



Driving Climate Actions

GCC 2.0

**Standard for
Development of
Methodologies**

V4.0- 2024

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ACRONYMS

ACCs	Approved Carbon Credits
AD+	Adaptation Fund Label
AFOLU	Agriculture, Forestry and Other Land Uses
AREC	Renewable Electricity Certificates, which are additional to what would have happened in absence of the renewable electricity generating project activity
BAU	Business-as-usual
BECCS	Bioenergy Carbon Capture and Storage
C+	CORSIA Label- Pilot/First Phase
CA+	Article 6.2 Label
CAR	Corrective Action Request
CCP+	Core Carbon Principles Label
CARA	Corresponding Adjustment Reserve Account
CCS	Carbon Dioxide Capture and Storage
CDM	Clean Development Mechanism
CL	Clarification Request
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CP	Crediting Period
DACCS	Direct Air Carbon Capture and Storage
EL	Regular Environmental No-harm Label (complying with legal requirements)
EBL	Enhanced Environmental No-harm Label (complying with legal and even beyond legal requirements)
ERVR	Emission Reduction Verification Report
FAR	Forward Action Request
FPIC	Free, Prior, and Informed Consent
GCC	Global Carbon Council
GCC 1.0	GCC's First Generation Regulatory Framework & Documents
GCC 2.0	GCC's Second Generation Regulatory Framework & Documents

GHG	Greenhouse Gases
GHG-SS	GHG Sectoral Scopes
GORD	Gulf Organisation for Research and Development
GSC	Global Stakeholder Consultation
GWP	Global Warming Potential
HCLOA	Host Country Letter of Authorization
ICAO	United Nation's International Civil Aviation Organisation
ICVCM	Integrity Council for Voluntary Carbon Markets
IPCC	Intergovernmental Panel on Climate Change
ICROA	International Carbon Reduction and Offsetting Alliance
IPLCs	Indigenous Peoples and Local Communities
ISO	International Organization for Standardization
KYC	Know Your Counter party
LOIHC	Letter of Intent from Host Country
LSC	Local Stakeholder Consultation
MENA	Middle East & North Africa
MRA	Mutual Recognition Arrangement
NbS	Nature Based Solutions
NDC	Nationally Determined Contributions
NR	Nature based Solutions Removal Label - Regular
NR+	Nature based Solutions Removal Label – Enhanced or Plus
PSF	Project Submission Form
PVR	Project Validation Report
RCP	Renewal of Crediting Period
RFR	Request for Registration
RFI	Request for Issuance

PMR	Project Monitoring Report
PRC	Post Registration Change
PS	Project Standard
PSF	Project Submission Form
S _L	Regular Social No-harm Label (complying with legal requirements)
S _B L	Enhanced Social No-harm Label (complying with legal and even beyond legal requirements)
SDG+	United Nations Sustainable Development Goals Label (Bronze, Silver, Gold, Platinum, or Diamond)
SDG	Sustainable Development Goal
TR+	Technological Reductions/Removals Label
UNFCCC	United Nations Framework Convention on Climate Change
UNSDGs	United Nations Sustainable Development Goals
VCA	Verification Report of Corresponding Adjustment
VR	Verification Report
VVB	Validation and Verification Bodies
VVS	Validation and Verification Standard

1. Introduction

1. The Global Carbon Council (GCC) Program is the first international carbon market & sustainable development program in the Global South. The GCC¹ Program is a voluntary carbon program and an initiative of the Gulf Organisation for Research and Development (GORD). The GCC Program places special emphasis on low-carbon development in the Middle East and North Africa (MENA) region, which has largely remained under-represented in carbon markets. The GCC Program is comprised of the entire governance structure, system, and the documentation framework to achieve these objectives².
2. The GCC Program V2.0 has been designed by integrating the following international best practices on climate change mitigation in its design:
 - (a) Experiences gained in the development, implementation, and operation of various GHG programs, including Clean Development Mechanism (CDM);
 - (b) No harm to Environment and Society due to a GHG project submitted to the GCC Program;
 - (c) Contribution of GHG projects to the UN Sustainable Development Goals of the 2030 Agenda for Sustainable Development;
 - (d) Eligible Unit Criteria (EUC) and Carbon Offset Credit Integrity Assessment Criteria of CORSIA,
 - (e) ICVCM requirements; and,
 - (f) Requirements of Article 6.2 of the Paris Agreement.
3. The overall purpose of the GCC Program is to support the achievement of the goals of the Paris Agreement and support raising the ambition of Nationally Appropriate Contributions (NDCs) under the Paris Agreement by making voluntary carbon market instruments available for corporates and governments to enhance low-carbon and sustainable development.
4. The GCC Program is based on the 'Polluter Pays Principle' which provides private sector climate finance and compensation to those projects that reduce or remove greenhouse gases and help to address climate change and ensure sustainable development.
5. The GCC Program follows the best international practices in setting and maintaining the highest standards of environmental integrity with each carbon credit that is issued. It is accredited by the United Nations International Civil Aviation Organization (ICAO) for the pilot phase of the CORSIA scheme & the International Carbon Reduction and Offsetting Alliance (ICROA).
6. The GCC Program provides an opportunity for developing projects that eliminate, reduce/remove, or offset greenhouse gas emissions and help to catalyze climate action on the ground while ensuring that project construction and operations do not cause harm to

¹ The GCC Program is operated on behalf of the GCC Advisory Board, GCC Regulatory Committee, and GCC Steering Committee by the GCC Operations Team. Any project submission to 'GCC' or 'GCC Program' shall be considered to be submitted to GCC Steering Committee, which shall be processed by 'GCC Operations Team', as per the 'Program Processes'. 'GCC Operations Team' can be contacted at operations@globalcarboncouncil.com.

² GCC documents are available here: <https://www.globalcarboncouncil.com/how-gcc-works/resource-center/>

the environment and society and contribute to the United Nations Sustainable Development Goals as per host-country' priorities.

7. The Standard for Development of Methodologies (this document) establishes rules and requirements for developing a new methodology or methodological tool (referred to as "tools" here onwards) or revising existing methodologies or tools under the GCC Program, including sections and key components that a methodology or tool shall contain.
8. This document has been developed based on the requirements established in Section 5 of the Program Manual, which is the overarching program document linking together various GCC documents that contain the rules and requirements governing the GCC Program.
9. The Program Definitions document provides definitions of the terms used in this document and shall be referred to when applying this document. When applying this document, the requirements stipulated in the latest approved versions of the Program Manual and Program Processes shall apply to Project Owners, GCC Validation and Verification Bodies (VVBs), the GCC Operations Team, and the GCC Regulatory Committee.
10. When applying this document for the development or revision of GCC methodologies to meet the ICVCM's CCP Label requirements, the requirements stipulated in the latest approved version of the Standard on ICVCM Eligibility of Projects and Issuances shall be applied by Project Owners, the GCC Operations Team, the GCC Regulatory Committee, or any other relevant stakeholders when developing, revising, or clarifying GCC methodologies seeking to meet the ICVCM's CCP Label requirements.

2. Purpose

11. The purpose of this document is to provide the GCC requirements and rationale for various sections and elements of baseline and monitoring methodologies and tools.

3. Entry into Force

12. This document shall immediately enter into force on 1st February 2025³. The transition and implementation plan on how these requirements apply differently to projects at different stages (existing or new, at or prior to registration or issuance stages) will be made available on the GCC website.

4. GCC Methodology Development

13. This document outlines the elements required when developing a new methodology and specifies the requirements for each section of the methodology, including GHG sectoral scopes, applicability, the project boundary, the baseline scenario, additionality, emission reductions/removals (including baseline emissions, project emissions, and leakage), and monitoring.
14. A GCC baseline and monitoring methodology shall include the mandatory sections and elements indicated below (sections 4.1 to 4.9).

4.1 GHG Sectoral Scope

15. The GCC Scopes and the GHG Sectoral scopes (GHG-SS) covered by the GCC Program are defined in the GCC Program Framework and in the Program Definitions documents.
16. A GCC methodology shall define the relevant GHG-SS as stipulated in section 5 of the GCC Program Framework and stated below.

³ Subject to finalization of all regulatory setup for operationalizing GCC 2.0 workflow.

GHG SECTORAL SCOPE (GHG-SS #)	GHG SECTORAL SCOPE TITLE
1.	Energy (renewable / non-renewable sources)
2.	Energy distribution
3.	Energy demand
4.	Manufacturing industries
5.	Chemical industry
6.	Construction
7.	Transport
8.	Mining/mineral production
9.	Metal production
10.	Fugitive emissions from fuels (solid, oil and gas)
11.	Fugitive Emissions from production and consumption of halocarbons and sulfur hexafluoride
12.	Solvents use
13.	Waste handling and disposal
14.	Afforestation and Reforestation
15.	Agriculture
16.	Carbon Capture and Storage of CO ₂ in Geological Formations

4.2 Applicability Conditions

17. The methodology or tool shall include applicability conditions that define the eligibility criteria that a GHG-reduction/removal project must fulfill to be eligible to apply the methodology, for preparing a project submission form as part of an application to register a project under the GCC. These conditions include technical, technological, policy, economic and regulatory or any other aspects of the Project Activity that affect its eligibility to apply the methodology or tool.
18. The applicability conditions shall be expressed without any ambiguity in order to bring complete clarity in the assessment of eligibility of Project Activity to apply the methodology or tool.

4.3 Project Boundary

19. The project boundary of a GCC Project Activity is defined as the physical delineation and/or geographical area of the GCC Project Activity and the specification of GHGs and sources/sinks under the control of the Project Owners that are significant and reasonably attributable to the GCC Project Activity, in accordance with the applied methodology.

20. The methodology shall describe and justify the physical delineation of the project boundary, including the gases and sources included, bearing in mind that it shall encompass all anthropogenic emissions by sources of greenhouse gases under the project and baseline scenarios that are significant and reasonably attributable to the Project Activity.
21. The methodology shall:
 - (a) Explain the physical delineation of the eligible Project Activity by use of a figure or flowchart;
 - (b) Explicitly list all sources and GHGs included in the project boundary and explain whether any sources/sinks related to the baseline, project emissions/removals and leakage emissions have been excluded, and, if so, justify their exclusion;
 - (c) When defining the emission sources/sinks that are included in the project boundary in the baseline and project scenarios, Project Owners shall make conservative assumptions.

4.4 Baseline Scenario

22. The baseline scenario is the scenario for the GCC Project Activity that reasonably represents the GHG emissions/removals within the project boundary that would occur in the absence of the GCC Project Activity.
23. The baseline scenario of a GCC Project Activity should be defined based on one of the three baseline approaches as stipulated in paragraphs 48(a), 48(b), or 48(c) of *the Modalities and Procedures for a Clean Development Mechanism* (Decision 3/CMP.1) or paragraph 22 (a), 22 (b) or 22 (c) of *the Modalities and Procedures for Afforestation and Reforestation Project Activities under the Clean Development Mechanism in the First Commitment Period of the Kyoto Protocol* (Decision 5/CMP.1), as relevant.
24. The CDM Guidelines for determining baselines for measure(s)⁴ should be followed for all non-afforestation and non-reforestation projects, to determine when and under which situations a baseline approach as defined in paragraphs 48(a), 48(b), and 48(c) of Decision 3/CMP.1 is used. When selecting approach 48(c), GCC-approved guidelines/standards or approved CDM guidelines/standards may be used for defining benchmarks⁵.
25. The baseline scenario of a GCC Project Activity is encouraged to be defined based on one of the approaches stipulated in paragraph 36(i), 36 (ii), or 36(iii) of the Rules, modalities, and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement (Decision 3/CMA.3). In doing so, the methodology shall define which of the above referred approaches has been applied to determine the baseline scenario of the GCC Project Activity.
26. The baseline scenario shall be established taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the GCC Project Activity sector. Methodologies should contain provisions to take into account national/sectoral policies and measures and relevant circumstances, including national,

⁴ CDM Guidelines for determining baselines for measure(s).

⁵ For example, the CDM *Guideline for establishing sector specific standardized baselines*.

regional, or local, social, economic, environmental and technological circumstances, where relevant and practicable, based on robust data and verifiable information. In this regard, the type of data and information that would be necessary to meet the provision contained in this paragraph should be specified in the methodologies, particularly, if relevant, with regard to applicability conditions, setting the baseline, and demonstrating additionality.

4.5 Project Additionality

27. As per the GCC Project Standard, the additionality of projects shall be demonstrated to ensure that the Project Activity reduces anthropogenic emissions of GHGs below those that would have occurred in the absence of the Project Activity and/or it increases GHG removals above those that would have occurred in the absence of the Project Activity.
28. The following approaches to demonstrating additionality are accepted in GCC methodologies.

4.5.1 Standardized Positive List

29. A GCC Project Activity applying a technology, fuel or feedstock listed under a positive list is deemed automatically additional. This list identifies a broad set of Project Activities that are deemed additional. The GCC methodologies can refer to the positive list provided in the CDM Tool 32⁶.

4.5.2 Project Specific Demonstration of Additionality

30. For Project Activities that are not automatically additional (i.e., they do not fall under a Positive List of the CDM Tool 32), the methodology shall indicate specific approaches to determining additionality for each type of project for which the methodology is applicable. Two approaches may be used:
 - (a) Investment analysis of the project as compared to other project alternatives, demonstrating that the project without carbon revenue is not the most economically-attractive alternative; and
 - (b) Barrier analysis of the project, listing barriers (e.g., investment barriers, operational- or maintenance-cost barriers, technological barriers, institutional barriers, the first-of-its-kind barrier, etc.) that would prevent the project from being implemented.
31. In absence of methodology-specific additionality approach, relevant CDM tools/guidelines, Article 6.4 tools/guidelines (once adopted) and GCC tools/guidelines referred in the methodology shall be followed to demonstrate project-specific additionality. These include the: CDM Additionality Tool⁷, CDM Combined Tool to Identify the Baseline Scenario and Demonstrate Additionality⁸, CDM Tool for Additionality of Small-scale Projects⁹, CDM Microscale Additionality Tool¹⁰, CDM First-of-its-Kind Tool¹¹, Common Practice Tool¹²,

⁶ CDM Methodological tool: Positive lists of technologies.

⁷ CDM Methodological tool: Tool for the demonstration and assessment of additionality.

⁸ CDM Methodological tool: Combined tool to identify the baseline scenario and demonstrate additionality.

⁹ CDM Methodological tool: Demonstration of additionality of small-scale project activities.

¹⁰ CDM Methodological tool: Demonstration of additionality of microscale project activities.

¹¹ CDM Methodological tool: Additionality of first-of-its-kind project activities.

¹² CDM Methodological tool: Common practice.

Investment Analysis Tool¹³, and the Barrier Analysis Guideline¹⁴. GCC may also develop new guidelines/tools for the demonstration of additionality in the future.

32. When applying the additionality approaches, GCC tools/guidelines and CDM tools/guidelines mentioned above, realistic and credible alternative(s) to the GCC Project Activity available to the Project Owner that provide outputs or services comparable with the proposed GCC Project Activity shall be considered. These alternative(s) shall be in compliance with all mandatory applicable laws and regulations, even if these laws and regulations have objectives other than GHG emission reductions (e.g. to reduce local air pollution). National and local policies that do not have legally-binding status shall not be considered.

4.6 Project Emission Reductions/Removals

33. The methodology shall describe the method(s) and equations to be used to calculate baseline and project emissions and leakage, as well as GHG emission reductions/removals for proposed Project-Activities.
34. For non-AFOLU projects, the baseline approach shall be selected as per the CDM Guidelines for Determining Baselines for Measure(s).
35. The methodology shall include methods for determining project emission reductions/removals and leakage from various GHG sources and may refer to appropriate approved GCC and CDM/Article 6.4 (once adopted) tools.

4.7 Leakage

36. The Modalities and Procedures for a Clean Development Mechanism (Decision 3/CMP.1) require that reductions in anthropogenic emissions by sources shall be adjusted for leakage in accordance with the monitoring and verification provisions in paragraphs 59 and 62, respectively. Leakage is defined as the net change of anthropogenic emissions by sources of greenhouse gases that occurs outside the project boundary, and which is measurable and attributable to the CDM project activity.
37. The Modalities and Procedures for Afforestation and Reforestation Project Activities under the Clean Development Mechanism in the First Commitment Period of the Kyoto Protocol (Decision 5/CMP.1) require taking into account potential sources of leakage attributable to the project activity and define leakage as the increase in greenhouse gas emissions by sources which occurs outside the boundary of an afforestation or reforestation project activity under the CDM which is measurable and attributable to the afforestation or reforestation project activity.
38. Paragraph 33 of the Rules, Modalities, and Procedures for the Mechanism Established by Article 6, paragraph 4, of the Paris Agreement (Decision 3/CMA.3) also requires methodologies to avoid leakage, where applicable.
39. In line with the mentioned-above provisions of the CDM Modalities and Procedures and the Rules, Modalities and Procedures for the Article 6.4 Mechanism of the Paris Agreement, GCC methodologies shall contain provisions, where applicable, on how leakage may be avoided, minimized, or addressed. In doing so, the methodology shall

¹³ CDM Methodological tool: Investment analysis.

¹⁴ CDM Guidelines for objective demonstration and assessment of barriers.

define which of the provisions has been applied to avoid, minimize, or address leakage of the GCC Project Activity.

4.8 Baseline and Project Monitoring Methodology

40. The methodology shall describe the monitoring method, management structure for monitoring, the parameters to be monitored (parameters used for calculating baseline, project, and leakage emissions as well as emission reductions and removals for proposed projects), data monitoring procedures (measurement, collection, aggregation, quality control, reporting format) and other important monitoring requirements.
41. For each monitored parameter, the methodology or tool shall define whether the parameter value will be fixed *ex-ante* (prior to registration) or regularly monitored at prescribed intervals by the methodology.
42. For each monitored parameter, the methodology or tool shall require Project Owners to define the value assigned to the parameter, frequency of measurement, method of measurement, measurement, and instrument calibration requirements and accuracy requirements, data aggregation, and reporting procedures.
43. The methodology or tool shall define the default values for baseline, project or leakage parameters allowed for each relevant specific type of Project Activity for which the methodology is applicable, and shall provide references for the values selected, and justification for the representativeness and conservativeness of the default values.

4.9 Remaining Lifetime of Baseline Equipment

44. The methodology applicable to retrofit or replacement projects shall require determining the remaining lifetime of the baseline equipment and referring to the latest approved version of the CDM Tool to determine the remaining lifetime of the equipment.¹⁵
45. The GCC will only issue carbon credits for such projects for the period equivalent to the remaining lifetime of the baseline equipment and the project crediting period, whichever is shorter.

4.10 Global Warming Potentials

46. The methodology shall use the global warming potentials (GWPs) as stipulated in the Project Standard to calculate GHG emission reductions/removals achieved by GCC Project Activities.

5 General Rules for Projects When Applying GCC Methodologies

47. Unless otherwise specified in an applicable methodology or tool, IPCC default values shall be used only when country- or project-specific data are documented to be either: (i) not available; and/or (ii) not reliable or of not sufficient quality based on evidence-based judgment of Project Owner or GCC VVBs.
48. When applying methodologies or tools that require the determination of parameter(s) for calculating baseline and project emissions but do not prescribe procedures for determining those parameters, the same data sources (e.g., IPCC values, national values) and calculation and/or measurement procedures for each parameter (e.g., calculation of

¹⁵ CDM Methodological Tool: Tool to determine the remaining lifetime of equipment.

annual average flow rate, hourly measurements) shall be applied for both baseline- and project-emissions calculations. For example, if a calculated emission factor based on measured data is used for calculating emissions in the baseline, a calculated emission factor shall also be used for determining project emissions, unless otherwise specified in the applied methodology or tool. If it is not possible to use the same data sources, the conservativeness of emission reductions shall be the basis for the selection of data sources.

49. Values of monitored or default parameters that are applied in the calculation of baseline emissions, project emissions, and leakage shall be documented. If more than one value is found to be appropriate, the most conservative value among the appropriate values shall be used.
50. To demonstrate that appropriate and conservative values have been utilized, Project Owners shall transparently list and describe the sources of all values used (e.g., peer-reviewed literature, test results, official reports/ statistics).
51. Original sources shall be referenced using a standard referencing method, rather than quoting secondary publications that refer to original sources.
52. When more than one source is used to aggregate data to derive a value, the sources used shall be clearly indicated.
53. Project Owners shall justify why the values selected and their sources are appropriate, applicable, and conservative.

DOCUMENT HISTORY		
Version	Date	Comment
V 4.0	17/12/2024	<ul style="list-style-type: none"> ▪ Revised version released upon approval by the GCC Regulatory Committee as per the GCC Program Process and published. ▪ Revised version contains the following changes: <ul style="list-style-type: none"> ○ Expanding the applicability of the document to methodological tools; ○ Encouragement to apply the Rules, Modalities and Procedures for the Mechanism Established by Article 6, paragraph 4, of the Paris Agreement (Decision 3/CMA.3) in the establishment of the baseline scenario; ○ Allowing the use of Article 6.4 tools/guidelines (once adopted); ○ Adding a section on leakage; ○ Consideration of national/sectoral policies and circumstances in the baseline scenario ○ Including a reference to the CDM Tool to determine the remaining lifetime of equipment ○ The number of editorial changes to improve clarity;
V 3.1	31/12/2020	<ul style="list-style-type: none"> ▪ The name of GCC Program's emission units has been changed from "Approved Carbon Reductions" or ACRs to "Approved Carbon Credits" or ACCs.
V 3.0	17/08/2020	<ul style="list-style-type: none"> ▪ Revised version released on approval by the Steering Committee as per the GCC Program Process; ▪ Revised version contains the following changes: <ul style="list-style-type: none"> ○ Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC); ○ Change of name of document from "Standard on Key Project Requirements and Methodology Development" to "Standard for Development of Methodologies." ○ Considered and addressed comments raised by the Steering Committee: <ul style="list-style-type: none"> - during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and - electronic consultations EC01-Round 03 (08.08.2020-16.08.2020). ▪ Feedback from the Technical Advisory Board (TAB) of ICAO on GCC submissions

		for approval under CORSIA ¹⁶ .
V 2.0	25/06/2019	<ul style="list-style-type: none">▪ Revised version released for approval by the GCC Steering Committee.▪ This version contains details and information to be provided, consequent to the latest worldwide developments (e.g., CORSIA EUC).
v1.0	01/11/2016	<ul style="list-style-type: none">▪ Initial version released for approval by the GCC Steering Committee under GCC Program Version 1

¹⁶ See ICAO recommendation for conditional approval of GCC at https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf



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