

# GCOM VVB STANDARDS

### STANDARDS FOR ACCREDITING

VALIDATION/VERIFICATION BODIES (VVB)

Standards for a validation/verification body in Saudi Arabia's voluntary Greenhouse Gas Crediting & Offsetting Mechanism (GCOM)

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### 1. Introduction

#### 1.1. Purpose

- 1.1.1. The Validation and Verification Body (VVB) standard document outlines the qualifications and competencies required for VVBs to ensure effective validation and verification under the Greenhouse Gas Crediting and Offsetting Mechanism (GCOM). The purpose of this standard is to establish a clear and comprehensive framework for assessing the performance and compliance of Validation and Verification Bodies (VVBs) with the GCOM criteria. It ensures that VVBs are equipped to provide precise and dependable assessments, thereby maintaining the integrity and effectiveness of GCOM.
- 1.1.2. Compliance with this document, coupled with the other relevant documents under GCOM, is designed to uphold the highest standards of environmental integrity, transparency, and accountability in the validation and verification of carbon reduction and/or removal projects. This document will be updated regularly to reflect any developments.

### 2. Entry into Force

2.1 This version of the standard is effective as of [x].

### 3. Principles

3.1.1. VVBs must ensure independence in validation or verification by avoiding bias and conflicts of interest and maintaining objectivity. They should uphold ethical conduct by demonstrating trust, integrity, and confidentiality. Reports

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must reflect findings accurately, including any significant obstacles or differing opinions. Additionally, VVBs must exercise due professional care, apply sound judgment, and possess the necessary skills and competencies for the task.

3.1.2. The principles outlined in section (5) of GCOM's VVB Accreditation Criteria govern how VVBs under GCOM should prepare, conduct, and report on verification and validation activities.

#### 3.2. Safeguarding Impartiality (General)

- 3.2.1. The VVB shall ensure that its independence of judgment is protected from any external influences by maintaining adequate staffing, both internally and through external resources if needed, as well as ensuring financial stability to prevent any compromises to its impartiality and decision-making.
- 3.2.2. The VVB shall take necessary steps to remain impartial and proactively prevent conflicts of interest that could influence its ability to make objective decisions. If the VVB is part of a larger organization, it must ensure that its validation and verification duties are completely independent of other functions within the organization. Similarly, if the VVB has any affiliated entities, it must ensure that no conflicts of interest arise between its validation and verification and the operations of those entities.

#### 3.3. Ensuring Impartiality at All Levels (General)

3.3.1. The VVB must implement, document, and continuously uphold a policy that safeguards impartiality across all its validation and verification activities. This policy should reflect the VVB's recognition of the potential influences that could impact its neutrality and ensure that these risks are fully addressed. The impartiality policy must be understood and applied across all levels of the organization, and it should be made publicly accessible, such as through the VVB's website.

#### 3.4. Organizational Commitment to Impartiality



- 3.4.1. A VVB must establish a documented organizational structure to ensure the impartiality of its validation and/or verification activities. This includes implementing a policy and associated procedures to maintain impartiality, supported by mechanisms such as a committee.
- 3.4.2. The committee, along with its members and management, must operate independently from all validation and verification functions. It must also have unrestricted access to all relevant records to perform thorough reviews when required. Regular meetings should be held, and detailed records of the proceedings must be maintained.
- 3.4.3. If the committee identifies any issues in the VVB's impartiality safeguards, it must escalate the matter to the VVB's top management. Should the top management fail to address the issue, the committee is authorized to report the matter to GCOM.

#### 3.5. Structural Safeguards

- 3.5.1. To safeguard impartiality, the VVB must establish a documented structure that ensures impartiality in its operations. An independent impartiality committee must be formed, comprising key stakeholders and reporting directly to top management. This committee should:
  - Regularly review conflict of interest assessments and mitigation strategies to ensure their effectiveness;
  - Be composed of individuals who are independent from the validation and verification processes;
  - Approve and monitor the implementation of measures to address potential conflicts of interest and impartiality risks;
  - The committee should also prepare an annual report summarizing its activities and submit it to the VVB's top management for review. If necessary, it may escalate unresolved issues to relevant authorities.

#### 3.6. Operational Safeguards

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- 3.6.1. The VVB must implement procedures to identify and mitigate potential risks to impartiality in its daily operations. This includes conducting regular conflict of interest analysis, especially when organizational changes occur, such as mergers or acquisitions. The conflict of interest analysis should cover areas such as:
  - Revenue sources that may influence impartiality, especially when there are many contracts with the same client;
  - Risks of self-review or personal interests affecting judgment;
  - Familiarity between personnel and clients could compromise the objectivity of the validation or verification process;
  - Any form of coercion or pressure that might impair impartial decisions.
- 3.6.2. In response to identified risks, the VVB must adopt mitigation strategies such as prohibiting certain activities, implementing controlled restrictions, or disclosing potential conflicts to ensure impartiality is maintained.

#### 3.7. Continuous Monitoring and Review

3.7.1. To maintain the integrity of its operations, the VVB must conduct annual reviews of all relevant data concerning impartiality, such as the outcomes of conflict-of-interest analyses and the effectiveness of mitigation strategies. Any non-conformities identified must be addressed through corrective actions. A detailed report of this review should be prepared and kept on record.

## 4. Sectoral Scopes of Accreditation

4.1.1. For a VVB to conduct the validation and/or verification of a GCOM project or activity and issue a validation and/or verification report, the VVB shall be



accredited in the sectoral scope of the methodology applied by the project or activity. The sectors include, but are not limited to:

#### 4.1.2. Energy Efficiency and Renewable and lower GHG emissions Energy Generation:

- Renewable Energy Production: (hydropower, biomass energy, biomass fuels, geothermal power, solar power, wind energy, fuel cell)
- Energy Efficiency Improvements: (conservation, efficiency, waste heat recovery, cogeneration, trigeneration, industrial process optimization)

#### 4.1.3. Industrial processes (non-combustion, chemical reaction, fugitive, other)

- SF6 replacement
- SF6 emission avoidance
- HFC destruction/decomposition
- PFC anode effect mitigation
- Production of nitric acid and adipic acid
- Reduced emissions from destruction of N2O in manufacturing

#### 4.1.4. Transportation, Modal, and Fuel Shift

- Lower emission vehicles (electric, hydrogen vehicles)
- Route optimization
- Metro, Bus Rapid Transport (shift from private to public transport)
- Internal combustion engine

#### 4.1.5. Land Use, Land Use Change and Forestry (LULUCF)

- Sequestration of carbon due to afforestation, avoided deforestation, sustainable forest management, forest products)
- Soil carbon sequestration (no-till, grass cover)

#### 4.1.6. Carbon Capture and Storage

 Emissions sources that are injected into underground geological formations (e.g., abandoned oil and gas reservoirs, saline aquifers, or un-minable coal seams)

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#### 4.1.7. Livestock

- Methane Collection and Destruction
- Livestock and other anaerobic digester operations
- Agricultural methane emission reduction
- Agricultural carbon emission reduction

#### 4.1.8. Waste Handling and Disposal

- Capture and destruction of Landfill gas
- Capture and use of Landfill gas (bio digestion, aerobic treatment)
- Methane recovery in wastewater treatment
- Avoidance of methane production in wastewater treatment
- Coal mine methane
- Waste to Energy

### 5. Legal, Financial and Operational Matters

#### 5.1. Legal Standards and Requirements

- 5.1.1. A VVB will operate legally, enter contracts, make independent decisions, and be subject to legal action under its own name.
- 5.1.2. The VVB should have no ongoing legal proceedings related to malpractice, fraud, or similar issues that could affect its role. Additionally, it must maintain records of all current and past judicial cases. If any legal action against the VVB conflicts with its responsibilities, it must be properly addressed.

#### 5.2. Financial Capabilities

5.2.1. **Financial stability:** A VVB must demonstrate financial stability with three years of financial statements or shareholder commitments, a three-year financial plan, and annual monitoring of its finances to ensure it remains capable of performing its functions.

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5.2.2. Liability: A VVB must show that it has thoroughly assessed and understood all possible financial risks related to its validation or certification activities and has made suitable plans to manage these risks.

#### 5.3. Operational Capabilities

#### 5.3.1. Management structure (entity management)

5.3.2. The entity must establish a robust management structure that ensures effective implementation of its validation and verification functions under GCOM. The management structure will be responsible for overseeing all operational, supervisory, and quality assurance processes, with final decisionmaking authority for validation, verification, and certifications.

#### 5.3.3. The key features of the management structure include:

- 5.3.4. Top management is responsible for the VVB's performance, quality assurance, and final decisions on validations and verifications.
- 5.3.5. The VVB must maintain a clear organizational chart showing authority lines, roles, and responsibilities, including management, validation/verification personnel, and supervisory committees.
- 5.3.6. The names, qualifications, and experience of top management and key personnel involved in validation and verification must be documented.

#### 5.4. Quality Management Measures

#### 5.4.1. Responsibilities of top management:

- 5.4.2. The top management of a VVB shall demonstrate its commitment to the development and implementation of a quality management system in accordance with GCOM's standards and criteria.
- 5.4.3. The top management of a VVB shall put into place measures to ensure that the policies are understood, implemented and maintained at all levels of the organization.

#### 5.4.4. Document and record management system:



- 5.4.5. A VVB shall establish, document, implement and maintain a procedure for controlling all documents that form part of its quality management system (internally generated or from external sources), such as quality manual, procedures, instructions, forms, templates, check-lists, etc., as well as all relevant GCOM documents (standards, criteria, procedures, and guidelines). The documentation can be in any form or type of medium; for instance, paper or electronic.
- 5.4.6. A VVB shall establish, document, implement, and maintain a procedure for controlling the identification, collection, indexing, access, filing, storage, protection, retrieval, time retention, and disposition of all its records.
- 5.4.7. Records of original observations, derived data and sufficient information used to follow an audit trail shall be maintained to demonstrate compliance with the GCOM accreditation criteria and standards.
- 5.4.8. Records shall be retained for a period of time consistent with its contractual and legal obligations and the criteria and standards. All records shall be held securely and safely so as to preserve all confidential information.
- 5.4.9. The record control procedure should protect and back up records to prevent unauthorized access to; or amendment of these records.
- 5.4.10. A VVB shall establish, document, implement and maintain a procedure for maintaining and managing specific records pertaining to all its validation and/or verification activities.
- 5.4.11. A VVB shall establish, document, implement and maintain a procedure for conducting internal audits of its validation and verification functions and those of its outsourced entities in order to verify whether its quality management system is effective and ensure that its operations continue to comply with the GCOM accreditation criteria and standards and its own documented policies and procedures.

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- 5.4.12. A VVB shall conduct an internal audit on its validation and verification functions and those of its outsourced entities at least once a year and in accordance with a predetermined schedule and procedure.
- 5.4.13. The VVB shall develop, implement, and document a procedure to identify and address noncompliance to GCOM accreditation criteria and standards, along with preventative measures for noncompliance.
- 5.4.14. The VVB's top management shall oversee the implementation of the quality management and its periodic review, ensuring necessary changes and improvements are implemented.

#### 5.5. Information Management

- 5.5.1. Information to be Publicly Available: The VVB must make some of its information publicly available on the GCOM website during its accreditation period, including the validation and verification reports to be submitted by the project proponent. Additionally, the VVB must make available a list of all projects it has validated and/or verified. Furthermore, the VVB's impartiality policy, complaint handling procedure with a contact person, and appeals handling procedure with contact details for the responsible individual must also be made accessible to the public.
- 5.5.2. Confidentiality: The VVB must implement, document, and maintain procedures to safeguard the confidentiality of any information obtained or generated during its validation and verification activities. All personnel involved in these processes must adhere to the confidentiality requirements. The VVB is responsible for ensuring compliance, which can be achieved through signing confidentiality agreements. The VVB is not permitted to disclose information about Project Proponents for which it has provided validation or verification services. In cases where disclosure is legally necessary, the VVB must obtain prior written consent from the Project



Proponent and inform them before sharing any confidential information with third parties.

### 6. Human Resources and Competence

6.1.1. The VVB's management shall be internal resources for the VVB and shall oversee and ensure consistent compliance with GCOM's criteria and standards.

#### 6.2. Sufficiency of Human Resources

- 6.2.1. A VVB shall evaluate and ensure it has sufficient resources to conduct its validation and verification functions, considering at a minimum the following:
  - Needed competencies related to the technical area and sectoral scope it has been accredited for;
  - The geographical location of the project, and;
  - The expected volume of activities for the future. The VVB shall document the activities and their respective results.
- 6.2.2. The VVB shall conduct annual assessments at a minimum to ensure the availability of sufficient human resources to perform its functions according to the standards laid out in (6.2.1) and maintain records of the results of its assessments.
- 6.2.3. The VVB's management shall be responsible for the validation and verification of personnel whether they are internal or external resources and takes responsibility for the work carried out by those personnel.
- 6.2.4. The validation and verification team, whether it is composed of one or more individuals, must have the capacity to carry out the work, as well as the technical knowledge and skills required, including:
  - Technical and methodological aspects



- Additionality assessment and baseline establishment
- GHG accounting and monitoring
- Environmental, health, safety, and financial matters
- Auditing knowledge and skills
- 6.2.5. The validation and verification team shall have the skills to effectively communicate with the client.

#### 6.3. Recruitment

- 6.3.1. The VVB may use internal or outsourced personnel for the completion of its functions in compliance with the relevant competencies.
- 6.3.2. The VVB shall establish and maintain records for the outsourced personnel including contracts and proof of the personnel's competency and qualification.
- 6.3.3. The VVB shall ensure compliance of the outsourced personnel to GCOM's validation and/or verification standards, including through conducting continuous monitoring and assessment of performance and maintaining records of results.

#### 6.4. Competence of Management Personnel

- 6.4.1. The VVB must ensure and demonstrate throughout the accreditation term that its management personnel responsible for validation and verification functions are competent to carry out these roles. This includes:
  - Identifying the human resource requirements for validation and verification activities.
  - Evaluating the competence of personnel, qualifying them, and selecting members of technical review teams.
  - Approving contract reviews related to validation and verification activities.
  - Maintaining the competence of validation and verification personnel through continuous monitoring and training.



- Supervising the proper implementation of validation and verification procedures.
- Making final decisions on validation and verification opinions and reports.
- Managing activities to safeguard the impartiality of all validation and verification functions.
- Establishing, implementing, and maintaining a quality management system for validation and verification activities.

#### 6.5. Responsibilities of Top Management

- 6.5.1. The VVB's top management personnel are responsible for the overall authority and performance of the organization's validation and verification functions. They hold the following responsibilities:
  - Formulating and developing policies related to the VVB's operations.
  - Documenting, implementing, and supervising the execution of policies and procedures.
  - Supervising finances, administrative matters, and handling contractual arrangements.
  - Making decisions on disputes and complaints related to validation and verification activities.

#### 6.6. Committees for Policy and Operational Oversight

6.6.1. The VVB must establish, document, implement, and maintain procedures for the appointment, terms of reference, and operation of any operational or supervisory committees. These committees should be involved in policymaking or operational functions related to validation and verification activities.



# 7. Validation and Verification/Certification

### Processes

#### 7.1. Contract Review and Approval

7.1.1. VVBs A VVB must establish procedures to review and approve contracts for GCOM project validation or verification services. This process ensures accreditation in the relevant scope, availability of competent resources, and adherence to impartiality standards. Key factors like project location, timelines, language, and safety are considered. Contract details, including liability terms and project scope, must be documented and approved before proceeding.

#### 7.2. Selection of Team Members

7.2.1. The VVB must assign qualified personnel to validation and verification teams, ensuring technical expertise and impartiality. Team members must disclose any potential conflicts of interest, and formal safeguards must ensure unbiased conduct. Selection considers project complexity, risks, and logistical needs. Project participants are informed of the team composition in advance to allow for justified objections.

#### 7.3. Validation, verification, and issuing reports

7.3.1. VVBs must follow established procedures to perform validation and verification. Plans should define team roles and ensure qualified personnel conduct site visits. Before issuing final opinions or reports, a technical review must confirm compliance with all requirements. Final approvals and report issuance must be overseen by authorized management. This streamlined approach ensures that all validation and verification activities are carried out competently, impartially, and in compliance with GCOM's criteria and standards.

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#### 7.4. Corrective and preventative actions

- 7.4.1. **Corrective actions**: In the case that any of the following scenarios occurs, the VVB is required to submit a Corrective Action Request (CAR):
  - The project participants have made mistakes that will impact the proposed GCOM project activity's potential to achieve real, measurable, verifiable, and additional reduced GHG emissions or net anthropogenic GHG removals.
  - The appropriate GCOM requirements have not been met.
- 7.4.2. The VVB will submit a Clarification Request (CL) if the information is insufficient or unclear to ascertain whether the relevant GCOM rules and requirements have been fulfilled.
- 7.4.3. CARs and CLs must be resolved or "closed out" by the VVB only if the project developer amends the project design, rectifies the PDD, or submits additional explanations or evidence addressing the VVB's concerns. In the event that this is not met, the VVB will not issue a validation/ verification report for the proposed GCOM activity.
- 7.4.4. **Preventive actions:** The VVB shall establish, document, implement and maintain a procedure for proactive identification of non-compliance, areas of improvement and implementing actions to prevent their occurrence.

### 8. Complaint, Dispute and Appeal Processes

#### 8.1. Legal Standards and Requirements

8.1.1. VVBs are required to establish, document, implement, and maintain a publicly accessible appeals procedure for the purpose of receiving, managing, evaluating, and investigating complaints, as well as making decisions and implementing appropriate corrections and corrective actions. The process enables clients to appeal assessment decisions in addition to

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complaints procedure which enables stakeholders to file complaints against

the project, project developer, auditor, and other involved parties.

8.1.2. The procedure must be disclosed to DNA and be accessible upon request from clients and it must align with international best practices.



# 9. Glossary, Definitions, and References

Abbreviation	Term
DNA	Designated National Authority
GCOM	Greenhouse Gas Crediting & Offsetting Mechanism
UNFCCC	United Nations Framework Convention on Climate Change
PACM	Paris Agreement Crediting Mechanism – Article 6.4
VVB	Validation Verification Body
CDM	Clean Development Mechanism
GCOM	Greenhouse Gas Crediting & Offsetting Mechanism
GHG	Greenhouse Gas
PDD	Project Design Document