相关内容)。
3. **"国家排放配额"**: 指在国家排放配额交易期间, 允许排放一吨二氧化碳当量的许可。
4. **"交易参与方"**: 指依《NEHG》第 2 条第 2 或第 3 款规定, 被认定为纳税人或义务人的自然人、法人或合伙企业, 即使其后可适用税收豁免程序亦同。
5. **"能源税"**: 指根据《2022 年矿物油税法》征收的矿物油税、《天然气税法》征收的天然气税, 以及《煤炭税法》征收的煤炭税。
6. **"碳泄漏"**: 指由于本联邦法律所涉温室气体排放转移至联邦领土之外所产生的风险。
7. **"联合产品分类 (Combined Nomenclature)"**: 指《理事会条例 (EEC) 第 2658/87 号》第 1 条中规定的商品分类体系及《共同关税目录》, 最后一次修订为《执行条例 (EU) 2017/1925》, 修改了《条例 (EEC) 第 2658/87 号》的附件一。
8. **"EU ETS I"**: 指《2003/87/EC 指令》建立的欧盟统一温室气体排放配额交易系统 (排除第 IVa 章), 以及《2011 年排放证书交易法》第 8 条在国家层面的实施 (EZG 2011, 联邦公报 I 第 118/2011 号, 最近由联邦公报 I 第 196/2023 号修订)。
9. **"主管机关"**: 指设有国家排放交易办公室的奥地利海关局, 依据第 28 条。
10. **"减免措施参与方"**: 指依据第 8 条规定符合减免措施适用范围并希望申请的自然人、法人或合伙企业。
11. **"豁免措施参与方"**: 指依据第 7 条规定符合豁免适用范围的自然人、法人或合伙企业。
12. **"EU ETS 2"**: 指《2003/87/EC 指令》第 IVa 章规定的、涵盖建筑和道路运输等领域的欧洲排放交易系统, 以及其在《2011 年排放证书交易法》第 8 条中的国家层面实施 (EZG 2011, 联邦公报 I 第 118/2011 号, 最近由联邦公报 I 第 196/2023 号修订)。
13. **"IPCC 指南"**: 指政府间气候变化专门委员会 (IPCC) 于 2006 年发布的国家温室气体清单编制指南及其后续更新版本。
14. **"AGVO"**: 指《欧盟条例 (EU) 第 651/2014 号》, 该条例于 2014 年 6 月 17 日发布, 根据《欧盟运作条约》第 107 条和第 108 条, 宣布某些类型的援助符合内部市场的规定 (见 2014 年 6 月 26 日官方公报 L187, 第 1 页), 最后一次修订为《条例 (EU) 2023/1315》。

2 Principles for Verification and Validation 核查与验证原则

2.1 CURRENT SCOPE OF ACCREDITATION

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 verifica-



tion 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).

Applicable documents:

- RE_02_02_40e_Product_Expert Verification and Validation of GHG Inventories
- RE_02_01_06_Geschäftsordnung QAC (Rules of Procedure)
- RE_02_01_07_Schlüsselinteressen QAC (Key interests)
- RE_02_01_08_I_A_Quellen Unparteilichkeit QAC (Sources Impartiality)
- CL_02_01_01_QAC_Identifikation und Analyse möglicher Quellen der Unparteilichkeit (Identification and analysis of possible sources of impartiality)

2.1 当前认可范围

验证与核查的总体目标是向所有相关方提供信心，确保已验证/核查的声明符合相关要求。验证或核查的价值在于通过一个公正且具备能力的验证/核查机构所进行的评估所建立的信任水平。

为了促进这一信任，验证或核查过程基于以下原则：

- 基于客观证据的取证活动；
- 对数据、信息、核算或假设的批判性审查；
- 仔细筹备并执行验证/核查活动；
- 对发现和结论的可靠陈述；
- 识别不符合项与待澄清问题，并启动相应措施；
- 确保参与过程人员的公正性。这也意味着不得存在利益冲突，例如直接或间接的经济利益、恐吓或熟人关系（个人接近）。

适用文件：

- RE_02_02_40e 产品专家 温室气体清单的验证与核查
- RE_02_01_06 QAC 议事规则
- RE_02_01_07 QAC 关键利益相关方
- RE_02_01_08_I_A_Quellen QAC 公正性来源
- CL_02_01_01_QAC_识别与分析可能影响公正性的来源

2.2 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).

Applicable documents:

- RE_02_02_40e_Product_Expert Verification and Validation of GHG Inventories
- RE_02_01_06e_Internal Regulations
- RE_02_01_07e_Key interests
- RE_02_01_08e_I_A_Sources Impartiality QAC
- CL_02_01_01e_QAC_Identification and analysis of possible sources of impartiality

2.2 通过公正与专业评估建立信任

验证与核查的总体目标是向所有相关方提供信心，确保已验证/核查的声明符合相应要求。验证或核查的价值取决于验证/核查机构通过公正与专业评估所建立的信任水平。

为建立这种信任，验证或核查过程应基于以下原则：

- 基于客观证据开展取证活动；
- 对数据、信息、核算或假设进行批判性审查；
- 认真筹划并执行核查/验证活动；
- 可靠呈现核查发现与结论；
- 识别不符合项和未闭合事项，并推动纠正；
- 保证参与人员的公正性，避免利益冲突，例如直接或间接的经济利益、施压或过度熟识（人际关系过密）。

适用文件包括：

- RE_02_02_40e 《产品专家——温室气体清单的验证与核查》
- RE_02_01_06e 《内部管理规定》
- RE_02_01_07e 《关键利益关系管理》
- RE_02_01_08e 《QAC 的公正性来源》
- CL_02_01_01e 《QAC 公正性可能来源的识别与分析》

2.3 INTERESTED PARTIES

Potential 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, BMWF, BMJ, BMK
- Financial institutions
- NGOs
- Audit firms or statutory (financial) auditors



- Trading participants within the framework of the National Emissions Trading Act (NEHG) / EU-ETS 2 to fulfill their obligations to submit the verification report of an independent accredited auditing body to the competent authority
- Customs office, National Emissions Trading Authority (AnEH)

2.3 利益相关方

潜在的相关方可能包括：

- 寻求验证或核查的公司
- 客户及其合作伙伴
- 奥地利认可机构 (Accreditation Austria)
- 标准化机构，如奥地利标准协会 (ASi)、国际标准化组织 (ISO)
- 各类主管机关，如财政部 (BMF)、劳动与经济部 (BMWD)、司法部 (BMJ)、气候保护部 (BMK)
- 金融机构
- 非政府组织 (NGO)
- 审计公司或法定 (财务) 审计人员
- 国家温室气体排放权交易法 (NEHG) / 欧盟排放交易体系第二阶段 (EU-ETS 2) 框架内的交易参与方，用于履行其将经独立认可审核机构验证报告提交给主管机关的义务
- 海关办公室，国家排放交易主管机关 (AnEH)

3 Competence Criteria 能力标准

The normative basis is ISO 14066-2023 Greenhouse gases – Competence requirements for greenhouse gas validations and verification teams.

本部分依据 ISO 14066:2023 《温室气体 —— 温室气体验证与核查团队的能力要求》。

3.1 DEFINITION

Competence: ability to apply knowledge and skills to achieve intended results

NOTE 1 Ability implies exhibiting appropriate personal behavior when conducting the validation or verification.

NOTE 2 Adapted from ISO 19011:—, definition 3.14.

NOTE 3 When defining competence, the following meanings have been applied to the words used:

- knowledge refers to facts and methods, i.e. to know;
- skills means to carry out in practice, i.e. to do.

3.1 定义

能力：应用知识与技能以实现预期结果的能力。

注 1：能力意味着在执行验证或核查时具备适当的个人行为表现。

注 2：摘自 ISO 19011 定义 3.14。

注 3：在定义“能力”时，对所用术语解释如下：

- **知识：**指事实与方法，即“知道”；
- **技能：**指实际执行操作的能力，即“做”。

3.2 FUNDAMENTAL REQUIREMENTS

Verifiers and validators **act independently, objectively and apply an evidence-based ap-**

proach. Furthermore, they **critically** observe data, calculations, assumptions and results.

With each assignment, **independence** must be confirmed in the WIS.

The **evidence-based approach** refers to collecting evidence, such as measurement protocols, meter readings, technical data sheets, invoices, references of sources etc. ...

Fair presentation: Ensure the validation / verification activities, findings, conclusions and opinions are presented truthfully and fairly. Report significant obstacles encountered during the process of validation or verification, as well as unresolved diverging opinions among verifiers or validators, to the responsible party and the client.

Conservativeness: When assessing comparable alternatives, use a **cautiously moderate** selection.

Reports and other controlled documents must be prepared in German or English, if necessary, in the national language in combination with German or English. If international partners write controlled documents such as the feasibility checks, engagements, standard checklists, reports, or opinions in two languages, Quality Austria must review and approve these documents before they are used.

3.2 基本要求

验证员与验证员应独立、公正地工作，并采用基于证据的方法。同时，应对数据、计算、假设和结果进行批判性观察。

每次任务执行前，需在 WIS 中确认独立性。

基于证据的方法包括收集诸如测量记录、仪表读数、技术数据表、发票、信息来源参考等证据。

公正呈现：应如实、公正地展示验证 / 核查活动、发现、结论与意见。如在验证 / 核查过程中遇到重大障碍，或验证员 / 核查员之间存在未解决的分歧，应及时报告给责任方和客户。

保守性：在评估可比方案时，应采取谨慎、适度的选择。

报告和其他受控文件应使用德语或英语编写。如有需要，可与所在国官方语言同时使用。如国际合作伙伴以双语撰写受控文件（如可行性评估、委托协议、标准清单、报告或意见书），须由 Quality Austria 审核并批准后方可使用。

3.3 CRITERIA

- Appointment as an Environmental Management Auditor A1 (ISO 14001 or EMAS environmental verifier) or Energy Management Auditor ISO 50001 or experienced expert in the design and calculation of such inventories
- Required knowledge in terms of the **processes and procedures** of the applicants
- Knowledge of the international and national **climate protection policies**
- Basic understanding of the LCA based on ISO 14040 and ISO 14044
- **Competence and understanding of standards** such as ISO 14064 and ISO 14067
- Assessment of **inventory boundaries**
- Data measurement, collection, calculation and evaluation incl. calibration of measuring equipment (cf. ISO 14001:2015, Clause 9.1)

Knowledge and understanding of NEHG, EU-ETS 2 and the resulting obligations and requirements for the affected trading participant (e.g. greenhouse gas emissions reports; registration requirements, monitoring plan and its surveillance, etc.), Implementing Regulation 2018/2066; Implementing Regulation 2023/2122; EU Guidance Document March 2024; EU Guidance Document June 2025; Monitoring



and Reporting Regulation (MRR) 2018/2066; EU ETS Directive 2003/87/EC; AVR: Commission Implementing Regulation (EU) 2018/2067, etc.

- Knowledge of **conversion factors** of fuels
- Knowledge of the **Global Warming Potentials** of typical GHGs
- Knowledge of **legal requirements**
- Knowledge of **potential risks** in the inventory and evaluation
- **Sampling methods**
- **Social skills**
- **Decision-making skills**

See RE_05_01_05_20e Requirements for GHG verifiers

The applicable documents include

- RE_02_02_40e Product Expert Verification and Validation of GHG Inventories
- RE_05_01_01_01e Conditions for auditors, assessors, examiners, technical experts, validators, verifiers

3.3 能力准则

- 被任命为环境管理审核员 A1 (ISO 14001 或 EMAS 环境核查员) 或能源管理审核员 (ISO 50001) , 或具有温室气体清单设计与计算经验的专家;
- 具备申请方相关工艺流程与程序的必要知识;
- 了解国际与国家气候保护政策;
- 基本了解 ISO 14040 和 ISO 14044 所规定的生命周期评估 (LCA) ;
- 熟悉 ISO 14064 与 ISO 14067 等标准;
- 能够评估清单边界;
- 具备数据测量、采集、计算与评估能力, 包括测量设备的校准 (参考 ISO 14001:2015 第 9.1 条款) ;
应具备对以下内容的知识与理解: 国家温室气体排放配额交易法案 (NEHG) 及欧盟排放交易体系第二阶段 (EU-ETS 2) 所规定的义务与要求, 包括温室气体排放报告、注册义务、监测计划及其监管机制; 欧盟委员会实施条例 2018/2066 与 2023/2122; 2024 年 3 月和 2025 年 6 月发布的欧盟指南文件; 监测与报告条例 (MRR) 2018/2066; 欧盟排放交易指令 2003/87/EC; 以及关于数据核查和核查机构认可的实施条例 (AVR) 2018/2067 等法规文件。
- 熟悉燃料转换因子;
- 了解典型温室气体的全球变暖潜能值 (GWP) ;
- 了解相关法律法规要求;
- 了解清单与评估中可能存在的风险;
- 掌握抽样方法;
- 具备良好的社交能力;
- 具备决策能力。

详见文件 RE_05_01_05_20e 《温室气体核查员要求》

适用文件包括:

- RE_02_02_40e_产品专家对温室气体清单的验证与核查
- RE_05_01_01_01e_审核员、评估员、考官、技术专家、验证员与核查员的条件

3.4 EXAMPLES OF LEGAL REQUIREMENTS

- REGULATION (EU) No 517/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006. This new F-gases Regulation replaces the previous Regulation No 842/2006 on specific fluorinated greenhouse gases. The new F-gases Regulation became effective on 9 June 2014 and applies since 1 January 2015. Subsequently, refrigerant charge was no longer expressed in kilograms, but acc. to their CO₂ equivalents;
- National Refrigeration Equipment Regulations;
- REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (EU Taxonomy Regulation);
- COM (2021) 189 final, 2021/0104 (COD), Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting;

3.4 法律要求示例

- **欧盟法规 (EU) 第 517/2014 号**: 欧洲议会与理事会于 2014 年 4 月 16 日发布, 关于含氟温室气体的管理并废除旧法规 (EC) 842/2006。该新版法规自 2014 年 6 月 9 日生效, 并自 2015 年 1 月 1 日起实施。其变更之一是冷媒不再以公斤计量, 而是按二氧化碳当量计算;
- 国家制冷设备法规;
- **欧盟法规 (EU) 2020/852**: 欧洲议会与理事会于 2020 年 6 月 18 日通过的法规, 旨在建立可持续投资的框架, 并修订法规 (EU) 2019/2088 (即“欧盟分类法”);
- **文件 COM (2021) 189 最终稿, 2021/0104 (COD)**: 欧洲议会与理事会提出的指令草案, 修订 2013/34/EU、2004/109/EC、2006/43/EC 指令与法规 (EU) No 537/2014, 内容涉及企业可持续发展报告;
- (此处省略后续法规条款)

4 Intended Users or Target Groups of GHG Statements 温室气体声明的预期用户或目标群体

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 in Austria.
- Competent authority under EU ETS 2 to which verification reports on greenhouse gas emission reports must be submitted (= Customs Office, National Emissions Trading Authority (AnEH))

客户应在可行性评估中明确温室气体声明所面向的目标群体。

目标群体可能包括：

- 非财务指标报告的阅读者；
- 价值链中的重点客户；
- 根据欧盟分类法（EU Taxonomy Regulation，环境目标 1）要求提供气候保护信息的银行或投资方（参见 ISO 14030-1 和 2 —— 绿色债券与贷款）；
- 温室气体项目的项目所有者；
- 市政当局；
- 政府监管机构；
- 非政府组织（如 "Klimaaktiv" 合作伙伴）；
- 授予生态标签的机构（如奥地利 VKI）等。
- 根据 EU ETS 2，温室气体排放报告的核查报告必须提交的主管机关（即海关总署，国家温室气体排放交易主管机关 AnEH）

5 Declaration / 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 for direct CO₂ emissions and would like to have the accuracy of the results of the inventory checked / verified; for example, the statement that the organization emits XY tons of CO₂eq with a limited level of assurance.
- The client has prepared a GHG inventory for direct and indirect CO₂ emissions and would like to have the accuracy of the results of the inventory checked / verified; for example, the statement that the organization emits XY tons of CO₂eq with a limited/reasonable level of assurance.
- 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?)



- The client fulfills the requirements and obligations under NEHG / EU ETS 2 in the balance year XX and has properly categorized its activities as a trading participant and reported the CO₂ quantities in the GHG report.

5 声明 / 陈述

客户需在可行性评估中明确其希望作出的客观、事实性声明。该声明可指某一时点，也可覆盖某一时间段，并可体现在温室气体报告或温室气体项目计划中。

可能的声明包括：

- 客户已编制直接 CO₂ 排放的温室气体清单，并希望对其结果的准确性进行核查，例如声明该组织的排放为 XY 吨 CO₂当量，并附有限保证；
- 客户已编制直接和间接 CO₂ 排放的清单，并希望对结果进行核查，例如声明该组织的排放为 XY 吨 CO₂当量，并附有限/合理保证；
- 客户已编制 Scope 1、2 和 3 的温室气体清单，并希望对结果的准确性进行核查；
- 客户计划进行投资，根据欧盟分类法，对于此类气候保护投资，必须根据 ISO 14064-2 编制温室气体清单，并需进行前期验证 (Ex-ante) ；
- 客户声称其生产过程为“碳中和”。（注：如主要依赖碳抵消手段，存在“漂绿”风险。碳抵消占比是多少？）
- 客户在结算年度 XX 履行了《国家排放交易法（NEHG）/ 欧盟碳排放交易体系第二阶段（EU ETS 2）》的相关要求与义务，已正确归类其作为交易参与方的活动，并在温室气体报告中如实申报了二氧化碳排放量。

6 Risks and Uncertainties

The following **influencing factors** could limit the result and its validity; see also ISO 14064-3 Annex B.3:

- **inadequate or poorly documented procedures** or adherence to procedures for collecting data, quantifying emissions and preparing GHG statements;
- **lack of staff competence** in procedures for collecting data, quantifying emissions and preparing GHG statements;
- **lack of management involvement** in preparing GHG statements;
- **failure** to identify all material emissions and removals;
- errors in **unit conversions**;
- **inconsistent preparation** of information from prior periods without disclosure;
- **misleading presentation of material**, such as highlighting favorable data or trends;
- **inconsistent quantification methods** or reporting between sites, division or other segments of the GHG statement;
- **inadequate disclosures of uncertainties and assumptions**;
- inappropriate or out-of-date global warming potentials;
- management override of internal controls;

Additional considerations for potential influencing factors:

- **Existing certifications:** Is the client certified acc. to ISO 14001 and/or ISO 50001, and therefore monitors, measures and evaluates the environmental and energy data



according to clause 9.1 of the standard?

- **Measuring equipment:** Measuring devices are not calibrated.
- **Data:**
 - Most of the data are not measured, but are based on assumptions and estimates;
 - Are the data collected automatically or do they have to be read and documented (possible errors during transmission)?
- **Assumptions:** What are the underlying assumptions and are they documented? Are the assumptions plausible?
- **State of the art**
- **Electricity**
 - Electricity balancing via eco-label certified electricity or via electricity labeling according to ELWOG (electricity generation mix)
 - Are the country-specific energy generation mixes and/or national energy suppliers known? Sources?
- **Leakages:** How are possible leakages identified and recorded, e.g. for F-gases, natural gas pipelines?
- **Fleet:**
 - Is the fleet data based on consumption data or on km readings?
 - Is the data collected via databases or is it transferred manually from driver's log-books?
 - Do the mileage readings also include private use of the vehicle?
- **Scope 3:**
 - What processes and activities are not reported at scope 3 level?
 - How is the employee mobility data collected? (E.g. employee surveys: response, extrapolations, surcharges etc.)
- **NEHG/EU-ETS 2:**
 - a) Double counting (e.g. with ETS I; §41 Emissions Certificates Trading Act 2011)
 - b) Conversion factors other than those recognized nationally are used and originate from analyses by non-accredited laboratories
 - c) No calibration of meters
 - d) Implementation and justification of uncertainty factors for each fuel stream and aggregated uncertainty factor
 - e) A trader has different types of coal in its product range and does not differentiate between coal types in its calculations.
 - f) De minimis thresholds of 1,000 tons of CO₂ are exceeded (per fuel or energy product)

6 风险与不确定性

以下影响因素可能限制结果及其有效性（参见 ISO 14064-3 附录 B.3）：

- 收集数据、量化排放和编制温室气体声明的程序不充分或记录不全；
- 执行上述程序的员工缺乏能力；



- 管理层对温室气体声明的参与不足；
- 未识别所有重要排放源与清除项；
- 单位换算错误；
- 未披露前期数据准备过程中的不一致处理；
- 材料展示误导性，例如仅突出有利数据或趋势；
- 同一企业不同地点、部门或报告段落之间采用不一致的量化方法或报告格式；
- 未充分披露不确定性与假设；
- 采用不当或过时的全球变暖潜值（GWP）；
- 管理层绕过内部控制流程。

其他潜在影响因素考量：

- **现有认证情况：**客户是否获得 ISO 14001 和/或 ISO 50001 认证？是否依照标准第 9.1 条款监测、测量与评估环境与能源数据？

- **测量设备：**测量仪器是否经过校准？

- **数据来源：**

- 大多数数据是否来源于假设和估算而非实测？
- 数据是自动采集还是需人工读取和记录？（如：传输过程可能出错）

- **假设设定：**

- 所依据的假设有哪些？是否有文档记录？假设是否合理？

- **行业通行水平/当前技术水平：**

电力相关问题：

- 电力是否通过生态标签认证电力进行平衡？或是否依据《电力法（ELWOG）》标签？
- 是否了解国家级的能源生产结构？有无权威来源？

泄漏问题：

- 是否识别和记录可能泄漏点？例如含氟气体、天然气管道等？

车队数据：

- 车队数据是否基于燃油消耗量或行驶里程？
- 数据是否通过数据库采集？或是人工从驾驶员日志记录转录？
- 是否包含车辆的私人使用里程？

Scope 3 相关问题：

- 哪些流程和活动未纳入 Scope 3 报告范围？
- 员工出行数据如何收集？（例如：员工调查的响应率，外推算法、补偿因子等）

- **NEHG/EU-ETS 2：**

- a) 双重计算（例如与 ETS I 重复；参见《2011 年排放权交易法》第 41 条）
- b) 使用了非国家认可的换算因子，且这些因子来自未经认证的实验室的分析结果
- c) 未对计量仪器进行校准
- d) 对每个燃料流和总不确定性因子进行了实施与合理性说明
- e) 某交易商的产品中包含多种类型的煤炭，但在计算中未区分煤炭类型
- f) 超过了 1000 吨 CO₂ 的最低排放量门槛（按每种燃料或能源产品计）

7 Level of Assurance in Case of Verification 核查时的保证等级

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.

在进行核查时，核查员与客户应就所适用的**保证等级**达成一致，并应考虑目标用户的需求。核查员应评估所选保证等级是否合适。

核查过程中不得更改保证等级，但核查员可终止当前委托，并重新以不同保证等级启动新的核查委托。

保证等级必须在核查开始前明确，因为它决定了取证活动的性质、范围和时间安排（即核查方案的设计基础）。

定义：保证等级：对温室气体声明的可信度程度（依据 ÖNORM EN ISO 14064-3; 3.6.5）

可能的保证等级包括：

- **合理保证等级：**ISO 14064-3:2019 的通用部分对“充分保证”方法作了规范性描述。
合理保证：通过有计划的核查活动（3.6.2）为历史数据和信息提供高度但非绝对的保证。
- **有限保证等级：**通过较小范围的核查活动（3.6.2）为历史数据和信息提供有限程度的保证。

（参见 ÖNORM ISO 14064-3:2019 附录 A）：有限保证核查允许核查员得出以下结论：“没有发现任何使我相信该温室气体声明存在重大错报的迹象”（采用否定表达方式）。有限保证核查的流程与合理保证相同，包括战略分析、风险评估和取证活动等。

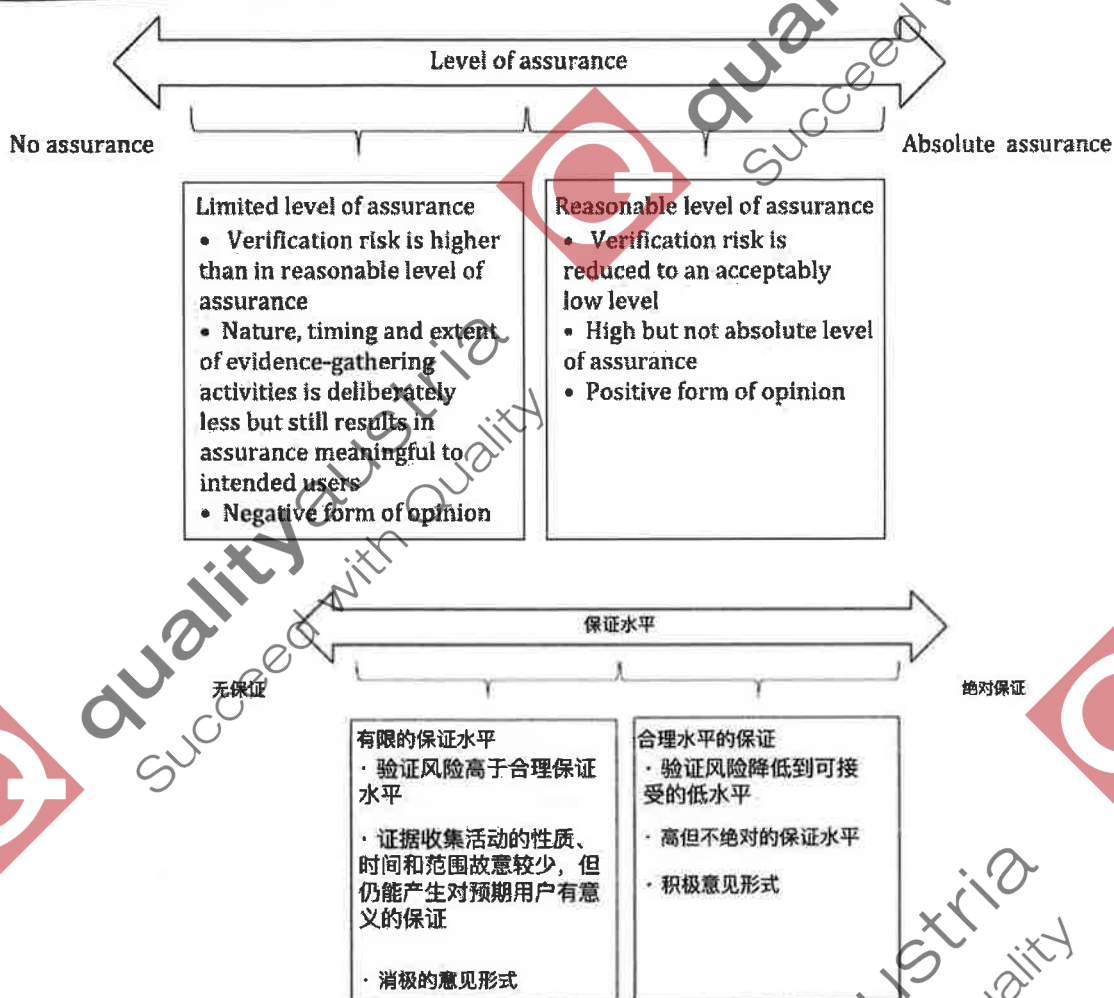


Figure: Level of assurance (Degree of confidence), Source ONORM EN ISO 14064-3:2019, A.1

ATTENTION! NEHG and EU-ETS 2 - only reasonable level of assurance!

The legislator (see §6 (4) Amendment EU-ETS 2) assumes a positive opinion, i.e., conversely, that Quality Austria Certification GmbH can only verify with **reasonable level of assurance**.

注意！NEHG 和 EU-ETS 2 —— 仅适用于“合理保证水平”！

立法者（参见 EU-ETS 2 修正案第 §6 (4) 条）假定核查意见为正面意见，即反过来说，Quality Austria 认证有限公司只能在“合理保证水平”下进行核查。

图：保证等级（置信度）来源：ONORM EN ISO 14064-3:2019，附录 A.1



7.1 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**.

The "**CL_27_01_193e Planning Verification, Strategic Analysis, Risk Assessment, Evidence-gathering plan**" is to be used for planning. This includes a structured approach acc. to ISO 14064-3, Clause 6.1.

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**.

7.1 有限保证核查流程的说明

来源: ISO 14064-3:2019, 附录 A.3 (规范性附录)

有限保证核查遵循与合理保证核查相同的一般流程, 但有如下补充说明:

- **战略分析:** 有限保证核查不要求对内部控制的设计、存在性和有效性进行详细评估, 假定控制系统本身是可靠的。
- **风险评估:** 对整个温室气体声明进行总体风险评估, 精细程度低于合理保证核查。不要求对下列具体方面进行详细识别:
 - 排放与清除: 发生性、完整性、准确性、截止性与分类;
 - 储存: 存在性、权利与义务、完整性、准确性与分配。

核查员应将风险分类为: 固有风险、控制风险和检查风险。

应使用《CL_27_01_193e_核查计划、战略分析、风险评估与取证计划》文件, 依据 ISO



14064-3 第 6.1 条款建立结构化核查流程。

- **核查计划** (来源 A.4.3.3) : 对于有限保证核查, 必须访问进行温室气体数据汇总的设施或现场, 除非核查员已充分了解该设施的汇总过程。其他设施或站点的访问应根据风险评估和取证计划决定。
- **取证计划** (来源 A.4.3.4) :
 - 在合理保证核查中, 取证计划会持续更新, 直到收集到充分、适当的证据为止;
 - 在有限保证核查中, 取证计划主要针对潜在重大错报进行更新。

8 Materiality Assessment / Materiality Thresholds 重大性评估 / 重大性阈值

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;
- non-compliance 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.

ATTENTION: Additional materiality assessment in accordance with NEHG/EU ETS 2

In connection with NEHG/ EU-ETS 2, the term "material" refers to the timely notification of "material changes" to the competent authority (= customs office) regarding registration or change registration of the **monitoring plan**. In this respect, all material/intended changes to the information provided in accordance with §4 and §5 must be reported immediately, while non-material changes must be reported by 31 December of the year in which the change occurs at the latest. The authority must take note of this notification and, if necessary, amend the registration decision or issue a decision in accordance with §5.

- Time frame: the calendar year in question for verification or the reporting period of the data points
- Justification and description of the uncertainty factors for each fuel stream and the total aggregated uncertainty factor



核查员 / 验证员应确认目标用户对重大性阈值的要求。如目标用户未设定阈值，则由核查员 / 验证员设定相应重大性阈值，并告知客户。

温室气体项目可自行设定重大性阈值。重大性包括定量性和定性性两个方面：

定量重大性：指温室气体声明中存在数值误差的情况，例如：

- 错报；
- 清单不完整（例如遗漏某些流程或被排除）；
- 温室气体排放分类错误；
- 计算方式错误（例如公式有误、转换因子错误或过时等）。

定性重大性：指对温室气体声明产生影响的非量化因素，例如：

- 控制缺陷，降低了核查员对报告数据的信心；
- 文件化信息管理混乱；
- 难以找到所需信息；
- 不符合间接与温室气体排放、清除或储存相关的法律法规要求。

重大性原则用于核查 / 验证设计阶段，也用于评估证据，以便形成结论。

注意：根据 NEHG/EU ETS 2 进行额外的重要性评估

在 NEHG/EU-ETS 2 的框架下，“重大”（material）一词指的是向主管机关（即海关）及时通报关于监测计划注册或变更注册的“重大变更”。根据第 4 条和第 5 条，凡是所提供信息的重大/计划性变更，必须立即报告；而非重大变更必须最迟在变更发生的该日历年 12 月 31 日前报告。主管机关须对该通知进行备案，并在必要时修改注册决定或根据第 5 条作出决定。

- 时间范围：与验证相关的日历年或数据点的报告期间
- 每个燃料流的不确定性因子及总不确定性因子的合理性说明和描述

9 Verification / Validation Process 核查 / 验证流程

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

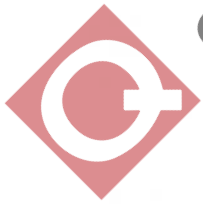
The following figures show the verification and validation process (source ÖNORM EN ISO 14064-3 figure 3, page 13 and figure 4, page 14).

核查或验证过程分为以下步骤：

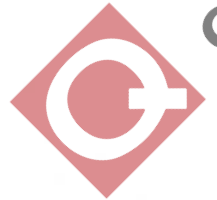


1. 可行性评估（前期委托）
2. 签署委托协议
3. 规划
4. 执行验证 / 核查
5. 审查
6. 做出决定并出具验证 / 核查声明
7. 处理上诉
8. 处理投诉
9. 文件记录

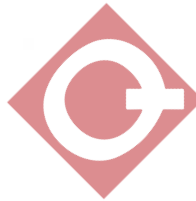
如下图所示，核查与验证的流程来源自 ÖNORM EN ISO 14064-3 图 3（第 13 页）和图 4（第 14 页）。



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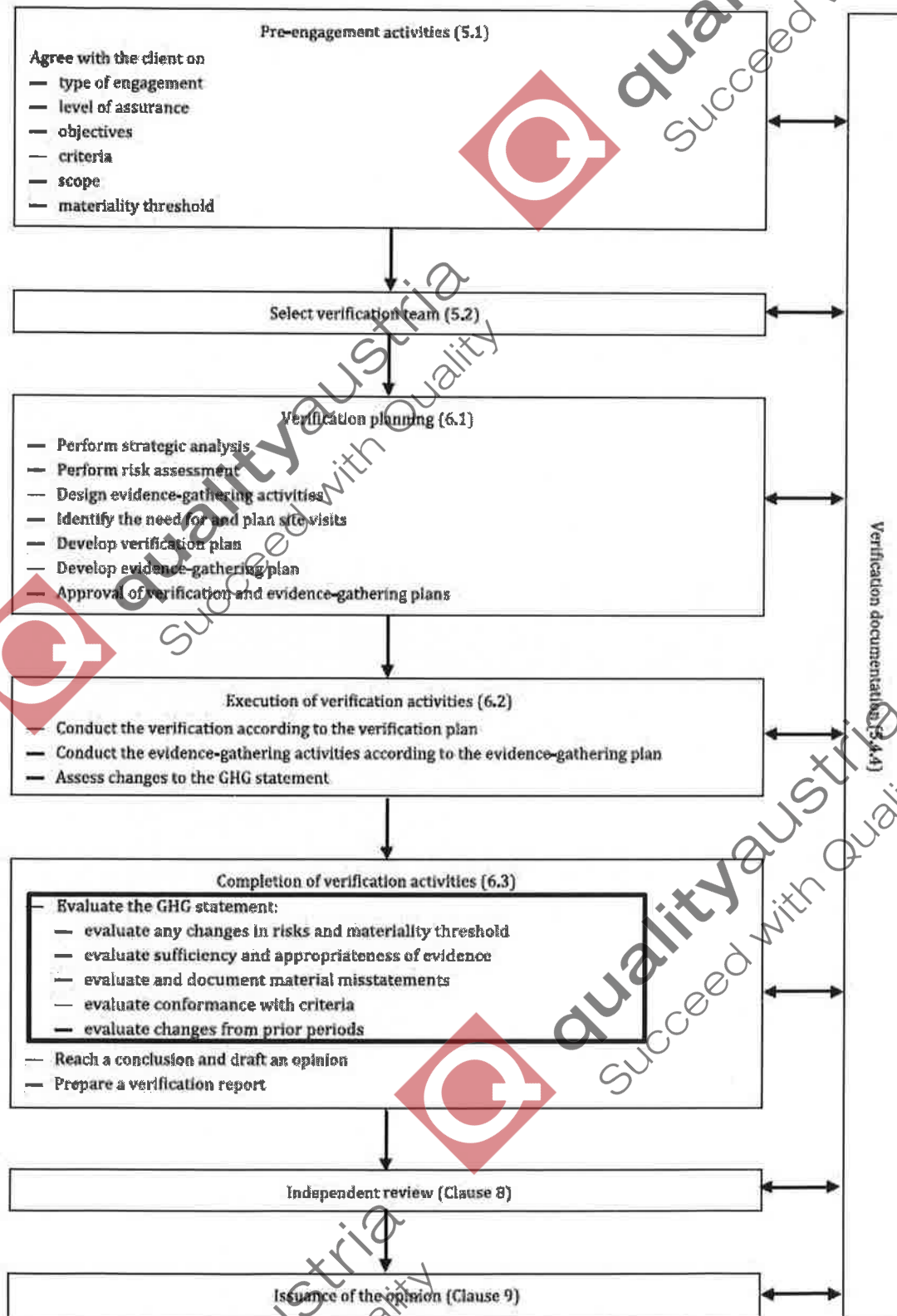


Figure 3 — Verification process

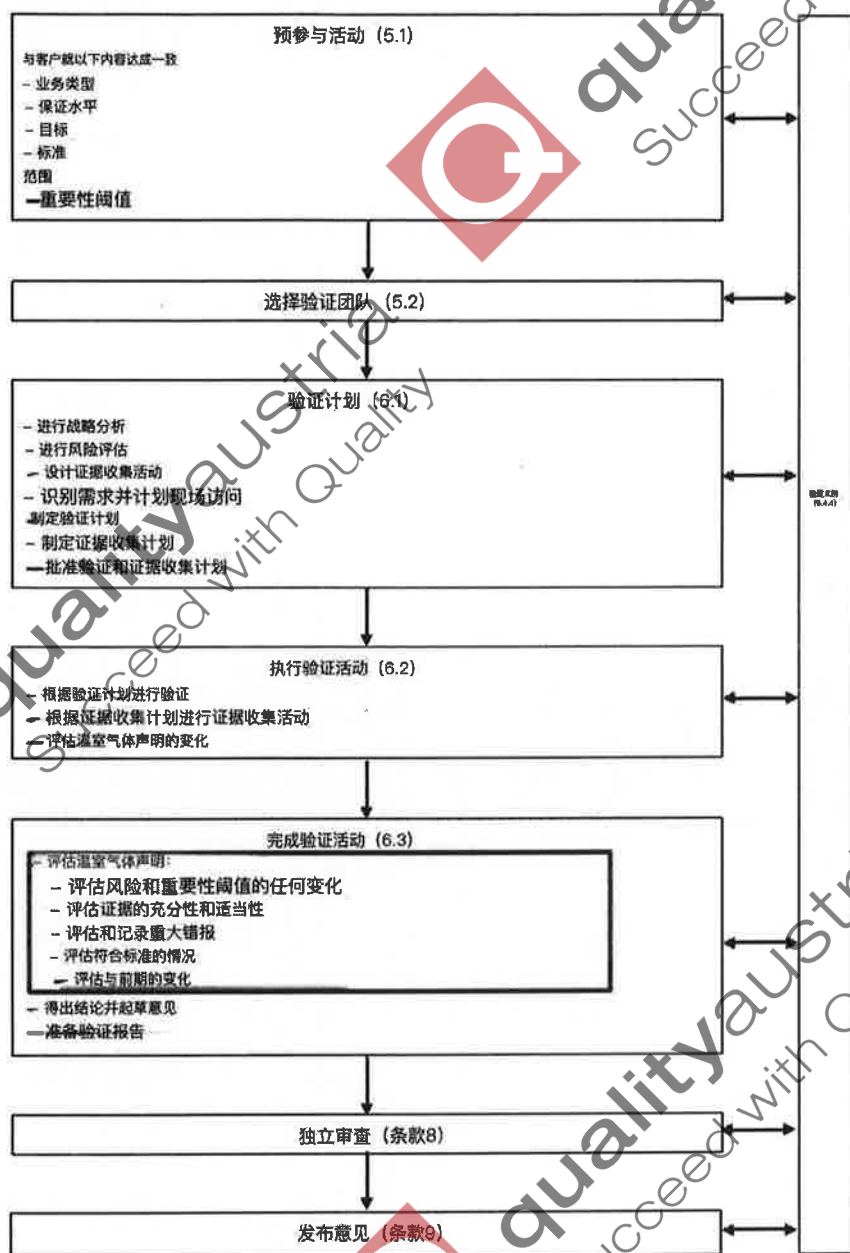


图3 - 验证过程



Figure 4 — Validation process

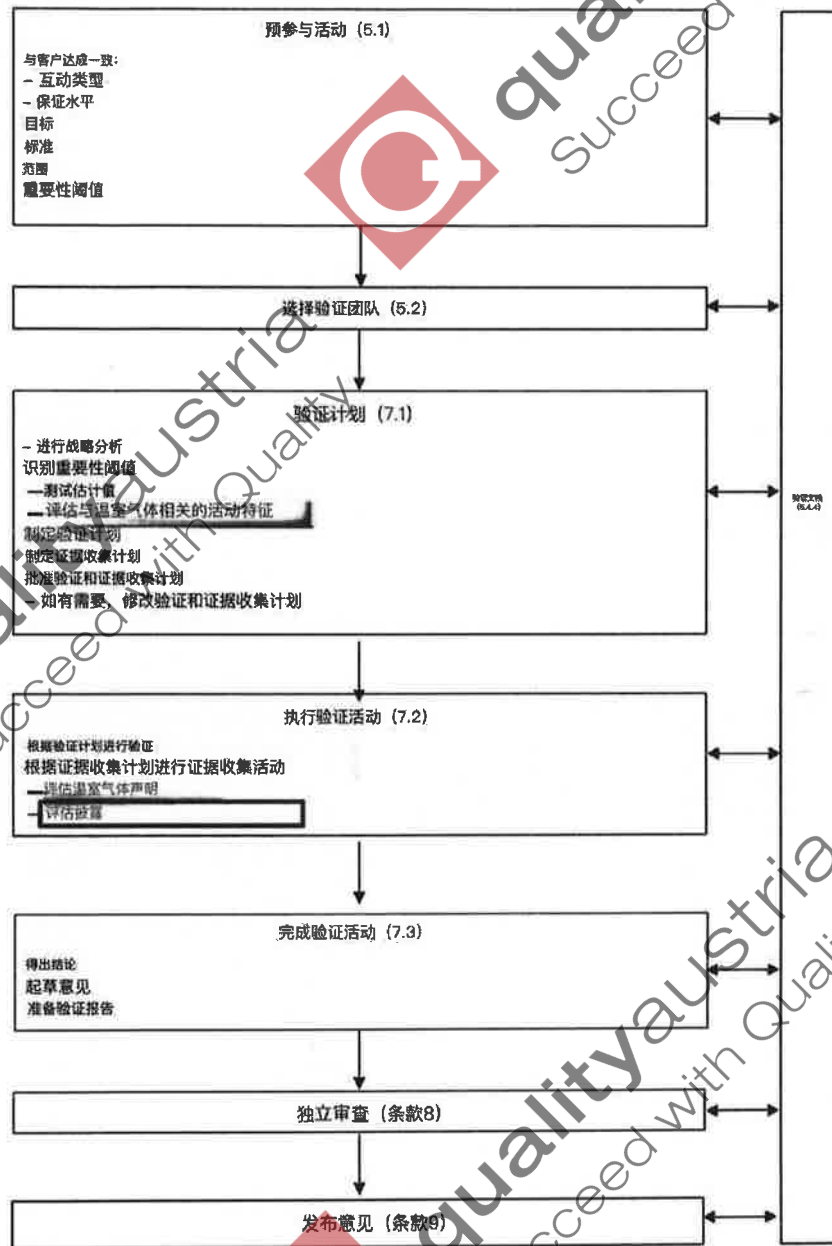


图4 - 验证过程



9.1 FEASIBILITY CHECK

The client provides the following information in advance using the form FO_25_03_27e_Information_offer_making_ISO 14064-1, 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?
- What is the base year or are there any corrections or changes in relation to the base year
- Information on **materiality**,
 - Inventory boundaries (site; corporate group or product)
 - Sources, sinks and reservoirs (SSR) for direct and indirect emissions
 - **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

The **NEHG/ EU-ETS 2 feasibility check** is handled in the controlled document FO_25_03_27-1_Informationen zur Angebotslegung_NEHG, information on making offers, German only).

In addition to the general information mentioned above, the following additional information is required for NEHG feasibility:

- **Decision** on approved registration with the competent authority; the decision must contain at least the following information:
 - Name and address of the trading participant;
 - A description of the means of placing on the market;
 - A list of the energy carriers that the trading participant is permitted to place on the market;
- Where applicable, registration of changes
- A monitoring plan (§ 7); monitoring and obligation to regularly improve the monitoring plan
- Reporting requirements / Reference period: reporting period/year; reference period for data points (if different from the reporting year)
- Number of clients, categorization of clients (e.g. intermediaries, EU ETS 1; end consumer, "product chain")
- Monitoring plan
 - GHG report; Greenhouse gas emissions report for the relevant verification year
 - Quantities of substances / energy sources
 - Number of product groups / fuels streams and their categorization (major, "de-minimis" fuel streams)
 - Details per fuel stream and category (e.g. system level conversion factor used; intended use; biogenic share, etc.)
 - Categorization of the trading participant (category A, B, "de-minimis", de-minimis threshold (<1 ton of CO₂)).
 - Exemptions applied (acc. to §20, §21, §22, §23 – basis for cross-checks in accounting)



- The **emissions report** must include the following information:
 - Name and address;
 - Type of product(s) and energy source(s) and description of the activity
 - Address, telephone number, and e-mail address of a contact person
 - Name of the owner of the trading participant and name of the trading participant, if available.
 - Per energy carrier and energy product(s)
 - Product group and energy carrier(s) placed on the market;
 - Emission factor(s) used
 - Total emissions of all fuel streams
 - End use(s) of energy carriers placed on the market
 - Uncertainty factor per fuel stream and total aggregate; description and justification
 - Means by which the energy carriers are placed on the market.
 - Calculations of CO₂ emissions: Quantity * Emission factor (e.g. the customs office list with 2a level emission factors); fuel-specific characteristics such as biogenic admixtures, etc.).
 - Emission factors: system level used at current IPCC; national standard factors for fuels in their latest valid form from the customs office (2a) or fuel-specific from accredited laboratories using recognized analysis methods
 - Client structure and client description "Product chain"

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)

9.1 可行性评估

客户应使用表格 **FO_25_03_278_信息收集表** 适用于 ISO 14064-1、ISO 14064-2 和 ISO 14067 的核查 / 验证, 提前提供以下信息:

- 客户名称
- 联系信息
- 联系人
- 站点概况 (包括国家信息)
- 有效证书, 例如 ISO 14001、EMAS、ISO 50001
- 行业 (部门)



- 主要活动
- 主要设施与技术
- 产品或产品组
- 是否需执行核查、验证或两者结合（如前期+后期评估）（参见ISO 14065:2022 第 9.2 条）
- 需被核查的声明
- 所依据的标准：ISO 14064-1、14064-2、14067 或特定的温室气体计划
- 是否已有历史验证或核查报告？
- 基准年信息，或是否对基准年有修订或变更？
- 重大性信息
- 清单边界（站点、集团或产品）
- 排放源、汇、库（SSR）：直接与间接排放
- 温室气体类型包括：
 - 二氧化碳 (CO₂)
 - 甲烷 (CH₄)
 - 一氧化二氮 (N₂O)
 - 氢氟碳化物 (HFCs)
 - 全氟碳化物 (PFCs)
 - 六氟化硫 (SF₆)
- 主要能源来源及使用量
- 主要能耗用户、关键设施或产品的能耗占比
- 能源供应商（购电、电力标签等）
- 数据周期（时间段）
- 清单中可能遗漏或排除的部分
- GHG 报告或温室气体计划
- **针对 ISO 14067 的附加问题包括：**
 - 是否计划进行产品对比声明？
 - 是否计划对产品碳足迹进行内部或外部评审？
 - 需要的保证等级信息：
 - 合理保证
 - 有限保证

NEHG/EU-ETS 2 的可行性审查依据受控文件 FO_25_03_27-1_Informationen zur Angebotslegung_NEHG（报价信息，仅提供德文）进行。

除了上述通用信息外，NEHG 的可行性评估还需提供以下附加信息：

■ 经主管机关批准的注册决定文件，需至少包含以下内容：

- 交易参与者的名称和地址；
- 上市方式的描述；
- 允许交易参与者上市的能源载体清单；
- 如适用，变更注册信息；
- 监测计划（§7）；监测责任及定期改进监测计划的义务；
- 报告要求 / 参考期间：报告期/年度；数据点的参考期间（如不同于报告年度）
- 客户数量及分类（如中间商、EU ETS 1、终端用户、“产品链”）
- 监测计划；
- GHG 报告，即相关验证年度的温室气体排放报告；
- 物质 / 能源来源的数量；
- 产品组 / 燃料流的数量及其分类（主要流、“可忽略”流）
- 每个燃料流及分类的详细信息（如使用的系统级转换因子、用途、生物质比例等）
- 交易参与者的分类（A 类、B 类、“可忽略”类别，<1 吨 CO₂ 的可忽略门槛）；
- 所适用的豁免条款（依据 §20、§21、§22、§23——用于会计交叉核查）
- 排放报告必须包括以下信息：
 - 名称和地址；



- 产品和能源来源类型及活动描述;
- 联系人地址、电话号码和电子邮件地址;
- 交易参与者所有者的名称及交易参与者的名称 (如有);
- 按能源载体和能源产品分类:
 - 上市的产品组和能源载体;
 - 使用的排放因子;
 - 所有燃料流的总排放量;
 - 上市能源载体的最终用途;
 - 每个燃料流的不确定性因子及总不确定性因子; 相关描述与说明;
 - 能源载体的上市方式;
- CO₂ 排放量的计算方式: 数量 * 排放因子 (如使用海关发布的 2a 级排放因子); 考虑燃料的特性, 如生物混合比例等;
- 排放因子: 当前 IPPC 使用的系统级因子; 海关提供的最新版国家标准因子 (2a), 或通过认可实验室采用公认分析方法得出的特定燃料因子;
- 客户结构及“产品链”中的客户描述。

Quality Austria 将在委托前审核以上信息的完整性、准确性与合理性。预评估结果将涵盖以下内容:

- 可行性判定
 - 否: 拒绝验证 / 核查, 告知客户
 - 是: 进入正式委托准备阶段
- 验证 / 核查活动的时间安排 (作为委托基础)
- 重大性判断
- 保证等级定义
- 初始现场审核所需问题列表 (风险相关)

9.2 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;
- GHG declaration;
- **level of assurance (for NEHG/EU ETS 2: always reasonable 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.



9.2 委托阶段

申请方将收到验证或核查的正式报价，包括适用的一般条款和条件（GTCs）以及补充要求（适用于温室气体清单或产品碳足迹验证 / 核查程序）。

报价封面中的“其他事项”部分将包含以下内容：

- 验证 / 验证范围说明
- 所适用的标准规范
- 可能的排除项
- 温室气体声明；
- 保证水平（针对 NEHG/EU ETS 2：始终为合理保证水平）

根据 ISO/IEC 17029:2019 第 9.3.2 条款的规定，客户需将任何可能影响验证意见有效性的事项告知 Quality Austria。

报价将引用适用的文件。客户签署报价后，合同即成立，Quality Austria 将发送包含起止日期的委托确认函。

适用文件：

RE_25_03_04e_温室气体最短时间计算

9.3 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.**

9.3 规划与准备 —— 核查 / 验证第一阶段

根据复杂性和范围，在 WIS 系统中指派团队或单独验证员 / 核查员，并指定一名组长（Lead-V）。组长负责计划、批准和变更管理。

组长将从客户服务中心（CSC）接收全部可行性评估信息用于准备。验证 / 核查可为迭代过程。

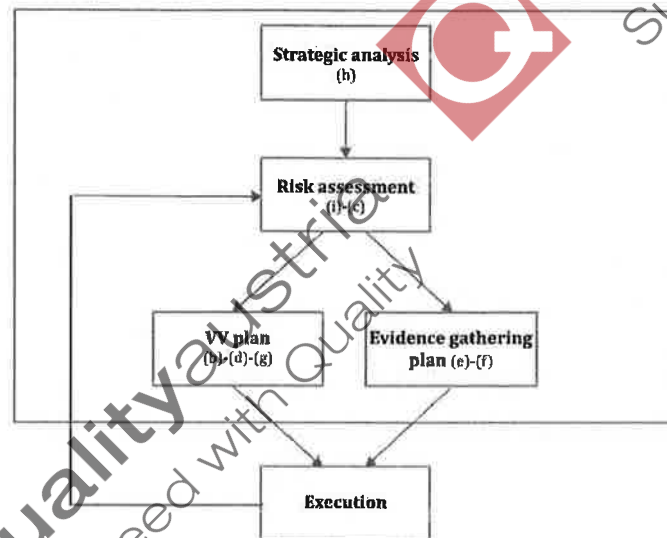


Figure 1 — Steps of a planning process

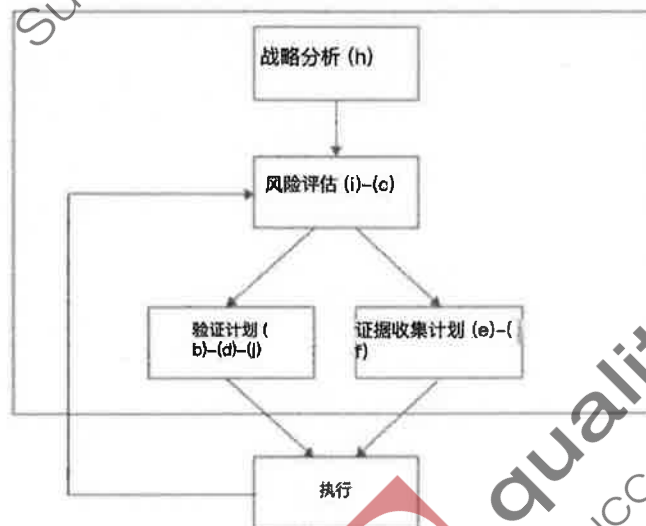


图1 - 计划过程的步骤

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

The "CL_27_01_193e Planning Verification, Strategic Analysis, Risk Assessment, Evidence-gathering plan" is to be used for planning. This includes a structured approach acc. to ISO 14064-3, Clause 6.1.

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

■ Strategic analysis



- a) review of information from the **feasibility data sheet**;
- b) inventory **objectives**;
- c) clarification of **inventory boundaries** (ownership regarding CO₂ emissions, locations, site boundaries; scope of inventory);
- d) **materiality threshold**: may still need to be defined with the client organization, see chapter 8;
- e) **responsibilities** at the client organization (key personnel, competences, tasks);
- f) **declaration** / statement;
- g) review of the **GHG report** or previous V-reports;
- h) GHG relevant **processes** (activities, operations);
- i) relevant **sector** information;
- j) **overview of facilities**;
- k) potential relevant legal basics including climate protection obligations;
- l) **energy and material flows** (Sankey diagrams incl. source, sinks and possible reservoirs);
- m) types of sources of **information and data** incl. potential estimate methodology;
- n) review of the data collection process (measurement, monitoring, evaluation, periods) and potential statements on the accuracy of data;
- o) determination of emission factors including references or application of the correct system level of emission factors in accordance with NEHG/EU ETS 2 requirements.
- p) **Validation**:
 - i. What **requirements** does the intended **user** of the validation report specify?
 - ii. Is a proper public disclosure of the GHG statement available?
 - iii. What are the results of the sensitivity and uncertainty analysis?
 - iv. Appropriateness and quality of the estimate methodology
 - v. Could **possible side effects or shifts** of emissions occur? If the GHG-related activity must consider side effects, the validator has to assess the completeness and accuracy of these modifications.
 - vi. **Functional equivalence**: the validator shall assess whether the project and the baseline scenario are functionally equivalent.
 - vii. **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:**

- a) complexity of the organization;
- b) clear specifications in the organization;
- c) recognition of potential misstatements;
- d) Are all SSRs identified? To what extent is the data complete and accurate?
- e) clarification of possible influencing factors that could affect the outcome;



- i. materiality threshold;
 - ii. exclusions;
 - iii. identification of possible uncertainties and their relative effect on the GHG statement;
 - iv. calibration of measuring equipment;
 - v. type and frequency of data collection, e.g. automated data collection vs. point-by-point manual data collection;
 - vi. level of detail of available information: measurement concept at different levels (main meter, sub-meter, or mobile meter?);
 - vii. data monitoring: continuous measurement or punctual / time-limited measurements;
 - viii. evaluation of data incl. calculations, conversions and use of suitable databases or emission factors;
 - ix. potential risks and inaccuracies in the data management process;
 - x. 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 party responsible (client organization, client).
- f) identification of possible nonconformities;
- g) Do any significant or unusual emissions exist outside of operations?
 - h) Are there legal risks?
 - i) Is an improvement process incl. root cause analysis, corrections and corrective actions established?
- type of quality assurance in the inventory;
 - Special features of risk analysis from NEGH/EU ETS 2, such as avoidance of double counting and uncertainties
 - Use of "means" and distribution channels
 - Possible breaches in data points and errors in (IT) systems

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 project GHG statement verification

The **strategic analysis** shall consider the following (cf. ISO 14064-3:2019, 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 14064-3:2019, 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.

Other applicable documents:

- CL_27_01_193e_ISO 14064-3_Planning Verification, Strategic Analysis, Risk Assessment, Evidence-gathering plan
- CL_27_01_199_ISO 14064-3_NEHG-ETS2_Planning-Verification_Strategic Analysis_Risk Assessment_Evidence Plan
- FO_27_01_238e_Verification and Validation Plan – this is a **TEMPLATE** and must of course be adapted to the circumstances;

使用文件: **CL_27_01_193e 《ISO 14064-3 规划、战略分析、风险评估、取证计划》**

根据 ISO 14064-3 第 6.1 条采用结构化方法。

在第一阶段的验证 / 核查中 (如可能, 进行现场), 将与客户详细讨论以下内容:

战略分析

a) 审查可行性数据表中的信息;

b) 盘查目标;

c) 明确盘查边界 (与 CO₂ 排放相关的所有权、位置、现场边界、盘查范围);

- d) 重要性阈值：如尚未设定，则需与客户机构确认，见第 8 章；
- e) 客户机构的职责分配（关键人员、能力、任务）；
- f) 声明 / 陈述；
- g) 审查温室气体报告或以往的验证报告；
- h) 与温室气体相关的过程（活动、运营）；
- i) 相关行业信息；
- j) 设施概览；
- k) 潜在相关的法律依据，包括气候保护义务；
- l) 能源和物料流（桑基图，包括来源、汇和可能的储存）；
- m) 信息和数据来源类型，包括潜在估算方法；
- n) 数据收集流程的审查（测量、监测、评估、周期）及对数据准确性的潜在说明；
- o) 排放因子的确定，包括参考依据或是否依据 NEHG/EU ETS 2 要求使用正确的系统级排放因子；
- p) 适用于确认的事项：
 - i. 最终使用方对确认报告有何要求？
 - ii. 是否有妥善的温室气体声明公开信息？
 - iii. 敏感性与不确定性分析的结果为何？
 - iv. 估算方法是否适当、质量是否良好？
 - v. 是否可能存在副作用或排放转移？若项目需考虑副作用，则验证人员需评估这些修改的完整性与准确性；
 - vi. 功能等效性：验证人员需评估项目与基准情景是否在功能上等效；
 - vii. 敏感性：验证人员需识别潜在变动较大的假设，并判断这些变动是否对 GHG 声明具有实质影响。

现场审核内容包括：

- 重要设施、储存区
- 风险分析与风险评估：
 - a) 组织的复杂性；
 - b) 组织内是否有明确的规范说明；
 - c) 潜在误报识别；
 - d) 是否识别了所有 SSR（Significant Structural Risks）？数据是否完整且准确？
 - e) 澄清可能影响结果的因素：
 - i. 重要性阈值；
 - ii. 排除项；
 - iii. 潜在不确定性的识别及其对 GHG 声明的相对影响；
 - iv. 测量设备的校准情况；
 - v. 数据收集类型与频率，例如自动收集与逐点手动收集；
 - vi. 可用信息的详细程度：不同层级的测量概念（主表、子表或移动设备？）；
 - vii. 数据监测方式：持续测量还是定点/时间限制测量；
 - viii. 数据评估，包括计算、换算及是否使用合适的数据库或排放因子；
 - ix. 数据管理过程中的潜在风险与不准确性；
 - x. 特别是在确认中：估算方法（假设的适当性、适用性，估算数据及所基于数据的质量；计算模型、预测）；验证人员应形成自身的点估值或估值区间，以评估申报方（客户机构、客户）的假设。
 - f) 潜在不符合项的识别；
 - g) 是否存在运营范围之外的重大或异常排放？
 - h) 是否存在法律风险？
 - i) 是否建立了包括根本原因分析、纠正与纠正措施在内的改进流程？
- 盘查的质量保证类型；
- NEHG/EU ETS 2 风险分析的特殊内容，例如避免双重计算与不确定性问题。
 - “手段”与分销渠道的使用情况
 - 数据点中的潜在漏洞与 IT 系统中的错误

项目温室气体声明验证的附加要求：

战略分析应考虑以下内容（参见 ISO 14064-3:2019 第 6.1.1.2 条）：

- 项目计划；
- 确认报告的结果；



- 监测计划的要求；
- 所采用的监测方法；
- 监测报告。

风险评估应考虑以下内容（参见 ISO 14064-3:2019 第 6.1.2.5 条）：

- 当前的运行条件是否反映了项目计划或标准中的假设、限制、方法和不确定性；
- 基准计算的复杂性和数据可用性；
- 实际与预期的减排量或清除量提升之间的对比。

产品类温室气体声明补充要求（参见 ISO 14064-3 第 6.1.1.3）：

- 生命周期解释结果（含结论与限制）
- 功能单位或声明单位（ISO 14067）
- 单元流程特性
- 生命周期阶段
- 截止点设定

产品类风险评估需考虑（参见第 6.1.2.6）：

- 产品复杂程度与系统边界
- 各生命周期阶段的排放与清除贡献
- 分配方法
- 类似产品的生命周期结果可用性
- 使用与处置阶段的代表性
- 所引用碳足迹研究的可靠性
- 关键审查结果

NEHG 与 EU-ETS 2 的要求

随着相关决定的发布（该决定也要求事先审查监测计划）以及参考文件中换算因子的规定，通常可认为验证的前提条件是有利的。

可能的影响因素包括：

- 企业规模 / 复杂程度：简单、中等、高度复杂；
- 日历年度 / 数据点报告期的界定；
- 测量仪器 / 这些仪器的校准和验证情况；是否纳入内部控制系统以及检查记录的文件化；
- 排放因子系统层级应用：IPCC 2006 版标准因子、国家级排放因子 Level 2a、来自认可实验室的燃料特定排放因子。如使用实验室的燃料特定排放因子，需提供具备 ISO 17025 资质的认可检测实验室的证明文件，并附带抽样计划；还应确认该实验室声明的测量不确定度；建议在认证机构网站上进行资质交叉核查；
- 建议在准备阶段向客户询问上一年度是否存在重大变更，若有，是否已及时向主管机关报告；
- 考虑 IT 系统和会计系统的应用情况：例如，小型企业是否有采购与销售文件的数字化存档系统（文件可能丢失、是否有防火措施等）；
- 内部控制措施如何规划和实施？操作风险如何管理、执行并根据监测计划和监督计划中的持续改进义务进行记录？

规划与准备阶段的输出包括：

- 验证 / 验证 / 组合形式的确认
- 声明内容的一致理解
- 范围与清单边界确认
- 活动时间安排确认（可能调整）
- 错报、排除、不准确与不确定性的记录，为保证等级设定提供输入
- 核查 / 验证计划：相关人员指派，重要证据文档计划
- 标准实施中的潜在不符合项需提前告知客户

验证批准相关：

验证员需评估目标用户是否认可该 GHG 活动。评估包括：



- 是否满足用户设定的可接受标准 / 合规标准;
- 是否存在地理或时间限制, 并评估活动是否符合;
- 活动是否真实、可量化、可验证、永久且可强制执行;
- 在核实 GHG 声明计算后, 重新评估该活动是否仍被认可。

规划准备阶段时间预估:

- 一般需 6-8 小时, 视组织规模与 GHG 报告复杂度而定
- 报告草稿可能包括: 声明 / 范围 / 不确定性
- 最迟在计划核查日期前两周提供验证 / 核查计划 (V-plan)
- 文档编制时间一般为 4-8 小时

适用文件包括:

- CL_27_01_193e 《ISO 14064-3 规划、战略分析、风险评估与取证计
- CL_27_01_199 ISO 14064-3/ENHG-ETS2 核查计划-战略分析-风险评估-证据收集计划
- FO_27_01_238e 《验证与核查计划模板》——此为模板, 需根据实际情况调整

9.4 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**.

Evidence-gathering activities

- interviews;
- site-visit incl. observation;
- review of invoices, supporting documents, measurement protocols, test books;
- questioning of models, calculations (conversions, source of emission factors etc.);
- plausibility checks;
- cross-checking of conversion factors, e.g. source of supply, topicality;
- ...

Site visit requirements

When planning for on-site visits, the following shall be considered:



- the results of the risk assessment;
- the number and size of sites and facilities;
- the degree of confidence;
- the nature and magnitude of emissions at different sites and facilities;
- the diversity of activities;
- the complexity of quantifying emissions sources;
- the results of prior verifications or validations.

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**. The verification or validation is based on the following checklist: see CL_27_01_182e_ISO 14064-1; CL_27_01_184e_ISO 14064-2, CL_27_01_189 ISO 14067, FO_27_01_230_Prüfbericht_NEHG (Test report, incl. Integrated checklist)

Possible evidence documents

- inventory boundaries;
- overview of the value chain;
- measurement concept;
- process illustrations;
- overview of facilities;
- sampling legal register;
- quantification methods;
- Sankey charts;
- input-output analyses with quantities in kWh (energy), liters (fuels), Nm³ (gas), kg (refrigerants);
- data measurements (meter readings);
- collection of data, e.g. from energy invoices, delivery notes;
- calibration protocols of measuring equipment;



- documentation of assumptions;
- documented estimate methodologies, assumptions, projections for the future;
- sensitivity or uncertainty analyses;
- calculations (formulas);
- modeling concepts;
- technical data sheets or facility books (asset ledger/book);
- inspection or maintenance records, e.g. refrigeration systems, F-gas Regulation;
- conversion factors incl. reference values;
- GWP potentials incl. reference values;
- BAT documents.

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 or NEHG

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 as an attachment;
- **an opinion** for users.

Report requirements

Report: Verification or validation results in a report that includes the following minimum contents:

- **impartial qualityaustria** report on the **actual findings** (title or introduction);
- **company data** (identification of the responsible party);
- reference to the **activity (criteria)**: organization (ISO 14064-1), project (ISO 14064-2) or product (ISO 14067); Quality Austria has verified / validated the audit criteria



according to ISO 14064-1 or -2:2019 or ISO 14067:2019, based on ISO 14064-3:2019. The reviewed data refer to the period 20xy;

- Note that the organization is responsible for the environmental information statement (integrated as a fixed sentence in the report): *"Quality Austria states that the client organization is responsible for the preparation and fair presentation of the environmental information statement."*
- *Quality Austria is responsible for the opinion on the GHG statement based on this verification.*
- definition of **criteria** as the basis for the environmental information statement;
- in case of *validation*: If the environmental information statement contains a forecast, an explanation must be stated that the actual results may differ from the estimates, as the assumptions on which the estimates are based may change → *"Quality Austria hereby states that future estimates are based on assumptions. Actual results are likely to be different from the extrapolated or estimated outcomes, as the assumptions or underlying conditions may change."* (integrated as a fixed sentence in the report);
- scope / inventory boundary;
- declaration / statement;
- level of assurance;
- objectives;
- risk assessment;
- materiality analysis
 - for each scope level (significant sources [energy uses, processes, facilities], potential sinks; reservoirs);
 - interpretations / decisions;
 - potential misstatements;
- *Validation*: assumptions, forecast procedures, assessment of disclosure;
- sources of information: disclosure on measured data, extrapolated data, hypothetical data, or combinations;
- uncertainties including limitations, restrictions, errors;
- description of the procedure / methodology incl. citation of material evidence documents appropriate to the verification / validation plans and evidence-gathering plans;
- sampling of legal requirements
- potential nonconformities / deviations (**ATTENTION: separate action protocol FO_27_01_237_Action Protocol GHG**);
- **ATTENTION: NO HINTS** are permitted in the report;
- conclusion: evidence is sufficient and appropriate (level of assurance);
- hint at the end of the report: our report is exclusively designed for Company X, in county A, and may not be suitable for other purposes;
- date and address of Quality Austria; signature.

ATTENTION: NEHG/EU-ETS 2

There is an **Excel template from the EU (FO_27_01_261_Policy_ETS2:_Verification_report)**, which must be used exclusively.



The report is based on the EU Commission template "FO_27_01_261_Policy_ETS2_Verification_report.xls". This template is in English, there is currently no German version available. However, according to the authorities, the report can be completed in German. The report also includes the test certificate confirming the "satisfactory opinion" statement (see screenshot 1) and the possible recording of nonconformities/misstatements (see screenshot 2).

OPINION	
OPINION - verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above regulated entity in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.
OPINION - verified with comments:	We have conducted a verification of the greenhouse gas data reported by the above regulated entity in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:
OPINION - not verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above regulated entity in its Annual Emissions Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to - <select as appropriate>
Opinion Statement:	
Comments which qualify the opinion:	1. 2.

Screenshot 1: Excerpt from the Excel Template – Test certificate

Verification Report - Emissions Trading System ETS2 Annual Reporting		GUIDANCE FOR VERIFIERS	
Please enter the name of the regulated entity on the Opinion Statement sheet at line 6 Annex 1A - Misstatements, Non-conformities, Non-compliances and Recommended Improvements		Note: the name of the regulated entity will be automatically picked up once it is entered on the Opinion Statement Sheet	
A. Uncorrected Misstatements that were not corrected before issuance of the verification report	Material?	Please select "Yes" or "No" in the column "Material?" as appropriate	
A1	- select -	< Please insert relevant description: one line per uncorrected misstatement point. If further space is required, please divide another block using the "*" sign in the left margin. < If there are NO uncorrected misstatements please state NOT APPLICABLE in the first row.	
A2	- select -		
A3	- select -		
A4	- select -		
A5	- select -		
A6	- select -		
A7	- select -		
A8	- select -		
A9	- select -		
A10	- select -		
B. Uncorrected Non-conformities with approved Monitoring Plan < including discrepancies between approved plan and actual fuel streams identified during verification		Material?	
B1	- select -	< Please insert any relevant data: One line per non-conformity point. If further space is required, please divide another block using the "*" sign in the left margin. < If there are NO non-conformities please state NOT APPLICABLE in the first row.	
B2	- select -		
B3	- select -		
B4	- select -		
B5	- select -		
B6	- select -		
B7	- select -		
B8	- select -		
B9	- select -		
B10	- select -		
C. Uncorrected Non-compliances with MRN which were identified during verification		Material?	
C1	- select -	< Please insert any relevant data: One line per non-compliance point. If further space is required, please divide another block using the "*" sign in the left margin.	
C2	- select -		

Screenshot 2: Excerpt from the Excel Template: Nonconformities and misstatements



6.3.1.5 Evaluation of changes from prior periods

The verifier shall determine whether the responsible party has appropriately disclosed any changes from prior periods that make the periods incomparable.

For **projects, when evaluating conformity to criteria, the verifier** shall consider the following:

- the **extent of the project's implementation**, including the completeness of the installation of technology, equipment and measurement equipment;
- the **operation of the project**, including the operating characteristics when compared to the **limitations and assumptions** in the criteria;
- the **monitoring plan and methodology**, including any requirements in the criteria;
- **changes in the monitoring plan**, installed equipment or baseline;
- **judgement of conservativeness** that have a material effect on the GHG statement;
- the results of any **validations**.

9.4 核查 / 验证执行

前期收集的信息、发现、温室气体报告 / 温室气体计划和 V 计划构成执行的基础。若在执行中对 V 计划有所更改，需予以记录并相应更新。

在执行核查或验证时，重点在于：

- 通过审查文件资料（受控规范、记录）、访谈和现场访问等方式收集客观证据；
- 收集证据时应注意测量数据、发票和资料来源的可追溯性；
- 识别并记录可能的错误陈述和不确定性。验证 / 核查在执行过程中也可以是一个反复迭代的过程。

执行过程中可能包含以下步骤：

- 对传送文件的案头审查；
- 在具备适当 ICT 和经验的前提下进行远程核查 / 验证；
- 现场访问；
- 对修正内容进行核查 / 验证。

证据收集活动

- 访谈；
- 现场访问和观察；
- 审阅发票、支持性文件、测量记录、测试记录；
- 审核模型、计算方式（换算、排放因子来源等）；
- 合理性检查；
- 比对转换因子，例如供应来源、数据时效性；
- 等等。

现场访问要求

在安排现场访问时，应考虑以下因素：

- 风险评估的结果；
- 场地与设施的数量和规模；
- 置信度等级；
- 不同场所与设施的排放性质和规模；
- 活动的多样性；
- 排放源量化的复杂性；
- 以往核查或验证的结果。

核查员在下列情形中应安排现场或设施访问：

- 初次核查；
- 由于人员更换等原因，对之前核查活动及结果不了解的后续核查；
- 场地或设施所有权发生变更；
- 识别出错误陈述；
- 自上一次核查以来排放、去除或存储量存在异常重大变化；
- 新增对温室气体陈述具有重大影响的场地或设施；



- 报告的范围或边界发生重大变化；
- 数据管理发生重大变更。

如果验证员认为无需进行现场或设施访问，则必须对该决定的理由进行说明并记录。验证或确认应基于以下核对清单进行：见 CL_27_01_182e_ISO 14064-1；CL_27_01_184e_ISO 14064-2；CL_27_01_189 ISO 14067；FO_27_01_230_Prüfbericht_NEHG（测试报告，含整合核对清单）。

可能的证据文件

- 清单边界；
- 价值链概况；
- 测量概念；
- 流程图示；
- 设施概况；
- 法规登记抽样；
- 量化方法；
- 桑基图；
- 输入输出分析（单位为 kWh、升、Nm³、公斤等）；
- 数据测量（表计读数）；
- 数据收集（如能源账单、交货单）；
- 测量设备校准记录；
- 假设文档；
- 估算方法、假设、未来预测；
- 敏感性或不确定性分析；
- 计算公式；
- 模型概念；
- 技术资料表或设备台账；
- 检修或维护记录（如制冷系统、F 气体法规）；
- 转换因子及参考值；
- 全球变暖潜能值（GWP）及参考资料；
- 最佳可行技术文件（BAT）等。

可能的计划或流程变更

以下情况可能导致核查 / 验证计划的调整：

- 范围变更（如新增场所）；
- 客户 / 责任方联系人可用性变更（如生病）；
- 场所访问受限（如疫情）；
- 时间安排变更；
- 证据收集方式变更（如需重新计算数据）；
- 信息来源变更；
- 新风险识别；
- 错误陈述识别；
- 与 ISO 14064-1、-2 或 ISO 14067 不符的情形。

任何计划的更改需经 Lead-V 批准。

核查或验证的结果

包含两种类型的文件资料：

- 报告（含行动协议）；
- 提供给用户的意见陈述。

报告要求

报告需包含以下最小内容：

- Quality Austria 出具的关于实际发现的公正报告（标题或介绍）；
- 企业信息（责任方识别）；
- 所核查活动的引用（依据标准）：组织（ISO 14064-1）、项目（ISO 14064-2）或产品（ISO 14067）；依据 ISO 14064-3:2019 进行的核查 / 验证；
- 固定语句：“Quality Austria 声明客户组织负责环境信息声明的准备与公正呈现。”；
- Quality Austria 负责本次核查所出具的温室气体陈述意见；
- 标准作为环境信息陈述基础的定义；
- 如为验证：若信息声明包含预测内容，需说明预测结果可能与实际不符：固定语句为“未来预测基于假设，实际结果可能与预测不同”；
- 范围 / 清单边界；



- 声明 / 陈述;
- 置信度等级;
- 核查目标;
- 风险评估;
- 重要性分析 (按不同层级, 如能源来源、设施、潜在汇);
- 判断与决定;
- 潜在错误陈述;
- 验证: 假设、预测程序、披露评估;
- 信息来源: 实测、外推、假设数据等;
- 不确定性: 限制、误差等;
- 方法与流程说明 (含证据文件引用);
- 法规要求抽样;
- 潜在不符合项 (注意: 需另附行动协议表 FO_27_01_237);
- 报告中不得出现建议性提示;
- 结论: 证据是否充分且适当;
- 报告结尾声明: 本报告专为某公司在某地使用, 可能不适用于其他用途;
- 日期、Quality Austria 地址和签名。

注意: NEHG / EU-ETS-2

欧盟提供了一个 Excel 模板 (FO_27_01_261_Policy_ETS2:_Verification_report), 必须专门使用该模板。

该报告基于欧盟委员会模板“FO_27_01_261_Policy_ETS2_Verification_report.xls”。此模板为英文版本, 目前尚无德文版本。但根据主管机关的说明, 报告可以使用德语填写。该报告还包括用于确认“满意意见”声明的测试证书 (见截图 1) 以及记录不符合项/错误陈述的部分 (见截图 2)。

OPINION	
OPINION - verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above regulated entity in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated.
OPINION - verified with comments:	We have conducted a verification of the greenhouse gas data reported by the above regulated entity in its Annual Emissions Report as presented above. On the basis of the verification work undertaken (see Annex 2) these data are fairly stated, with the exception of:
OPINION - not verified as satisfactory:	We have conducted a verification of the greenhouse gas data reported by the above regulated entity in its Annual Emissions Report as presented above. On the basis of the work undertaken (see Annex 2) these data CANNOT be verified due to - <select as appropriate>
Opinion Statement:	
Comments which qualify the opinion:	1. 2.

截图 1: 来自 Excel 模板的节选 —— 测试证书



截图 2: 来自 Excel 模板的节选 —— 不符合项与错误陈述

6.3.1.5 前期变更的评估

核查员需确认责任方是否充分披露前期与本期不可比的变更。

对于项目，在评估是否符合标准时应考虑：

- 项目实施的程度，包括技术、设备、计量工具的完整性；
- 项目运行情况与标准中的假设和限制条件是否一致；
- 监测计划及方法；
- 监测计划、设备或基线的变更；
- 对保守性判断是否对温室气体陈述产生实质性影响；
- 任何前期验证的结果。

Types of opinions

Definition of 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: 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.

Then, the verifier shall reach a conclusion based on the evidence gathered and draft a verification 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**.

意见类型

验证 / 确证意见的定义：向预期使用方（3.2.4）正式出具的书面声明，目的是就责任方（3.2.3）在其温室气体报告（3.4.2）中所作的温室气体声明（3.4.3）提供可信度，并确认其符合评定标准（3.6.10）。

预期使用方：由报告温室气体相关信息的人确定的个人或组织（3.2.2），其依赖该信息作出决策。

验证人员需基于所收集的证据形成结论，并起草验证意见。

ISO 14064-3 区分三种类型的意见：

- **无保留意见**：标准要求已满足，证据充分且适当；
- **保留意见**：存在缺陷或可能存在缺陷；
- **否定意见**：未纠正不符合项，存在重大错报，或证据不足或不适当。

此区分也反映了温室气体盘查的质量。以下表格总结了根据 ISO 14064-3 第 6.3.2.2 条及后续条款的质量标准：

无保留意见

存在充分且适当的证据以支持与温室气体排放、移除或

保留（不同意）意见

起草保留意见前，验证员应确保温室气体声明中不存在重大错报。

否定意见

不存在充分或适当的证据支持无保留或保留意见；或



无保留意见

储存相关的重要事项。

所采用的标准对与温室气体排放、移除或储存的重要事项适用得当；

若验证员计划依赖控制措施，其有效性已被评估。

保留（不同意）意见

保留意见与温室气体声明结合阅读时，通常能充分告知预期使用方有关声明中的缺陷或可能的缺陷。

对于非重大错报有相关要求：见 ISO 14064-3 第 6.3.2.3 条。

否定意见

所采用的标准对相关重要事项适用不当；或

若验证员计划依赖控制措施，但无法判断其有效性；

若客户在规定时间内未纠正重大错报或不符合项，验证员应在形成结论时加以考虑。

关于错报，不同意见类型如下：

错报类型

无错报

错报不重大

错报重大

错报重大

存在错报但类型未知

存在错报但类型未知

错报程度

无

非广泛性

非广泛性

广泛性

非广泛性

广泛性

意见类型

无保留意见

无保留意见 / 保留意见

保留意见

否定意见

保留意见

放弃出具意见（免责声明）

注 1：当错报既不重大也不广泛时，若相关项目有规定，仍可出具保留意见。

注 2：广泛性错报（单独或合并）指以下情况：

- 并非局限于特定要素、分类或环境信息声明中的项目；
- 即使局限，也代表声明中的实质部分；
- 对预期使用方理解声明具有根本性影响。

若验证任务在完成前终止，Quality Austria 可选择不出具意见（参见 ÖNORM EN ISO 14065:2022 第 9.7.1.5 条）。

若无法获得充分适当的证据，Quality Austria 可放弃出具意见，并声明无法形成结论，错报的可能影响为重大且广泛。

在验证历史信息的工作结束时，除非已放弃出具意见，或任务类型为 AUP（约定程序），Quality Austria 应出具意见。仅无保留或保留意见可向预期使用方提供保证。



在确证未来活动结果时，Quality Austria 应出具意见（除非放弃）。确认证明应基于对假设、限制及方法的评估，结论必须建立在充分适当的信息基础上。

意见中可包含 Quality Austria 的责任限制声明。

如为保留意见，应说明修改原因。若原因为定量问题，Quality Austria 应指明错报的数值及其对环境信息声明的影响。

如为否定意见，应说明原因。

若放弃出具意见，应提供解释。

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.

There is a **template of an opinion with text modules**, which must be adapted to the specific circumstances.

The contents of the opinion include the following statements:

- **qualityaustria** letterhead
- Quality Austria GmbH has carried out the verification / validation on behalf of Organization xy to review the Statement xy. Normative basis of the verification / validation is ISO 14064-1, ISO 14067 xy.
- Verification / Validation is based on GHG report / GHG plan of Organization xy (Date). The scope of the GHG inventory includes: sites, products.
- Materiality: Based on our assessment experience, Quality Austria has determined materiality levels for the GHG report / GHG plan as a whole and for material areas (e.g. scope 1, 2, 3), taking into account quantitative and qualitative data.
- The client is solely responsible for the provision of the GHG report / GHG plan incl. data-gathering procedures and evaluation, taking into account legal requirements. The client is also responsible for the internal quality control of the inventory.
- In its verification / validation process, Quality Austria maintains its impartiality, independence, objectivity and ensures confidentiality. 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 verifying / validating 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.
- Significant findings were documented in the **qualityaustria** report and communicated to the management.
- For a limited level of assurance, the nature, extent and timing of the verification ac-



tivities acc. to 14064-3 is not as detailed as in the reasonable level of assurance verification.

■ Conclusion:

- The requirements are considered **fulfilled / not fulfilled** based on the samples drawn.
- Verification – Reasonable level of assurance: Quality Austria concludes with reasonable assurance that the data and information in the GHG statement were fairly stated. **The opinion after assessment is:** **unmodified opinion** (Reasons are: **There is no misstatement / the misstatement is not material**).

or

Quality Austria **cannot confirm** the level of assurance.
The opinion after assessment is: **modified opinion** (Reasons are: _____) / **negative opinion** (Reasons are: _____).

- 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.

The opinion after assessment is: **unmodified opinion** (Note: only possible if the full scope has also been ensured for the effectiveness of control and this has been stated in the order! Usually not the case with limited level of assurance, therefore delete) / **modified opinion** (Reasons are: _____).

or

Quality Austria **cannot confirm** the level of assurance.
The opinion after assessment is: **modified opinion** (Reasons are: **The misstatement is material ...** / **negative opinion** (Reasons are: _____).

■ Validation:

Quality Austria states that it had not found any evidence to indicate that the assumptions, methods and limitations in the statement did not provide a reasonable basis for the projections or forecasts.

The opinion after assessment is: **unmodified opinion / modified opinion** (Reasons are: _____).

or

Quality Austria had found evidence to indicate that the assumptions, methods and limitations in the statement did not provide a reasonable basis for the projections or forecast and **cannot confirm** the GHG statement. The opinion after assessment is: **modified opinion** (Reasons are: **Misstatement is material ...** / **Negative opinion** (Reasons are: _____).

■ Date and signature

See templates

FO_27_01_206e_Verification Report_14064;

FO_27_01_226e_Verification Report_14067;

FO_27_01_208e_Opinion_14064_14067

FO_27_01_225_Test Certificate 14067

FO_27_01_261_Policy_ET52_Verification_report



故意错报 (ÖNORM EN ISO 14064-3 第 5.4.3 条)

若验证员/确认员在工作过程中发现有理由相信责任方存在故意错报或违反法律法规的行为, 验证员/确认员应尽快将此事项通报给相应的相关方。

意见 (验证或确认意见)

在出具意见之前, 所有可能的不符合项 (即不符合 ISO 14064 或 ISO 14067 的情况) 必须被关闭。评估可通过文件审查、远程评估或现场方式进行。具体方式由首席验证员 (Lead-V) 根据风险情况决定。

有一套标准意见模板 (包含固定模块), 需根据具体情况进行调整。

意见内容应包括以下声明:

- 使用 Quality Austria 的正式抬头;
- Quality Austria GmbH 受组织 XY 委托, 对声明 XY 进行验证/确认。验证/确认的规范依据为 ISO 14064-1、ISO 14067 XY;
- 验证/确认基于组织 XY 的温室气体报告/计划 (日期)。温室气体清单的范围包括: 场所、产品;
- 实质性: 基于我们评估经验, Quality Austria 结合定量与定性数据, 确定了温室气体报告/计划整体及各重要领域 (如 Scope 1、2、3) 的实质性水平;
- 客户对温室气体报告/计划的提供、数据收集流程及其评估负责, 并应符合相关法律要求, 同时负责清单的内部质量控制;
- Quality Austria 在验证/确认过程中保持独立性、公正性、客观性, 并确保保密性。所有信息均在过程中被严格审视;
- Quality Austria 获得了场所访问权、访谈对象和证据文件, 能够收集充分且适当的信息, 以支持对温室气体声明的验证/确认。Quality Austria 获得了对文件的无限制访问权。温室气体报告/计划已就完整性、一致性和合理性进行了审查。数量结构、计算、换算以及所用排放因子已就其可理解性与可追溯性进行了检查;
- 所有重要发现已在 Quality Austria 报告中记录, 并已向管理层通报;
- 若为有限保证级别, 根据 ISO 14064-3, 验证活动的性质、范围和时间安排不如合理保证级别详尽;
- **结论:**
 - 根据抽样结果, 要求被视为已满足 / 未满足;

验证 —— 合理保证级别:

Quality Austria 得出结论, 合理保证温室气体声明中的数据与信息是公允的。评估后的意见为:

- **无保留意见** (原因: 无错报 / 错报不重大);
- 或
- **Quality Austria 无法确认保证水平。**评估后的意见为:
 - **保留意见** (原因:);
 - **否定意见** (原因:);

验证 —— 有限保证级别:

Quality Austria 未发现任何证据表明温室气体声明中的数据与信息并非公允陈述。

评估后的意见为:



- **无保留意见**（备注：仅当已确认控制措施有效性，并在任务中明文说明时才适用！一般有限保证级别下不具备此条件，应删除）；
 - **保留意见**（原因：.....）；
- 或
- **Quality Austria 无法确认保证水平**。评估后的意见为：
 - **保留意见**（原因：错报重大.....）；
 - **否定意见**（原因：.....）；

确认：

Quality Austria 表示未发现任何证据，表明声明中所引用的假设、方法和限制无法构成合理的预测或估算依据。

评估后的意见为：

- **无保留意见 / 保留意见**（原因：.....）；

或

Quality Austria 发现相关证据表明该声明中的假设、方法和限制**不足以**构成合理预测或估算依据，因而无法确认温室气体声明。评估后的意见为：

- **保留意见**（原因：错报重大.....）；
- **否定意见**（原因：.....）；

• 日期与签名

参见模板：

- FO_27_01_206e_核查报告_14064;
- FO_27_01_226e_核查报告_14067;
- FO_27_01_208e_声明_14064_14067;
- FO_27_01_225_测试证书_14067;
- FO_27_01_261_政策_ETS2_核查报告

The **Lead-V signs** the opinion.

In case of **accreditation**, the **accreditation mark** must be included.



Documentation and WIS Upload

The following documents must be uploaded in the WIS. Some of the documents are **mandatory**:

- Feasibility data sheet including Pre-Engagement
- V-Planning and Strategic Analysis and Risk Assessment and Evidence-gathering Plan;
- V-Plan, checklist and report, which also record the executing persons and time of execution;
- GHG report or GHG plan or Carbon Footprint assessment of a product or service;



- checklist incl. documentation of reviewed items and evidence;
- report incl. sampling of legal requirements and relevant evidence;
- draft opinion;
- confirmation of verification / validation (verification confirmation);
- action protocol in case of noncompliance with standard requirements (nonconformities).

The following documents are **optional**:

- notes;
- possible evidence documents.

The verifier or validator uploads the above documents to the WIS. This does not constitute a verification or validation decision (review). An accredited and independent person has made this decision in the veto check.

首席验证员 (Lead-V) 需签署最终意见。
如涉及认证, 则必须包含认证标志。

文档上传至 WIS 系统

以下文件必须上传至 WIS 系统。其中部分文件为**强制性**:

- 可行性数据表, 包括初步接洽 (Pre-Engagement);
- 验证/确认计划、战略分析、风险评估与证据收集计划;
- 验证/确认计划 (V-Plan)、核对清单与报告 (需记录执行人员和执行时间);
- 温室气体报告 (GHG report)、温室气体计划 (GHG plan) 或产品/服务的碳足迹评估;
- 核对清单, 包括所审查项目及证据的文档记录;
- 报告, 包括法律要求的抽样与相关证据;
- 意见草稿;
- 验证/确认的确认文件;
- 若存在不符合标准要求的情况, 需上传纠正措施协议 (action protocol)。

以下文件为可选上传项:

- 工作记录笔记;
- 其他可能的证据文件。

验证员或确认员需将上述文件上传至 WIS 系统。**请注意**: 上传行为本身不构成最终验证或确认决定。该决定由一位具有认证资质且独立的人员通过**复核 (veto check)**作出。

9.5 INDEPENDENT REVIEW BY THE VETO EXAMINER

The veto examiner acts **impartially, independently, objectively** and has experience in verification or validation. The authorized veto examiners are listed in the document RE_02_01_04_Vetorechtsbeauftragte, and are correspondingly updated in the GPS in order to be able to make an assignment in the WIS.

The review **may only be carried out by persons** who were **not** involved in the **planning** and who are **not part of the verification / validation team**.



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).

The checklist (CL_27_01_190e_Veto_Check_GHG) must be used and uploaded as a mandatory document in the WIS.



The review decision (VETO) is documented in the WIS.

Communication with the client is then handled by the Customer Service Center (CSC).

9.5 否决审核员的独立审核

否决审核员应保持公正、独立、客观，并具有验证或确认方面的经验。授权的否决审核员名单列于文件 RE_02_01_04_Vetorechtsbeauftragte 中，并在 GPS 系统中相应更新，以便能够在 WIS 中分配。

审核只能由未参与计划且不属于验证/确认团队的人员执行。

审核活动

根据上传至 WIS 的文件，由具有资质并被指派的人员（否决审核员）至少审核以下事项是否符合要求：

- 验证团队的能力是否适当；
- 验证计划是否设计合理，文件化的证据是否充分且适当；
- 所有活动是否按照项目和保证水平执行；



- 审核目标、持续时间及重大性是否适当;
- 风险评估是否存在且易于理解;
- 文件记录是否完整且合理;
- 所引用的数据是否合理可信;
- 出具的意见是否具有结论性和说服力;
- 报告是否具有说明性;
- 温室气体声明是否真实和公正地呈现;
- 重大错报或事实性发现 (如不符合项) 是否已经被澄清和纠正 (见已关闭的纠正措施协议);
- 意见中的结论是否可以批准。

如需澄清

如审核中发现任何不明确、不完整或相互矛盾之处, 否决审核员应要求验证员/确认员在文件中补充足够的信息, 以便作出最终审核 (决策)。

审核中必须使用核对清单 CL 27_01_190e_Veto_Check_GHG, 并作为强制性文件上传至 WIS。

审核决定 (VETO) 应记录在 WIS 中。

随后与客户的沟通由客户服务中心 (CSC) 负责。



10 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.

10 验证/确认意见发布后的新发现事实

若在该日期之后发现可能对验证或确认意见产生重大影响的事实或新信息，验证员或确认员应：

- 尽快将此事通知客户和温室气体项目所有者；
- 采取适当行动，包括：
 - 向客户通报此事；
 - 考虑是否需要修订或撤回验证/确认意见。

如果需要修订验证/确认意见，Quality Austria 应建立相应流程重新出具意见，并说明修订原因。这可能意味着需要重复验证/确认流程中的相关步骤。Quality Austria 也可通知其他相关方，说明由于发现了新的事实或信息，原始意见的可信性可能受到影响。

可能的新事实来源包括：

- 客户报告重大变更；
- 上诉；
- 投诉；
- 利益相关方的询问；
- 批评性新闻报道。

验证员/确认员也可将此类信息通报给其他相关方，例如项目所有者或环境项目，以说明由于新发现的



事实或信息，原始意见的可信性可能已受到影响。

11 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 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.

11 与客户的沟通

- 按要求澄清可行性；
- 签订合同，包括通用条款和具体项目要求；
- 进行验证/确认的计划安排，包括介绍团队成员；
- 执行验证/确认；
- 在结案会议上向客户提供有关验证/确认结果的初步反馈；
- 向客户提交验证/确认报告；
- 如存在不符合标准要求的情况，向客户提供纠正措施协议；
- 如在审核过程中需要澄清的事项仍未解决，验证员/确认员将与客户沟通以获取必要的信息；
- 审核完成后，客户也将收到签署的意见书；
- 若在发布验证/确认意见后发现可能对意见产生重大影响的事实或新信息，Quality Austria 应尽快通知客户，并在适用时通知项目所有者，并与客户讨论该事项，如有必要，采取适当行动。

12 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



12 上诉与投诉

在此，参照规定文件 RE_10_01_01e_Appeals_and_Complaints。该文件可通过以下网站公开获取：
<https://www.qualityaustria.com/en/service/complaints/>

如有上诉或投诉，也可直接发送至以下电子邮箱地址：

reklamationen@qualityaustria.com

13 Records

Quality Austria shall retain and control records of its validation and verification activities, including:

- Information provided during the pre-engagement and scope of the validation / verification;
 - a) → *Feasibility check in the client file; filing in the GPS*
- Reasoning for determining duration of validations / verifications;
 - a) → *Calculation of the V-time as input for the offer;*
 - b) → *Offer*
 - c) → *Contract*
 - d) → *Filing in the GPS*
- All revisions / amendments to validation / verification planning activities;
 - a) → *Checklist V-Planning*
 - b) → *Updated V-plans, filing in the GPS*
- Demonstration that the validation / verification activities have been carried out in accordance with the requirements of this document and the validation / verification program, including
 - a) related findings and information on material or non-material misstatements;
 - *Report, checklist, action protocol;*
 - b) evidence to support conclusions and decisions;
 - c) validation / verification opinions; → *Statement, report, opinion; report and opinion in the WIS*
 - d) appeals and complaints and any subsequent corrections or corrective actions;
 - *filing on the X-drive*

13 记录

Quality Austria 应保留并管理其验证和确认活动的相关记录，包括：

- 在启动前阶段以及验证/确认范围中提供的信息；
 - 客户档案中的可行性评估；归档于 GPS 系统中；
- 关于验证/确认时间安排的理由；
 - 以“验证所需时间计算”作为报价依据；
 - 报价文件；
 - 合同文件；
 - 归档于 GPS 系统中；



- 所有验证/确认计划活动的修订和变更；
 - 验证计划核对清单；
 - 更新的验证计划，归档于 GPS 系统中；
- 验证/确认活动按照本文件及验证/确认项目要求实施的证明，包括：
 - 与重大或非重大错报有关的发现及信息；
 - 报告、核对清单、整改措施协议；
- 支持结论和决策的证据；
- 验证/确认意见；
 - 声明、报告、意见书；报告和意见书需上传至 WIS 系统；
- 上诉与投诉及后续的更正或纠正措施；
 - 存档于 X 盘。

14 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.
- **Access to evidence** for verification (information, records, and access/contact to all relevant employees or computer-based systems).
- The time schedule/deadlines are the responsibility of the trade participant. This means that Quality Austria Certification GmbH is not responsible for the timely completion of corrections or for any possible delay in submission to the customs office.

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 cer-



tification. 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 ÖNORM 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>		

14 客户组织的进一步义务

除了最新版的 Quality Austria《通用条款与条件》外，下列条款适用于第 VIII 条：

- 客户组织应负责提供环境信息声明，以及温室气体（GHG）报告或温室气体计划；
- 客户组织应将意见书或实际发现的报告完整地传达给 Quality Austria；
- 客户组织应向 Quality Austria 提交充分且适当的证据；
- 客户组织应将可能存在的不确定性和限制告知 Quality Austria；
- 客户组织应立即向 Quality Austria 通报任何可能影响已出具意见书有效性的事实；
- 客户组织应立即告知 Quality Austria 温室气体清单中的重大变更，以判断是否需要更新验证/确认。重大变更也可能涉及产品设计、材料构成或影响因子所用数据库的变化；
- 环境信息声明、GHG 报告或 GHG 计划中的错报应在约定时间内进行修正；
- 已识别的不符合项应通过适当的更正/纠正措施在约定时间内关闭，并提交给 Quality Austria，以供其审查有效性。
 - 可获取用于核查的证据（信息、记录，以及与所有相关员工或计算机系统的接触/访问权限）。
 - 时间安排/截止日期由交易参与方负责。这意味着 Quality Austria Certification GmbH 不对修正工作的及时完成或向海关提交时可能出现的任何延误承担责任。

除此之外，以下条款适用于第 XIII 条：

- 客户组织仅可使用与已验证/已确认声明直接相关的标识或引用，不得在产品认证方面造成误导。ISO 14067（产品碳足迹）验证为例外情况；
- 客户组织不得以可能误导预期用户或损害 Quality Austria 声誉的方式使用环境信息声明、意见书、报告、标识、徽标或标签；
- 若验证包含 ISO 14064-1，组织应向公众公开依据 ISO 14064-1 编写的 GHG 报告，或 Quality Austria 与 GHG 主张相关的验证声明。如 GHG 主张已被独立验证，则应向预期用户公开验证声明；
- 客户组织不得使用认证标识来暗示未经验证或确认的声明也已通过验证/确认；
- 不得在包含未经验证或确认信息的环境信息声明上使用 Quality Austria 的标识；
- 客户组织应区分“简略引用”（short-form）与“完整引用”（long-form）方式。若使用简略引用，必须包含或提及相应的完整引用。可接受的引用方式如下（详见 ÖNORM EN ISO 14065:2022 附录 B）：



主体性质	简略引用	完整引用
历史信息 ¹	“在合理保证水平下已验证”	“根据 20xx-xx-xx 出具的意见，Quality Austria 以合理保证得出结论：我们声明中的数据与信息表述公平。”
历史信息 ¹	“在有限保证水平下已验证”	“根据 20xx-xx-xx 出具的意见，Quality Austria 未发现任何证据表明我们声明中的数据与信息不公平。”
预测或前瞻性声明	“已确认”	“根据 20xx-xx-xx 出具的意见，Quality Austria 未发现任何证据表明我们声明中引用的假设、方法与限制不合理。”

¹ 提交验证的历史数据与信息可以是监测值、估算值或模型值。

² 当责任方（组织）使用“已验证”等词语（如“第三方验证”或“Quality Austria 验证”）时，均应使用完整引用。

生命周期评估（LCA）类声明验证和商定程序（AUP）的引用方式如下：

引用类型	简略引用	完整引用
功能单位或声明单元	“已确认”	“我们声明中的上游和核心数据已由 Quality Austria 验证，下游数据已通过 AUP 检查。Quality Austria 于 20xx-xx-xx 出具了验证意见与事实发现报告，未发现任何表明声明不公平的证据。”

说明：当责任方使用“验证”一词时，完整引用适用于所有含“验证”、“第三方验证”或“Quality Austria 验证”意涵的表达。

15 Rules Governing the Use of Marks

Example of an acceptable use of a mark



Logo Quality Austria ISO 14064-1 Client number	"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."
Example of an <u>unacceptable use</u> of a mark	
Logo Quality Austria ISO 14064-1 Client number	"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 ."

15 标识使用规则

可接受的标识使用示例:

Quality Austria 标识

ISO 14064-1 客户编号

"我们的温室气体数据与信息清单已由 Quality Austria 验证。根据其于 20xx-xx-xx 出具的意见, Quality Austria 以合理保证得出结论: 我们声明中的数据与信息表述公平。"

不可接受的标识使用示例:

Quality Austria 标识

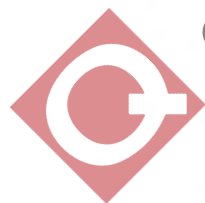
ISO 14064-1 客户编号

"我们的温室气体数据与信息清单显示, xy 组织已达成其可持续发展目标, 并实现了科学碳目标, 正在按照《巴黎协定》目标迈向低碳经济转型之路。"



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Certification

Verification / Validation



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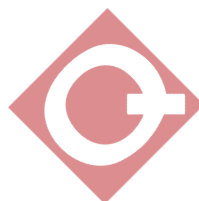


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