Certification procedure according to ISO 14064-3 or TN-CC 020 for GHG-Inventories based on PAS 2050, ISO 14064-1, GHG Protocol or comparable standards

The certification of GHG-inventories according to ISO 14064 consists of the performance of a preliminary meeting for establishment and agreement of the framework conditions for the certification, drafting of a verification and sampling plan, performance of the Audit, and finally issuance of the certificate. After the initial verification, periodic verifications are generally carried out on an annual basis.

The auditors are selected by the Head of the Certification Body of TÜV NORD CERT GmbH based on the fact that they are approved and qualified for the sector.

1. Preliminary meeting (agreement of framework conditions)

The preliminary meeting is carried out before the main audit, in order to ensure that the verification that has been applied for is in fact feasible. In the Preliminary meeting, the verifier discusses and agrees the following points with the client:

- **Objectives of certification**: The verifier must ensure that the desired objectives can be achieved and that they are compatible with the general project situation.
- **System boundary:** The areas of the operation considered during creation of the greenhouse gas inventory, along with the relevant buildings, activities, emission sources and greenhouse gases must be agreed with the client, as must the period for which the verification is to be carried out. The limits that are established in this process constitute the system boundary. The desired system boundary must be compatible with the standards on which the audit is based, the objectives of the certification and the interests of stakeholders who place their trust in, and rely on, the assertions to be verified.
- **Standards:** The standard(s) used for the calculation of the inventory and also any further criteria of interested parties, must be described and examined for applicability.
- **Level of Assurance:** The level of the detail desired in the final verification statement must be laid down. This must not conflict with the objectives or the standards.
- **Materiality:** Depending on the Level of Assurance, the objectives and the system boundary, the verifier lays down the level of materiality.

The Preliminary meeting can take the form of a personal preliminary meeting at the client's premises or can take place using modern media of communication (e.g. telephone or video conference). It must be ensured that all the aforementioned aspects are agreed upon, understood by al those involved and recorded in writing. The decision as to whether a meeting is needed at the client's premises is taken by the Audit Team Leader. The time interval between the Preliminary meeting and the Audit should not be longer than 3 months. If a significant deviation of the contractually defined efforts will be identified during the Preliminary meeting, the proposal may be revised in cooperation with the client.

The Preliminary meeting is carried out both for the first and for the periodic verifications. If there are no significant changes with regard to any of the named criteria, in the subsequent verifications the Preliminary meeting can generally be performed at the same time as the Audit. The decision is made by the Audit Team Leader.

If, at the end of the Preliminary meeting, it is not possible to state that the client is ready for the Audit, the certification procedure is broken off after the Preliminary meeting.

2. Drafting of the verification and sampling plan

Based on the results of the Preliminary meeting, the verifier writes a verification plan and a sampling plan. Both plans can be included in one joint document.

The verification plan primarily serves for description of necessary inspection steps, and includes the necessary time planning/scheduling. The sampling plan serves to describe necessary data, proofs and other sources of information that have to be inspected in the course of the verification in order that the desired certification result can be achieved.

In addition, these documents provide information regarding the agreed parameters, such as the objectives of the certification, the Level of Assurance, system boundary, standard(s) and materiality, as these are essential for establishment of the inspection steps and for identifying the data that is necessary for the verification.

3. Audit (Inspection)

3.1 Preliminary inspection of documents submitted

The Verification begins with the preliminary inspection of relevant documents that must be submitted by the client at least one week before the date of the audit. These client documents must include:

1. Calculation of the CO_2 inventory
2. Documentation report
3. Evidences of data sources used

Within the framework of the preliminary inspection, the calculation, the secondary data and standard values used and also the documentation is inspected for mathematical errors, discrepancies and the use of data and factors that are either incorrect or cannot be logically understood. In so far as assumptions were made, they are evaluated to ensure that they can be logically understood and that, in case of doubt, they are conservative. In case information is available from previous verifications, this information will be considered during this inspection in an appropriate manner.

Any errors or discrepancies that are identified are recorded in a nonconformity report. If the nonconformities are so serious that certification seems impossible, the certification procedure is broken off at this point.

Based on the findings of the preliminary inspection, it may be that the verification and/or sampling plan have to be adapted.

3.2 On-site audit

The audit is carried out at the site of the client which is to be certified. If the organisation to be certified operates at several locations, the audit team leader can decide at his discretion whether one, several or all locations have to be audited. The number of the audited locations must be stated in the verification plan. The decision regarding the number of locations to be inspected depends on the "Level of Assurance" and on the assessment of the materiality.

The on-site audit basically serves the following purposes:

- Discussion of discrepancies and/or errors that were identified in the preliminary inspection.
- Examination of evidences of data used (e.g. activity data). Evidences that are examined can be, for example, electricity and gas bills, driving logs, travel receipts, fuel receipts etc.
- Site inspection for verification of all emission sources taken into consideration and in order to establish if any emission sources have been omitted.
- if appropriate, comparison of recorded data with measuring devices (e.g. electricity or gas meters).

All discrepancies and deviations are added to the nonconformity report.

3.3 Evaluation of the greenhouse gas assertion / correction phase

Based on the findings from the documents submitted for the preliminary inspection, and based on the on-site audit, the greenhouse gas assertion (carbon footprint) is evaluated with regard to its accuracy and traceability. An assessment is also made as to whether all the requirements laid down in the applied standards have been fulfilled.

Based on the nonconformity report - which is handed to the client following the on-site audit - the client first has the opportunity to rectify any errors that have been identified, and to clarify any nonconformities. Following this phase, the corrections that have been carried out are evaluated by the verifier. If, following this evaluation, some nonconformities are still open (i.e. present), a further correction phase follows if necessary. The time allowed for the correction phase is agreed between the client and the Audit Team Leader. It should not be longer than 3 months.

Finally, the verifier must assess if the documents provided by the client and the results from the data inspection and the correction phase are sufficient in order to clearly prove the accuracy of the greenhouse gas assertion (carbon footprint). During the assessment, the parameters agreed at the beginning, such as objectives of certification, level of assurance, system boundary, standards and requirements of stakeholders and materiality are taken into consideration.

The final verification report is drafted based on the inspection that was carried out.

3.4 Carbon neutrality

In so far as carbon neutrality is the objective (e.g. according to PAS 2060 or TN-CC 020), the inspection also includes verification of withdrawal of a sufficient number of suitable greenhouse gas certificates from the market. Evidences regarding this compensation can, in so far as the certificates have already been deleted, be verified directly in the audit. However, the certificates may also be withdrawn following final assessment of the carbon footprint (Clause 3.3) as it is only then that a final result regarding the necessary compensation is available. Proofs regarding proper and orderly compensation must then be provided by the client immediately, in order that they can be documented in the verification report.
In the case of successful certification of "carbon neutrality", the corresponding TÜV NORD CERT mark of conformity is also awarded alongside the certificate (see Clause 6). Use of the mark of conformity is coupled to the certificate; in other words, the mark may only be used as long as the client is in possession of a valid certificate.

4. Verification report

The verification report collates and summarises the findings of the inspection steps that have been carried out. It contains the final statement with an assessment of the audited greenhouse gas assertion. In addition, the report contains information regarding the certification procedure, the corrections that are needed, reduction measures that have been carried out and also verified references.

The final statement summarises the parameters agreed at the beginning (objectives of the certification, level of assurance, system boundary, standards, materiality). In addition, it contains the greenhouse gas assertion of the client, followed by an assessment on the part of the verifier. If the assertion is only considered correct to a limited extent, the report also contains a list of the limitations, with justifications.

5. Periodic verifications

The first periodic verification, in so far as no different inspection interval has been laid down (e.g. as a result of client request or as a requirement by the audit team leader), is performed one year after the initial verification and from then on is carried out on an annual basis. The procedure for the subsequent inspections corresponds to that of the initial verification, whereby it may be possible to dispense with a separate Preliminary meeting (see Clause 1).

6. Issuance of certificate

The certificate is issued following positive review of the certification procedure by the Head of the Certification Body or his Deputy, or by suitably appointed persons. The reviewer ("veto person") is not permitted to have participated in the audit.

The certificate can only be issued if all the nonconformities have been rectified, i.e. when the corrective actions have been verified and accepted by the Audit Team.

The certificates generally cover one year. At this end of this year, in so far as contractually agreed, a new verification is carried out for the subsequent year. In the case of successful recertification, i.e. if this new audit is satisfactory, a new certificate is issued in the following year.

By agreement between the client and the verifier, the certificate can be issued to cover a maximum of three years. This assumes a previous audit of the emission inventory for a three-year period. In the case of shorter inspection periods (e.g. 1 month), the certificate also has a correspondingly shorter period of coverage.