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| **Section 1** | **ISO 14066:2011** | |  |  |  |  |  |  |
| **5.1** | **General**  Does the validation team or a verification team collectively shall have the required competence (3.1.4) to perform validation or verification activities. | |  |  |  |  |  |  |
| **5.2** | Knowledge  General  Does the V/V Team possess the following  a) GHG programme knowledge  b) technical knowledge  c) data and information auditing knowledge  d) team leader knowledge | |  |  |  |  |  |  |
| **5.2.2** | **GHG programme knowledge** | |  |  |  |  |  |  |
| **5.2.2.1** | Generic GHG programme knowledge (ISO 14066:2011)  Does the V/V team collectively have GHG programme knowledge, including the following:  a) Eligibility requirements?  b) Applicable legal requirements?  c) Implementation in different jurisdictions as applicable?  d) Restrictions associated with geographic locations?  e) V/V requirements and guidelines? and  f) Scope of the GHG emissions subject to reporting? | |  |  |  |  |  |  |
| **5.2.2.2.** | Additional GHG programme knowledge for organization level verification (ISO 14066:2011)  Does the verification team have additional GHG programme knowledge for organization level verification, including, as applicable, eligible processes and sectors? | |  |  |  |  |  |  |
| **5.2.2.3** | Additional GHG programme knowledge for project validation or verification (ISO 14066:2011)  Does the project validation team or project verification team collectively have additional GHG programme knowledge for project V/V, including:  a) established project boundaries and project types, including industry sectors and technology areas?  b) applicable project methodologies?  c) eligible emission reductions or removal enhancements? | |  |  |  |  |  |  |
| **5.2.3.1** | **Generic technical knowledge (ISO 14066:2011)**  Does the V/V team collectively have technical knowledge, including (as applicable) the following:  a) GHGs, global warming potentials, activity data and emission factors?  b) Application of materiality and material discrepancy?  c) Application of quantification and reporting principles?  d) Relevant sector GHG sources, sinks and reservoirs (SSRs)? and  e) relevant sector quantification methodologies, monitoring techniques and calibrationprocedures and their consequences for data quality? | |  |  |  |  |  |  |
| **5.2.3.2** | **Additional technical knowledge for organization level verification (ISO 14066:2011)**  Does the verification team collectively have additional technical knowledge for organization level verification, including (as applicable) criteria, processes, procedures and/or methodologies for setting:  a) organizational boundaries?  b) operational boundaries? | |  |  |  |  |  |  |
| **5.2.3.3** | Additional technical knowledge for project validation or verification (ISO 14066:2011)  Does the project V/V team collectively have additional project-specific technical knowledge including (as applicable) the following:   1. the application of the following principles and concepts:   • conservativeness?  • equivalence?  • additionality?  • leakage?  • permanence?   1. common criteria, processes, procedures and/or methodologies for:   • selecting baselines?  • setting GHG project boundaries?  • assessing additionality (as exemplified by benchmarking and financial, technological and policy barriers)?  • the treatment of uncertainty?  c) key factors that influence the GHG emission reduction and/or removal enhancement?  d) the views of relevant stakeholders? | |  |  |  |  |  |  |
| **5.2.3.4** | **Additional technical knowledge for the verification of other GHG assertions** (ISO 14066:2011)  Does the verification team collectively have additional technical knowledge for the verification of other GHG assertions, including criteria, processes, procedures and/or methodologies for:  a) life cycle assessment for the purposes of carbon footprint declarations?  b) environmental declarations and labels?  c) statements of carbon neutrality and other related assertions? | |  |  |  |  |  |  |
| **5.2.4** | **Data and information auditing knowledge (ISO 14066:2011)**  Does the V/V team collectively have data and information auditing knowledge, including:  a) data and information auditing methodologies?  b) risk assessment methodologies?  a) data and information sampling techniques?  b) GHG data and information control systems?  c) typical internal control systems? | |  |  |  |  |  |  |
| **5.2.5** | **Team leader knowledge (ISO 14066:2011)**  Does the team leader have sufficient V/V knowledge (applicable to the engagement) including:  a) the scope, criteria, objective, materiality and level of assurance of the V/V?  b) the competence of team members?  c) V/V of related risks?  d) project, resource, and team management? | |  |  |  |  |  |  |
| **5.3** | **Skills (ISO 14066:2011)**  Does the V/V team collectively have the necessary skills to perform V/V activities, such as:  a) retrieve relevant information and apply the knowledge in a manner appropriate for the work?  b) understand the meaning, translation, and interpretation of information?  c) think critically and analyse multiple inputs?  d) distinguish between facts and inferences and exercise professional scepticism?  e) carry out independent research to challenge assumptions and evidence asserted by a responsible party or client?  f) strike a balance between attention to detail and a high-level assessment of the anticipated outcome during the V/V process?  g) manage detail, particularly at the level of ensuring that required checks are performed (e.g. between a GHG project plan and the GHG project report, and between a GHG inventory and its corresponding report)?  h) evaluate the information, data, and assumptions and make professional judgements?  i) apply V/V methods in expected and unanticipated situations?  j) communicate the V/V process and results? | |  |  |  |  |  |  |
| **6** | **Sector competence (ISO 14066:2011)**  Does the V/V team collectively have applicable sector knowledge and skills?  For each sector, does the V/V team’s collective technical competence include the capability to:  a) identify GHG SSRs from process flow diagrams, site plans, site inspections, process and instrumentation drawings, approvals and permits or other data sources?  b) identify GHG SSRs relative to the sector?  c) identify sources of leakage?  d) identify project baselines associated with a specific project type?  e) identify situations that could affect the materiality of the GHG assertion, including typical and atypical operating conditions?  f) demonstrate equivalence between the type and level of activities, goods or services of the baseline scenario and GHG project?  g) apply industry knowledge in assessing the project and baseline scenarios? | |  |  |  |  |  |  |
| **7** | **Competence for the review of GHG validation or verification statements (ISO 14066:2011**)  Is the personnel carrying out the review of the validation or verification statement competent to carry out the functions or activities as set out in ISO 14065? | |  |  |  |  |  |  |
| **8** | **Development and maintenance of validation and verification knowledge and skills (ISO 14066:2011)** | |  |  |  |  |  |  |
| **8.1** | **General (ISO 14066:2011)**  Is the V/V team competent on the basis of the team’s collective knowledge, skills and abilities? | |  |  |  |  |  |  |
| **8.2** | **Demonstration of knowledge and skills** (ISO 14066:2011)  For the purposes of achieving initial or supplemental qualifications to undertake V/V activities for given sectors, did the validator or verifier demonstrate his/her knowledge and skills through a variety of methods, including but not limited to:  a) education?  b) training?  c) work experience relevant to the competence required for the activity?  d) tutoring or mentoring by more experienced staff? | |  |  |  |  |  |  |
| **8.3** | **Maintenance of knowledge and skills**  (ISO 14066:2011)  Does a validator or verifier maintain knowledge and skills through ongoing awareness of developments in GHG management, including relevant national and international GHG programmes, climate science and relevant legal requirements. | |  |  |  |  |  |  |
|  | Does a validator or verifier should also undertake a programme of continuing professional development, including training, consistent with emerging trends in GHG management | |  |  |  |  |  |  |
| **Section 2** | **ISO 14064-3 :2019** | |  |  |  |  |  |  |
| **5** | **Requirements applicable to verification/validation** | |  |  |  |  |  |  |
| **5.1** | **Pre-engagement activities** | |  |  |  |  |  |  |
| **5.1.1** | **General**  Does the verifier/validator confirm the following aspects of the engagement:  a) type;  b) objectives: verification/validation;  c) scope: boundary, period;  d) criteria: materiality, level of assurance, etc. | |  |  |  |  |  |  |
|  | **See A.8.2.3.1 to A.8.2.3.8 of IAF MD 6** | |  |  |  |  |  |  |
| **5.1.2** | **Type of engagement**  Do the verifier/validator and the client agreed on the engagement type(s) and considered the needs of the intended user. The verifier/validator shall assess the appropriateness of the proposed engagement type.  **NOTE** A verifier/validator can conduct a mixed engagement, as described in Annex D, when:  a) the scope of each type of engagements is clearly defined;  b) the GHG statements are developed in accordance with criteria. | |  |  |  |  |  |  |
| **5.1.3** | **Level of assurance in the case of verification**  For verification, the verifier and the client shall agree on the level of assurance to be applied and shall consider the needs of the intended user? Does the verifier shall assess the appropriateness of the level of assurance. Does the verifier 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.  ISO 14064-3:2019 describes requirements applicable for verification at a reasonable level of assurance. In cases of limited level of assurance, the requirements in Annex A of ISO 14064-3:2019 shall be met.  Considerations for verification are given in Annex B. | |  |  |  |  |  |  |
| **5.1.4** | **Objectives**  Do the verifier/validator and client agree on the verification/validation objectives at the beginning of the verification/validation engagement? | |  |  |  |  |  |  |
|  | Do Verification objectives include reaching a conclusion about the accuracy of the GHG statement and the conformity of the statement with criteria? | |  |  |  |  |  |  |
|  | Do Validation objectives include an assessment of the likelihood that implementation of the GHGrelated activities will result in the achievement of GHG outcomes as stated by the responsible party, if included in the validation scope.? | |  |  |  |  |  |  |
| **5.1.5** | **Criteria**  Do the verifier/validator and client agree on the criteria taking into account the principles and requirements of the standards or GHG programme to which the responsible party subscribes? | |  |  |  |  |  |  |
|  | Does the verifier/validator assess the suitability of the criteria proposed by the client, considering:  a) the method for determining engagement scope and boundaries;  b) the GHGs and sources, sinks and reservoirs (SSRs) to be accounted for;  c) the quantification methods;  d) requirements for disclosures | |  |  |  |  |  |  |
|  | Are Criteria relevant, complete, reliable and understandable.  Does It available to the intended user.?Are the criteria referenced in the opinion? | |  |  |  |  |  |  |
| **5.1.6** | **Scope**  Do verifier/validator and agree on the verification/validation scope at the beginning of the verification/validation process.  Does the scope, as a minimum, included the following:  a) boundaries;  b) facilities, physical infrastructure, activities, technologies and processes;  c) GHG SSRs;  d)types of GHGs;  e) time period.  For GHG statements that contain emission reductions or removal enhancements, Does the scope also include:  — any material secondary effects?  — baselines (verification)?  — baseline scenarios (validation)?.  NOTE GHG emission reductions or removal enhancements can be offset by affected GHG SSRs (see ISO 14064-2:2019, 3.1.11). GHG emission reductions or removal enhancements affected by GHG SSRs are often referred to as leakage or other secondary effects. | |  |  |  |  |  |  |
| **5.1.7** | **Materiality thresholds** | |  |  |  |  |  |  |
|  | Do verifier/validator confirm the materiality threshold required by the intended users. If no materiality threshold has been specified by intended users, Does the verifier/validator set (a) materiality threshold(s) and communicate them to the client. | |  |  |  |  |  |  |
| **5.2** | **Verification/validation team selection**  Does team selected that has the necessary skills and competences to undertake the verification/ validation**?** | |  |  |  |  |  |  |
|  | **See A.8.3.3.1 to A.8.3.3.20 of IAF MD 6** | |  |  |  |  |  |  |
| **5.3** | **Verification/validation activities and techniques**  Do Verifiers/validators use one or more of the following evidence-gathering activities and techniques in the verification/validation:  a) observation;  b) inquiry;  c) analytical testing;  d) confirmation;  e) recalculation;  f) examination; | g) retracing;  h) tracing;  i) control testing;  j) sampling;  k) estimate testing;  l) cross-checking;  m) reconciliation. |  |  |  |  |  |  |
| **5.4**  **5.4.1** | **Specific requirements**  **Verifier/validator communication** | |  |  |  |  |  |  |
|  | Do the verifier/validator, as soon as practicable, communicate requests for clarification, material misstatements and nonconformities to the responsible party? | |  |  |  |  |  |  |
|  | If there is a material adjustment to be made to the GHG statement, Does the verifier/validator communicate the need for the adjustment to the responsible party. | |  |  |  |  |  |  |
|  | If, in the verifier’s/validator’s judgement, the responsible party does not respond appropriately within a reasonable period, Does verifier/validator shall inform the client, if different from the responsible party. | |  |  |  |  |  |  |
|  | If, in the verifier’s/validator’s judgement, the client does not respond appropriately within a reasonable period, Does verifier/validator shall:  a) issue a modified or adverse verification/validation opinion; or  b) withdraw from the verification/validation.  Does the verifier/validator communicate non-material misstatements to the responsible party? | |  |  |  |  |  |  |
| **5.4.2** | **Sufficiency of evidence**  If the verifier/validator determines that there is insufficient information to support the GHG statement, Does the verifier/validator request additional information.?  If sufficient information cannot be obtained and the information is necessary for the verifier/validator to form a conclusion, Does the verifier/validator not proceed with the verification/validation and shall disclaim the issuance of an opinion.? | |  |  |  |  |  |  |
| **5.4.3** | **Intentional misstatement**  If a matter comes to the verifier’s/validator’s attention that causes the verifier/validator to believe in the existence of intentional misstatement or noncompliance by the responsible party with laws and regulations, Does the verifier/validator communicate the matter to the appropriate parties as soon as practicable | |  |  |  |  |  |  |
| **5.4.4** | **Documented information**  Does verifier/validator maintain the following records:  a) engagement terms;  b) verification/validation plan;  c) evidence-gathering plan;  d) who performed the evidence-gathering activities and when they were performed; e) collected evidence;  f) requests for clarification, material misstatements and nonconformities arising from the verification/validation and the conclusions reached;  g) communication with the responsible party on material misstatements;  h) the conclusions reached and opinions by the verifier/validator;  i) the name of the independent reviewer, the date of review and comments of the reviewer. | |  |  |  |  |  |  |
| **6** | **Verification**  6.1 Planning  6.1.1 Strategic analysis  6.1.1.1 General | |  |  |  |  |  |  |
|  | Do the verifier perform a strategic analysis to understand the activities and complexity of the organization, project or product, and to determine the nature and extent of the verification activities.  Does strategic analysis consider: | |  |  |  |  |  |  |
| a) relevant sector information; | |  |  |  |
| b) the nature of operations of the facility(ies) or project or product; | |  |  |  |
| c) the requirements of the criteria, including applicable regulatory and/or GHG programme requirements; | |  |  |  |
| d) the intended user’s materiality threshold, including the qualitative and quantitative components; | |  |  |  |
| e) the likely accuracy and completeness of the GHG statement; | |  |  |  |
| f) the scope of the GHG statement and related boundaries; | |  |  |  |
| g) the time boundary for data; | |  |  |  |
| h) emissions SSRs and their contribution to the overall GHG statement; | |  |  |  |
| i) changes in GHG emissions, removals and reservoir quantities from the prior reporting period; | |  |  |  |
| j) appropriateness of quantification and reporting methods, and any changes; | |  |  |  |
| k) sources of GHG information; | |  |  |  |
| l) data management information system and controls; | |  |  |  |
| m) management oversight of the responsible party’s reporting data and supporting processes; | |  |  |  |
| n) the availability of evidence for the responsible party's GHG information and statement; o) the results of previous verifications; | |  |  |  |
| p) the results of sensitivity or uncertainty analysis (see ISO 14067); | |  |  |  |
| q) allocation approach; | |  |  |  |
| r) the type of GHGs (e.g. only CO2 or also other gases); | |  |  |  |
| s) the applied monitoring methodology (i.e. direct measurement of GHGs or calculation of GHGs with indirect measurement of activity and calculation data); | |  |  |  |
| t) other relevant information. | |  |  |  |
|  | Are the results of the strategic analysis used in the risk assessment. | |  |  |  |  |  |  |
|  | **See A.8.4.1 to A.8.4.14 of IAF MD 6** | |  |  |  |  |  |  |
| **6.1.1.2** | **Additional requirements for project GHG statement verification**  **Does The strategic analysis consider:**  a) the project plan;  b) the results of the validation report;  c) the requirements of the monitoring plan;  d) the applied monitoring methodology;  e) the monitoring report. | |  |  |  |  |  |  |
| **6.1.1.3** | **Additional requirements for product GHG statement verification**  **Does strategic analysis consider**:  a) the results of the life cycle interpretation, including conclusions and limitations;  NOTE See ISO 14044:2006, 3.5.  b) the functional or declared unit (see ISO 14067);  c) the characteristics of unit processes;  d) the life-cycle stages;  e) cut-offs. | |  |  |  |  |  |  |
| **6.1.2**  **6.1.2.1** | **Risk assessment**  **General**  Does verifier perform a risk assessment of the GHG statement to identify the risk of a material misstatement or nonconformity with the criteria. Does risk assessment consider the results of the materiality assessment.  Does verifier assess the risk of misstatement and determine the nature and extent of evidence gathering activities? | |  |  |  |  |  |  |
|  | Does the verifier shall determine performance materiality taking into account the intended user’s quantitative materiality threshold.? | |  |  |  |  |  |  |
|  | Does the verifier identify qualitative matters that may be material? | |  |  |  |  |  |  |
| **6.1.2.2** | **Types of risks**  Are Inherent risks, control risks and detection risks identified and assessed for the GHG statement. Does these risks identified:  a) for emissions and removals: occurrence, completeness, accuracy, cut-off and classification;  b) for storage: existence, rights and obligations, completeness, and accuracy and allocation | |  |  |  |  |  |  |
| **6.1.2.3** | **Risk assessment considerations**  **Are risk assessment consider the following:**  a) The likelihood of intentional misstatement in the GHG statement; | |  |  |  |  |  |  |
|  | b) the relative effect of emission sources on the overall GHG statement and materiality; | |  |  |  |  |  |  |
|  | c) the likelihood of omission of a potentially significant emission source; | |  |  |  |  |  |  |
|  | d) whether there are any significant emissions that are outside the normal course of business for the responsible party or that otherwise appear to be unusual; | |  |  |  |  |  |  |
|  | e) the nature of operations specific to an organization, facility, project or product; | |  |  |  |  |  |  |
|  | f) the degree of complexity in determining the organizational or project boundary or product system boundary and whether related parties are involved; | |  |  |  |  |  |  |
|  | g) any changes from prior periods; | |  |  |  |  |  |  |
|  | h) the likelihood of non-compliance with applicable laws and regulations that can have a direct effect on the content of the GHG statement; | |  |  |  |  |  |  |
|  | i )any significant economic or regulatory changes that might impact emissions and emissions reporting; | |  |  |  |  |  |  |
|  | j) selection, quality and sources of GHG data; | |  |  |  |  |  |  |
|  | k) the level of detail of the available documentation; | |  |  |  |  |  |  |
|  | l) the nature and complexity of quantification methods; | |  |  |  |  |  |  |
|  | m) the degree of subjectivity in the quantification of emissions | |  |  |  |  |  |  |
|  | n) any significant estimates and the data on which they are based; | |  |  |  |  |  |  |
|  | o) the characteristics of the data management information system and controls; | |  |  |  |  |  |  |
|  | p) the apparent effectiveness of the responsible party’s control system in identifying and preventing errors or omissions; | |  |  |  |  |  |  |
|  | q) any controls used to monitor and report of GHG data; | |  |  |  |  |  |  |
|  | r) the experience, skills and training of personnel. | |  |  |  |  |  |  |
| **6.1.2.4** | **Information sources for risk assessment** | |  |  |  |  |  |  |
|  | Does the verifier may perform an initial site visit to obtain data and information for the risk assessment. | |  |  |  |  |  |  |
|  | Does verifier may perform high-level analytical procedures to determine other areas of risk. These highlevel analytical procedures may include:  a) evaluation of changes in GHG emission intensity;  b) evaluation of changes in GHG emissions, removals and storage over time;  c) evaluation of expected GHG emissions, removals and storage against reported emissions. | |  |  |  |  |  |  |
| **6.1.2.5** | **Additional requirements for project GHG statement verification** | |  |  |  |  |  |  |
|  | Are risk assessment consider the following:  a) whether the current operating conditions reflect the assumptions, limitations, methods and uncertainties in the project plan or criteria;  b) the complexity and data availability of the baseline calculations;  c) a comparison of actual versus expected emission reductions or removal enhancements. | |  |  |  |  |  |  |
| 6.1.2.6 | Additional requirements for product GHG statement verification  Are risk assessment consider the following:  a) the degree of product complexity and system boundaries;  b) the contributions of emissions and removals at different lifestages;  c) the allocation procedures;  d) the availability of life-cycle results from comparable products;  e) the representativeness of use and end of life scenarios;  f) the reliability of any carbon footprint studies used;  g) the results of any critical review. | |  |  |  |  |  |  |
| **6.1.2.7** | **Uses for risk assessment information**  Does the risk assessment used in developing the verification and evidence-gathering plans. Any input into the risk assessment shall be recorded.  The risk assessment output may address how the verification is planned with respect to the following: a) GHG emissions SSRs;  b) boundaries;  c) data management details;  d) management controls | |  |  |  |  |  |  |
| **6.1.3**  **6.1.3.1** | **Evidence-gathering activities**  **General**  Do the verifier design evidence-gathering activities to collect sufficient and appropriate evidence upon which to base the conclusion?  Does verifier shall obtain more persuasive evidence the higher the risk of misstatement?  Do verifier consider inherent risk and detection risk in designing the evidence-gathering activities.  Irrespective of the risks identified, Have the verifier design and perform analytical procedures and tests for each type of material emission or removal.  Do the verifier develop evidence-gathering activities that determine whether the GHG statement conforms to the criteria, taking into account the principles of the standards or GHG programme that apply to the GHG statement. | |  |  |  |  |  |  |
| 6.1.3.2 | **Data trail**  Do the verifier design evidence-gathering activities to determine the existence of data trails for material emissions, removals and/or storage | |  |  |  |  |  |  |
| 6.1.3.3 | **GHG information system and controls**  Do the extent of the assessment of the GHG information system and control depend on the results of the risk assessment.  Evidence-gathering activities that assess the design and effectiveness of the GHG information system and controls shall consider:  a) the selection and management of the GHG data and information;  b) processes for collecting, processing, consolidating and reporting GHG data and information;  c) systems and processes that ensure the validity and accuracy of the GHG data and information;  d) the design and maintenance of the GHG information system;  e) systems, processes and personnel that support the GHG information system, including activities for ensuring data quality;  f) the results of instrument maintenance and calibration;  g) the results of previous verifications, if available and appropriate.      statement with the underlying records and examining material adjustments made during the course of preparing the GHG statement. | |  |  |  |  |  |  |
| **6.1.3.4** | **GHG data and information**  Do the verifier design the evidence-gathering activities to test GHG data and information. | |  |  |  |  |  |  |
| **6.1.3.5** | **Data aggregation process**  Do the verifier design evidence-gathering activities that relate to the data aggregation process, including reconciling the GHG | |  |  |  |  |  |  |
| **6.3.2** | **Conclusion and draft opinion** | |  |  |  |  |  |  |
| **6.3.2.1** | **General**  Do the verifier reach a conclusion based on the evidence gathered and draft a verification opinion | |  |  |  |  |  |  |
| **6.3.2.2** | **Unmodified opinion**  In order to draft an unmodified opinion, Does the verifier shall ensure that:  a) there is sufficient and appropriate evidence to support material emissions, removals or storage;  b) the criteria are applied appropriately for material emissions, removals or storage;  c) the effectiveness of controls has been evaluated when the verifier intends to rely on those controls. | |  |  |  |  |  |  |
| 6.3.2.3 | **Modified opinion**  In order to draft a modified opinion,Do the verifier ensure that there is no material misstatement at the level of the GHG statement. | |  |  |  |  |  |  |
|  | When there is a departure from the requirements of the criteria or a scope limitation, Does the verifier decide what type of modification to the verification opinion is appropriate? In addition to materiality, Does the verifier consider:  — the degree to which the matter impairs the usefulness of the GHG statement?  — the extent to which the effects of the matter on the GHG statement can be determined?  — whether the GHG statement is, or could be understood to be, misleading even when read in conjunction with the verifier’s opinion?  . | |  |  |  |  |  |  |
|  | 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.  In this case, Is the non-material misstatement,:  a) confined to specific elements, classifications or line items of the GHG statement;  b) even if confined, not representative of a substantial portion of the GHG statement;  c) not fundamental to the intended user’s understanding of the GHG statement. | |  |  |  |  |  |  |
| 6.3.2.4 | **Adverse opinion**  In order to draft an adverse opinion, Does verifier conclude that:  a) there is insufficient or inappropriate evidence to support an unmodified or modified opinion; or  b) criteria are not appropriately applied for material emissions, removals or storage; or  c) the effectiveness of controls cannot be determined when the verifier intends to rely on those controls.  If the responsible party does not correct any material misstatement or nonconformity in an agreed period of time,Does the verifier shall take this into consideration when reaching the conclusion.? | |  |  |  |  |  |  |
| **.3.2.5.6** | **Disclaiming the issuance of an opinion**  In order to disclaim the issuance of an opinion, Does the verifier ensure that he/she has been unable to obtain sufficient appropriate evidence and can conclude that the possible effects on the GHG statement of undetected material misstatement(s) are material and pervasive**.** | |  |  |  |  |  |  |
| **6.3.3** | **Verification report**  Does the verifier shall draft a verification report. Do a verification report include as a minimum:  a) an appropriate title;  b) an addressee;  c) a statement that the responsible party is responsible for the preparation and fair presentation of the GHG statement in accordance with the criteria;  d) a statement that the verifier is responsible for expressing an opinion on the GHG statement based on the verification;  e) a description of the verification evidence-gathering procedures used to assess the GHG statement;  f) the verification opinion;  g) the date of the report;  h) the verifier’s location;  i) the verifier’s signature;  j) a summary of the GHG statement;  k) reference to the verification criteria;  l) verification scope. | |  |  |  |  |  |  |
| **7**  7.1  **7.1.1** | **Validation**  **Planning**  **Strategic analysis** | |  |  |  |  |  |  |
|  | Does the validator have a sufficient understanding of the GHG-related activity and its relevant sector information to plan and conduct the validation? Does this enable the validator to:  — identify the types of potential material misstatements and their likelihood of occurrence;  — select the evidence-gathering procedures that will provide the validator with a basis for his/her assessment and conclusions? | |  |  |  |  |  |  |
|  | Does the strategic analysis consider:  a) relevant sector information; | |  |  |  |  |  |  |
| b) the nature of operations; | |  |  |  |
| c) the requirements of the criteria, including applicable regulatory and/or GHG programme requirements; | |  |  |  |
| d) the intended user’s materiality threshold, including the qualitative and quantitative components; | |  |  |  |
| e) the likely accuracy and completeness of the GHG statement | |  |  |  |
| f) the proper disclosure of the GHG statement; | |  |  |  |
| g) the scope of the GHG statement and related boundaries; | |  |  |  |
| h) the time boundary for data; | |  |  |  |
| i) emissions SSRs and their contribution to the overall GHG statement; | |  |  |  |
| j) appropriateness of quantification and reporting methods, and any changes; | |  |  |  |
| k) sources of GHG information; | |  |  |  |
| l) data management information system and controls; | |  |  |  |
| m) management oversight of the responsible party’s reporting data and supporting processes; | |  |  |  |
| n) the availability of evidence for the responsible party's GHG information and statement; | |  |  |  |
| o) the results of sensitivity or uncertainty analysis; | |  |  |  |
| p) other relevant information. | |  |  |  |
|  |  |  |
| 7.1.2 | **Materiality thresholds**  Does the validator identify materiality thresholds for the purposes of concluding on the GHG statement? | |  |  |  |  |  |  |
|  | Does the validator identify qualitative matters that may be material**.** | |  |  |  |  |  |  |
| **7.1.3** | Estimate testing  Does the validator evaluate whether the assumptions applied comply with the criteria and whether the estimates of future values are appropriate. | |  |  |  |  |  |  |
|  | Does validator assess:  a) the appropriateness of the estimate methodology;  b) the applicability of the assumptions in the estimate;  c) the quality of the data used in the estimate. | |  |  |  |  |  |  |
|  | Does the validator shall develop validation evidence-gathering procedures that test the operating effectiveness of the controls over how the estimate was done? | |  |  |  |  |  |  |
|  | Does the validator develop his/her own estimate or range to evaluate the responsible party’s estimate.? | |  |  |  |  |  |  |
| **7.1.4**  **7.1.4.1** | **Assessment of GHG-related activity characteristics**  **General**  Does validator develop evidence-gathering activities that assess the following characteristics of the GHG-related activity? | |  |  |  |  |  |  |
| **7.1.4.2** | Recognition  Does the validator shall determine whether the intended user(s) recognize the GHG-related activity? In assessing recognition, Does the validator ?  a) 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; | |  |  |  |  |  |  |
|  | b) assess whether there are geographical or temporal restrictions specified by the intended user(s) and whether the GHG-related activity complies with these restrictions | |  |  |  |  |  |  |
|  | c) assess whether the GHG-related activity is real, quantifiable, verifiable, permanent and enforceable; | |  |  |  |  |  |  |
|  | d) after the confirmation of the calculations used in the GHG statement, re-assess whether the GHGrelated activity will still be recognized. | |  |  |  |  |  |  |
| **7.1.4.3** | **Ownership**  Does the validator assess whether the responsible party owns or has the right to claim emission reductions or removal enhancements expressed in the GHG statement? | |  |  |  |  |  |  |
| **7.1.4.4** | **GHG boundary**  Does the validator assess whether the boundaries as set by the responsible party are appropriate.? | |  |  |  |  |  |  |
|  | In assessing the GHG boundaries, Does the validator assess the scope of the boundaries for the GHG related activity to ensure it contains all relevant SSRs.? | |  |  |  |  |  |  |
| **7.1.4.5** | **Baseline scenario selection**  For GHG-related activities that assert emission reductions or removal enhancements, Does the validator assess whether the baseline is the most appropriate, plausible and complete hypothetical scenario. | |  |  |  |  |  |  |
|  | In assessing the baseline selection, Does the validator  a) determine whether the baseline determined is recognized by the intended user; | |  |  |  |  |  |  |
|  | b) assess whether the baseline is established using a credible, documented and repeatable process; | |  |  |  |  |  |  |
|  | c) assess whether the baseline is appropriate for the GHG-related activity, for the period referenced in the GHG statement; | |  |  |  |  |  |  |
|  | d) assess the baseline selection, including how conservativeness, uncertainty, common practice and the operating environment affect the selection. | |  |  |  |  |  |  |
| **7.1.4.6** | **Activity measurements**  Does the validator assess the designed operational conditions and the associated activity levels used in the GHG quantification methodologies for the GHG-related activity to determine how they will produce accurate, complete and conservative estimates? | |  |  |  |  |  |  |
| **7.1.4.7** | **Secondary effects**  For GHG-related activities that assert emission reductions or removal enhancements, Does the validator assess the GHG-related activity to determine if material economic effects during the GHG statement period will change emissions outside the GHG-related activity boundary. | |  |  |  |  |  |  |
|  | If the GHG-related activity is required to account for secondary effects, Does the validator shall assess the completeness and accuracy of these adjustments.  NOTE Secondary effects are sometimes called “leakage”. | |  |  |  |  |  |  |
| **7.1.4.8** | Quantification methodologies and measurements  Does the validator assess whether the selected quantification methodologies and associated measurements or monitoring are acceptable to the intended user.? | |  |  |  |  |  |  |
|  | In assessing the quantification methodologies and measurements, Does the validator:  a) assess whether these quantification methodologies and associated measurements or monitoring are of acceptable accuracy and reliability; | |  |  |  |  |  |  |
|  | b) assess whether these quantification methodologies and associated measurements or monitoring are conservative; | |  |  |  |  |  |  |
|  | c) assess whether these quantification methodologies and associated measurements or monitoring have been appropriately applied; | |  |  |  |  |  |  |
|  | 1. note for disclosure and materiality purposes when operational ranges, operational conditions or assumptions have not been met.   NOTE Quantification methodologies refer to the method of estimating GHG emissions and include calculations, models, mass-balance and their associated indirect measurements, and direct measurements, etc. | |  |  |  |  |  |  |
| **7.1.4.9** | **GHG information system and controls**  Does the validator shall assess the GHG information management system and procedures of the GHGrelated activity to determine whether they can be relied upon during verification.? | |  |  |  |  |  |  |
|  | In assessing data management, Does the validator :  a) identify all measured and monitored data and assess whether it corresponds with the calculations, including the measured and monitored data for the GHG-related activity; | |  |  |  |  |  |  |
|  | b) identify and confirm the acceptability of all additional information that is used in the GHG outcome calculations including, but not exclusive of, emission factors, conversions and global warming potentials; | |  |  |  |  |  |  |
|  | c) assess whether there is sufficient and appropriate planned record keeping to connect the measurements to the reporting; | |  |  |  |  |  |  |
|  | d) identify key points in the data management process that have inherently higher risks of misreporting and assess the responsible party’s data controls at the key risk points; | |  |  |  |  |  |  |
|  | e) identify responsibilities for the data and GHG information management system and assess whether appropriate segregation of duties has occurred and appropriate levels of responsibility and authority have been assigned; | |  |  |  |  |  |  |
|  | f) assess whether the data collection and control operation frequencies are appropriate; | |  |  |  |  |  |  |
|  | g) assess whether the backup and retrieval systems are sufficiently robust; | |  |  |  |  |  |  |
|  | h) assess whether the content of the GHG statement and who it is distributed to are appropriate; | |  |  |  |  |  |  |
|  | i) assess whether the data controls and GHG information management system meet the requirements of the intended user. | |  |  |  |  |  |  |
| **7.1.4.10** | **Functional equivalence**  For GHG-related activities that assert emission reductions or removal enhancements, Does the validator assess whether the project and baseline are functionally equivalent.  In assessing functional equivalence, Does the validator:  a) assess both quantitative and qualitative aspects of functional equivalence;  b) identify and document the functional unit used for the quantitative assessment;  c) assess the comparability of the scope of the GHG-related activity boundaries. | |  |  |  |  |  |  |
| **7.1.4.11** | **Calculation of GHG statement**  Does the validator confirm the calculations used in the GHG statement. | |  |  |  |  |  |  |
|  | In confirming the calculations, Does the validator shall:  a) confirm the correct application of calculations (e.g. emission factors);  b) confirm the correct application of conversion of measurement units and global warming potentials;  c) confirm the calculations have been performed in accordance with the criteria**.** | |  |  |  |  |  |  |
| **7.1.4.12** | **Future estimates**  If applicable, Does the validator evaluate the future estimates associated with the GHG statement. In evaluating forecasts or projections? | |  |  |  |  |  |  |
|  | Does the validator assess:  a) the proposed approach and assumptions inherent in the projection;  b) the applicability of scope of the projection to the proposed GHG-related activity;  c) the sources of data and information used in the projection, including their appropriateness, completeness, accuracy and reliability? | |  |  |  |  |  |  |
|  | For GHG-related activities that assert emission reductions or removal enhancements,Does the validator assess the comparability between the baseline and the proposed project, including the consistency of assumptions and boundaries across the GHG statement period? | |  |  |  |  |  |  |
| **7.1.4.13** | Uncertainty  Does the validator assess whether the uncertainty associated with the GHG statement affects disclosure or the ability of the validator to arrive at a conclusion. ? | |  |  |  |  |  |  |
|  | In assessing uncertainty,Does the validator :  a) identify uncertainties that are greater than expected;  b) assess the effect of the identified uncertainties on the GHG statement;  c) determine the appropriate course of action given the uncertainty. | |  |  |  |  |  |  |
| **7.1.4.14** | **Sensitivity**  Does the validator identify assumptions with high potential for change and assess whether these changes are material to the GHG statement.? | |  |  |  |  |  |  |
| **7.1.5** | **Validation plan**  Does he validator develop a validation plan that addresses the following:  a) scope and objectives;  b) identification of the validation team and the roles of team members;  c) client/responsible party contact;  d) schedule of validation activities;  e) validation criteria;  f) materiality;  g) schedule for site visits, if any.  **.** | |  |  |  |  |  |  |
|  | Does the validator shall communicate the validation plan to the responsible party and ensure that relevant responsible party personnel are notified prior to the beginning of any site visit? | |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |
| **7.1.6** | **Evidence-gathering plan**  Does validator design evidence-gathering activities to collect sufficient and appropriate evidence for each characteristic of the GHG-related activity to support his/her conclusion? | |  |  |  |  |  |  |
|  | Except in cases where the validator chooses to examine all evidence, Does the validator use a risk-based process to identify evidence to be collected for each characteristic of the GHG-related activity? | |  |  |  |  |  |  |
|  | Does the validator shall use any validation activities or techniques in designing the evidence-gathering plan including site visits? | |  |  |  |  |  |  |
| **7.1.7** | **Approval of validation and evidence-gathering plans**  Are the validation plan and evidence-gathering plan approved by the team leader**.** | |  |  |  |  |  |  |
|  | Are Amendments to the validation plan and evidence-gathering plan be approved by the team leader in the following circumstances:  a) change in scope or timing of validation activities;  b) change in evidence-gathering procedures;  c) change in locations and sources of information for evidence-gathering;  d) the identification during the validation process of new risks or concerns that could lead to material misstatements or nonconformities. | |  |  |  |  |  |  |
| **7.1.8** | **Amendments to validation and evidence-gathering plans**  If evidence collected indicates a material misstatement(s) or identifies a nonconformity with the criteria, Does the validator modify the validation plan and evidence-gathering plan, as required. | |  |  |  |  |  |  |
| **7.2**  **7.2.1** | **Execution**  **General**  Does the validator conduct the validation according to the validation plan and the evidence-gathering activities according to the evidence-gathering plan? | |  |  |  |  |  |  |
| **7.2.2** | **Evaluation of the GHG statement**  Does the validator use his/her assessment and evaluations and the evidence gathered to assess the responsible party’s GHG statement against validation criteria? | |  |  |  |  |  |  |
|  | Does the validator assess, individually and in the aggregate, whether uncorrected misstatements are material to the GHG statement? | |  |  |  |  |  |  |
|  | Does the validator assess conformity with the criteria and re-assess recognition? | |  |  |  |  |  |  |
| **7.2.3** | **Proper disclosure**  Does the validator evaluate the GHG statement for proper disclosure and shall ensure that material disclosures occur**?** | |  |  |  |  |  |  |
|  | In assessing proper disclosure,Does the validator:  a) assess whether the GHG statement is accurate and complete;  b) assess whether the disclosure is a fair reflection of the GHG-related activity;  c) assess whether the disclosure contains unintended bias;  d) assess whether the disclosure addressed the intended users’ requirements and needs. | |  |  |  |  |  |  |
|  | **See A.8.5.1 to A.8.5.6 of IAF MD 6** | |  |  |  |  |  |  |
| **7.3**  **7.3.1** | **Completion**  **General**  Does the validator reach a conclusion based on his/her evaluation of the GHG statement and whether the GHG statement has been properly disclosed. If the responsible party does not correct any material misstatement or nonconformity in an agreed period of time? | |  |  |  |  |  |  |
|  | Does the validator shall take this into consideration when reaching the conclusion? | |  |  |  |  |  |  |
| **7.3.2**  **7.3.2.1** | **Opinion**  **General**  Does validator draft a validation opinion based on the evidence gathered during the validation and choose one of the options in 7.3.2.2 to 7.3.2.5.  NOTE For alternate names to validation opinion types, see Table 1. | |  |  |  |  |  |  |
| **7.3.2.2** | **Unmodified opinion**  In order to draft an unmodified opinion,Does the validator ensure:  a) there is sufficient and appropriate evidence to support the future estimate;  b) the criteria meet the needs of the intended user;  c) the criteria are appropriately applied for material emissions, removals or storage. | |  |  |  |  |  |  |
|  | **7.3.2.3 Modified opinion**  In order to draft a modified opinion, Does the validator ensure that there is no material misstatement at the level of the GHG statement? | |  |  |  |  |  |  |
|  | When there is a departure from the requirements of the criteria or deficiencies in the assumptions used to develop future estimates, the validator shall decide what type of modification to the validation opinion is appropriate. In addition to materiality,Does the validator consider:  — the degree to which the matter impairs the usefulness of the GHG statement;  **—** the extent to which the effects of the matter on the GHG statement can be determined;  — whether the GHG statement is, or could be understood to be, misleading even when read in conjunction with the validator’s opinion.  A modified validation 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 | |  |  |  |  |  |  |
|  | **7.3.2.4 Adverse opinion**  In order to draft an adverse opinion, Does the validator conclude:   1. there is insufficient or inappropriate evidence to support a modified or unmodified opinion; or   b) criteria are not appropriately applied for material emissions, removals or storage; or  c)the effectiveness of controls cannot be determined when the validator intends to rely on those controls. | |  |  |  |  |  |  |
| **7.3.2.5** | **Disclaiming the issuance of an opinion**  In order to disclaim the issuance of an opinion, Does the validator ensure that he/she has been unable to obtain sufficient appropriate evidence and concludes that the possible effects on the GHG statement of undetected material misstatement(s) are material and pervasive**?** | |  |  |  |  |  |  |
| **7.3.3** | **Validation report**  Does validator draft a validation report? And does the validation report shall include as a minimum:  a) an appropriate title;  b) an addressee**;**  **c) a** statement that the responsible party is responsible for the preparation and fair presentation of the GHG statement in accordance with the criteria;  d) a statement that the validator is responsible for expressing an opinion on the GHG statement based on the validation;  e) a description of the validation evidence-gathering procedures used to assess the GHG statement; f) the validation opinion;  g) the date of the report;  h) the validator’s location;  i) the validator’s signature;  j) description of the validated baseline, or reference to it;  k) projected emission reductions or removal enhancements;  l) validation scope. | |  |  |  |  |  |  |
| **8** | **Independent review**  Is An independent reviewer(s) selected that is competent and different from the persons who conducted the verification/validation? | |  |  |  |  |  |  |
|  | Is an independent review completed before the opinion is issued?  The independent review may be conducted during the verification/validation process to allow significant issues identified by the independent reviewer to be resolved before the opinion is issued. | |  |  |  |  |  |  |
|  | Does the independent reviewer(s) evaluate:  a) the appropriateness of team competencies;  b) whether the verification/validation has been designed appropriately;  c) whether all verification/validation activities have been completed;  d) significant decisions made during the verification/validation;  e) whether sufficient and appropriate evidence was collected to support the opinion;  f) whether the evidence collected supports the opinion proposed by the verification/validation team;  g) the GHG statement and the verification/validation opinion;  h) whether the verification/validation was performed according to this document, including whether:  1) the risk assessment, verification/validation plan and evidence-gathering plan address the objective, scope and level of assurance;  2) for verification:  i) the evidence-gathering activities address the risks identified;  ii) a data trail has been established for material emissions, removals and storage;  3) for validation:  i) the evidence-gathering activities address the GHG-related activity characteristics;  4)verification/validation team decisions are supported by sufficient and appropriate evidence;  5)any restatements have been adequately assessed;  6)the GHG statement is in accordance with the criteria;  7)significant issues have been identified, resolved and documented.  NOTE Significant issues are misstatements and nonconformities identified by the verification/validator team that could affect the verifier/validator opinion. | |  |  |  |  |  |  |
|  | Does independent reviewer communicate with the verification/validation team when the need for clarification arises. The verification/validation team shall address concerns raised by the independent reviewer. | |  |  |  |  |  |  |
|  | Are the independent review results be documented | |  |  |  |  |  |  |
| **9**  **9.1** | **Issuance of opinion**  **General**  Do the verifier or validator shall make a decision whether to an opinion or to disclaim the issuance of an opinion. | |  |  |  |  |  |  |
| **9.2** | **Types of opinions**  After reaching a decision to issue an opinion, Doe the verifier/validator issue an opinion of one of the following types:  a) unmodified;  b) modified;  c) adverse.  NOTE See 6.3.2 and 7.3.2 for requirements associated with the drafting of opinions. | |  |  |  |  |  |  |
| **9.3** | **Contents of opinion**  Does the opinion contain:  a) identification of the GHG-related activity (e.g. organization, project, product);  b) identification of the GHG statement, including the date and period covered by GHG statement;  c) identification of the responsible party and a statement that the GHG statement is the responsibility of the responsible party;  d) identification of the criteria used to compile and assess the GHG statement;  e) a declaration that the verification or validation of the GHG statement was conducted in accordance with this document;  f) the verifier’s conclusion including level of assurance, if applicable;  g) the validator’s conclusion;  h) the date of the opinion.  The opinion may contain statements that limit the liability of the verifier or validator. | |  |  |  |  |  |  |
|  | For a modified opinion,Is the opinion contain a description of the reason for the modification and place this description before the verifier’s or validator’s conclusion? | |  |  |  |  |  |  |
|  | Does verifier or validator state the reasons for an adverse opinion | |  |  |  |  |  |  |
|  | When the issuance of an opinion is disclaimed, Does the verifier or validator state the reasons for the decision | |  |  |  |  |  |  |
|  | Where the GHG statement includes a forecast of future emission reductions/removals, Does the GHG opinion explain that actual results may differ from the forecast as the estimate is based on assumptions that may change in the future.  NOTE Annex D provides examples of verification and validation opinions, including the use of limitation statements. | |  |  |  |  |  |  |
| **10** | **Facts discovered after the verification/validation**  Does the verifier or validator obtain sufficient appropriate evidence and identify relevant information up to the date of the verification or validation opinion.  If facts or new information that could materially affect the verification or validation opinion are discovered after this date, | |  |  |  |  |  |  |
|  | Does the verifier or validator take appropriate action, including communicating the matter as soon as practicable to the responsible party, the client and the GHG programme.  The verifier or validator 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 | |  |  |  |  |  |  |
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| **Validation/Verification body** |  | **Acc. No.** |
| **Type of Visit** | **Document and Record Review/Pre-Assessment/ Initial Assessment / Surveillance / Re-Assessment** | |
| **Name of the Assessor** |  | |
| **Date** |  | |