Supplementary appendix – Scheme/programme: GHG Project

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CHAPTER 1 - GENERAL

This appendix defines the procedures applied by RINA for validation and verification activities and the procedures that must be followed by interested parties to request and obtain validation/verification of GHG Project scheme/programme, with respect to what is already defined in the General Regulations for validation/verification activities of information declared in claims.

CHAPTER 2 – REFERENCE SCHEME/PROGRAMME/VALIDATION/VERIFICATION REQUIREMENTES

Rules

- 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 14064-3:2019 Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements.
- ISO 14065:2020 - General principles and requirements for bodies validating and verifying environmental information.
- IAF MD 6 - IAF Mandatory Document for the Application of ISO 14065.

Definitions

- Greenhouse gas; GHG: gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere and clouds
- Greenhouse gas source; GHG source: Process that releases a GHG into the atmosphere
- Greenhouse gas sink; GHG sink: Process that removes a GHG from the atmosphere
- Greenhouse gas reservoir; GHG reservoir: Component, other than the atmosphere, that has the capacity to accumulate GHGs, and to store and release them
- Greenhouse gas emission; GHG emission: Release of a GHG into the atmosphere
- Greenhouse gas removal; GHG removal: Withdrawal of a GHG from the atmosphere by GHG sinks
- Greenhouse gas emission reduction; GHG emission reduction: Quantified decrease in GH emissions between a baseline scenario and the GHG project
- Greenhouse gas removal enhancement; GHG removal enhancement: Quantified increase in GHG removals between a baseline scenario and the GHG project
- Greenhouse gas emission factor; GHG emission factor: Coefficient relating GHG activity data with the GHG emission
- Greenhouse gas removal factor; GHG removal factor: Coefficient relating GHG activity data with the GHG removal
- Global warming potential, GWP: Index, based on radiative properties of GHGs, measuring the radiative forcing following a pulse emission of a unit mass of a given GHG in the present-day atmosphere integrated over a chosen time horizion, relative to that of carbon dioxide (CO_2)

- Carbon dioxide equivalent; CO2eq: Unit for comparing the radiative forcing of a GHG to that of a carbon dioxide
- Greenhouse gas project; GHG project: activity or activities that alter the conditions of a GHG baseline and which cause GHG emission reductions or GHG removal enhancements
- Greenhouse gas report; GHG report: Standalone document intended to communicate an organization's or GHG project's GHG-related information to its intended users
- Greenhouse gas baseline; GHG baseline: Quantitative reference(s) of GHG emissions and/or GHG removals that would have occurred in the absence of a GHG project and provides the baseline scenario for comparison with project GHG emissions and/or GHG removals
- Baseline scenario: Hypothetical reference case that best represents the conditions most likely to occur in the absence of a proposed GHG project
- Monitoring: Continuous or periodic assessment of GHG emissions , GHG removals or other GHG-related data
- Uncertainty: Parameter associated with the results of quantification that characterizes the dispersion of the values that could be reasonably attributed to the quantified amount
- Greenhouse gas project proponent; GHG project proponent: Individual or organization that has overall control and responsibility for a GHG project
- Interested party: Person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity
- Greenhouse gas programmeme; GHG programmeme: Voluntary or mandatory internation, national or subnational system or scheme that registers, accounts or manages GHG emissions, GHG removals, GHG emission reductions or GHG removal enhancements outside the organization or GHG project.

  The Programme may be managed at an international, regional, national, subnational, sectoral or organizational level. A Programme may also be called a "scheme". A set of standards capable of covering all the requirements of this document can serve as a Programme. A Programme may also be a letter of commitment (or contract) between the Validation Institution and its Client, or refer to a formal document of the Programme itself which has a set of rules which may have varying degrees of specification and complexity
- Level of assurance: Degree of confidence in the GHG statement
- 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
- Carbon credits; CO_2 credits: unit of emission reduction or greenhouse gas removals enhancement generated by the project corresponding to 1tCO_{2eq} and eligible to be traded and sold on the market

CAPTHER 3 - CONTRACT

3.1

RINA prepares the offer based on the following information/documents:

- name and address of the client/Organization;
- description of the Organization;
- activities, emission sources and types;
- description of processes and used technologies;
- type of activity (validation and/or verification):
- title of the project;
- location and characteristic of the GHG project (sector/technical area, size in CO_{2eq});
- calculation methodology and reference baseline;
- project duration (credit period);

- stakeholders;
- GHG sources, sinks and /or reservoirs;
- required level of assurance;
- related dimension (in CO_{2eq}) of the GHG statement; and
- all the informatio reported in the information questionnaire.

The materiality treshold, based on the estimated quantity of emissions removed/avoided, established by RINA for reasonable assurance levels is equal to: 15% for size < 1,000 tCO_{2eq}/year; 12.5% for the size equal to or >1,000 tCO_{2eq}/year and < 5,000 tCO_{2eq}/year; 10% for size ≥ 5,000 tCO_{2eq}/year.

3.2

The contract stipulated between RINA and the organization includes:

- the document review of the organization's documents (including the strategic analysis and the verification risk analysis);
- the gathering of sufficient objective evidence on the original data/information, ensuring its traceability through the data/information management process, further analysis and calculations; the identification of errors and consideration of their materiality; the assessment of compliance with the requirements (also by means of on-field checks for on-site visits/assessments and telephone or remote interviews).

CHAPTER 4 – PLANNING

4.1

Together with the request for verification, or after it, the Organization must make the following documentation available to RINA:

a) GHG report describing the GHG project as defined in Chapter 2;
b) GHG programmeme as defined in Chapter 2 and described in the document attached to this appendix ("annex 1");
c) calculation methodology and project baseline (if not included in a) or b));
d) calculation sheets and formulas (in case of verification and, if available, in case of validation);
e) monitoring (in case of verification);
f) any information/document required by the agreed programmeme.

In addition to the documentation indicated above, RINA may at its discretion also request additional documentation to be examined that it deems necessary for verification.

4.2

Team reviews documents to ensure they meet the agreed verification criteria. Through the examination of the documentation, the team initiates and proceeds with the strategic analysis and risk analysis as described below.

Strategic analysis

At the beginning of the verification, RINA evaluates the probable nature, extent and complexity of the verification tasks by carrying out a strategic analysis of all the activities concerning the GHG statement.

The strategic analysis includes the following factors in case of validation:

- the relevant sector information;
- the nature of operations;
- the criteria requirements, including all the legislative and/or possibly applicable GHG programmeme requirements;
- the materiality threshold of the intended user(s), including qualitative and quantitative components;
- the accuracy level and the completeness of the GHG statement;

- the correct issuance of GHG statement;
- the scope of the GHG statement and related boundaries;
- the temporal boundaries of data;
- the emissions' SSR and their relative contribution in the GHG statement;
- the suitability of the methods of quantification and reporting, with any modifications;
- the sources of information on GHGs;
- data management information systems and related controls;
- the overall view of the responsible party's data management and support processes;
- the availability of evidence for the responsible party's GHG declaration and information;
- the results of the sensitivity or uncertainty analyses;
- other relevant information.

In case of verification:

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

Risk analysis (only in case of verification activities)

Based on the result of the strategic analysis, RINA conducts a risk analysis taking into consideration the sources and scale of any errors, omissions or misrepresentations in order to define the priorities of the areas and the extent of the verification of the data and information of the GHG and to provide input to the development of the verification and sampling plan. When developing the risk analysis the team should at least consider the following:

- that the current operating conditions reflect the assumptions, limitations, methods and uncertainties defined in the project plan;
- complexity in the definition of the project boundaries;
- complexity of methods of quantification;
- adequacy of the management system, the data processing system and the control system;
- information related to previous assessments at the organization's installation.

Following the strategic and risk analysis, the verification times and the sites to be sampled could be modified with respect to what was defined in the contract review phase.

CHAPTER 5 – EXECUTION OF VALIDATION/VERIFICATION ACTIVITIES

5.1

Based on the results of the activities referred to in the previous chapter, the Team shall identify the situations that require a visit to the sites and installations, including the number and location of the individual places to visit, taking into account:

- results of the risk assessment and the levels of efficiency identified in the evidence gathering;
- number and size of sites and installations associated with the project;
- diversity of activities carried out at each site and installation which contribute to the GHG statement;
- nature and magnitude of the emissions at the various sites and installations and the respective contribution to the GHG statement;
- complexity of quantifying the sources of emissions generated at each relevant site or installation;
- degree of confidence in the GHG data management system;

- all risks identified through the risk assessment indicating the need to visit specific places;
- the results of previous verifications or validations, if available.

On-site visit

The Team is required to travel to a site or installation under any of the following circumstances:

a) an initial validation/verification;
b) a subsequent validation/verification for which the Validator/verifier does not know the activities and results of the previous validation/verification;
c) a validation/verification in which a change of ownership of a site or an installation has been validated/verified and in which the emissions, removals and storage of the site or installation are material for the purposes of the GHG statement;
d) in case of identification of inaccuracies during the validation/verification that require a visit to the site or to the installation;
e) in case of unexplained material variations in terms of emissions, removals and storage compared to the previously validated/verified GHG statement;
f) in case of addition of a site or an installation of SSR which is material for the purposes of the GHG statement;
g) in case of material changes in the scope or boundaries of reporting;
h) in case of material changes in data management affecting the specific site or installation.

The Team shall provide evidence of the assessment carried out in order to decide whether or not to conduct an on-site validation/verification and justify any decision taken on this aspect. The validation/verification shall be performed at the Organization's site(s) unless another method can be justified in specific cases. The Team validates/verifies on site:

1) operations and activities pertaining to GHG SSRs
2) data management and control systems;
3) physical infrastructure;
4) equipment, such as measuring devices and instruments, necessary to define the traceability of applicable calibration and monitoring information;
5) types of equipment and supporting assumptions and calculations (e.g. verify that the manufacturer information used as a basis for emission calculations are compatible with the installed equipment);
6) processes and material flows affecting emissions;
7) scope and boundaries;
8) compliance with operational and data collection procedures;
9) personal activities that may affect materiality;
10) sampling equipment and methodologies;
11) monitoring practices against the requirements established by the responsible party or specified in the criteria;
12) calculations and assumptions made during the determination of data on GHGs and emissions and, if applicable, reductions in emissions and enhancements in emissions removals;
13) quality assurance and control procedures in place aimed at preventing and correcting any errors or omissions in the indicated monitoring parameters.

Draft Report

Following the on-site visit, the team provides the Organization with a Draft Verification Report which will summarize the findings that need to be further processed, investigated or integrated by the Organization in order to confirm that the GHG statement meets the requirements.

The organization shall provide further clarifications or make necessary improvements to the report and documentation in order to achieve a positive outcome of the verification.

Depending on the nature of the improvements/corrections and/or the documentation provided, a site visit may be required to verify the correct implementation of the proposed corrective actions.

Findings management

You can have 3 types of findings: CAR (*Corrective Action Request*), CL (*Clarification*), R (Recommendation).

A Corrective Action Request (CAR) is issued if one of the following occurs: requirements have not been met, errors have been made in the assumptions, data or calculation.

A request for clarification (CL) is issued if the information is insufficient or not clear enough to determine whether the applicable requirements have been correctly applied; a CL could therefore lead to a CAR, if the clarification were to reveal a non-fulfillment of a requirement of the standard or be positively closed if the additional information provided should highlight compliance with the reference standard.

A recommendation (R) is an input for improvement that can be taken into account for future updates of the carbon footprint.

Final Report

Upon receipt of the organization's responses and modified documents following the findings, the Draft Verification Report is reviewed to reflect the responses provided by the organization and the team's comments in relation to each finding. The Final Verification Report will be issued once all the findings in the draft Verification Report have been resolved and accepted by RINA. The Final Verification Report is prepared including the Final Verification Opinion.

RINA reserves the right to terminate the contract or to issue the Final Verification Report and a negative opinion, in agreement with the Organization, without prejudice to the right to receive the agreed remuneration, if the findings are not resolved and accepted in a satisfactory after 3 months from the first issue of the Draft Verification Report, or after more than 3 revisions.

Verification opinion

Based on the information gathered during the verification, RINA presents a Verification Opinion. The Verification Opinion includes at least one of the following opinions:

1. Positive opinion for Limited assurance level;
2. Positive opinion for Reasonable assurance level;
3. Negative opinon.

The Verification Opinion contains the following information:

a) identification of the activity connected to GHGs;
b) identification of the GHG declaration, including the date and period concerned of the GHG statement;
c) identification of the responsible party and declaration of the exclusive responsibility of the responsible party in relation to the GHG statement;
d) identification of the criteria used to compile and evaluate the GHG statement;
e) a declaration certifying that the verification of the GHG statement was carried out in accordance with the reference standard;
f) the verifier's conclusion, including the level of assurance, if applicable;
g) the date of the opinion.

CHAPTER 6 – DECISION AND ISSUANCE OF THE VALIDATION/VERIFICATION CLAIM

The Final Report and Opinion are subject to an independent technical review and decision to ensure that the validation/verification process has been carried out in accordance with the agreed scheme/programmeme, that the procedures for the validation/verification activities have been properly followed and that due diligence and professional judgment have been applied.

The person in charge of the independent technical review also assesses whether the gathered evidence is sufficient to allow RINA to issue a validation/verification opinion with reasonable certainty.

RINA informs the organization in writing of the conclusions it has reached regarding the validation/verification.

CHAPTER 7 – REVISION AND REVOCATION OF THE DECLARATION

The provisions of the General Regulations for the validation and verification of information declared in claims apply.

CHAPTER 8 - HANDLING COMPLAINTS AND APPEALS

The provisions of the General Regulations for the validation and verification of information declared in claims apply.

CHAPTER 9 - CONTRACTUAL CONDITIONS

The provisions of the General Regulations for the validation and verification of information declared in claims apply.

CHAPTER 10 - AGREED PROCEDURES (AUP)

RINA may perform an AUP engagement provided that the intended user agrees on the evidence collection activities and assumes responsibility for these procedures.

If the organization requests as a result of the service provided a report on the results of the verification activity without indicating an Opinion, RINA will explicitly agree at the contractual level with the customer, in the offer and in the contract:

- the procedures to be carried out;
- the elements to be verified;
- the criteria for collecting evidence;
- the criteria to be used to determine the results;
- the minimum elements to be reported on the report.

If the intended user intends to disclose the results of the agreed procedure to a wider audience (e.g. public statement), any limitations on disclosure of the information contained in the report must be specified both in the agreement signed with the intended user and in the report itself.

CHAPTER 11 – MIXED ENGAGEMENT

A mixed engagement is an engagement combining verification and validation activities performed at the same time and on the same GHG statement.

For each engagement, it is essential to define between RINA and the Organization: the boundaries, the methodology applied (for example the verification is based on risk, the validation on the project, the AUP is configured as the execution of verification activities), the results obtained from the execution of each type of commitment.

RINA will issue a single opinion at the end of the activities containing the opinions on the engagements as agreed with the Organization (client).

ANNEX 1
GREENHOUSE GAS PROGRAMMEME

Introduction

A greenhouse gas programmeme (GHG programmeme, offset programme, "Programmeme") performs three basic functions: (1) develops and approves standards that establish criteria for the quality of carbon credits (carbon offset credits); (2) examine GHG projects (offset projects) against these standards, usually with the help of a third-party verifier; if applicable, (3) operate registry systems that issue, transfer, and withdraw offsetting credits.

The carbon credit generation programme applies only to the voluntary market (Verified Emission Reductions, VER). The requirements of the Programmeme are to be considered in addition to those of the ISO 14064 series of standards.

For the meaning of the terms and their definitions, see ISO 14064-2.

Rules

The Programmeme shall have documented procedures describing how it operates; these procedures must be public and document at least:

1. internal roles and responsibilities
2. the process of evaluating the eligibility of projects
3. the record management method (if provided)
4. the validation/verification methods
5. the methods of communication with third parties
6. stakeholder engagement rules

The Programme shall also document the access rules of the projects for participation in the Programme itself and the methodologies for quantifying emissions.

Requirements

The Programmeme defines the minimum requirements that projects shall meet in order to be included in the Programme itself; these minimum requirements shall concern:

1. eligibility;
2. additionality (project situation);
3. permancence;
4. credit quantification;
5. socio-environmental characteristics;
6. double counting;
7. leakage;
8. baseline;
9. parameters to be monitored within the monitoring plan;
10. reporting methods.

In the case of additionality, the Programmeme defines the "additionality test" that the project must pass with respect to the chosen reference scenario (for example, technological test, financial test, legislative test).

Validation/verification projects

The Programme defines the methods for carrying out the validation/verification of projects in addition to what is reported in ISO 14064-3.

The Programme defines the minimum requirements to operate as a validator/verifier within the Programme itself in addition to the criteria defined by ISO 14064-3 and in compliance with the requirements of ISO 14066.

Requirements for those who buy credits

The Programme defines and documents the requirements for those who purchase credits generated by projects implemented within the Programme itself.

Credits

Credits are associated with reductions/enhancements of GHG removals that are:

- real, quantifiable and verifiable:
- additional;
- not overestimated;
- permanent;
- not otherwise claimed by anyone;
- not associated with significant social or environmental harm.

Credits shall be transferred to a registry (or to the Programme registry if provided) in an amount equal to the net reduction/removal of reported and verified GHG emissions

Programmeme Registry

The programme may define a register relating to the credits generated through the projects carried out within it. The register shall contain at least the following information:

- names and reference data of those who carried out the project;
- amount of reduction in emissions/enhancement in GHG removals;
- type of project;
- place of realization of the project;
- connection to the project documentation and to its proponent;
- validation / verification;
- period of validity;
- credits sold;
- remaining credit.

The register shall be publicly available.