



International Carbon Registry

ICR requirement document

Summary

ICR serves as a platform 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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Table of Contents

1.	Background	4
1.1	Introduction	4
1.2	Objective	5
1.3	Reference Standards	5
1.4	Methodologies	6
2.	Principles	8
3.	General Requirements	9
3.1	General	9
3.2	Documentation	10
3.3	Eligibility Criteria	10
3.3.1	Methodologies	10
3.4	Start Date and Crediting	11
3.4.1	Start Date	12
3.4.2	Crediting Period	12
3.5	Adjustment	12
3.6	Project Location	12
3.7	Ownership	13
3.8	Other GHG Programs	13
3.9	Other certifications	13
3.10	Host country attestation	13
4.	Project Design	14
4.1	General	14
4.2	Project Design Description – Describing the project	14
4.2.1	Safeguards	15
4.3	Boundary (Identifying GHG SSRs relevant to the project)	16
4.4	Baseline (Determining the GHG baseline)	16
4.4.1	Additionality	16
4.5	Identifying GHG SSRs Relevant to the Baseline Scenario	18
4.6	Selecting GHG SSRs for monitoring or estimating GHG emissions and removals	18
4.7	Quantification	18
4.8	Quantifying GHG emission reductions and removal enhancements	19
4.8.1	Leakage	19
4.8.2	Non-Permanence	19
4.9	Data (Managing data quality)	20
4.10	Monitoring (Monitoring the GHG project)	20
4.11	Documentation (Documenting the GHG project)	21
4.12	Deviation	21

5.	Grouped projects	22
5.1	General	22
5.2	Eligibility criteria for inclusion of additional project activities.....	22
5.3	Description of project activities under the grouped project	22
5.4	Inclusion of project activities post registration	23
6.	Validation	24
6.1	Validation	24
6.1.1	Validation Process	24
6.1.2	Competence	24
6.1.3	Validation Report	24
7.	Verification.....	26
7.1	Verification.....	26
7.1.1	Verification Process	26
7.1.2	Competence	26
7.1.3	Verification Report	26
8.	Validation and Verification Bodies	27
	Appendix – Document History	28

1. Background

1.1 Introduction

Immediate climate action is required to transition the world to a low-carbon economy. The need grows more urgent by the day, as evidenced in Working Group I's contribution to the Sixth Assessment Report¹ by the Intergovernmental Panel on Climate Change (IPCC) and further emphasized in the April 2022 report by Working Group III's *Climate Change 2022: Mitigation of Climate Change*². To achieve the goals of the Paris Agreement to limit global warming to 1.5 degrees Celsius, the global community needs to reach Net-zero emissions no later than 2050. Although the primary focus of governments and corporations must be on reducing emissions, establishing a credible carbon market mechanism is paramount to support the goals of the Paris Agreement and those of the United Nations for Sustainable Development. The voluntary carbon market has the potential to significantly accelerate efforts to mitigate climate change and achieve the goals of the Paris Agreement.

Carbon credits enable organizations to compensate for emissions by financing the avoidance/reduction of emissions from other sources or removing greenhouse gases from the atmosphere, thus contributing to the transition to global Net-zero. Carbon credits can also support emerging climate technologies by increasing financial gain and allowing for earlier market penetration. This can enable the maturation and deployment of emerging innovative methods, which can position the solution in a more competitive position against carbon-intensive alternatives. Therefore, it is urgent to enable emerging technologies to enter the voluntary carbon market to access finance that will help deploy these solutions. Such global deployment can decrease the rate at which emerging economies utilize fossil-fueled solutions to meet their energy needs. The investments needed to scale emerging low-carbon technologies do not meet today's markets' risk and return expectations. An effective and adaptable carbon market can facilitate capital flows to these technologies through carbon offsetting mechanisms established on the principles that emerged in initiatives such as the Clean Development Mechanism.

ICR is a Greenhouse Gas (GHG) program and an initiative in Iceland to facilitate financing climate projects while safeguarding environmental integrity and contributing to a sustainable and low-carbon economy. The ICR serves as a platform for climate projects of any size where environmental integrity is promoted with credibility, consistency, and transparency of

¹ IPCC, 2021: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, In press, doi:[10.1017/9781009157896](https://doi.org/10.1017/9781009157896).

² IPCC, 2022: *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: [10.1017/9781009157926](https://doi.org/10.1017/9781009157926)

quantification, monitoring, reporting, validation, and verification. ICR recognizes the need to scale and accelerate the decarbonization of the economy, with climate financing for climate projects avoiding or reducing GHG emissions and sequestering or removing GHG from the atmosphere. ICR also recognizes the need to bring prominent technologies and nature-based solutions to light that have yet to establish a methodology according to the CDM or other GHG Programs but need the financial support of the emerging carbon markets to be viable. Therefore, the ICR is based on ISO standards, resulting in a more effective and efficient review of emerging methodologies. ICR welcomes GHG projects from the entire world. However, it places particular emphasis on decarbonizing energy production and utilization and technological development for carbon removal projects and includes sectors that have not participated in this emerging global carbon market.

ICR's mission is to build confidence in the carbon market for investors, project developers, corporations, the environmental community, authorities, and the public. The goal is to facilitate the necessary scaling of the voluntary carbon markets and the underlying climate solutions and utilize the market mechanism for real climate impacts. By that, financing climate projects viable for a fast transition to a low-carbon economy can be accelerated.

1.2 Objective

The objectives of ICR are to:

- (a) provide accessible requirements structured around ISO 14064-2, applicable to all types of climate-related mitigation projects, and facilitate and promote transparency by all parties involved in the ICR, both organizations and project proponents;
- (b) ensure the quality and consistency of project design descriptions and monitoring reports prepared by project proponents submitted to ICR during the project cycle;
- (c) ensure consistency and quality of validation and verification reports prepared by validation/verification bodies submitted to ICR during the project cycle;
- (d) promote efficiency, effectiveness, integrity, and transparency of climate projects;
- (e) promote the development of emerging technology and climate solutions, facilitating a fast transition to a low-carbon economy.

1.3 Reference Standards

ICR Project Requirement Document is structured to be consistent with principles, requirements, and guidance of:

- International Organization for Standardization ISO 14064-2, ISO 14064-3, ISO 14065, and ISO 14066 (ISO).
- World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI) - The GHG Protocol for Project Accounting (WBCSD/WRI)
- Clean Development Mechanism/Joint Implementation (CDM/JI) emerged during the Kyoto protocol and voluntary GHG programs.

The ISO 14060 family of standards provides clarity and consistency for quantifying, monitoring, reporting, and validating and verifying GHG mitigations to support sustainable development through a low-carbon economy and benefit organizations, project proponents, and interested parties worldwide. Specifically, the use of the ISO 14060 family of standards:

- Enhances the environmental integrity of GHG quantification.
- Enhances the credibility, consistency, and transparency of GHG quantification, monitoring, reporting, verification, and validation.
- Facilitates the development and implementation of GHG management strategies and plans.
- Facilitates the development and implementation of mitigation actions through GHG emission mitigations.
- Facilitates the ability to track performance and progress in reducing GHG emissions and/or increase in GHG removals.

All contain consistent general requirements for quantifying GHG mitigations that result from project-based activities, including requirements for:

- Establishing GHG accounting boundaries.
- Estimating baseline emissions.
- Determining project-case emissions.
- Monitoring project activities.

ISO and WBCSD/WRI are generally consistent in their requirements but have different structures and terminologies. ICR relies on terminology from either or all standards, depending on context. Further, CDM and other GHG programs set out principles regarding additionality and crediting mechanisms. In general, Climate projects and emerging climate solutions shall conform to the requirements of *ISO 14064-2 Greenhouse gases — Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements*, and validation of projects and methodologies and verification of GHG emission mitigation outcomes shall be according to current versions of *ISO 14064-3 Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements*, *ISO 14065 General principles and requirements for bodies validating and verifying environmental information* and *ISO 14066 Greenhouse gases — Competence requirements for greenhouse gas validation teams and verification teams*.

1.4 Methodologies

Generally, GHG programs provide robust methodologies for the implementation of climate projects that projects need to conform to for eligibility under the GHG program. Approval of new methodologies follows a strict process that ICR provides. Methodology development and recognition under GHG programs can however delay implementation and decelerate scaling of climate action where solutions cannot utilize VCMs to support the implementation of impactful

solutions. There is a need for an effective and progressive response to the urgent threat of climate change based on the best available scientific knowledge. At the same time, there's a call for the standardization of VCMs to enhance comparability and consistency. ISO is an independent, non-governmental international organization with a membership of 167 national standards bodies. ISO brings together experts to share knowledge and develop voluntary, consensus-based, market-relevant international standards through its members. International organizations, governmental and non-governmental, in liaison with ISO, take part in the work of developing standards. Standards are developed by sector-specific experts. ISO produces documents supporting scientific knowledge transformation into tools that will help address climate change. ISO standards, therefore, support innovation and provide solutions to global challenges such as climate change.

ISO 14064-2 provides principles and requirements for determining baselines, and monitoring, quantifying, and reporting of project emissions. It focuses on GHG projects or project-based activities specifically designed to reduce GHG emissions and/or enhance GHG removals.

To provide a platform for climate actions that haven't a go-to approved methodology and support accelerated deployment of prominent climate solutions, ICR allows registration of projects that conform to ISO 14064-2 and the requirements herein, providing them with access to VCMs with the issuance of carbon credits prior to methodology approval.

2. Principles

The principles of the requirements are adapted from WBCSD/WRI, CDM, and ISO 14064-2. All climate projects shall strive to follow these principles, and methodology development shall adopt these as fundamental principles. Applying the principles is crucial to safeguarding GHG-related information as a true and fair account. The principles are the basis for and will guide the application of the requirements in this document.

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.

ICR sets further out requirements consistent with the CDM and other GHG programs facilitating registration of climate projects and issuances of carbon credits that can be traded and used for compensating for and offsetting GHG emissions.

3. General Requirements

Climate projects eligible for registration and issuance of International Carbon Credits (ICCs) shall include physical action/implementation.

Projects may be located in any part of the world. They shall not be implemented due to statutory requirements in the host country, or they are systematically not enforced, and non-compliance with those requirements is widespread in the host country and complies with all applicable statutory requirements. Projects shall deliver real, measurable, and additional climate mitigation outcomes compared to their baseline. The application of ISO 14064-2 is indispensable for applying the ICR requirement document.

In order to avoid double counting, projects shall not be included in any other voluntary or compliance GHG program. If the project boundary overlaps with a project of a similar nature registered with another GHG program, the project proponent shall demonstrate that there is no double accounting of impacts.

GHG emission mitigations recognized as ICCs equal to one metric ton of carbon dioxide equivalent (CO₂-e) avoided, reduced, sequestered, or removed. After projects are registered, ICC credits may be issued based on the amount GHG avoided, reduced, sequestered, or removed and reported by the project proponent and validated and verified by an approved Validation and Verification body (VVB) and according to ICR Process Requirements.

3.1 General

Projects shall conform to all requirements included herein, the requirements set out in ISO 14064-2³, and follow the ICR process requirements.

While designing, implementing, and monitoring a project activity or any activities within a grouped project, the project proponents shall consider and use any applicable standards, methodologies, standardized baselines, methodological tools, guidelines, and other regulatory documents.

Unless stated otherwise, requirements and principles provided in this document apply both to stand-alone projects and project activities included in a grouped project. Requirements for projects shall be read in terms of both stand-alone projects and a project activity included under a grouped project. Additional requirements for project activities included under a grouped project are provided in section 5.

Project proponents shall use the most recent version of ICR templates for readability and consistency.

³ ISO 14064-2 may be found on International Standards Organizations website.

<https://www.iso.org/standard/66454.html>

3.2 Documentation

Project proponents applying to have a project activity registered with the ICR shall prepare a project design description (PDD) using the most recent version of the applicable project design description template and have it validated by an approved VVB.

When completing the project design description, the project proponent shall provide all necessary information and documentation to demonstrate the conformity of the project activity with all applicable requirements herein and the requirements of ISO 14064-2.

The project proponent planning to issue and/or activate ICCs for GHG emission mitigations achieved by the implemented registered project activity shall prepare, for each monitoring period, a monitoring report using the most recent version of the Monitoring report template and have verified by an approved VVB.

When completing the monitoring report, the project proponents shall provide all necessary information and documentation to demonstrate the conformity of the implemented registered project activity and monitored GHG emission mitigations to all applicable requirements herein and ISO 14064-2.

When completing the project design description or monitoring report, the project proponent shall follow the instructions outlined in the templates.

3.3 Eligibility Criteria

All projects that lead to climate change mitigation conforming to requirements herein and ISO 14064-2 are eligible for registration. Projects may follow methodologies, e.g. approved methodologies in order to facilitate implementation, subject to conformity to the requirements herein and ISO 14064-2.

All projects with a start date after 1. January 2013 are eligible for registration with ICR subject to conformity to other requirements. Projects with a start date before 1. January 2020 shall demonstrate historical additionality (section 4.4.1) from its implementation and continuance of additionality at validation.

Projects with a start date before 1. January 2020 shall complete registration before 31. December 2023.

3.3.1 Methodologies

Projects validated and verified following an approved methodology are eligible if they conform to the current version of this document and the current version of the applied methodology. Approved methodologies are:

- Methodologies, modules, and tools valid and active under the Clean Development Mechanism.

- Methodologies, modules, and tools developed by ICR and approved through the methodology approval process.
- New methodologies, modules, and tools developed by project proponents and approved through the methodology approval process.

Approved methodologies are listed in the ICR approved methodologies document⁴. The project proponent may also rely upon other methodologies or establish their criteria for quantification of GHG emission mitigations if their applications demonstrate conformity to the requirements herein and ISO 14064-2. If project proponents are applying a methodology, they shall demonstrate their applicability.

Project proponents can propose approval for new methodologies for climate projects in order to facilitate the implementation of projects and their documentation. For the methodology to be approved, it shall be validated according to ISO 14064-2 by an approved VVB and requires further impartial internal screening for conformity to the requirements herein as further outlined in the ICR methodology requirements document.

3.4 Start Date and Crediting

The project's start date is the date when operations of the climate project start and begin produce GHG emission mitigation. Crediting period begins at the start date and is the period while the project is eligible for issuing ICCs.

ICCs may be issued when projects have been validated on an ex-ante basis (i.e., after validation of project and estimation on GHG emission mitigation outcomes) subject to demonstration of additionality level 4b. At issuance, such ICCs are in-active and cannot be used for offsetting purposes until they have been activated⁵. ICCs are activated on an ex-post basis (i.e. after verification that mitigations are real) and only for GHG emission mitigations within the monitoring period. Active ICCs can be retired and used for offsetting purposes.

Credits are activated sequentially according to serialization and vintage when GHG emission mitigation outcomes are verified. All ICCs have unique serial numbers with embedded information identifying the project type, location, project proponent, vintage, and other attributes. The unique serial number persists as ICCs are transferred between accounts or are retired and become offsets.

Projects that cannot demonstrate conformity to additionality level 4b may issue ICCs when GHG emission mitigations have been verified and are active at issuance.

⁴ <https://carbonregistry.com/wp-content/uploads/2022/10/ICR-Approved-Methodologies-v3.0.pdf>

⁵ First verification of mitigation outcomes can coincide with validation resulting in Ex-Post issuance.

The process of issuing and activating ICCs is described in the ICR process requirements.

3.4.1 Start Date

The project start date is the date when activities that lead to GHG emission mitigation have been implemented and the project's operations start.

3.4.2 Crediting Period

Crediting period for projects with a start date before 1. January 2021:

Crediting period for project activities is a maximum of 10 years or a conservative estimate of the technical lifetime of the installed technologies or implemented measures and associated impacts with no option of renewal. With respect of project activities involving CDR, a crediting period of a maximum of 15 years or a conservative estimate of the technical lifetime of the installed technologies or implemented measures and associated impacts, renewable a maximum of twice.

Crediting period for projects with a start date after 1. January 2021:

Crediting period for project activities is a maximum of 5 years or a conservative estimate of the technical lifetime of the installed technologies or implemented measures and associated impacts. The crediting period is renewable a maximum of twice or a maximum of 10 years with no option of renewal.

For project activities involving CDR, a crediting period of a maximum of 15 years or a conservative estimate of the technical lifetime of the installed technologies or implemented measures and associated impacts. The crediting period is renewable a maximum of twice.

Renewal of Crediting Period

Project proponents may apply at the end of the current crediting period for a renewal of the crediting period, subject to conformity to all future requirements, update of the PDD, re-evaluating baseline scenarios using tools and methodologies in effect at the time of renewal, and validation by an approved VVB.

3.5 Adjustment

The risk of non-permanence and performance of projects registered with ICR is addressed with an adjustment account held and operated by ICR. When projects issue ICCs ex-ante, they shall deposit 2% of issued ICCs to the adjustment account irrespective of sector and project type. For reversal events and/or non-performance, when the project proponent cannot compensate for the reversal or performance, ICR cancels ICCs from the adjustment account on a first-in, first-out basis. Project-based non-permanence risk adjustment is discussed in section 4.8.2.

3.6 Project Location

Projects throughout the world are eligible to be registered with ICR. Project proponents shall demonstrate the applicability of projects with regards to the requirement herein and the requirements of ISO 14064-2 if a methodology is applied in other geographic locations than its applicability.

3.7 Ownership

Full and uncontested legal ownership to control and operate projects and any transferrable instruments issued shall be demonstrated. If the ownership of legal title to instruments issued is transferred from the project beneficiaries, it shall be demonstrated.

3.8 Other GHG Programs

Project proponents shall not issue instruments for the same GHG emission mitigations under ICR and another GHG program. Projects may, however, apply for transfer of registration to ICR. If transferring, all previous documentation regarding the project activities shall be made available for ICR and the VVB. The ICR process requirements discuss requirements for transitioning from other GHG programs.

3.9 Other certifications

Projects may possess other environmental and/or social benefits certifications. Such certifications may be identified in the project design documents. The project proponent shall demonstrate the environmental and/or social benefits of the certification and make all documentation available for the VVB for validation and verification.

All monitoring for other certifications shall be identified in the monitoring report and assessed in the validation and verification reports.

3.10 Host country attestation

Projects that intend to be eligible for international trading shall obtain and submit a letter of assurance and authorization from the host country or countries where the emission mitigations occur.

4. Project Design

4.1 General

Requirements set out in this section apply to all project activities, including those under a grouped project that seeks to be registered under ICR.

For submission of projects to ICR for the purpose of registration, project proponents shall design the project according to the requirements of ISO 14064-2, the requirements herein, and, where applicable, the requirements of the applied methodology.

If applying an approved methodology, the application shall be according to the requirements provided and utilization of tools and modules referred to, subject to section 4.12. Project proponents may rely on relevant current good practice guidance tools⁶.

Projects may implement multiple project activities. When more than one methodology is applied to a project, the project design description shall specify each activity separately. Applicability conditions, demonstration of additionality, determination of the baseline scenario, quantification, and permanence risk assessment (where applicable) shall be applied separately to each project activity unless applied methodologies refer to the same tools. The project proponent shall consider all cross effects of using different methodologies.

Where the requirements provided in an applied methodology, module, or tool conflict with the requirements herein and/or ISO 14064-2 and regarding the registration process, ICR requirements, ICR process requirements, and ISO 14064-2 take precedence.

4.2 Project Design Description – Describing the project

For submitting projects to ICR, the project proponent shall use the ICR project design description 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. The project proponent shall follow the instructions in the template and section 6.2 in ISO 14064-2.

The project proponent shall provide a detailed description of the geographic boundary of the project activities and the physical location of facilities as applicable to project activities. The location of the boundaries shall be documented with GPS coordinates. The project proponent shall provide maps, shapefiles, and other relevant information to delineate the project boundary as applicable.

All GHG emission mitigations shall be expressed in tCO₂-e.

⁶ Good practice guidance can come from a recognized origin, such as industry practices and associations, similar projects, benchmarking, GHG program tools, or others that are fit for the purpose

If deviations have been applied for a project that has been validated and is no longer consistent with the validated project design description and the estimated GHG emissions mitigations, the project proponent shall have the project re-validated.

The project proponent shall provide details on whether the implementation involves reduction in emissions (avoidance), if it removes CO₂ (CDR), or is a hybrid project (avoidance and removal) along with the appropriate sector of the project implementation.

The project shall be implemented and operated conforming to the project design description. The project proponent shall indicate any short-term deviations from the project design description, applied methodologies, other applied documents, or permanent changes to the registered project activity. All deviations shall be reported in an updated version of the project design description and validated under subsequent verification.

4.2.1 Safeguards

Project proponents shall identify the project's negative environmental and socio-economic impacts and engage with local stakeholders during the project design and implementation of the activities. All projects shall undergo a 30-day public comment period. The project proponent shall respond to all comments received and demonstrate actions implemented to the VVB.

The project proponent shall implement a process of continuous communication with local stakeholders.

The project proponent shall recognize, respect, and support local property rights and not infringe on private or public property. The project proponent shall not relocate people off their lands without consent, and when relocation occurs, it shall be carried out with just and fair compensation.

The project shall minimize and, where possible, avoid negative environmental and social impacts. If present, the project proponent shall address all negative environmental and socio-economic impacts arising from the project activities and input received during a consultation with local stakeholders and ongoing communications.

Where applicable, project proponents shall minimize the risk of damage to ecosystems by considering:

- (a) not introducing invasive species or allowing an invasive species to thrive through project activities.
- (b) the use of non-native species over native species and their potential adverse effects.
- (c) the use of fertilizers, chemical pesticides, biological control agents, and other inputs used by the project and their possible adverse effects.

Additional certification standards may be applied to demonstrate social and environmental benefits beyond GHG emission mitigations.

4.3 Boundary (Identifying GHG SSRs relevant to the project)

The project proponent shall describe, identify, and assess relevant GHG SSRs to the project and the baseline scenario and determine if they are controlled, related, or affected by the project (leakage), and if they shall be included or excluded. Any grounds for exclusion shall be demonstrated and justified. The project proponent may follow a methodology to determine the project boundary.

4.4 Baseline (Determining the GHG baseline)

The baseline scenario represents activities and GHG emissions that are most likely to occur in the absence of the project activity. The project proponent shall select or establish, describe, and apply criteria and procedures to identify, determine, and justify the GHG baseline scenario. The baseline scenario shall be accurately determined so that an accurate comparison can be made between the GHG emissions that would have occurred under the baseline scenario and the GHG emission mitigations achieved by project activities. In developing the baseline scenario, project proponents shall justify assumptions, values, and procedures so that the most plausible baseline scenario leads to a conservative estimation of GHG emission mitigations.

When applying a methodology, the project proponent should establish and describe the baseline scenario according to the applied methodology's requirements and justify any deviations from the methodology.

Project proponents should check that the data needed to determine the baseline scenario are available before attempting to identify the baseline scenario. Available data shall be relevant, reliable, and verifiable and may involve industry, country, regional, and local information. All sources for obtaining necessary information shall be documented.

4.4.1 Additionality

Additionality represents a net environmental benefit and real mitigation of GHG emissions in excess of the baseline scenario. The concept of additionality is a vital consideration for quantifying project-based GHG emissions mitigation. Additionality shall be demonstrated with a positive outcome of a project-specific additionality test. ICR defines additionality as a multilevel principle, ranging from Level 1 to Level 5, where these levels are laid out as follows:

Level 1 additionality – ISO 14064-2 GHG emissions additionality

GHG emission mitigations shall be additional to the baseline scenario. ISO 14064-2 addresses additionality as the project proponent shall select or establish, justify, and apply criteria and procedures for demonstrating that the project results in GHG emissions mitigations that are additional to what would occur in comparison to the determined GHG baseline.

Level 2a additionality – Statutory additionality

The project shall implement actions that go beyond statutory requirements. Projects are statutory additional if their implementation and/or operation is not required by any law, statute, or other regulatory framework, agreements, settlements, or other legally binding mandates requiring implementation and operation or requiring implementation of similar measures that would result in the same levels of GHG emission mitigations in the host country.

Level 2b additionality – Non-enforcement additionality

Projects are non-enforcement additional if their implementation and/or operation is subject to statutory requirements that are systematically not enforced and where non-compliance with those requirements is widespread in the host country.

Level 3 additionality – Technology, institutional, common practice additionality

The project shall implement climate actions that are subject to barriers to implementation or accelerate the deployment of technology or activities.

Projects may be technology, institutional, or common practice additional if it faces significant organizational, cultural, social, or technological barriers to implementation, where carbon market incentives are essential in overcoming these barriers. These barriers may be a lack of trained personnel, supporting infrastructure for implementation, logistics for maintenance, and lack of knowledge on practices. The project activity may lead to accelerated technology deployment that would unlikely have occurred otherwise. If an action can demonstrate the promotion of an accelerated deployment of a technology that would otherwise face difficulties and have slower penetration, then it is assumed that the increased rate results in increased GHG emissions mitigations.

Level 4a additionality – Financial additionality I

Projects are considered Level 4a additional if they face financial limitations that can be mitigated by revenues from the sale of carbon credits where carbon credit revenues are reasonably expected to incentivize the implementation of projects or carbon credit revenues important in maintaining the projects' operations' ongoing financial viability post-implementation.

A project is Level 4a financially additional if the project activity results in higher costs or relatively lower profitability than would have otherwise occurred in the baseline scenario.

Level 4b additionality – Financial additionality II

Projects are considered Level 4b additional if they face significant financial limitations that can be avoided by revenues from the sale of carbon credits where carbon credit revenues are the major or only source of revenues and carbon credit revenues are a precondition for the implementation of the project and/or carbon credits revenues are essential in maintaining the project operations and ongoing financial viability post-implementation.

Level 5 additionality – Policy additionality

Projects are considered Level 5 additional if their implementation goes beyond its host country's climate objectives and lies outside the scope of the climate action strategy towards the host country's NDCs.

Additionality Test

Project proponents shall demonstrate the project's additionality and at a minimum conform to levels 1, 2, and 3. However, the project may demonstrate if it conforms to supplementary additionality levels. When applying a methodology, the project proponent should follow additionality testing guidelines.

For additionality testing, project proponents may apply the latest version of: *CDM Tool for demonstration and assessment of additionality*; *Combined tool to identify the baseline scenario and demonstrate additionality*; *Positive lists of technologies*; or other tools from a recognized origin. For policy additionality, the project proponent shall rely on and refer to the host country's current NDC. Projects are labeled with their additionality levels in the ICR registry platform.

4.5 Identifying GHG SSRs Relevant to the Baseline Scenario

The project proponent shall identify GHG SSRs relevant to the project baseline and its boundary to the extent possible. This means applying conservative assumptions, emission factors, and calculation methods, taking criteria and procedures according to section 6.3 in ISO 14064-2 into account, or following the applied methodology.

The project proponent shall justify any exclusion of any GHG SSR. Emission factors shall be 100-year global warming potential (GWP) values from the Intergovernmental Panel on Climate Change (IPCC). The project proponent shall use GWP values from the fifth assessment report (AR5) or later unless it can justify the use of earlier GWP values.

4.6 Selecting GHG SSRs for monitoring or estimating GHG emissions and removals

Project proponents shall follow the applied methodology or establish and apply criteria and procedures for selecting GHG SSRs for monitoring. When establishing criteria and procedures, the project proponents should follow Annex A.3.2.1 in ISO 14064-2.

4.7 Quantification

GHG emission mitigations achieved by the project activity and addressing leakage (GHG SSRs affected by the project) lay the foundation for the volume of ICCs that can be issued. Project proponents shall follow a methodology to quantify GHG emissions mitigations or establish criteria and procedures for the quantification. The quantification shall include all GHG SSRs identified and all GHGs and shall be reported in tCO₂-e.

The project proponent shall estimate GHG emissions mitigations for selected GHG SSRs separately for:

1. each relevant GHG for each GHG SSR relevant for the project;
2. each GHG SSR relevant for the baseline scenario.

Net GHG emissions and/or removals generated by the project activities shall be quantified and reported.

4.8 Quantifying GHG emission reductions and removal enhancements

Based on criteria from section 4.7, the project proponent shall select and follow criteria from a methodology or establish criteria and procedures for quantifying aggregated GHG emission mitigations during the implementation and operation of the project to undertake ex-post calculations of GHG emission mitigations. The project proponent shall describe all steps to be undertaken, resulting in quantification as the net difference between the baseline and the GHG emissions mitigations considering leakage. The project proponent shall provide ex-post calculation of GHG emission mitigations for each monitoring period.

The project proponent shall provide ex-ante projections for each monitoring period and for the total projections for the GHG emission mitigations for the crediting period.

The quantification shall convert all GHGs to tCO₂-e.

All ex-ante estimates and ex-post calculations shall be converted to CO₂-e using GWP values from the IPCC AR5 unless earlier GWP values can be justified.

4.8.1 Leakage

Potential sources of leakage (affected GHG SSRs), as identified in section 4.3, and the location of areas where leakage could occur shall be identified, accompanied by a description of any appropriate mitigation measures. Any leakage assessment shall be conservative, shall not account for positive leakage, and shall be subtracted from the quantification of GHG emission mitigations of the project. Any potential leakage shall be monitored. All leakage shall be deducted from the total GHG emission mitigations of the project and subtracted from the number of GHG emission mitigations eligible to be activated.

4.8.2 Non-Permanence

Project proponent implementing AFOLU projects and CDR subject to a risk of reversal shall deposit non-tradable buffer credits to cover unforeseen losses in carbon stocks.

A proportion of expected GHG emission mitigations shall be transferred to an adjustment account to protect projects from unexpected reductions in carbon stocks or increases in emissions. The project proponent shall establish and apply criteria, procedures, and/or methodologies to assess the risk of a reversal of GHG emission mitigations. A reversal risk assessment shall address the risk of non-permanence, including both general and project-specific risk factors. General risk factors include financial, technical, management, rising land opportunity costs, regulatory and social instability, and natural disturbances. Project-specific risk factors may

vary by project type. Project proponents may use a relevant current good practice guidance risk assessment tool⁷ or rely on ISO 31000 to assess the non-permanence risk.

The number of credits to be deposited to the AFOLU and CDR pooled buffer adjustment account is determined by the risk assessment.

Irrespective of the risk assessment, the project proponents shall never deposit less than 10% of issued ICCs in the AFOLU buffer adjustment account and 1% in the CDR (non-AFOLU) buffer adjustment Account.

4.9 Data (Managing data quality)

The project proponent shall ensure that data and information are maintained securely and retrievably and implement measures to prevent loss of data. The project proponent shall establish and implement quality management procedures to manage data and information.

4.10 Monitoring (Monitoring the GHG project)

The impacts of project activities on identified GHG SSRs shall be monitored in order to determine the net GHG emission mitigations and for the purpose of issuing and/or activating already issued ICCs. The monitoring plan shall include parameters, GHG SSR identified and according to section 4.6 and/or be in line with the applied methodology and the requirements of ISO 14064-2.

All data and information related to the monitoring of the GHG project shall be recorded and documented following procedures established according to section 4.10.

If the project has other environmental and/or social benefits being verified, the monitoring plan shall also outline measurements or otherwise obtain, record, compile, and analyze data and information important for quantifying and reporting impacts on relevant environmental and/or social impacts.

According to the monitoring plan, the project proponent shall provide monitoring results to the VVB. Project proponents shall use the monitoring report template for reporting. The monitoring report shall include schedules, roles and responsibilities, equipment, resources, and methodologies to obtain, estimate, measure, calculate, compile and record GHG data and other information for the project and GHG emissions mitigations.

The frequency of monitoring and verification for projects that have been validated, registered and issued ex-ante instruments shall be annual. For AFOLU projects, the monitoring and verification frequency may be up to five years.

⁷ Good practice guidance can come from a recognized origin, such as industry practices and associations, similar projects, benchmarking, GHG program tools, or others that are fit for the purpose of risk assessment.

4.11 Documentation (Documenting the GHG project)

The project proponent shall continuously document records of evidence of project conformity to applicable requirements and according to ISO 14064-2. The documentation shall be available and accessible to the VVB or ICR upon request for at least three years after the end of the crediting period.

4.12 Deviation

Projects may deviate from procedures set out in methodologies where alternative methods may be more efficient and where the deviation will achieve the same level of accuracy or are more conservative. Any deviation shall be reported.

Any short-term deviations from the monitoring plan, applied methodologies, other applied documents, or permanent changes to registered project activity shall be reported following updated documentation, validation, and submission to ICR and the VVB.

5. Grouped projects

5.1 General

Project proponents may group several projects to represent a grouped project.

For submission of a grouped project to ICR for the purpose of registration, the project proponent shall design it in accordance with the requirements of ISO 14064-2, the requirements herein, and where applicable, the requirements of the applied methodology.

The project proponent shall use the ICR project design description template for submitting a grouped project to ICR. The project design description shall provide details of all project activities included in the grouping and its GHG emissions mitigations, including schematics, specifications, and how the project mitigates GHG emissions. The project proponent shall follow the instructions provided in the template.

The spatial boundary for grouped project activities shall be defined, and geographic coordinates for each project activity shall be provided to delineate the grouped project boundary. The project proponent shall provide a delineation of the project area where project activities are not isolated to single or multiple geographic coordinates.

Grouped projects may incorporate multiple project activities. Where a grouped project includes multiple project activities, the project design description shall indicate which project activities may occur in each geographic area.

5.2 Eligibility criteria for inclusion of additional project activities

Eligibility criteria shall be established for inclusion of new project activities instances post registration of grouped project.

The eligibility criteria shall include conditions, specifications, and requirements for inclusion, corresponding to the requirements herein, ISO 14064-2, and any applied methodologies. All project instances shall be subject to the determined baseline scenario in the project description and additionality characteristics consistent with the original project activities. When establishing eligibility criteria, all requirements herein, ISO 14064-2, and methodology specific requirements shall be considered. Guidelines for project instances on demonstrating conformity may be established, e.g. additionality.

5.3 Description of project activities under the grouped project

As part of the grouped project intended for registration, the project proponent shall include a detailed generic description of the type of project activities that are included in the grouped project. Common elements and characteristics shall be described, and eligibility for inclusion of project instances established according to section 5.2.

When describing the project activity, the project proponent shall conform to requirements set out for project design in section 4 for the grouped project design and for all instances of projects included in the grouped project at validation.

A grouped project may involve the application of multiple methodologies as well as multiple sectoral scopes. Each project activity shall be separated in the project design description and eligibility criteria established for each activity.

Project activities within a grouped project may vary in terms of ownership, location, boundary, start date, duration, level of additionality, baseline, relevant GHG SSRs, leakage, permanence risk, and specific technology applied. If there are variations in any of the aforementioned factors, they shall be stated and justified in the generic description of project activities that are included under the grouped project and in the eligibility criteria.

The grouped project shall consider measures and management of centralized data collection and monitoring of the grouped project according to sections 4.9 and 4.10.

5.4 Inclusion of project activities post registration

For inclusion of a project activity post registration of the grouped project, a description of the proposed project activity(ies) shall be included in the monitoring report. The description shall demonstrate conformity to the already registered group project's eligibility criteria. The project instance shall conform to the requirements of ISO 14064-2, the requirements of this document, and the requirements of applied methodology (where applicable).

The project instance shall be validated for conformity to the eligibility criteria and other applicable requirements of ISO 14064-2 and the requirements herein.

The start date shall be the same as the original grouped start date or later.

The project design description shall be updated if the new project instance includes a new proponent.

6. Validation

Validation is the process of evaluating the reasonableness of the assumption, limitations, and methods that support the statement of the outcome of the implementation of the project and its activities and a project's conformity to the ICR requirements and ISO 14064-2. All projects are subject to validation.

6.1 Validation

Validation involves determining the project methodology and a project's eligibility to generate GHG emission mitigation outcomes on an ex-ante basis. Validation shall be conducted according to ISO 14064-3 and ISO 14065. The validation report shall be made public.

Validation shall be completed within two years of early registration of the project.

Projects may deviate from the validated project design description in order to accommodate changing circumstances post-validation. All such deviations shall be described and assessed by VVB during the subsequent verification for conformity to the requirements herein and ISO 14064-2. The project design description shall be updated accordingly.

Where the project does not fully conform to the applied approved methodology or deviates, the validation/verification body shall determine if it results in non-conformity to ISO 14064-2.

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, when applicable, the applied methodology.

If the project deviates from the applied methodology, the validation body shall determine if the deviation is material considering the requirements of ISO 14064-2 and the requirements herein.

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 body shall use the validation report template and follow all instructional text in the validation report template. The validation report shall include a validation statement and the opinion of the validation.

The validation statement shall be according to ISO 14065.

Where the project being validated does not meet the validation criteria, the validation/verification body shall produce an adverse validation opinion and provide the validation report to the project proponent and ICR. The project proponent shall inform the ICR of any adverse validation opinion and is ineligible for registration until implementation of

corrective actions and the validation/verification body has closed any non-conformities and provided a positive validation opinion.

7. Verification

Verification is the process of evaluating and independently determining if the outcome of the implementation of the project ex-post and its activities and conformity to the ICR requirements and ISO 14064-2 based on historical data and information. All projects are subject to verification of the implementation of projects and mitigation outcomes. The same VVB shall be contracted to carry out validation and the first verification unless the VVB does not fulfill the requirements for conducting the verification.

7.1 Verification

Verification involves determining the project's GHG emissions mitigation outcomes. Verification shall be conducted according to ISO 14064-3 and ISO 14065. The evidence-gathering plan shall be sufficient so the VVB body can provide a reasonable level of assurance. The verification report shall be made public. The first verification can be conducted at the same time as validation.

If project impacts under verification assessment do not meet the verification criteria, the VVB shall produce an adverse verification opinion and provide the verification report to the project proponent. The project proponent shall inform the ICR of any adverse verification opinion and is ineligible for issuance or activation of ICCs until corrective action is taken and the validation/verification body has closed any non-conformities and provided a positive verification opinion.

7.1.1 Verification Process

The verification process shall follow the requirements set out in ISO 14064-3. The criteria for verification is ISO 14064-2, the requirements herein, and when applicable, the applied methodology.

If the project implementation has deviated from the validated project design description, the VVB body shall conduct a validation of the deviation and determine if the deviation is material.

7.1.2 Competence

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

7.1.3 Verification Report

The verification report shall describe the verification process, any findings raised during verification, actions to react, and the conclusions reached by the VVB. The VVB shall use the verification report template for the verification report and follow all instructional text contained in the template. The verification report shall include a verification statement and the opinion of the verification.

The verification statement shall state the volume of GHG emission mitigation outcomes generated during the monitoring period and verified with respect to non-permanence risk and leakage eligible to be issued as ICCs.

8. Validation and Verification Bodies

Validation and verification bodies are eligible to provide validation and verification services under the ICR 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 (IAF).

The VVB shall hold such accreditation or approval for validation or verification (as applicable) for the sectoral scope(s) applicable to the project. 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.

VVBs are eligible to conduct validation of methodology under the methodology approval process. The VVB shall hold accreditation for validation for the sectoral scope(s) applicable to the methodology. Where the methodology falls under more than one sectoral scope, the VVB shall hold accreditation for validation for all relevant sectoral scopes.

Appendix – Document History

Version	Date	Comment
4.0	14.10.2022	First version of ICR Requirement Document v.4.0 Enhanced alignment with the structure of ISO 14064-2. Addressing clarification requests from Technical Advisory Board (TAB) of ICAO on ICR submission for approval under CORSIA. Application of specific approved methodologies revised. Additionality benchmarking implemented. Requirements for grouped projects established. Definition on start date and crediting period revised.