



International
Carbon
Registry

ICR methodology requirements

Summary

ICR serves as a framework for climate projects of any sizes where environmental integrity is promoted with credibility, consistency and transparency of quantification, monitoring, reporting, validation, and verification.

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1. Introduction

This document provides requirements for developing new methodologies under the ICR program. The purpose of this document is to support project proponents, methodology developers, and validation/verification bodies (VVBs) in developing and assessing methodologies.

1.1 Objective

The objectives of this document are to:

- (a) provide accessible requirements applicable to all types of climate-related mitigation methodologies;
- (b) facilitate and promote transparency by all parties involved in the ICR, both emitters and project proponents;
- (c) ensure the quality and consistency of methodology design prepared by methodology developers and submitted to ICR for approval;
- (d) ensure consistency and quality of validation of new methodologies;
- (e) promote the development of methodologies of emerging climate technology and solutions and their access to the carbon markets, facilitating a fast transition to a low-carbon economy.

1.2 Reference Standards

ICR methodology requirements are structured to be consistent with principles, requirements, and guidance of:

- International Organization for Standardization ISO 14064-2.
- Clean Development Mechanism/Joint Implementation (CDM/JI) and other GHG Programs.

ICR relies on terminology from reference standards. Further, CDM and other GHG programs set out principles regarding additionality and crediting mechanisms. In general, emerging methodologies shall fulfill the requirements of ISO 14064-2, and validation of methodologies shall be according to current versions of ISO 14064-3, ISO 14065, and ISO 14066.

ISO 14064-2 is a project-based standard. However, new methodologies are subject to validation according to the requirements of ISO 14064-2 on a methodology level, not project level *mutatis mutandis*, i.e., application of a validated methodology on a project level should conform to ISO 14064-2. Further approval of an assessment by ICR according to the requirements of the ICR methodology requirements and ICR requirement document according to the ICR methodology approval process.

2. Principles

The principles of the requirements are adapted from WBCSD/WRI, CDM, and ISO 14064-2. The development of methodologies shall adopt these as fundamental principles in their structure and application.

Relevance - Use data, methods, criteria, and assumptions that are appropriate for the intended use of reported information.

Completeness - Consider all relevant information that may affect the accounting and quantification of GHG Emission Mitigation.

Consistency - Enable meaningful comparisons in GHG-related information.

Accuracy - Reduce bias and uncertainties as far as is practical/cost-effective.

Transparency - Provide clear and sufficient information for reviewers to assess the credibility and reliability of GHG Emission Mitigation claims.

Conservativeness - Use conservative assumptions, values, and procedures to ensure that GHG emission mitigations are not over-estimated.

This document further sets out the requirements and structure of methodologies to be consistent with CDM and other GHG programs, facilitating consistency in applying methodologies and issuances of ICCs.

3. General Requirements

For a methodology to be approved under the ICR program, it shall demonstrate how it meets the requirements herein. Methodologies are approved according to the methodology approval process set out in the ICR methodology approval process.

Methodologies shall encourage ambition over time; encourage broad participation; be real, transparent, conservative, credible, and below 'business as usual'; avoid leakage where applicable; recognize suppressed demand. Methodologies shall include relevant assumptions, parameters, data sources, and key factors. Methodologies shall also consider uncertainty, leakage, policies and measures, and relevant circumstances, including social, economic, environmental, and technological circumstances, and address reversals where applicable.

Methodologies may be developed by project proponents, stakeholders, or ICR. Methodologies shall be validated by a VVB accredited for the sectoral scope the methodology applies to and be approved by ICR through the ICR methodology approval process, confirming its conformity to the ICR requirement document, the requirements herein, and ISO 14064-2. Methodologies shall demonstrate how they meet the requirements in this document and ISO 14064-2 at a methodology level. Methodologies shall be written clearly and concisely.

Methodologies shall adopt the ICR methodology description template in as much detail as possible, though ICR will allow for different structures of methodologies. Methodologies may apply modular approaches and/or tools for specific tasks and different approaches for demonstration of additionality and baseline, clearly stating how the modules and/or tools are to be utilized. Methodologies may refer to and utilize modules and/or tools that other approved GHG programs have approved if their application conforms to ISO 14064-2 and ICR requirements. The methodology description provides the structure of the methodology, and separate modules and/or tools are used to perform specific methodological tasks.

ICR methodologies and approved methodologies may be revised under the ICR program. Methodology revisions are applicable when only minor alterations to an existing methodology are required to describe project activities appropriately. Methodology revisions are also applicable when an existing methodology can be materially improved, which includes comparing existing and proposed revisions to show that changes will deliver material improvements resulting in greater accuracy of measurement of GHG emissions mitigations, improved conservatism, and/or reduced costs. Methodology revisions follow the ICRs methodology approval process.

Methodologies shall include sufficient information on their application and evidence to allow readers to see how applying the methodology results in mitigating climate change. Methodology developers may exclude information on intellectual property rights and/or confidential information important for the application of the methodology in the published methodology. However, all relevant information demonstrating conformity to the ICR methodology requirements shall be provided to the VVB and ICR.

4. Methodology Components

4.1 Other Methodologies and Sources

Methodology developers shall list all methodologies reviewed during the methodology development, both those of similar nature and those utilized in constructing the proposed methodology, along with modules/tools/regulations.

4.2 Summary Description of the Methodology

The methodology developer shall provide a summary of the proposed methodology where essential components and associated project activities are described generally.

4.3 Definitions

Methodologies may set out defined terms in addition to those already included in the ICR program to help users understand the context of the methodology and improve its readability. Methodologies shall not define terms that are already included in the ICR program.

4.4 Applicability Conditions

Applicability conditions define conditions where the project activities can be applied, e.g., geographic location, technology, and any other conditions where the methodology may or may not be applicable.

4.5 Boundary

Methodologies shall establish criteria and procedures for describing and determining project boundaries, identifying GHG SSRs, and justifying any inclusion or exclusion of GHG SSRs. The boundary shall include GHG SSRs controlled by the project proponent and GHG SSRs related to or affected by the project activity.

4.6 Baseline Scenario

The baseline scenario represents activities in the absence of the project activity and associated GHG emissions. The baseline scenario shall be determined to allow for an accurate comparison between the GHG emissions that would have occurred under the baseline scenario and the GHG emission mitigations achieved by the project activities.

The methodology shall require the application of one of the following approach(es) for determining the baseline, accompanied by a justification for the appropriateness of the choices:

A performance-based approach, taking into account the following:

- (i) Best available technologies that represent an economically feasible and environmentally sound course of action, where appropriate;
- (ii) An ambitious benchmark approach where the baseline is set at least at the average emission level of the best performing comparable activities providing similar outputs and services in a defined scope in similar social, economic, environmental, and technological circumstances;
- (iii) An approach based on actual or historical emissions, adjusted downwards to encourage ambition over time.

For the baseline scenario, methodologies may utilize tools approved under the CDM.

4.7 Additionality

Methodologies shall establish a procedure for demonstrating additionality. Methodologies shall demonstrate additionality using a project, performance, and/or activity method. Methodologies shall either apply and reference an appropriate and high integrity additionality tool approved under an approved GHG program or develop a full and detailed procedure for demonstrating and assessing additionality directly within the methodology or within a separate tool. See further additionality requirements in the ICR requirement document.

4.8 Quantification of GHG Emission Mitigations

Net GHG emission mitigations achieved by projects are the basis for the volume of ICCs that can be issued, where baseline emissions and project emissions and/or removals must be accurately quantified in order to determine net emission reductions and removals achieved by projects. Methodologies shall therefore set out procedures for quantifying these emissions and/or removals. Methodologies shall establish criteria and procedures for quantifying GHG emissions mitigations for all selected GHG SSRs identified in the project boundary.

Methodologies shall establish separate criteria and procedures for quantifying net GHG emission mitigations for the selected GHG SSRs for both the project (including leakage) and the baseline scenarios. Quantification of net GHG emission mitigations generated by the project shall be based on either of the two options:

- The difference between the GHG emissions and/or removals and GHG SSRs relevant for both the project and the baseline scenario.
- The difference between carbon stocks and GHG SSRs that are relevant for both the project and the baseline scenario.

Methodologies shall establish procedures to quantify leakage where the potential for leakage is identified. When quantifying GHG emissions and/or removals achieved by the project, the sum of emissions resulting from project activities and leakage shall be withdrawn.

Where appropriate, net GHG emission reductions and removals, and net change in carbon stocks, shall be quantified separately for the project and the baseline scenarios for each relevant GHG and its corresponding GHG SSRs.

Where there's a risk of reversals, the methodology shall establish criteria and procedures to quantify associated risk for the determination of buffer.

4.9 Monitoring

Methodologies shall describe data and parameters available at validation, i.e., those fixed for the duration of the project crediting period, and data and parameters that are measured and monitored for verification, i.e., those monitored during the project crediting period. Furthermore, methodologies shall describe the criteria and procedures for obtaining, recording, compiling, and analyzing monitored data and parameters.

5. Implementation of a Project

For consistency in the application of the methodology at the project level, the methodology developer shall design a project following the requirements of ISO 14064-2, the requirements of the proposed methodology, and the ICR requirement document. The project may be designed for demonstration of the methodology application only.

The methodology developer and/or a project proponent shall use the ICR project design description (PDD) template to provide details of the project and its GHG emissions mitigations, including schematics, specifications, and a description of how the project mitigates GHG emissions with the application of the proposed methodology. The project proponent shall follow the instructions provided in the template and ICR requirement document.

6. Validation

Validation of methodologies is the process of evaluating the proposed new methodology and its reasonableness of assumption, limitations, and methods included with its application and how it will support a statement of the outcome of the implementation of a project and its activities based on its application. Further evaluation of its conformity to ISO 14064-2, the ICR methodology requirements, and the ICR requirement document. All proposed methodologies are subject to validation of the proposed new methodology and the PDD developed following section 5.

6.1 Validation

Validation involves determining if the proposed methodology is eligible to generate GHG emission mitigation outcomes when applied. Validation shall be conducted according to ISO 14064-3 and ISO 14065. The validation report shall be made public.

Validation of the methodology may be in conjunction with validation of a PDD and verification of mitigation outcomes.

6.1.1 Validation Process

The validation process shall follow the requirements in ISO 14064-3. The criteria for validation are ISO 14064-2, the requirements herein, and applicable requirements from the ICR requirement document. During methodology assessment, VVBs need to assess whether the methodology conforms to the validation criteria with the establishment of criteria and procedures ensuring conservativeness and scientific integrity.

Methodology assessment requires background research, review of documentation, and interviews with experts and key stakeholders to determine whether the criteria and procedures established in the methodology conform to requirements and principles set out in the ICR requirement document and good practice standards¹ and the requirements herein. VVBs need to consider underlying assumptions and approaches used in the methodology and assess whether and how the methodology incorporates relevant scientific and sector-specific considerations.

VVBs need to consider that methodologies shall be written in a manner that provides a prescriptive set of criteria and procedures that projects can apply and be assessed by VVBs to minimize subjective interpretation by project proponents applying the methodology and VVBs assessing projects. This includes using precise language, avoiding vague terminology, and ensuring the application and proper use of the keywords “can,” “shall,” “should,” and “may.”

6.1.2 Competence

The validation team shall meet the competence requirements in ISO 14065 and ISO 14066.

6.1.3 Validation Report

The validation report shall describe the validation process, any findings raised during validation, actions to react, and the conclusions reached by the validation body. The validation report shall include a validation statement and the opinion of the validation.

The validation statement shall be according to ISO 14065.

¹ Good practice guidance can come from a recognized origin, such as, scientific literature, industry practices and associations, similar methodologies, benchmarking, GHG program tools, or others that are fit for the purpose

6.1.4 Validation Bodies

Validation bodies are eligible to assess the proposed new methodology and accompanied PDD if they have signed an agreement with ICR and are accredited under an ICR approved GHG program and/or accredited under ISO 14065 by an accreditation body that is a member of the International Accreditation Forum.

The VVB shall hold such accreditation or approval for validation or verification (as applicable) for the sectoral scope(s) applicable to the proposed methodology. Where the methodology falls under more than one sectoral scope, the VVB shall hold accreditation or approval for validation or verification (as applicable) for all relevant sectoral scopes.

7. Methodology Revision

ICR methodologies and methodologies approved under other GHG programs may be revised.

Revision of a methodology is applicable when the project activity is similar to project activities under an existing methodology, and changes needed to include the project activity in question to the existing methodology are reasonable and non-extensive. Methodology revisions are also applicable if a methodology can be improved so that changes will deliver material improvements resulting in greater accuracy of measurement of GHG emissions mitigations, improved conservatism, and/or reduced costs.

Methodology revisions shall be prepared using the ICR methodology description template. They shall follow the ICR methodology approval process and are subject to conformity to all ISO 14064-2, ICR methodology requirements, and the ICR requirement document.