

The Gold Standard

Validation & Verification Manual for CDM Projects

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How to Use This Manual

WWF, together with other NGOs, developed the Gold Standard (GS) for Clean Development Mechanism (CDM) projects. It provides a tool to ensure that the CDM delivers credible projects with real environmental benefits and, in doing so, raises confidence with host countries and the public that projects represent new and additional investments in sustainable energy services.

This Gold Standard Validation & Verification Manual (GS-VVM) has been developed to assist DOE's in validating CDM projects that are being developed in accordance with GS requirements. The information provided *refers to GS specific requirements* and further guidance may be needed for compliance with the requirements of the CDM in total.

This manual refers to other important GS documents, listed below:

- The Gold Standard Manual for CDM Project Developers
- The Gold Standard Project Design Document for CDM Projects (GS-PDD)
- The Gold Standard Project Design Document for Small-Scale CDM Projects (GS-SSC-PDD)

The Validation and Verification Manual (IETA/PCF, 2004) provides information on general CDM and is also used as a reference.

Part 1 of this manual describes the objectives of a GS validation and verification.

Part 2 provides general information about the GS validation and verification.

Part 3 presents the requirements against which validators are to assess a project's eligibility to obtain GS status.

Reference is made to the various sections of the GS-(SSC)-PDD, providing the requirements for the development of a PDD according to GS guidelines.

The validation manual will be updated on the basis of practical experience and, if necessary, to reflect any changes to the CDM PDD.

Part 4 provides DOEs with the GS verification requirements.

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Part 1: Gold Standard Validation & Verification Objectives

The objective of a validation in accordance with the GS for CDM projects is to have an independent third party assess that the project design of a CDM project fulfill the requirements set out by the GS.

The objective of verification in accordance with the GS for CDM projects is to have an independent third party assess whether the project has been implemented as planned, that the actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan and that the project provides benefits in accordance to its project design.

The GS validation and verification guarantees premium quality carbon credits, by ensuring that the CDM project meets the stricter additionality requirements posed by the GS and that the project results in real and measurable benefits to local stakeholders.

Hence, the validator will confirm that the project design (as documented) is sound and reasonable and meets the relevant criteria. This implies that the project, its baseline and the monitoring plan, must be in compliance with relevant UNFCCC and host Party criteria, as well as the GS specific criteria. The verifier will in turn report on the projects' actual results.

Part 2: Introduction to the Gold Standard Validation & Verification

2.1 Validation

Who can validate for the GS?

Every DOE accredited to the UNFCCC for the relevant scopes. An overview of accredited DOEs can be obtained from the UNFCCC web-site: <http://cdm.unfccc.int/DOE/list>. The project proponent has to contract an accredited DOE and notify it of its intention of validating the project to the GS.

Which projects are eligible for the GS?

Projects which fulfill conventional CDM requirements and pass all the screens offered in Box 1. A project is recognized as a GS project when a validator has confirmed this in its Final Validation Report.

Box 1: Overview of The Assessment Framework and Its Three Screens

Project Type Eligibility Screen (see Ch.3.2)

Additionality Screen (see Ch. 3.3)

- Previous public announcement check
- Additionality tool
- ODA additionality test
- Conservative approach check
- Technology transfer and/or technology innovation

Sustainable Development Screen (see Ch. 3.4)

- Sustainable development assessment
- Environmental Impact Assessment (EIA)
- Public consultation procedures

Although these screens/tests are additional to the conventional CDM project cycle requirements, they are designed as far as possible to fit in with regular CDM activities, in order to keep additional transaction costs as low as possible.

What is a Validation Protocol?

The Validation Protocol shall provide guidance as well as document the results of the validation activities and it serves the following purposes:

- It organizes, details, and clarifies the requirements a CDM project is expected to meet.
- It ensures a transparent validation process by inducing the validator to document how a particular requirement has been validated and which conclusions have been reached.

The protocol may also be used during the validation process to assist the validator to keep track of:

- Issues to be further checked
- Issues to be clarified by the project proponents
- Issues to be corrected by the project proponents

It is important that the protocol clearly shows how the DOE has checked the GS criteria. The protocol is thus an essential document for the validation process and is to be included in the Validation Report (see following sections Draft Validation Report and Final Validation Report).

An example of how a Validation Protocol may be structured is illustrated by Table 1, 2 and 3. A generic *CDM Validation Protocol* for the validation of CDM projects has been developed to facilitate cost-effective and comprehensive validations of CDM projects. The generic protocol can be downloaded from: <http://www.ieta.org/ieta/www/pages/index.php?IdSitePage=394>. It should be noted that the checklist questions may not be applicable for all investors, and should not be viewed as mandatory for all projects. Prior to using this generic Validation Protocol, the validator should review and adjust/amend the protocol in order to reflect the individual project characteristics and circumstances, individual investor criteria, as well as the GS criteria offered in Part 3 of this manual.

Example of a how a Validation Protocol may be structured

Table 1: Mandatory Requirements for Clean Development Mechanism (CDM) Activities

| REQUIREMENT | Ref | CONCLUSION | Cross Reference to Checklist (Table 2) |
|---|---|---|--|
| The requirements the project must meet. | Reference to the legislation or agreement where the requirement is found. | This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) of risk or non-compliance with stated requirements. | To ensure a transparent process, this refers to the relevant checklist questions in Table 2 to show how the specific requirement is validated. |

Table 2: Requirements Checklist

| CHECKLIST QUESTION | Ref | MoV | COMMENTS | Draft Conclusions | Final Conclusions |
|---|---|---|---|--|---|
| The various requirements in Table 1 are linked to specific checklist questions the project shall meet. The checklist is organized in different sections, following the CDM-PDD structure. Each section is then further sub-divided. The lowest level constitutes a checklist question | Reference to documents where the source to the checklist question or item is found. | The means of verification explains how conformance with the checklist question is investigated, i.e. through document review (DR) or interview (I). | The section is used to elaborate and discuss the checklist question and/or the conformance to the question. and to explain the conclusions reached. | This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) or a Clarification Request (CL) Whenever a CAR or CL is issued, table 3 shall be used to describe how the findings have been resolved and concluded. | The final conclusion of the validation shall be documented as either OK, CAR or CL. This is based on the resolution of outstanding issues as elaborated in Table 3. |

Table 3: Resolution of Corrective Action and Clarification Requests

| Draft report clarifications and corrective action requests by validation team | Ref. to checklist question in table 2 | Summary of project owner response | Validation team conclusion |
|--|---|--|---|
| If the conclusions from the draft validation are either a Corrective Action Request or a Clarification Request, these shall be listed in this section. | Reference to the checklist question number in Table 2 where the CAR or CL is explained. | The responses given from the project proponent or other project participants during the communications with the validation team shall be summarized in this section. | This section shall summarize the Validation Team responses and final conclusions. The conclusions shall also be included in Table 2, in the section called "Conclusions Final". |

Source: EITA/PCF (2004), p. 48

Validation Guidance for the GS:

For the purpose of a GS registration, DOEs will validate according to guidance provided in Part 3 of this manual and will consult with a local or regional expert of their choice where necessary (specified in Part 3).

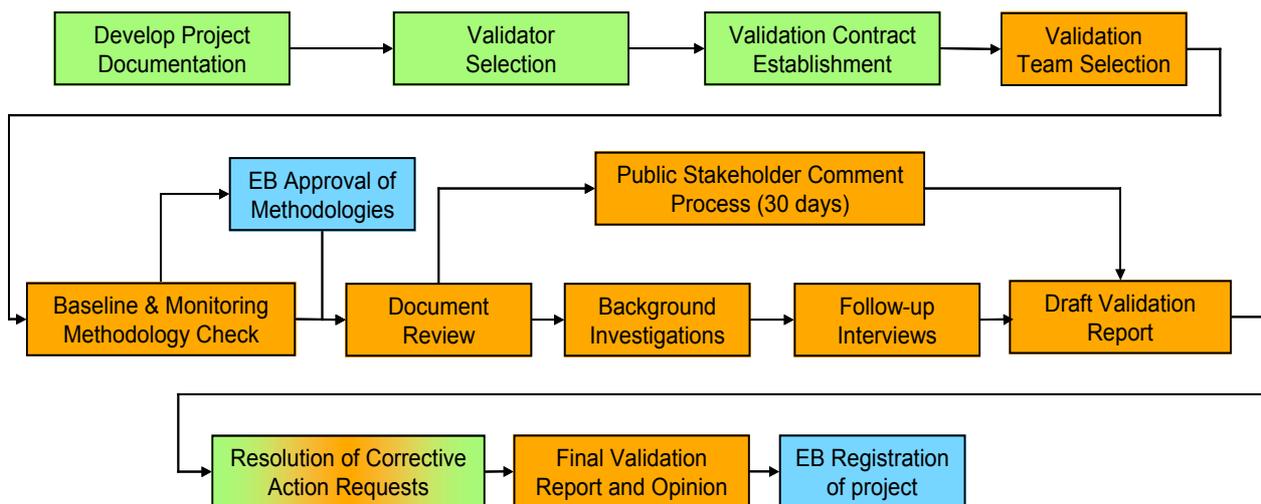
A local or regional expert is defined as somebody who has demonstrable experience in the sector and country/region where the proposed project activity is located.

The Validation Process

Validation by a DOE is required in order to register a project under the GS. The DOE will validate the project and its PDD according to the regular CDM requirements and the additional GS requirements as outlined in Part 3 of this manual. Where necessary, the DOE will request further clarification or corrective action on the project design.

Figure 1 provides an illustration of the general CDM validation process for large and small-scale projects. The different layers may be seen as representing the validation preparations, the validation itself and the formalization of the validation outcome. The color of the boxes represents the party responsible for the activity (green for the project proponent, orange for the validator, blue for the GS).

Figure 1: The General Validation Process for Small- and Large-Scale CDM Projects



Source: EITA/PCF (2004), p. 38

Further information on the general CDM validation process and its procedural steps is available in the Validation and Verification Manual (IETA/PCF, 2004), pp. 38-52. The information henceforth will mainly deal with additional requirements for the GS and procedural steps are offered below.

Document Review

The project document review shall establish to what degree a project meets the GS validation criteria (see Part 3). An overview of the relevant screens included in this review can be found in Box 1, offered at the beginning of this chapter. The project document review includes an evaluation of e.g. whether:

- The project documentation is complete and comprehensive and follows the structure and criteria given in the GS CDM PDD template.
- The project activity is eligible for the GS.

- Two stakeholder consultations have been carried out in accordance with GS requirements and comments are taken into account in the project design and the PDD.
- The Sustainable Development Assessment addresses all required sustainable development indicators and claims are sufficiently substantiated.
- The monitoring plan addresses the most sensitive sustainable development indicators.
- The Environmental Impact Assessment is carried out in accordance with GS requirements.

Background Investigation

A background investigation supplements documentation provided by project proponent. Generally, the validator will have to identify other informational sources that can provide background information for the validation and the focus should be to identify issues that are potentially of relevance to the project. Background studies are particularly important if the project is in the industrial or public sector that has not hosted a project of this character before, or if the validator has limited experience with particular host country circumstances. The background study should evaluate the political and legal, environmental, socio-demographic and technological policies, circumstances and trends applicable to a specific project. A background investigation through a host country visit is encouraged for projects where host country or sector specific information is not obtained through prior validation of projects.

For the GS project, special attention should be paid to background studies of the environmental and social sustainability of the project. The background investigation shall enable a risk-based validation (see Ch. 3.1) and the validator should emphasize issues that might incur risks related to a successful project implementation or accomplishment.

Examples of relevant background information for a GS validation:

- Local circumstances and development needs plus other projects in the region.
- Project relevant stakeholder groups.

Follow-Up Interviews – Desk Reviews & Host Country Visits

The assessment performed during a project validation shall enable the validator to arrive at a conclusion regarding the reasonableness of project assumptions. This assessment shall include theoretical as well as practical considerations, and shall also give an opinion on critical factors related to the project baseline.

Follow-up interviews are to discuss and validate issues related to:

- Project baseline and additionality: follow-up interviews with host country project stakeholders may prove useful or even necessary.
- The technical implementation or financing of the project: follow-up interviews with the project developer may also be beneficial.
- GS requirements: follow-up interviews with local and national NGOs that have endorsed the GS may be required.
- Sustainable development: discussions with the host Party's designated national authority (DNA) in order to understand and validate issues related to sustainable development is important for CDM projects, especially GS projects. Unless local validators are used for project validation, a thorough understanding of these issues may be difficult to achieve through other means.

Follow-up interviews are a prerequisite if the validator does not find sufficient or complete information or evidence via other means of verification. Interviews may be performed face-to-face or via telephone. A site visit may prove useful for some projects, such as refurbishment of existing installations and energy efficiency projects. A site visit may not be required for green-field projects.

Desk Reviews vs. Host Country Visits

A validation based on a desk review only, including telephone interviews with host country project stakeholders, may be used as a cost-effective way of validation when:

- The project context is well known, and
- The project's additionality is proven by similar projects in the same environment.

A validation based on a desk review only will usually require that similar project have been validated and previously achieved registration under the CDM or the GS, and that the implementation of these projects have not changed the additionality of the proposed project. Hence, a well documented project proposal with reference to prior projects of the same character may be cause for a validator to choose not to incur the extra costs related to a host country visit.

Stakeholder Consultation Process

The validator shall make the PDD of the project under consideration publicly available and invite Parties, stakeholders and UNFCCC accredited and NGOs to comment on the validation of requirements within 30 days. Comments received during the 30-day stakeholder consultation process shall be made publicly available. The invitation for comments shall be open and transparent in a way that allows receiving comments from regional stakeholders.

It should be noted that this consultation process is henceforth referred to as the Main Stakeholder Consultation. In addition to the UNFCCC requirements, the GS requires that full documentation is made publicly available for two month prior to validation in a readily accessible form, and a Main Stakeholder Consultation Report (for further guidance, see Ch. 3.4.3).

Draft Validation Report

The draft validation reports should facilitate the joint effort between the project proponent and the validator to develop and document and answers and conclusions to requirements which are considered applicable for CDM projects. The draft report shall clearly indicate how the GS is addressed.

The independent validation exercise and subsequent discussions given in the report shall:

- Enable the project proponent to address any concerns the validator may have raised, and how these may be clarified.
- Provide an overview of the scope of the validation and the conclusions for individual requirements.
- Provide an overview of the efforts deployed by the validator in order to arrive at the draft validation findings.
- Build on the transparency principles, and particularly indicate the implications of corrective action requests identified during the validation.
- Include a general discussion of details captured by the validation protocol, and clearly state the conclusions related to each of the general issues required for a successful validation.

Box 2 offers an example of what a Draft Validation Report may contain.

Box 2: Example of the Contents of a Draft Validation Report

| |
|---|
| 1 Introduction |
| 1.1 Objective |
| 1.2 Scope |
| 1.3 GHG Project Description |
| 2 Methodology |
| 2.1 Review of Documents |
| 2.2 Follow-Up Interviews |
| 2.3 Resolution of Outstanding Issues |
| 3 Preliminary Validation Findings |
| 3.1 Project Design |
| 3.2 Project Type Eligibility Screen |
| 3.3 Additionality |
| 3.4 Baseline |
| 3.5 Monitoring Plan |
| 3.6 Calculation of GHG Emissions |
| 3.7 Sustainable Development Screen |
| 3.8 Comments by Local Stakeholders |
| 4 Comments by Parties, Stakeholders, and NGOs |

A Validation Report template is available from IETA:

<http://www.ieta.org/ieta/www/pages/index.php?IdSitePage=394>

If using IETA's Validation Report template, please remember to include, under Validation Findings, the sub-chapters addressing:

- Additionality
- Project Type Eligibility Screen
- Sustainable Development Screen

Resolution of Clarifications and Corrective Action Requests

A validation may identify issues relate to the project baseline, implementation or operations that need to be further elaborated, researched or added to meet UNFCCC, host Party, or GS requirements. It is imperative that these issues are transparently identified, discussed and concluded in the validation report and opinion.

A Clarification Request is issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A Corrective Action Request is issued when non-compliance with a project requirement, or a risk to successful fulfillment of the particular project objectives, is identified. Hence, a Corrective Action Request is issued where:

- Mistakes have been made in assumptions or the project documentation which directly influences the project results.
- The requirements deemed relevant for validation of a project with certain characteristics are not met.
- There is a risk that the project would not be registered by the UNFCCC and the GS.

- Emission reductions and sustainable development impacts cannot be verified and certified

Upon a Clarification/Corrective Action Request

- The validator shall make sure that all clarification requests and corrective action requests are reported and elaborated in the conclusion of the Draft Validation Report.
- Also minor issues, i.e. to those which do not represent a risk of changing the validation conclusions, shall be brought to the attention of the project proponent for consideration. However, minor issues may not necessarily be presented as part of the Validation Opinion.
- After the presentation of clarifications for corrective action requests in the Draft Validation Report the project proponent will have to respond to these requests, and (if possible) to resolve the issues before a final Validation Opinion is formulated by the validator. Every exception shall be justified.

Resolution of Requests

The requests can be resolved by the project proponent by modifying the project design and by rectifying and updating the PDD. If this is not done in the final stages of the validation the project may not be recommended for UNFCCC and GS registration, and the expected emission reductions can subsequently not be verified and certified. Reasons for non-acceptance must be explained in the Validation Opinion (Further guidance on Validation Opinion is provided below).

A corrective action requests may:

- lead to amendments to the project's monitoring plan, or adjustments of the selected project baseline; and
- require further investigation of issues that are not considered or appropriately addressed in the project documents.

It should be noted that even if the validation does not result in any (remaining) Corrective Action Requests, the project could still end up not producing the expected emission reductions. Some issues can only be fully clarified e.g. after an investment decision has been made, or after an *ex post* (i.e. when emission reductions have been achieved) verification and certification has established if and how many CERs the project actually has generated.

It is the responsibility of the project proponent to respond to the Corrective Action Requests identified by the validator in a timely manner. However, as some issues may only be verified during or after project implementation, it shall be clearly documented in the PDD how these requests will be addressed. For this as well as for all other changes as a result of the validation, the nature and location of changes shall be clearly identified in the revised PDD.

All changes shall be approved by the project proponent before submitted to the validator for final review.

Final Validation Report

The Final Validation Report should reflect the results from the dialogue and any adjustments made to the project after the Draft Validation Report was submitted. It will in its appearance look much like the Draft Validation Report, but will now reflect the response to corrective action and clarification requests, discussions and revisions to project documents. Box 3 offers an example of what a Final Validation Report may contain.

The Final Validation Report should give the final conclusions regarding the projects conformance with relevant UNFCCC and GS requirements. The report may raise issues that need to be subsequently addressed during project implementation.

Box 3: Example of the Contents of a Final Validation Report

| |
|---|
| 1 Introduction |
| 1.1 Objective |
| 1.2 Scope |
| 1.3 GHG Project Description |
| 2 Methodology |
| 2.1 Review of Documents |
| 2.2 Follow-Up Interviews |
| 2.3 Resolution of Outstanding Issues |
| 3 Final Validation Findings |
| 3.1 Project Design |
| 3.2 Project Type Eligibility Screen |
| 3.3 Additionality |
| 3.4 Baseline |
| 3.5 Monitoring Plan |
| 3.6 Calculation of GHG Emissions |
| 3.7 Sustainable Development Screen |
| 3.8 Comments by Local Stakeholders |
| 4 Comments by Parties, Stakeholders, and NGOs |

A Validation Report template is available from IETA:

<http://www.ieta.org/ieta/www/pages/index.php?IdSitePage=394>

If using IETA's Validation Report template, please remember to include, under Validation Findings, the sub-chapters addressing:

- Additionality,
- Project Type Eligibility Screen
- Sustainable Development Screen

The Validation Report shall:

- Give an overview of the approach employed by the validator in order to arrive at the final validation conclusions and opinion.
- Particularly indicate the implications of any remaining corrective action requests not resolved during the validation.
- Include the general discussion of details captured by the validation protocol.
- Include conclusions related to project requirements.
- Include a Validation Opinion (see next heading).

The DOE shall go through necessary quality assurance procedures to ensure the correctness of the report and opinion.

Validation Opinion

After completing a validation, the DOE shall provide a Validation Opinion. The Validation Opinion shall either form the basis for UNFCCC and GS registration of the project, or explain the reason for non-acceptance, if the project is judged not to fulfill the requirements for validation. In case of non-approval,

the opinion will be an important decision factor for project proponents whether to proceed or not with the project.

A distinction should be made between reasons for non-acceptance based on UNFCCC requirements and based on GS requirements. The validator may conclude that the project meets UNFCCC requirements but cannot be validated as a GS CDM project.

The Validation Opinion shall include:

- Summary of the validation methodology and process, and the applied validation criteria
- Statement on project components/issues not covered in the validation engagement
- Summary of the validation conclusions
- Statement on the likelihood of emission projections
- Liability statement with regards to the validity of the validation opinion

The Validation Opinion shall confirm that a project meets stated criteria and that the methods presented in the PDD are acceptable and have been correctly applied. For the purpose of the GS, it must specifically address compliance with the GS requirements (described in Part 3).

Possible validation outcomes:

A. Unqualified validation opinion

An unqualified validation opinion is issued if the review and further assessment of the project design, the baseline and monitoring plan concluded that the project complies with all UNFCCC, host Party and Gold Standard requirements. This means that all corrective action requests presented in the draft validation report were satisfactorily resolved.

B. Qualified validation opinion

A qualified validation opinion will be issued when the project meets all UNFCCC, host Party and Gold Standard requirements, but does not meet criteria given to provide for consistent project operations, monitoring and reporting. The project developer shall rectify such issues prior to project commencement, and the initial verification or first periodic verification shall determine whether qualifications stated in the validation opinion have been sufficiently addressed.

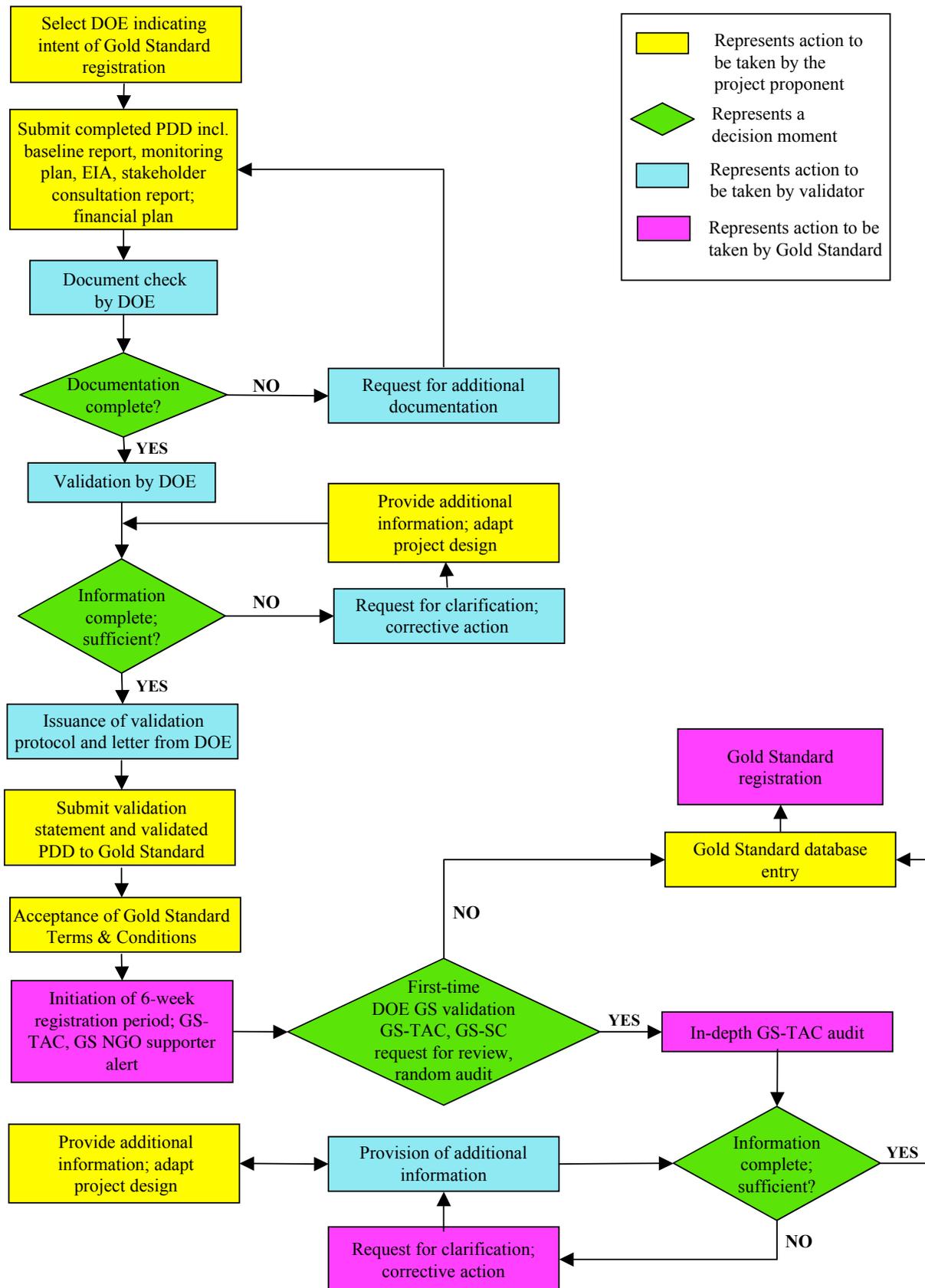
C. Denial of validation

A denial of validation shall be clearly expressed when the validator is unable to obtain sufficient and appropriate evidence which could confirm that UNFCCC, host Party or Gold Standard requirement are met, or where evidence show that such requirement are not met. Hence, the validator will conclude that the project cannot be validated.

GS Validation and Registration Procedures

For registration of the project under the GS, both the validated GS-(SSC)-PDD (including the information necessary for conventional CDM registration) and the Final Validation Report must be submitted to the GS. Project proponents also have to accept the GS Terms and Conditions (see Appendix D). Figure 2 provides an overview of GS validation and registration procedures.

Figure 2: GS Validation and Registration Procedures



2.2 Validation for Retroactive GS Registration

Projects can retroactively register to the GS, under certain conditions. Developers wishing to apply for retroactive registration under the GS should contact the GS for an initial feasibility assessment:

info@cdmgoldstandard.org

The objective of the pre-assessment stage for retroactive registration is to:

- Determine whether the project has a chance to comply with the Gold Standard criteria
 - Describe what formal changes are needed at least to make the project potentially GS compliant.
 - Find the worst bugs/gaps in additionality and sustainable development screen
- ➔ The projects are themselves responsible to present all data in a way that the validator can assess whether they comply with the GS or not! The pre-assessment is a service to developers to avoid them submitting projects with no chances of success to DOEs.

Examples of key questions:

- Can the assessment of environmental, social and economic impacts be reformatted in a way that it fits into the GS methodology with the SD Matrix?
- Has the scoring process of the SD Matrix been sufficiently based on accessible documentation?
- Have the critical/most sensitive SD indicators that need to be monitored been selected?
- Have stakeholder consultations been conducted?
- If yes – are they documented in a way that it seems feasible that
 1. the right issues were addressed
 2. the right consequences were drawn
- Does the Monitoring Plan request monitoring of the most critical and sensitive SD indicators?
- Does the substantiation of additionality make sense?

The GS charges a fee for this initial assessment that is based on the expected annual volume of reductions (1 US-Cent per expected CER; with a minimum fee of 250 US\$).

The GS-TAC response of the pre-assessment phase forms a mandatory part of the documentation that must be submitted to the DOE for retroactive registration. This serves purely informational purposes for the DOE.

When can a project not be retroactively registered?

- If it clearly violates GS criteria.
 - If applying the GS makes changes necessary to the project design that go beyond formal issues; and these changes cannot be implemented credibly because the project has already started to operate/is under implementation.
- ➔ This means that even for operational projects, redoing the stakeholder consultations is possible, but if consultations yield concerns which the project cannot take into account due to its design and because it is already under implementation/operating, then the GS registration process must be cancelled.

For projects already under implementation or operational, i.e. the physical construction of installations associated with the project has started:

- Projects can earn GS credits for the emission reductions achieved in the future if they can credibly and transparently demonstrate that they have applied an equally rigorous project

development procedure, particularly with respect to stakeholder consultation and assessment of additionality.

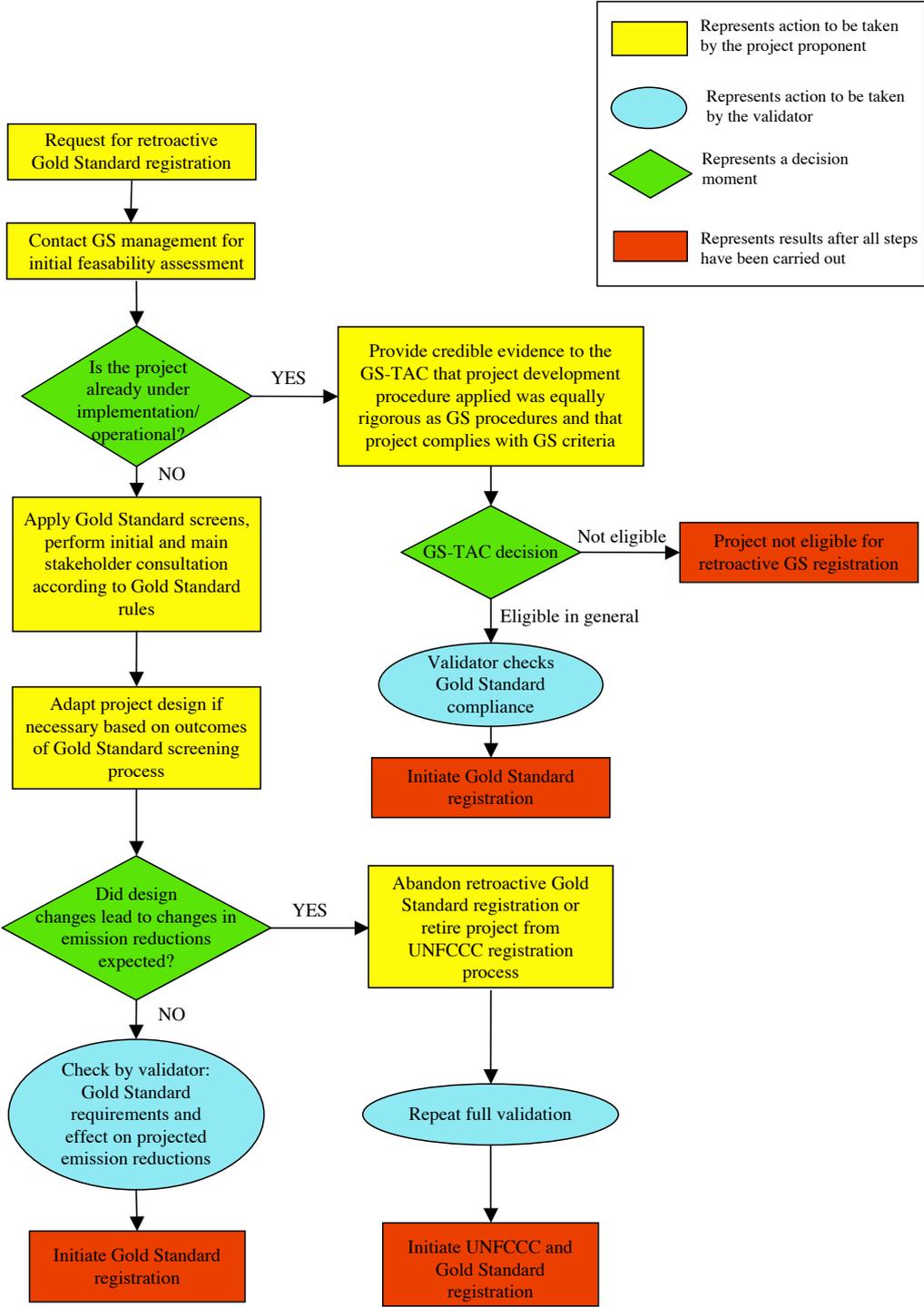
- Projects must comply with Gold Standard criteria.
- Project proponents wishing to make use of this option are requested to submit relevant documentation to the Gold Standard Technical Advisory Committee (GS-TAC) via info@cdmgoldstandard.org.
- The GS-TAC will conduct a first feasibility assessment and, if the outcome is positive, request DOE validation of the respective claim.

For projects having started the project development process or passed validation, but not yet under implementation or operational:

- Projects need to show full compliance with GS criteria. This includes performing an initial stakeholder assessment as described in detail section 3.4.3, subsequent adaptation of the PDD depending on the outcome of this process, and a Main Stakeholder Consultation according to the GS rules.
- A DOE must validate all new information, either at the same time as the regular CDM requirements or separately in cases when the project has already undergone validation for the conventional requirements. In the latter case, the validation documentation also needs to explicitly state that adaptation of the project to the GS rules has not led to a change in prospective emission reductions.
- If a project expects changes in already validated emissions reductions, due to consideration of GS criteria (e.g. lower reductions due to a more conservative approach in baselines calculations), the project needs to repeat full CDM validation process. Only a successful new validation reflecting the GS requirements may be submitted to the CDM EB for registration under the CDM. Previous requests for validation or registration need to be cancelled.

Figure 3 illustrates the necessary steps for retroactive GS registration.

Figure 3: Retroactive Registration of CDM projects to the Gold Standard



2.3 Verification

In order to make sure emission reductions claimed by a registered GS (SSC) CDM project are real, emission reductions need to be verified by a DOE that is accredited for verification by the CDM Executive Board (EB). A GS verification entails that the DOE will verify emission reductions achieved, leakage, changes to the key sustainable development indicators and the achievement and implementation of mitigation/compensation measures.

Who can verify a GS CDM project?

A DOE accredited for verification by the CDM EB. Project proponents are to notify the verifying DOE that the project should be verified according to the GS.

Basis for Verification:

GS verification is based on the monitoring plan (see section 3.5)

Verification Guidance for the GS

Guidance for DOEs regarding the verification process is offered in Part 4. Information concerning general verification procedures for CDM projects is available in the Validation and Verification Manual (IETA/PCF, 2004).

The Verification Report, Including a GS Specific Annex

A DOE shall report on the GS verification in a separate GS specific Annex to the Verification Report (further guidance is offered in Part 4).

Part 3: Validation Guide for the GS CDM

Part 3 of this manual is similar in structure to Part 3 of the “Gold Standard Manual for CDM Project Developers”, which enables an easy and quick comparison of the two documents.

The assessment framework consists of three screens and requirements pertaining to monitoring.

Box 4: The Three Screens

Project Type Eligibility Screen (see Ch. 3.2)

Additionality Screen (see Ch. 3.3)

- Previous public announcement check
- Additionality tool
- ODA additionality test
- Conservative approach check
- Technology transfer and/or technology innovation

Sustainable Development Screen (see Ch. 3.4)

- Sustainable development assessment
- Environmental Impact Assessment (EIA)
- Public consultation procedures

Requirements concerning monitoring and the monitoring plan are offered in Ch. 3.5.

3.1 Introduction

3.1.1 The Risk-Based Validation Approach

The validator shall use a risk-based validation approach. This means that the key risks of the project are to be identified, and requirements on data and assumptions with high risks are more stringent than for those with lower risks. This is particularly important for GS requirements. Especially important are the critical impacts identified in Sustainable Development Screen.

Key risks for meeting the criteria for achieving real, measurable, long-term GHG emission reductions are risks associated with:

- The project design,
- Baseline,
- Monitoring plan,
- Emission reduction estimates,
- Environmental impact and
- Comments by local stakeholders

A risk-based validation approach consists of the following steps:

- The validator shall identify the key risks associated with assumptions/claims made and data sources used, based on the information on the project provided in the PDD, and on the comments received by Parties, stakeholders and NGOs.

- The validator shall review the completeness, conservativeness and accuracy of the underlying evidence for the assumptions/claims made and data sources used. Assumptions/claims and data sources that are well identified and discussed in the PDD, that are substantiated with information from reliable references and that are sufficiently controlled by the monitoring plan are of less risk and can thus be given less emphasis.
- Remaining areas of uncertainty associated with assumptions made and/or sources used, which could not be fully recognized and approved by the validator during the above review, shall be investigated and tested further by the validator.
- The results of the review and further investigation shall give the necessary input for the Validation Opinion.

Risk Categories

Risks can be classified in risk categories e.g. High, Moderate and Low, and will depend on the issue's potential to underestimate the baseline emissions.

- The risk of overstating baseline emissions is a more serious risk compared to the risk of understating these. Overstating baseline emissions could lead to a situation where emissions reductions that are not real are transferred.
- A non-compliance with the GS CDM modalities and requirements is also a major risk situation.

Classifications of impacts, identified in the Sustainable Development Screen, are less straightforward. Whether a risk is classified as High, Moderate or Low is to a large extent subjective and requires the validator's expert judgment. In order to be able to make decisions on an issue, the validation team leader should have sufficient validation and verification experience.

Procedures for Dealing with High Risks

Once an issue has been classified as a high risk, more information shall be provided by the project proponent to clarify the situation and explain how the risk can be reduced. Measures can be taken to limit the risk e.g. by:

- additional monitoring.
- choosing a more conservative option, for example by selecting the lowest emission value from an uncertainty range of emission values for a baseline scenario.

Examples of risks and their valuation are provided in Appendix E.

3.1.2 Methods: Document Reviews and Follow-Up Interviews

The validation requires a set of methods to identify and determine risks related to project implementation and GHG emission reductions, which are to be used during both the document reviews and the follow-up interviews. The methods employed shall particularly focus on:

- The accuracy of provided information, and
- The credibility of the selected project baseline.

Methods that can be used in the validation process to verify assumptions during the document reviews and the follow-up interviews:

- Document Review:
 - Review of data and information to confirm the correctness of presented information
 - Cross-checks between information provided in the PDD and information from independent background investigations

- Follow-up Interviews:
 - On site
 - Via telephone
 - Via email
 Interviews shall include relevant stakeholders in the host country, personnel responsible for project design and implementation, and other stakeholders as applicable.
- Cross-check of information provided by interviewed personnel, i.e. by source check or other interviews (e.g. the interviews in the stakeholders consultation process).
- Comparison with projects or technology that have comparable characteristics
- Test of the correctness of critical formulas and calculations
- Witness and comparisons of similar projects in the host country
- Comparison between baseline factors and project performance factors to confirm comparability and consistency in the use of the monitoring plan.

3.1.3 Project Documentation Requirements

How should the GS specific information be presented by the project proponents?

The results of the GS screens (see Box 4) are part of the applicable PDD:

- a) The [Gold Standard Project Design Document \(GS-PDD\)](#) for large-scale project activities, or
- b) The [Gold Standard Small-Scale Project Design Document \(GS-SSC-PDD\)](#) for small-scale project activities as defined in “Simplified modalities and procedures for small-scale CDM project activities” (Annex II to decision 21/CP. 8). The appropriate documents can be downloaded from the GS web site (<http://www.cdmgoldstandard.org/downloads.php>)

The project proponent and the contracted DOE may choose at their convenience whether GS-specific information is presented as:

- i) an integral part of the PDD (as foreseen through the design of the GS-(SSC)-PDD); or
- ii) in (a) separate Annex(es).

The CDM EB will not accept changes to the regular PDD template outside the ‘grey boxes’. Project proponents are advised to check with their contracted DOEs and the relevant designated national authority (DNA) what option is to be favored in the local context.¹

What documents are to be submitted to the validator by the project proponent?

- **A complete GS-(SSC)-PDD**, including
 - The baseline report
 - The monitoring plan
 - Environmental Impact Assessment, (if applicable; see section 3.4.2 for detailed requirements)
 - Stakeholder consultation report

¹ Some DNAs (e.g. Brazil) require that all information not pertinent to the conventional CDM PDDs are submitted as separate annexes in order to approve the respective PDDs. Specifically, this is true for information on the sustainable development impact, whereas information on the project type and the additionality screens can be submitted as part of the conventional information.

Some DOEs insist on twice validating projects that submit a full GS PDD but later want to submit information pertinent to the conventional CDM only to the CDM EB, reasoning that the cutting of existing text may result in taking out information relevant to the CDM EB decision-making. In that case, project proponents should opt for submitting a PDD with separate Gold Standard annexes to the DOE.

- **A clear and transparent financial plan**, which allows the validator to assess whether the project financing includes ODA. This document will be treated as confidential by both the validator and the GS.

The GS CDM (SSC) PDD shall:

- be approved by the project proponent for its completeness before it is presented to the validator; and
- be complete and comprehensive enough to give an accurate picture of the project, its baseline and additionality, its technical features and its contribution to sustainable development.

Overview of Additional Requirements Compared to Standard CDM

To promote projects that deliver high quality carbon credits of premium value, the GS-(SSC)-PDD include additional requirements compared to the standard documents. An overview of the sections where additional requirements are found in both the PDD for large- and small-scale CDM projects is offered in Table 4 and Table 5, respectively. Table 6 offers a quick reference for finding the additional requirements for the GS CDM.

Table 4: Additional Requirements: Large-Scale CDM Projects (GS-PDD)

| PDD for CDM projects (GS-PDD) | |
|-------------------------------|--|
| A. 2 | Description of project activity |
| A. 4.2 | Category(ies) of project activity |
| A. 4.3 | Technology to be employed by the project activity |
| A. 4.4 | Brief explanation of how... emissions... are to be reduced by the proposed CDM project activity... |
| A. 4.5 | Public funding of project activity |
| D | Application of a monitoring methodology and plan |
| F. 1 | Documentation on the analysis of the environmental impact, including transboundary impacts |
| G. 1 | Brief description of how comments by local stakeholders have been invited and compiled |
| Annex 4 | Monitoring plan |

Table 5: Additional Requirements: Small-Scale CDM Projects (GS-SSC-PDD)

| PDD for small-scale CDM projects (GS-SSC-PDD) | |
|---|--|
| A. 2 | Description of the small-scale project activity |
| A. 4.2 | Category(ies) and technology of the small-scale project activity |
| A. 4.3 | Brief explanation of how... emissions... are to be reduced by the proposed CDM project activity... |
| A. 4.4 | Public funding of the small-scale project activity |
| B | Application of a baseline methodology |
| D | Application of a monitoring methodology and plan |
| F. 1 | If required by the host party, documentation on the analysis of the environmental impact of the project activity |
| G. 1 | Brief description of how comments by local stakeholders have been invited and compiled |

Table 6: Quick Reference for Finding the Additional Requirements for GS CDM

| PDD Section Reference | PDD for CDM projects (GS-PDD) | PDD for small-scale CDM projects (GS-SSC-PDD) |
|-----------------------|-------------------------------|---|
| A. 2 | X | X |
| A. 4.2 | X | X |
| A. 4.3 | X | X |
| A. 4.4 | X | X |
| A. 4.5 | X | |
| B | | X |
| D | X | X |
| F. 1 | X | X |
| G. 1 | X | X |
| Annex 4 | X | |

For more details of the content, please refer to the [Gold Standard Project Design Document for CDM projects \(GS-PDD\)](#) and the [Gold Standard Project Design Document for small-scale CDM projects \(GS-SSC-PDD\)](#).

3.2 The Project Type Eligibility Screen

- Check whether the project type is eligible for the Gold Standard (see Ch. 3.2.1 and 3.2.2)
- Relevant sections in the GS-CDM-PDD and GS-SSC-PDD: A.4.2

3.2.1 Eligible Project Types

Validation Guidance:

1) Check whether the project type is eligible for the GS.

- a) To be eligible the project must fall into one of the project types listed in Box 5. For a definition of these technologies, please refer to Ch. 3.2.2.

Box 5: Eligible Project Types

Renewable Energy (see section A.1, Ch. 3.2.2)

- PV
- Solar thermal
 - Electricity
 - Heat
- Ecologically sound biomass, biogas and liquid biofuels
 - Heat, electricity, cogeneration
 - Transport
- Wind
- Geothermal
- Small low-impact hydro, with a size limit of 15 MW, complying with WCD guidelines

End Use Energy Efficiency Improvement (see section A.2, Ch. 3.2.2)

- Industrial energy efficiency
- Domestic energy efficiency
- Energy efficiency in the transport sector
- Energy efficiency in the public sector
- Energy efficiency in the agricultural sector
- Energy efficiency in the commercial sector

- b) Bundling: Each project activity of a bundle must be in the list above. A bundle is defined as several different project activities submitted as one single CDM project (i.e. in one single PDD). All project activities that are part of a bundle must be considered.
- c) Project Size: Both large and small-scale projects are eligible for the GS. Technology definitions given, while linked to UNFCCC methodologies for small-scale projects, are equally applicable to

large-scale projects using technology of a similar design. If a large-scale project is developed, generic features of the technology need to be in accordance to that described in the small-scale methodologies for GS compliance while an appropriate UNFCCC-approved methodology in conjunction with the GS-PDD must be used.

2) Check that relevant additional conditions depending on project type are met (see Ch.3.2.2)

3.2.2 Definitions of Eligible Technologies

(This chapter is based on section 2.2 and Appendix A of the “Gold Standard Manual for CDM Project Developers”. Heading numbers are identical to those in the original text for a quick and easy comparison.)

A.1 Renewable Energy (Electricity, Heat)

The eligible project types correspond to categories AMS-I.A-I.D of those qualifying for small-scale project status under the CDM.²

Additional conditions apply for:

- biomass, biogas and liquid biofuels (see A.1.1 and relevant subsections); and
- hydroelectricity projects (see A.1.2)

Methane Capture / Recovery, categories AMS-III.D, AMS-III.G. and AMS-III.H. are eligible when renewable electricity or heat is generated (see section A.1.1.2 for detailed requirements).

Methane avoidance projects in the category AMS-III.E. are eligible when renewable electricity or heat is generated and additional conditions are met (see section A.1.1.2.3 for detailed requirements).

A.1.1 Ecologically Sound Biomass, Biogas and Liquid Biofuels

Specific requirements:

- Resources for biomass projects should be carbon neutral (at worst). This should be included in the baseline assessment.
- Project developers must declare if they use Genetically Modified Organisms or not. This must be taken into account in the EIA and stakeholder consultation.
- If biomass resources with competing uses (e.g., food, fodder or household cooking fuel) are used, this should be accounted for in the assessment of social impacts.

Ineligible projects: Co-firing of biomass in fossil fuel plants

A.1.1.1 Biomass

Eligible projects: Electricity and heat generation including cogeneration

Ineligible projects: Carbon sequestration.

The following categories of ecologically sound biomass projects are included in the GS:

- Energy crops

² See Appendix B, Simplified modalities and procedures for small-scale CDM project activities, FCCC/CP/2002/3; available at <http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html>

- Agro-processing and other residues

Examples of categories include:

- _ bagasse, mustard crop residues, rice and coffee husks, etc;
- _ woody waste from industry and vegetable processing biomass residues

A.1.1.2 Biogas

This category includes landfill gas (LFG) and biogas from agro-processing, wastewater and other residues.

Eligible projects: When renewable electricity is produced through a biogas project, emission reductions due to the capture of methane that would normally be emitted from the project are applicable under the GS.

Ineligible project: AMS III. D.-, III.G.- and III.H.-type projects that flare captured biogas and do not use the captured biogas for the production of electricity and/or heat. (Note: It is not required that credits are sought for the replacement of fossil fuels from heat/electricity generation by captured biogas and LFG.)

Specific requirements: AMS-III.G.

Projects of the design as defined in AMS-III.G. must show how the project design provides for a stable operation of a LFG-to-energy generator and consider implied maximum flowrates in relation to minimum flowrates necessary for stable operation of a generator in their predictions of expected emission reductions from the project. The yearly methane generation potential must be calculated using the default IPCC values for kj or more conservative assumptions; and project proponents shall discuss default values for kj in relation to potentially available decay rates observed under typical conditions of the project locality. Values used for MDy, project greater than 50% of MBy need to be substantiated with quantitative analysis.

A.1.1.2.1 Landfill Gas

Specific requirements: GHG methane emission reduction component

- Eligibility is limited to projects reducing methane emissions at existing sites that are not covered by existing legislation mandating LFG recovery.
- Where no such legislation exists, crediting of projects will be permitted until such legislation comes into force (related to the additionality of the project).
- Where a project activity leads to emission reductions that go beyond legal requirements, only those reductions that exceed these requirements are eligible for the GS. This must be reflected in the baseline calculation.
- The monitoring plan of LFG projects must cover monitoring of legislative development and monitoring of heat/electricity generation.

In the project description, project proponents are expected to elaborate on the following issues:

- Daily variations of CH₄ production and collection system / generator efficiencies (referencing this to necessary flow rates for stable operation of the generator and taking this into account in the emission reduction calculation appropriately)
- Current waste composition on the landfill and future changes in compositions to be expected, including consequences for future CH₄ production to be expected.

A.1.1.2.2 Agro-processing and Other Residues

Eligible Projects: The following project categories are permitted under the conditions stated in A.1.1.2

- Food-processing water treatment (e.g. from brewing).
- Animal slurries.
- Heat and power generation from waste water treatment projects.

Specific Requirements: AMS-III.H.

- For applications of projects relating to AMS-III.H. it must be shown how the project provides for stable operation of a gas-to-energy generator.
- Projects based on option 1.(i) are excluded from eligibility to the GS unless it can be shown that the new process improves quality of the discharge water substantially.
- Projects based on option 1.(ii) must show that sludge treatment is necessary and improves discharge water quality.
- Fertilizer production.

Specific Requirements: GHG methane emission reduction component

- Eligibility is limited to projects reducing methane emissions at existing sites that are not covered by existing legislation mandating methane recovery.
- Where no such legislation exists, crediting of projects will be permitted until such legislation comes into force (related to the additionality of the project).
- Where a project activity leads to emission reductions that go beyond legal requirements, only those reductions that exceed these requirements are eligible for the GS. This must be reflected in the baseline calculation.
- The monitoring plan of methane recovery projects must cover monitoring of legislative development and monitoring of heat/electricity generation.

A.1.1.2.3 Methane Avoidance

Eligible Projects: Projects designed as described in AMS-III.E. Avoidance of methane from biomass decay through controlled combustion are eligible if the energy from biomass combustion is used to generate heat and/or electricity replacing the use of fossil fuels under the condition that the following criteria are met:

Specific Requirements:

- The project is designed to burn biomass only (with an allowance of a total of 5 % of the energy generated to stem from other fuels in order to provide risk coverage for continuous operation);
- The project proponent can credibly demonstrate why reduction of the biomass waste is not possible at the source and why composting (e.g. using AMS-III.F.) is a less feasible option.

Ineligible Projects: Co-firing of non-renewable wastes

A.1.1.3 Liquid Biofuels

Eligible projects: This category includes biofuels for transport or generator sets, including biodiesel, bio-ethanol, etc.

A.1.2 Hydroelectricity

Eligible Projects: Projects involving hydroelectric plants with a maximum output capacity equivalent of up to 15 megawatts.

Specific Requirements: Project developers and operational entities must pay particular attention to the socio-economic and environmental impacts of project activities using hydroelectric installations. Specific guidance on this is presented in section 3.4.2 and for run-of-river projects in Appendix A.

A. 2 Energy Efficiency

Energy efficiency improvement is defined as the reduction in the amount of energy required delivering or producing non-energy physical goods or services

Eligible Projects: The eligible technologies correspond to AMS-II.C – II.F and AMS-III.C of those qualifying for small-scale project status under the CDM, with the exception of fossil-fuel switching activities included in categories II.D – II.F (see Appendix B, Simplified Modalities and Procedures for Small-Scale CDM project activities, FCCC/CP/2002/3; available at <http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html>)).

Co-generation projects in are eligible provided they can credibly demonstrate that the project has a demand-side energy efficiency character. Biomass co-generation projects shall be considered as category I. (Renewable Energy) activities.

Ineligible Projects: Fossil-fuel switching activities included in categories AMS-II.D – II.F (see above)

Specific Requirements: AMS-III.C.

Projects applying technologies as described in AMS-III.C. must include quantitative data on the average emissions of the baseline vehicles in order to be eligible to the GS.

3.3 The Additionality Screen

The baseline methodology and its application are closely connected to the determination of the project's additionality. Hence, the validator must determine that the selected baseline is actually the most likely scenario in a situation where the project is not implemented. The conclusion of this must confirm that the proposed project is not a part of the baseline scenario.

CDM projects must reasonably demonstrate that the emission reductions from the project are additional to what would have happened in the absence of the project. Additionality should be assessed in a conservative manner so as to avoid crediting business-as-usual activities.

To satisfy the GS additionality screen, project proponents need to demonstrate that:

- The project would not have occurred without the CDM; due to financial, political or other barriers.
- The project goes beyond a 'business as usual' scenario.
- Greenhouse gas (GHG) emissions are lower with the project than they would have been without the project (i.e. the baseline situation).

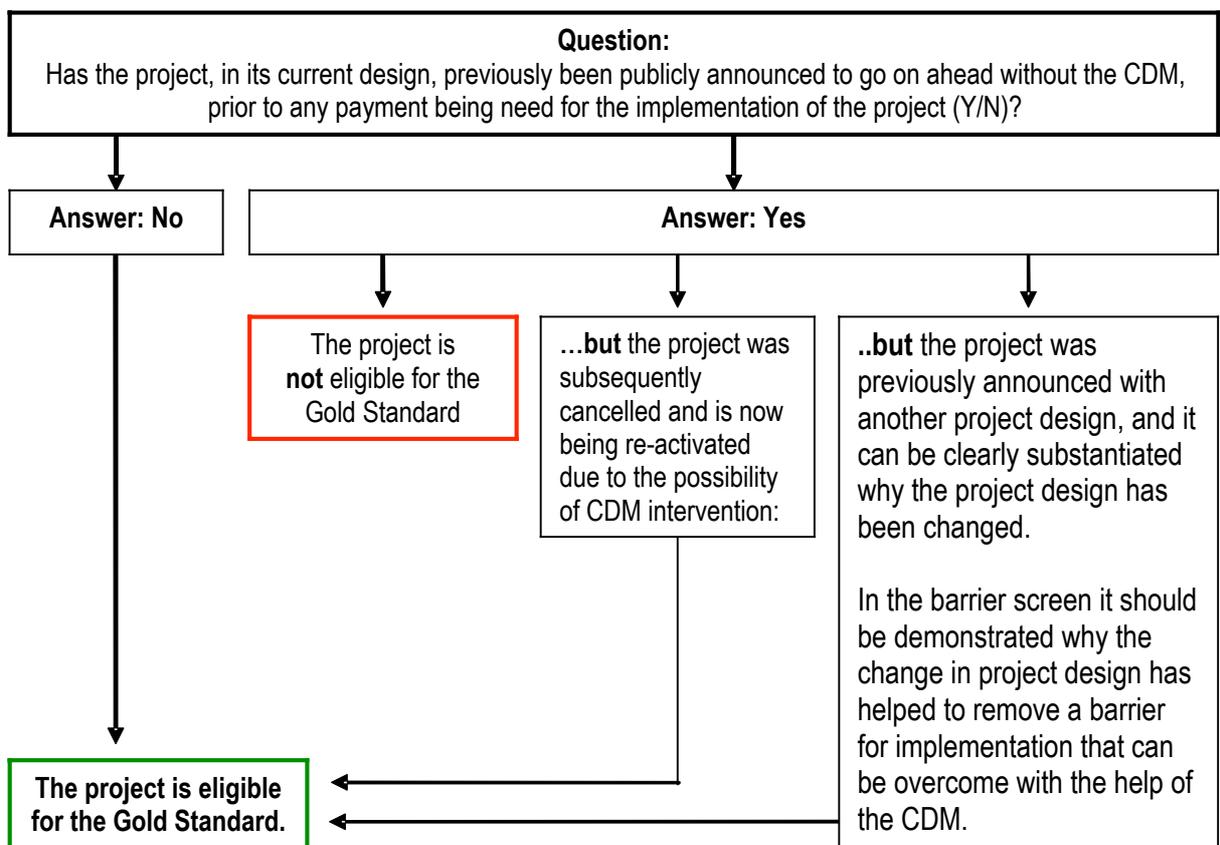
The GS additionality screen consists of five parts:

- Previous public announcement check (see 3.3.1)
- Additionality tool (see 3.3.2)
- ODA additionality test (see 3.3.3)
- Conservative approached check (see 3.3.4)
- Proof of technology transfer and/or knowledge innovation (see 3.3.5)

3.3.1 Previous Public Announcement Check

- Determine whether the project is eligible for the GS by checking whether the project, in its current design, has previously been publicly announced to go on ahead without the CDM, prior to any payment being needed for the implementation of the project (Y/N). See flowchart hereunder.
- Relevant sections in the GS-CDM-PDD: A.4.4
- Relevant sections in the GS-SSC-PDD: A.4.3

Validation Guidance:



3.3.2 Additionality Tool

- Check that the project proponent has applied the correct tool/method for assessing additionality and that it is used correctly. See specifications under (step 1), found here under.
- Check the project's additionality according to specifications (step 2-5), found here under.
- Relevant sections in the GS-CDM-PDD: A. 4.4, B
- Relevant sections in the GS-SSC-PDD: A. 4.3, B, E

Validation Guidance:

1) Additionality Tool:

- a) Check that the project proponent has applied UNFCCC's "Tool for the demonstration and assessment of additionality", Version 2 (dated November 28, 2005)
(http://cdm.unfccc.int/methodologies/PAMethodologies/AdditionalityTools/Additionality_tool.pdf)
- b) Check that the tool is used in its totality, i.e. steps 0-5 need to be passed and additionality document satisfactorily. Project proponents may choose between an investment **or** barrier analysis.

2) Main Arguments:

- a) Identify the main arguments that have been used by the project proponent to provide evidence of additionality.
- b) Assess the correctness of the line of argumentation.
- c) The argumentation shall also be addressed during the follow-up interviews with host country project stakeholders.

3) References: Check that the references used to demonstrate additionality are up-to-date and reliable.

4) Normal Practice in the Region: Check that the project proponent has compared the proposed project activity to normal practice in the region. This is particularly relevant in case similar projects have already been implemented on a commercial basis in the region.

5) Conservative Assumptions: Check that assumptions, quantitative or qualitative, used to claim additionality, are conservative.

3.3.3 ODA Additionality Test

- Check that a financing plan has been submitted with the GS-(SSC)-PDD (step 1).
- Check the use of ODA funds to establish eligibility for the GS (step 2).
- Relevant sections in the GS-CDM-PDD: A.4.5.
- Relevant sections in the GS-SSC-PDD: A.4.4

Validation Guidance:

- 1) **Financing Plan:** Check that a clear and transparent financing plan has been completed and submitted with the GS-(SSC)-PDD, and that it allows an assessment of whether the project financing includes ODA.
- 2) **ODA Funds:** Check use of ODA funds to establish eligibility for the GS according to criteria as specified below (a-b).

Box 6: Definition of Official Development Assistance (ODA) used for the GS

ODA is defined by the OECD as financial flows:

- To developing countries and multilateral institutions;
- Provided by government agencies;
- Whose main objective is that economic development and welfare of developing countries; and
- That are concessional in character, conveying a grant element of at least 25%.

Typical examples of ODA include grant funding from GEF and soft loans from development banks such as AfDB, ADB, etc.

Based on: OECD, Development Assistance Committee, Glossary, available online at http://www.oecd.org/glossary/0,2586,en_2649_33721_1965693_1_1_1_1,00.html#1965586

- a) Direct use of ODA funds is not permitted. In particular, this applies for the following activities:
 - General project investment cost excluding CDM components
 - Purchase of (new) technology
 - Installation costs
 - Running costs
 - Monitoring, verification and certification of emission reductions
 - Purchase of Certificate Emission Reductions (CERs)
- b) When can ODA be used?
 - ODA may be used for PDD development including, if required, a new methodology. If ODA is used for PDD development the project proponent must demonstrate the relevant streams of funding in the financing plan, and include a statement that PDD development support was not linked to a CER purchase agreement of any kind.

- ODA may be used for the installation and operating costs of a wider project of which the CDM project activity is part, as long as the project proponent can demonstrate that the need to implement the project activity submitted under the CDM was not a prerequisite to the implementation of the wider project.
- For ODA-discounted loans, the GS considers reduced loan costs as grants. Grants are not to exceed 25% of the total loan value. The formula in Box 7 shall be used to establish eligibility of projects with ODA-discounted loans:

Box 7: Formula for establishing eligibility of projects with ODA-discounted loans

If :

L_0 = initial loan

TC_{standard} = the total cost of the loan at the prevalent local/sectoral lending rate

TC_{project} = total cost of the loan including ODA for the project in discussion
(taking into account loan duration and repayment schedule)

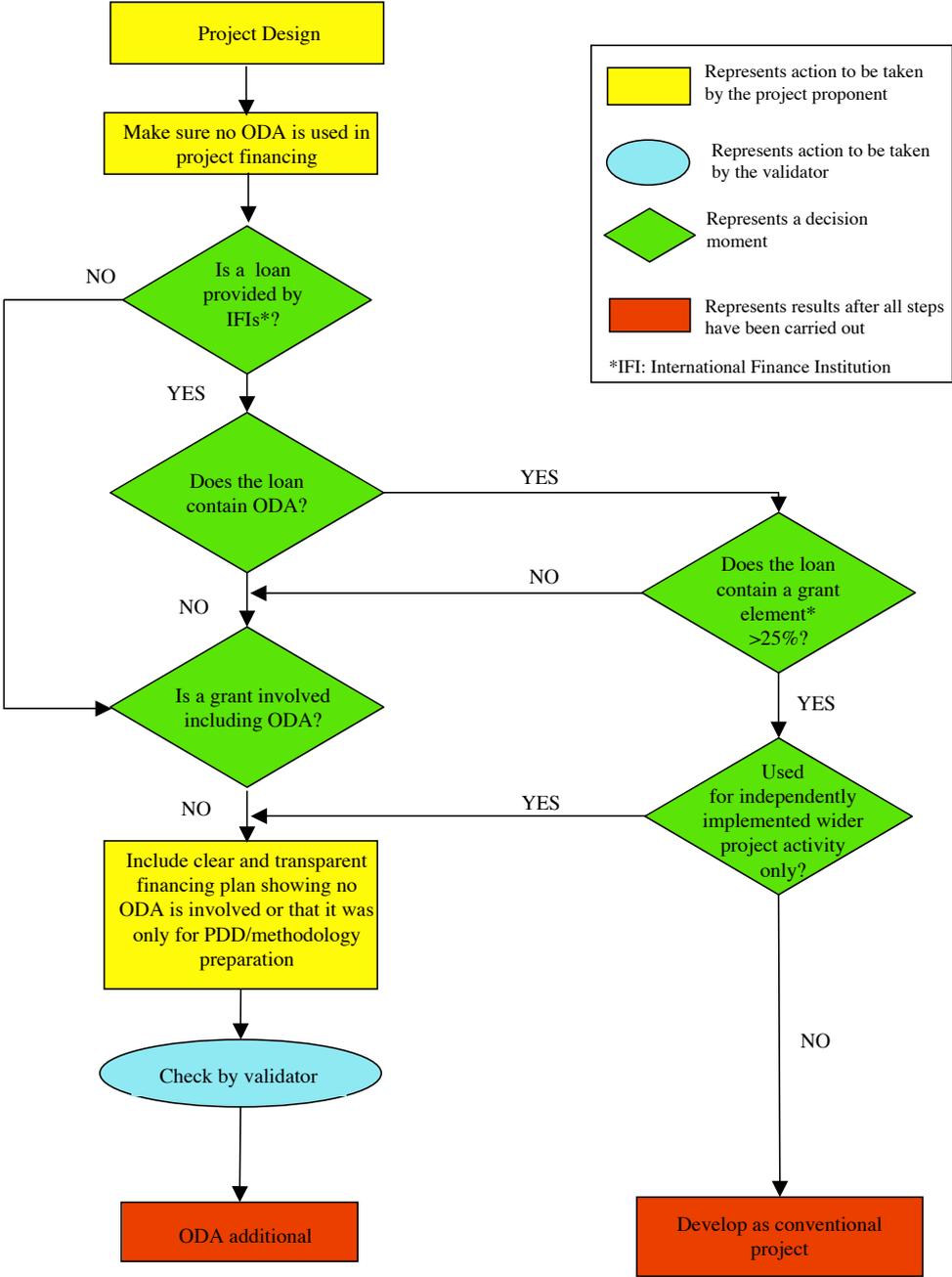
Then:

$TC_{\text{standard}} - TC_{\text{project}} > L_0 * 0.25 \rightarrow$ The project is not eligible to the Gold Standard

For the purpose of this calculation, the lifetime of the loan and repayment schedules as agreed with the lender must clearly be stated in the financial plan and used to calculate total cost of the loan. Local/sectoral lending rates can be defined using publicly accessible information; no project-specific quote is necessary.

See Figure 4 for an overview of the process for establishing ODA additionality.

Figure 4: The Process for Establishing ODA Additionality



* Loans discounted with the use of ODA below local lending rates shall be considered as containing a grant element

3.3.4 Conservative Approach Check of the Baseline Scenario

- Assess whether a sufficiently conservative baseline scenario is chosen, based on the baseline report and by consulting a local or regional expert (step1).
- Gold Standard specific criteria for demonstrating that a conservative approach is adopted are specified below (step 2 a-c).
- Relevant sections in the GS-CDM-PDD: A.4.4, B.

Validation Guidance:

1) Use of a Local or Regional Expert:

- a) Assess whether a sufficiently conservative baseline scenario is chosen on the basis of the baseline report and by consulting a local or regional expert.
 - A local or regional expert is defined as somebody who has demonstrable experience in the sector and country/region of the proposed project activity.
 - The validator may also refer to an in-house expert given that he/she provides a relevant local/regional experience.
- b) A local or regional expert must affirm (formally in writing) that a suitable approach and an appropriate methodology have been used in combination with conservative parameters.
- c) The contact details of the local or regional expert that has been involved in checking the baseline requirements is to be included in the Validation Protocol.

2) Criteria for Ascertaining a Conservative Baseline Scenario: To ascertain that GS criteria for a conservative approach are fulfilled, see (a)-(c) hereunder:

a) The Baseline Report:

Check that the baseline report:

- Describes the baseline methodology chosen
- Describes the set of quantified baseline scenarios
- Includes a substantiated choice for the most convincing scenario selected as the baseline
- Includes an overview of the current and known future legally binding regulatory instruments and assesses whether the project would be implemented anyway because of these.
- Provides evidence so that it can be assessed whether or not the technology used is considered “normal practice”.
- Addresses leakage issues as part of the baseline and project boundary as with any conventional CDM project.

b) Ensuring the Selection of the Most Convincing Baseline Scenario:

- Check that the methodology, used for calculating the baseline, is approved by the CDM Executive Board.

- Ensure that unless there is a convincing case for an alternative choice of baseline methodology and technical assumptions (e.g. emission factors), the approved methodology that results in the lowest baseline emissions is used.
 - Ensure that all likely baseline scenarios are developed and quantified.
 - Ascertain that the most convincing baseline scenario is selected, and that the choice is justified.
- c) Ensuring a Conservative Calculation of Baseline Emissions:
- Check that data or expert opinions are:
 - presented in a sufficient degree of detail and transparency; and
 - are verifiable.
 - Check that full transparency is applied with regard to which sets of data were selected based on the prerogative of conservativeness.
 - This includes full references to sources of data used.
 - Ensure that data uncertainties are clearly stated, if possible, with associated margins of error. All data and statements are to be checked.

3.3.5 Proof of Technology Transfer and/or Knowledge Innovation

- Check whether the project results in technology transfer and/or knowledge innovation (step 1 a-b).
- Project proponents shall substantiate why the proposed project activity has benefited from such a transfer. Check, with regards to the local circumstances in the baseline case, this substantiation (step 2 a-b).
- Relevant sections in the GS-CDM-PDD: A.4.3
- Relevant sections in the GS-SSC-PDD: A.2

Validation Guidance:

1) **Criterion:** GS projects must result in technology transfer and/or knowledge innovation.

a) Check whether the project results in technology transfer and/or knowledge innovation.

b) **Definition:**

Geographically, transfer of technology or knowledge is possible:

- _ From the North to the South (e.g. from an industrialized country to a developing country);
- _ From South to South (e.g. between developing countries);
- _ From an urban to a rural area;
- _ From a rural to an urban area.

2) **Benefits of Technology Transfer and/or Knowledge Innovation:**

a) Project proponents shall substantiate why the proposed project activity has benefited from such a transfer.

b) The validator will check this substantiation, considering the local circumstances in the baseline case.

3.4 The Sustainable Development Screen

The purpose of this screen is to assess whether the project complies with the requirements of the GS in terms of sustainable development.

The screen comprises three parts:

- Sustainable development assessment (Ch.3.4.1)
- EIA requirements (Ch.3.4.2)
- Public consultation procedures (Ch. 3.4.3)

These three parts are closely interlinked and Figure 5 gives an overview over the connections of the different requirements and timing.

Responsibility of the Project Proponents:

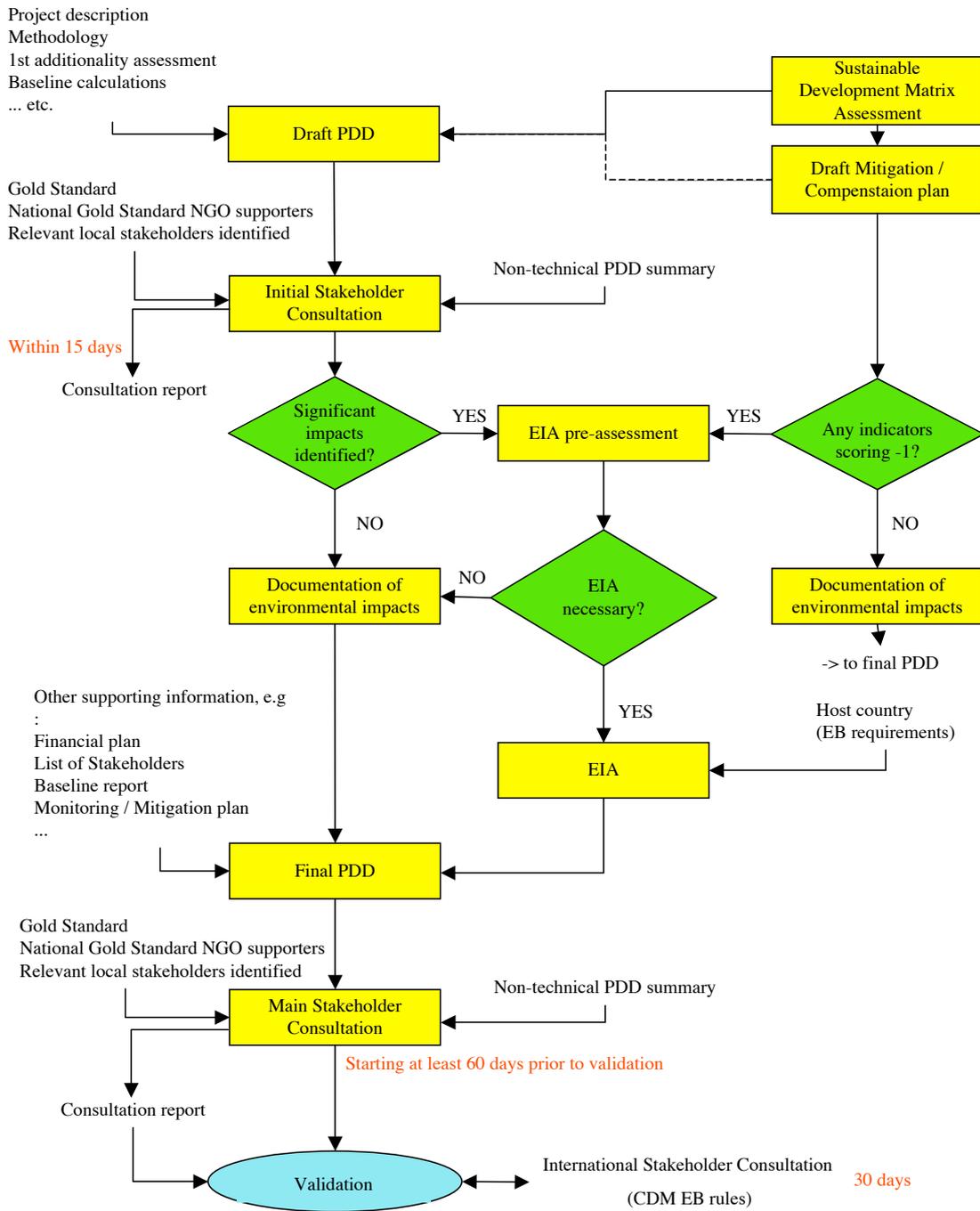
The project proponents are to support all the judgments and statements made as part of the Sustainable Development Screen with necessary information and materials to substantiate their claims with:

- the results of the Initial Stakeholder Consultation and subsequent consultation meetings
- information collected in the EIA and EIA screening process,
- supplemented by available research studies, interviews and references to similar projects.

Responsibility of the Validator:

The validator will assess whether the project proponent's claims are sufficiently substantiated.

Figure 5: GS Sustainable Development Screen – linkages and timing



3.4.1 Sustainable Development Assessment ³

- Assess whether the project proponent's claims regarding sustainable development are sufficiently substantiated (step 1-2).
- Relevant sections in the GS-CDM-PDD: A.2; D; and Annex 4

Validation Guidance:

1) The Sustainable Development Assessment Matrix (see Box 8 and Table 7):

- a) **Check all data and statements:** Check that existing data and input from the stakeholder consultation (see section 3.4.3) and, where necessary, that independent local expert opinions and judgments has been used.
 - The Sustainable Development Assessment Matrix should be based on existing sources of information, which could include data from existing reports, results from stakeholder consultations, and experiences with similar projects in similar situations, etc.
 - Where data are unavailable or is of poor quality, independent opinions and expert judgments can also be used.
 - Data or expert opinions need to be presented in a sufficient degree of detail, transparency and should be verifiable.
 - Data uncertainties should be clearly stated, if possible, with associated margins of error.
- b) **Transparency:** Make sure full transparency is applied and that the scoring (see Box 9) is reproducible and verifiable.
- c) **Public Consultation:** Check that the sustainable development (S)D indicators are discussed during the stakeholder consultation processes (see Ch. 3.4.3), as the opinions of people and communities affected by the project represent a key input into the sustainable development assessment.

2) Eligibility Criteria:

- a) **Point of Reference:** Check that all changes are to be considered relative to the baseline situation (i.e. without the proposed project) as defined in the project documents,
- b) **Scoring Requirements:**
 - Each of the components must have a sub-total score that is non-negative
 - The total score must be positive
 - If one of the indicators has a score of -2, the project is not eligible for the GS
 - Indicators scoring -1 are subject to the EIA Pre-Screen Checklist (see Ch. 3.4.2, Box 10) to determine necessity of an EIA

³ This methodology is based on the work of Helio International (www.heliointernational.org) and members of the South South North network (www.southsouthnorth.org).

c) Crucial SD Indicators:

Those indicators that are either crucial for an overall positive impact on sustainable development or particularly sensitive to changes in the framework conditions and/or where the public consultation (see Ch. 3.4.3) has yielded concerns of stakeholders:

- are to be marked with an asterisk (*); and
- must be included in the monitoring plan of the project. The data used for monitoring these indicators in the future must be consistent with the data used for the primary assessment (see Ch. 3.5, step 1, b - c).

Box 8: Introduction to the Sustainable Development Assessment Matrix and Its Scoring System

Any project seeking to obtain the Gold Standard must demonstrate clear benefits in terms of sustainable development. The contribution of the proposed project activity to the sustainable development of the country is based on indicators of three broad components:

- Local/global environment sustainability;
- Social sustainability and development;
- Economic and technological development.

The indicators within these three components are set out in the *Sustainable Development Assessment Matrix* (see Table 7, p. 33). They do not provide “yes” or “no” answers, but a rating of how the project performs against a series of parameters, based on quantitative and/or qualitative assessment. The project’s performance must be assessed using the *scoring system* (-2 to +2) found in Box 9 (p. 34). The Gold Standard does not define qualitative or quantitative boundaries between the different scores apart from the ability to undertake mitigation of major negative impacts (not possible → -2; possible → -1). This allows for situation-specific scoring of the indicators.

Table 7: Sustainable Development Assessment Matrix

| Component Indicators (A list describing the indicators in more detail is presented in Appendix B.) | Score (-2 to 2) |
|--|-----------------|
| Local/regional/global environment | |
| Water quality and quantity | |
| Air quality (emissions other than GHGs) | |
| Other pollutants (including, where relevant, toxicity, radioactivity, POPs, stratospheric ozone layer depleting gases) | |
| Soil condition (quality and quantity) | |
| Biodiversity (species and habitat conservation) | |
| Sub total | |
| Social sustainability and development | |
| Employment (including job quality, fulfilment of labour standards) | |
| Livelihood of the poor (including poverty alleviation, distributional equity, and access to essential services) | |
| Access to energy services | |
| Human and institutional capacity (including empowerment, education, involvement, gender) | |
| Sub total | |
| Economic and technological development | |
| Employment (numbers) | |
| Balance of payments (sustainability) | |
| Technological self reliance (including project replicability, hard currency liability, skills development, institutional capacity, technology transfer) | |
| Sub total | |
| TOTAL | |

Box 9: Scoring System for the Sustainable Development Assessment Matrix

- 2: major negative impacts, i.e. where there is significant damage to ecological, social and/or economic systems that cannot be mitigated through preventive (not remedial) measures.
- 1: minor negative impacts, i.e. where there is a measurable impact but not one that is considered by stakeholders to require that the project implementation is stopped or that cause significant damage to ecological, social and/or economic systems.
- 0: no, or negligible impacts, i.e. there is no impact or the impact is considered insignificant by stakeholders.
- +1: minor positive impacts
- +2: major positive impact

3.4.2 EIA Requirements

- Check that the project proponent conform to the requirements of the host country and/or the Executive Board in undertaking EIAs (general CDM requirement).
- In addition, or in the absence of any host country legal requirements, check the project against the GS requirements on EIA (step 1-4).

Validation Guidance:

1) EIA Requirements:

- a) General Requirements: Check that the project proponent conform to the requirements of the host country and/or the Executive Board in undertaking EIAs.
- b) GS Requirements: In addition, or in the absence of any host country legal requirements, check the project against the GS requirements on EIA.
 - If an EIA **has not** been carried out by the project proponents, go to step 2 (i) and (ii).
 - If an EIA **has been** carried out by the project proponents, go to step 2 (iii)

2) (i): If no EIA has been carried out:

Check that a description of the environmental impact of the project has been included and that an EIA is indeed not required for the proposed project, according to criteria below:

- a) No SD indicator scored -1 (Sustainable Development Matrix, Ch. 3.4.1); and
- b) Stakeholders did not identify any significant environmental or social impacts (Environmental and Social Impacts Checklist, for further information see Initial Stakeholder Consultation, Ch. 3.4.3)

2 (ii): If no EIA has been carried out, but one or more SD indicators scored -1 (Sustainable Development Matrix) and/or significant negative environmental and social impacts were identified (Environmental and Social Impacts Checklist):

Check that a description of the environmental impact of the project has been included and that an EIA is indeed not required for the proposed project, according to criteria below:

- a) EIA Pre-Screen Checklist: Check that impacts were assessed by project proponents using the EIA Pre-Screen Checklist (see Box 10) and that the outcome confirms that impacts were not significant (if impacts are significant an EIA is required).
 - Indicators scoring –1 in the Sustainable Development Matrix are subject to the EIA Pre-Screen Checklist to determine necessity of an EIA
 - Significant negative environmental and social impacts identified by the Environmental and Social Impacts Checklist, are subject to the EIA Pre-Screen Checklist (see Initial Stakeholder Consultation, Ch. 3.4.3)
 - Ascertain that the project proponent has provided concise, transparent and sufficiently detailed answers to clearly decide whether an EIA is necessary or not.
 - Ascertain that each question with regard to every significant impact identified is fully documented.
 - Assess that the documentation is complete, comprehensive, replicable and transparent.

- b) Mitigation and Compensation Measures: Check that mitigation and compensation measures and plans, and considerations thereof, are included in the project's monitoring plan (see Ch. 3.5).
- In cases where *SD indicators scored -1*, but impacts were not consider significant enough to require an EIA, possible mitigation measures must be considered and if feasible planned.
 - In cases where *significant impacts were identify in the Initial Stakeholder Consultation* (see Ch. 3.4.3), but impacts were not considered significant enough to require an EIA, a mitigation plan has to be developed.
 - Where mitigation is not feasible, appropriate compensation measures can be considered instead.

Box 10: EIA Pre-Screen Checklist

1. Will there be a large change in environmental conditions?
2. Will new features be out-of-scale with the existing environment?
3. Will the effect be unusual in the area or particularly complex?
4. Will the effect extend over a large area?
5. Will there be any potential for transboundary impact?
6. Will many people be affected?
7. Will many receptors of other types (fauna and flora, businesses, facilities) be affected?
8. Will valuable or scarce features or resources be affected?
9. Is there a risk that environmental standards will be breached?
10. Is there a risk that protected sites, areas, features will be affected?
11. Is there a high probability of the effect occurring?
12. Will the effect continue for a long time?
13. Will the effect be permanent rather than temporary?
14. Will the impact be continuous rather than intermittent?
15. If it is intermittent will it be frequent rather than rare?
16. Will the impact be irreversible?
17. Will it be difficult to avoid, or reduce or repair or compensate for the effect?

(Adapted from: CEC (1993) 'Environmental Manual: Environmental Procedures and Methodology Governing Lomé IV Development Cooperation Projects' DGVIII, CEC, Brussels, Belgium.)

2 (iii): If a full EIA has been carried out:

- a) Check that the EIA has been submitted (to you, the validator) and include it in the Main Stakeholder Consultation (see Ch. 3.4.3).
- b) Check that the EIA fulfills the GS requirements (see step 3).
- c) Check that mitigation and compensation measures for significant negative impacts identified by the EIA are included in the project's monitoring plan (see step 4).
- d) Assess whether the mitigation and compensation measures are sufficient, appropriate and adapted to local circumstances

3) The GS requires that an EIA should at least include:

- a) Significant Environmental and/or Social Issues: The significant environmental and/or social issues raised by Initial Stakeholder Consultation.

- b) SD Indicators: Those SD indicators scoring –1 in the Sustainable Development Assessment Matrix.
- c) Run-Of River Hydro Projects: The issues listed in Appendix A must be considered by the EIA.
- d) Dam and Other Storage Project Activities: must fulfill WCD guidelines. These can be found at: www.dams.org/report. See in particular Chapter 9 of The WCD Report: Criteria and Guidelines.
- e) Essential Questions:

The following questions are essential features, which must be answered with 'Yes' by an EIA:

- Have alternative technologies, sites and resource uses been given due consideration?
- Has the compatibility of the project activity with other existing policies, programs and projects been duly evaluated?
- Was the identification of environmental and socio-economic impacts deep and broad enough and did the assessment cover an appropriate area of influence?
- Did public consultation begin early enough to ensure that stakeholder views were incorporated in the design of the project activity?
- Were concerns raised during public consultation incorporated into the EIA?
- Are proposed impact mitigation and compensation activities credible and feasible? (See step 4 (a))
- Is the monitoring plan appropriate and feasible?

4) Requirements Regarding Significant Negative Impacts Identified in the EIA

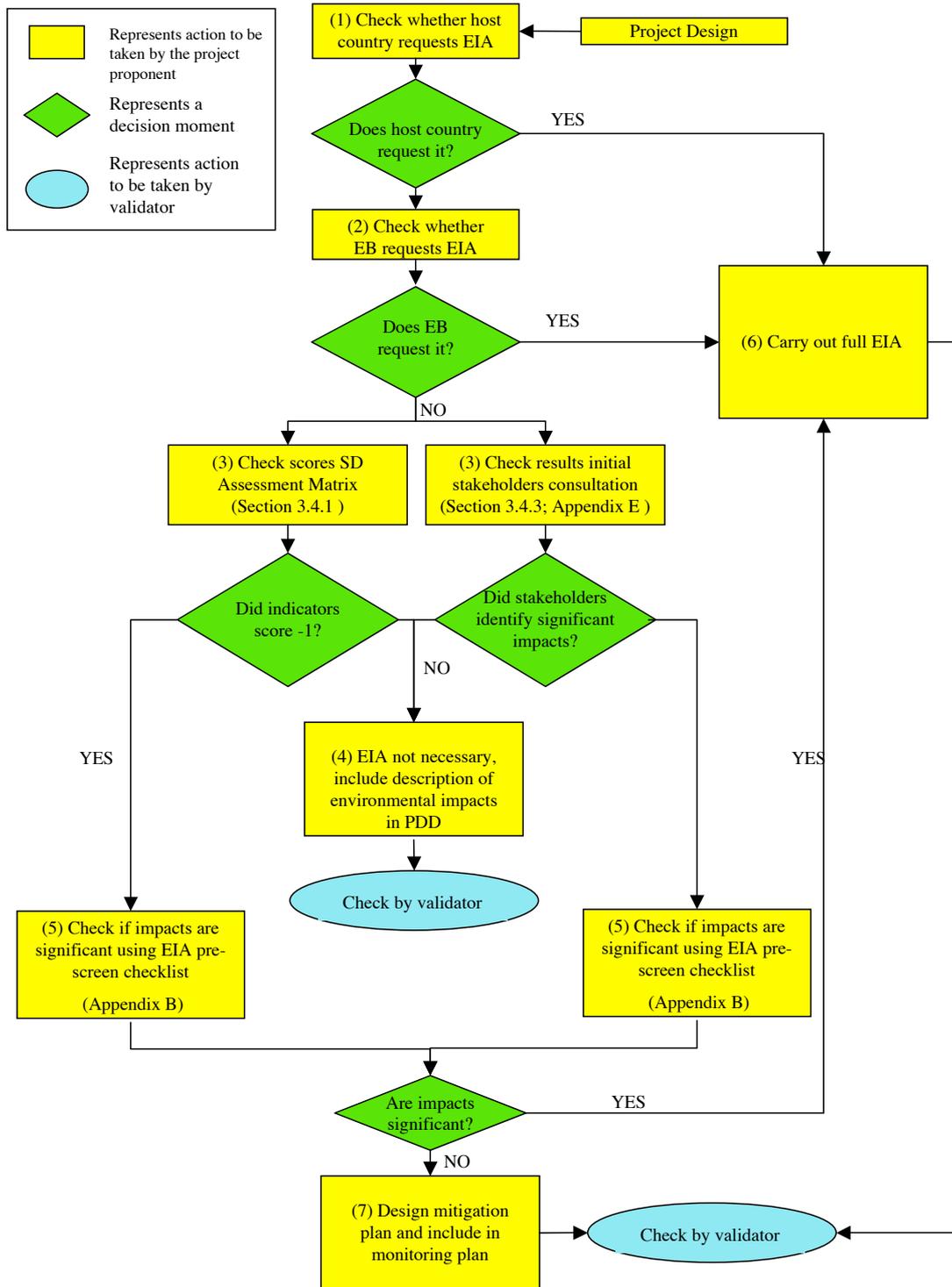
- a) Mitigation and Compensation Measures: where the EIA indicates that there will or may be significant adverse impacts,
 - Check that the project proponent has designed and will implement credible mitigation or compensation measures. Where mitigation measures are not feasible, compensation measures can be applied instead.
 - Check the viability of the implementation of the mitigation and compensation measures.

Note: Implementation of mitigation and compensation measures is subject to monitoring throughout the project lifetime (see 3.5).

- b) Main Stakeholder Consultation: Mitigation and compensation measures should be included in the Main Stakeholder Consultation (see 3.4.3)

The following flow chart (Figure 6) gives an indication of the requirements and steps to be undertaken to meet the EIA requirements of the GS.

Figure 6: EIA decision flowchart of the GS



3.4.3 Public Consultation Procedures

- Check that Project Proponents fulfill the Gold Standard Requirements regarding Public Consultation Procedures (step 1-3)
- Relevant sections in the GS-CDM-PDD and GS-SSC-PDD: G.1

Box 11 provides general information concerning the Initial and Main Stakeholder Consultation, i.e. when they take place and how they are conducted according to UNFCCC requirements. It is followed by GS specific requirements.

Box 11: General Public Consultation Procedures: The Initial and Main Stakeholder Consultation

Conventional CDM projects require public consultation procedures at two phases in the project cycle:

- Initial Stakeholder Consultation: Consultation of local stakeholders in the design phase. This consultation procedure has to be carried out according to the host country requirements.
- Main Stakeholder Consultation: Consultation of (local) stakeholders on the PDD. This consultation is done through publication of the PDD on the UNFCCC website for 30 days.

No additional requirements have been set by the UNFCCC (e.g. in terms of language, form).

Validation Guidance:

1) Stakeholder Participation:

- a) Ascertain that a list of the consulted stakeholders has been submitted (to you, the validator) as part of the PDD.
- b) Assess, with the support of a local expert, whether the range of stakeholders selected is appropriate (see Box 12). A local expert is defined as somebody who has demonstrable experience in the sector and country/region where the proposed project activity is located.
- c) The contact details of the local or regional expert should be included in the Validation Protocol.

Box 12: GS Requirements regarding Public Consultation Procedures

Comments must be actively invited, fully documented and disseminated. Adequate publicity must be given to the project, the availability of the PDD and other documentation, and hearings, (including publication in the local media and other relevant communication channels). At least the following stakeholders must be invited to participate in both consultation processes:

- local policy makers
- local people directly impacted by the project
- (if applicable) local NGOs
- Local and national NGOs that have endorsed the Gold Standard (Gold Standard supporters; a list of these organizations can be found at http://www.cdmgoldstandard.org/about_goldstandard.php?id=16. This includes consultation of those NGO supporters that have an international presence with local offices. Contact data to these offices is provided through the Gold Standard.
- The Gold Standard (info@cdmgoldstandard.org)

2) The Initial Stakeholder Consultation

Box 13: The Initial Stakeholder Consultation

The Initial Stakeholder Consultation is closely related to the EIA procedure. The initial stakeholder consultation shall take place prior to the decision on an EIA (where this is not already required by national legislation or the EB). If an EIA is required, the consultation will be used as input into the EIA process and should be carried out at the earliest opportunity.

In the event that an EIA is required by national legislation, the Initial Stakeholder Consultation must be carried out anyway, although the two processes can be integrated in the following way:

- If the requirements of the GS Initial Stakeholder Consultation can be satisfied under the national EIA regulations, the Consultation may be carried out as an integral part of the EIA process.

a) Minimum Requirements:

Assess that, at a minimum, the initial consultation was based on:

- Documentation on environmental impacts (info provided in section F.1 in the CDM PDD)
- The SD indicators of the Sustainable Development Matrix (see Ch. 3.4.1, 1, c)
- A non-technical summary of the draft PDD in an appropriate local language.

At least one public consultation meeting was carried out in an appropriate local language(s), organized by the project proponent in conjunction with an independent representative of the local community.

b) Results of the Public Consultation Meeting:

Check that the results were:

- made publicly available and concerns addressed in the PDD.
- made publicly available to stakeholders in a readily accessible format no more than 15 days after the initial consultation process has closed.

c) Stakeholder Participation: Check that stakeholders were asked to address the impacts, and their significance, raised in the Environmental and Social Impacts Checklist, (Appendix C).

d) Significant Impacts Identified by the Initial Stakeholder Consultation:

Where impacts are deemed as significant or particularly sensitive to changes in the framework conditions, check that:

- The project proponent assessed whether an EIA is necessary to further understand the significance of the impacts, using the EIA Pre-Screen Checklist (see Ch. 3.4.2, Box 10).
- That appropriate indicators addressing the impacts are added to the monitoring plan (see Ch. 3.5).

e) Initial Stakeholder Consultation Report:

Check that the report on the Initial Stakeholder Consultation include:

- A description of the procedure followed to invite comments, including all the details of the oral hearing such as, place, date, participants, language, local or national GS NGO supporters, etc.
- All the written comments received, and all comments received during the oral hearing and as a response to the newspaper announcement.
- The argumentation on whether or not comments are taken into account and the respective changes in the project design.

3) Main Stakeholder Consultation

- a) Check that the main consultation process has taken place before the project activity is validated.
- b) Check that, in addition to the UNFCCC requirements, full documentation was made publicly available for two months prior to validation in a readily accessible form, including:
 - The original and complete PDD (including the EIA, if applicable)
 - A non-technical summary of the PDD (in appropriate local language(s))
 - All relevant supporting information (if available in appropriate local language(s);
 - Additional, non-translated information must be made available as well and shall be translated to the local language upon any justified request of a stakeholder).
- c) During the consultation period the project developer should respond to comments and questions by interested stakeholders.
- d) Main Stakeholder Consultation Report:

Check that the report on the Main Stakeholder Consultation include:

- A description of the procedure followed to invite comments, including addressing all the details of the oral hearing such as, place, date, participants, language, local or national GS NGO supporters, etc.
- All written or oral comments received;
- The argumentation on whether or not comments are taken into account and the respective changes in the project design.

If necessary, (the validator shall) contact the local or national GS NGO supporters for additional information.

3.5 Monitoring Requirements and Monitoring Plan

- Assess the monitoring plan and the proposed monitoring equipment (step 1-3).
- Relevant sections in the GS-CDM-PDD: D; and Annex 4

To meet the requirements of the GS, the monitoring plan must allow for an accurate assessment, after project implementation, of the emission reductions resulting from the project, key sustainable development indicators and success of mitigation measures, as well as the quality requirements set out below.

The data collected on the basis of the monitoring plan is the basis for verification (see Part 4), where the DOE on a periodic basis audits monitoring results, the achieved emission reductions and the project's continued conformance with all relevant project criteria, in particular regarding the SD indicators.

Validation Guidance:

1) GS Requirements:

a) Local/Regional Expert

- A local or regional expert should check:
 - whether appropriate indicators are monitored, i.e. those that deliver the right information to make sure the project continues to have an overall positive impact on SD; and
 - that the data to be used for the monitoring will actually be available (to avoid to have an excellent monitoring plan that then cannot be implemented due lack of data).
- The contact details of the local or regional expert that has been involved in checking the baseline and monitoring requirements should be included in the Validation Protocol.

(A local or regional expert is defined as somebody who has demonstrable experience in the sector and country/region of the proposed project activity.)

b) Emission Reductions

Check that:

- Emission reductions are determined in the necessary degree of detail and, where applicable, data is interpreted conservatively.
- The relevant data is identified and that it is described how they will be established.
- The project proponent can ensure that indicators, that show the GHG emission level from the project, are recorded in a way that enables comparison with the baseline emission scenario

c) Sustainable Development Indicators:

Check that indicators of the Sustainable Development Assessment Matrix, which are critical for a positive contribution of the project to SD or that are particularly sensitive to changes in the framework conditions, are (see section 3.4.1, Step 2, c):

- clearly identified,
- marked with an asterisk (*) in the matrix, and
- added to the monitoring plan with a description of indicators and data collection methodology. The data used for monitoring these indicators in the future must be consistent with the data used for the primary assessment.

d) Public Consultations: Check that indicators, relevant for the issues of potentially significant importance raised in the public consultations (Initial and Main) (section 3.4.3), are

- clearly identified,
- marked with an asterisk (*), and
- included in the monitoring plan with a description of indicators and data collection methodology. The data used for monitoring these indicators in future must be consistent with the data used for the primary assessment.

e) Potential Mitigation/Compensation Measures:

- Sustainable Development Matrix: Check that, in cases where SD indicators were scored -1, but impacts were not consider significant enough to require an EIA, possible mitigation measures is discussed and if feasible planned. (see Ch. 3.4.2, step 2 (ii) b)
- Initial Stakeholder Consultation: Check that, in cases where significant impacts were identify by the Initial Stakeholder Consultation (see Ch. 3.4.3), but impacts were not considered significant enough to require an EIA, a mitigation plan has been developed. (see Ch. 3.4.2, step 2 (ii) b)
- EIA: Check that, for significant negative impacts identified by an EIA, the project proponent has designed and will implement credible mitigation measures or, where mitigation is not feasible, compensation measures (see Ch. 3.4.2, step 2 (iii) and step 4).
- Assess whether the mitigation and compensation measures are sufficient, appropriate and adapted to local circumstances.
- Check that appropriate success indicators for monitoring potential mitigation and compensation measures are selected and included in the monitoring plan.

2) Indicators: Check that the selection of the indicators is justified. It is recommended to use those indicators that are already in use for normal business practice. The following are examples of indicators that can be used:

- Project activity levels (e.g. kWh produced)
- Input feedstock use and quality (e.g. volume, moisture content of biomass fuel)
- Environmental impacts as identified in the EIA
- Leakage indicators

- 3) The Monitoring Plan & Equipment:** Assess the monitoring plan and the proposed monitoring equipment according to (a)-(f), you (the validator) may also contact a local expert for the validation of the selected key indicators for the monitoring of the SD impact of the project. If it is judged that the monitoring plan is not sufficient, then the project proponent should revise it accordingly.
- a) Check that the sources, collection and archiving of all relevant information for...
- _ The baseline,
 - _ The emissions and/or removals occurring within the project boundary during the crediting period;
 - _ The leakage;
 - _ The environmental impacts (CDM PDD section F.1)
 - _ The key SD indicators; and
 - _ The potential mitigation and/or compensation measures
- ...are in accordance with the procedures as required by the CDM EB and the GS, and are addressed in the monitoring plan.
- b) Monitoring Equipment: Check that the project proponent has described, in the monitoring plan, the monitoring equipment to be implemented in order to carry out the monitoring adequately.
- c) Quality of Assurance and Control Procedures: Check that quality assurance and control procedures for the monitoring process are described in the monitoring plan.
- d) Calculations:
- _ Check that procedures for the periodic calculation of the emission reductions and/or enhancements of removals by the project, and for leakage effects, if any, are addressed in the monitoring plan.
 - _ Check that documentation of all steps involved in the calculations is addressed in the monitoring plan.
- e) Methods for Data Registration, Monitoring, Measurement and Calibration: Check that the project proponent has described the methods used for data registration, monitoring, measurement and calibration. Preferably, an internationally recognized method should be applied.

Part 4: Verification Procedures for the GS

- Verify the:
 - Emission reductions achieved
 - Leakage
 - Changes to the key SD indicators

When is a GS verification to be carried out?

It shall be conducted at the same time and in the same periods as the verification under the regular CDM project cycle.

The Verification Report

The verifier shall provide a separate GS specific Annex to the Verification Report in which it will, based on the monitoring plan, report on

- Emission reductions achieved
- Leakage
- Changes to the key sustainable development indicators
- Achievement and implementation of mitigation/compensation measures, according to the success indicators as established in the monitoring plan

The DOE may verify selected samples of the monitoring plan only and will justify any such selection in the GS Annex to the verification report.

Changes since the validation...

It must be kept in mind that a validation can only tell something about a project's likelihood to comply with requirements and to succeed at a certain point in time and under given circumstances. The validation report will be one of the inputs used for verification of emission reductions, and:

- Any changes that have occurred since validation and that have impact on the claimed emission reductions shall therefore be considered.
- In addition, the verifier shall check whether any changes occurred that may have impact on the GS qualification of the project, particularly with reference to any potential changes in key parameters leading to an overall positive impact on sustainable development of the project.

What should be sent to the GS?

The full Verification Report, including the GS-specific Annex is, to be submitted to the GS by the project proponents.

Request for Further Clarification and Corrective Action

The GS, upon receipt of the Verification Report, will initiate a 2-week period during which GS-TAC members may request further clarification or corrective action (e.g. mitigation measures to maintain or restore the score/status of indicators deviating from targets set in the monitoring plan) from the verifier or the project developer.

In general, the GS can only require:

- project developers to initiate measures that secure the overall scores of the three sustainable development components, and
- that the conditions for the assessment of the Sustainable Development Matrix (see Ch. 3.4.1) are not violated (e.g. if an indicator monitored is scored with –2 at the time of verification corrective action must be initiated).

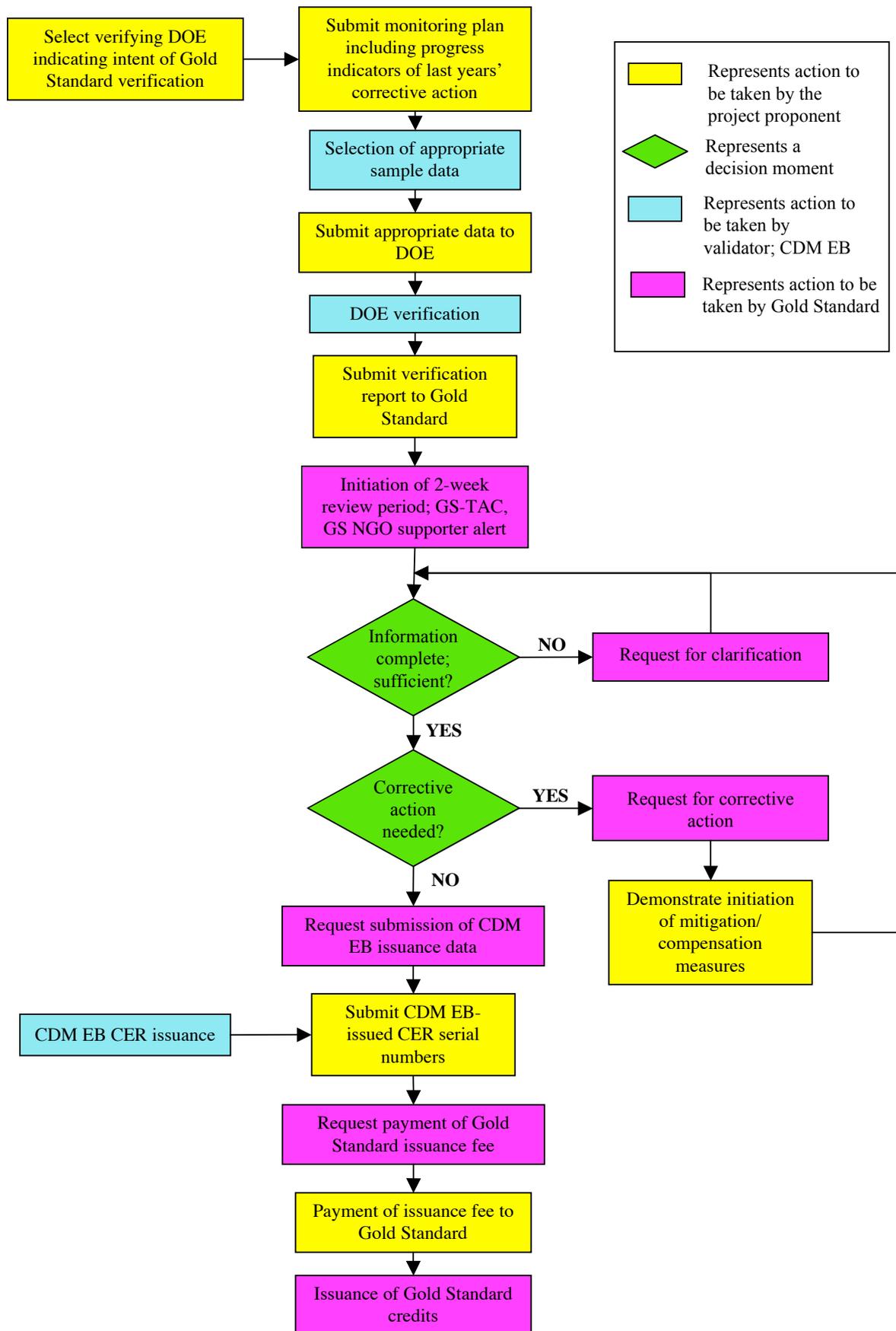
Restoring Compliance with GS Procedures

- Project developers must restore compliance with GS procedures within the following year.
- Verification will only be accepted if credible evidence of an initiated corrective action can be demonstrated by including the corrective action in the monitoring plan.
- Indicators, for corrective action initiated upon verification, must be verified by the DOE the following year.

After the 2-week period, upon receipt of the Verification Report, and upon receiving clarifications requested, and/or the demonstration of corrective actions initiated, the credits generated in the period that is verified are accepted as real, measurable emission reductions.

See Figure 7 below for an illustration of the GS verification and issuance procedures.

Figure 7: The GS Verification and Issuance Procedures



Appendix A: EIA Requirements for Run-Of River Projects

Relevant environmental and social aspects of run-of river projects

| Management domain | Basic requirements |
|----------------------|---|
| Minimum Flow | <p>Goal is a dynamic flow regime, which qualitatively simulates the natural hydrological regime</p> <p>Minimum flow which guarantees habitat quality and prevents critical oxygen and chemical concentrations</p> <p>No disconnection of lateral rivers</p> <p>Minimum water depth for fish migration during critical periods</p> <p>Lateral and vertical connectivity (flood plains and groundwater) shall not be substantially disturbed</p> <p>Provides sufficient transport capacity for sediments</p> <p>Landscape compartments shall not be destroyed</p> <p>Flood plain ecosystems shall not be endangered</p> <p>Conservation of locally adapted species and ecosystems</p> |
| Hydropeaking | <p>Rate of change of water level should not impair fish and benthic populations</p> <p>Reduction in water level should not lead to drying of the water course.</p> <p>Protective measures if flood plain ecosystems are impaired.</p> <p>No isolation of fish and benthic organisms when water level decreases</p> <p>No impairment of spawning habitat for fish</p> |
| Reservoir management | <p>Are there feasible alternatives to reservoir flushing?</p> <p>Changes in reservoir levels should not impair lateral ecosystems (flood plains, river shores, ...)</p> <p>Connectivity with lateral rivers should not be impaired</p> <p>Sediment accumulation areas should be used as valuable habitats, where feasible.</p> <p>Special protection of flood plain ecosystems if they are impaired</p> |
| Sediment management | <p>Sediments have to pass through the power plant.</p> <p>No erosion and no accumulation in the river bed below storage dams and water intakes because of a deficit in sediments.</p> <p>Sediment transport should sustain morphological structures, which are typical for the river.</p> <p>No accumulation of sediments below dams</p> <p>Riverine habitats have to be established</p> |
| Power plant design | <p>Free fish migration upwards and downwards (as far as technologically feasible)</p> <p>Protection of animals against injury and death stemming from power plant operations (turbines, canals, water intakes, ...)</p> |
| Social impacts | <p>Cultural landscapes</p> <p>Human heritage (including protection of special ethnic groups)</p> <p>Preservation of lifestyles</p> <p>Empowerment of local stakeholders in the decision-making process (about mitigation and compensation of social impacts)</p> <p>Resettlement of local population under similar or better living conditions (than prior to the project)</p> <p>Build additional social infrastructure, sufficient to cope with population increase (due to migration induced by the project)</p> <p>Water quality and fishing losses affecting downstream riverside population</p> |

Appendix B: List of Sustainable Development Indicators

A Local/global environmental sustainability

Water

Water quantity

This indicator is used to evaluate the project's contribution to water availability and access locally and regionally. Number of people with access to water supply in comparison with the baseline.

Water quality

This indicator is used to evaluate the contribution of the project to water quality locally and regionally in the project's area in comparison with the baseline. Water quality will be measured using concentration of main pollutants (including BOD and others) in any effluents generated by the project activity and their contribution, if any, to local water quality.

Dependent on the result of the EIA, both quantity and quality assessment should discuss seasonal variation of availability and quality in addition to mean annual data due to the fact that mean annual data might not be sufficient to provide full understanding of impacts of the project activity against the baseline.

Air quality

This indicator is used to evaluate the contribution of the project to local air quality. Air quality will be measured by comparing the concentration of most relevant air pollutants (e.g.: SO_x, NO_x, particulate matters etc.) generated by the project activity with the baseline.

Other pollutants

This indicator is used to evaluate the contribution of the project activity to reducing the flow of pollutants not already considered to the environment, including solid, liquid and gaseous wastes.

Soil condition

This indicator is used to evaluate the contribution of the project activity to local soil condition. Soil condition will be measured by comparing the concentration of most relevant soil pollutants, erosion and the extent of land use changes due to the project with the baseline.

Contribution to biodiversity

This indicator is used to evaluate the contribution of the project to local biodiversity. The change in biodiversity is estimated on a qualitative basis considering any destruction or alteration of natural habitat compared to the without projects scenario. A positive change will be given by previously disappeared species re-colonizing the area, a negative change will be given by species disappearing or by introduction of foreign species. In judging this, inputs from local communities should be considered a key resource.

B Social sustainability and development

Employment (quality)

This indicator is used to evaluate the qualitative value of employment, such as whether the jobs resulting from the project activity are highly or poorly qualified, temporary or permanent in comparison

with BAU. Take temporary and permanent as well as job-related Health and Safety (H&S) impacts as qualifications for job quality.

Livelihoods of the poor

This indicator comprises a number of sub-indicators. Where a sub-indicator is not relevant to the project, it should be ignored. After all the relevant variables have been considered, the total score should be non-negative.

Poverty alleviation

This sub-indicator is used to evaluate the project contribution to poverty alleviation. Poverty alleviation will be evaluated by calculating the change in number of people living above income poverty line compared to baseline.

Livelihoods of the poor: Contribution to equitable distribution and additional opportunity for disadvantaged sectors

This sub-indicator is used to evaluate contribution of the project to equitable distribution of wealth and opportunity, in particular gender and marginal or excluded social groups. The indicator combines quantitative - changes in estimated earned income (normalized to the project's starting year) compared with the baseline – and qualitative assessment - improved opportunities.

Access to essential services (water, health, education, access to facilities, etc.)

Access to essential services will be taken as an indicator of social sustainability, measured by the number of additional people gaining access in comparison with the baseline. Access must be directly related to the service and not an unintended impact.

Access to affordable clean energy services

The CDM and JI provide an important opportunity to improve the coverage of reliable and affordable clean energy services, especially to the poor and in rural areas. Where of a relevant scale, security of energy supply (an indicator of a country's ability to generate the power that is needed for services and the economy in comparison with the baseline), should be taken into account.

Human Capacity

This indicator is used to assess the project's contribution to raising the capacity of local people and/or communities to participate actively in social and economic development. It comprises three indicative sub-indicators:

Empowerment

The sub-indicator is used to evaluate the project's contribution to improving the access of local people to and their participation in community institutions and decision-making processes.

Education/skills

The sub-indicator is used to assess how the project activity enhances and/or requires improved and more widespread education and skills in the community.

Gender equality

The sub-indicator is used to assess how the project activity requires or enhances improvement of the empowerment, education/skills and livelihoods of women in the community.

C Economic and technological development

Employment (numbers)

Net employment generation will be taken as an indicator of economic sustainability, measured by the number of additional jobs directly created by the CDM project in comparison with the baseline.

Sustainability of the balance of payments

Net foreign currency savings may result through a reduction of, for example, fossil fuel imports as a result of CDM projects. Any impact this has on the balance of payments of the recipient country may be compared with the baseline.

Hard currency expenditures on technology, replicability and contribution to technological self-reliance

As the amount of expenditure on technology changes between the host and foreign investors, a decrease of foreign currency investment may indicate an increase of technological sustainability. When CDM projects lead to a reduction of foreign expenditure via a greater contribution of domestically produced equipment, royalty payments and license fees, imported technical assistance should decrease in comparison with the baseline. Similarly a reduced need for subsidies and external technical support indicates increased self-reliance and technology transfer.

Appendix C: Public Consultation: Environmental and Social Impacts Checklist

Environmental and Social Impacts Checklist

This list should be used in the Initial Stakeholder consultation and should be completed by the stakeholders. Project proponents may choose to only have certain stakeholders complete certain parts/questions of this list. In this case, the selection of questions (and the various stakeholder groups) must be transparently and sufficiently be documented and justified. The validator will check the selection and justification for appropriateness.

Project proponents should clarify that the first answer column refers to a scenario with the project implemented as compared to the baseline scenario, i.e. a situation without the project, but including other future development at the location.

| Environmental Impacts | Yes / No / ? . Briefly describe | Is this likely to result in a significant effect? Yes/No/? – Why? |
|--|------------------------------------|---|
| 1. Will construction, operation or decommissioning of the Project use or affect natural resources or ecosystems, such as land, water, forests, habitats, materials or, especially any resources which are non-renewable or in short supply? | | |
| 2. Will the Project involve use, storage, transport, handling, production or release of substances or materials (including solid waste) which could be harmful to the environment? | | |
| 3. Will the Project release pollutants or any hazardous, toxic or noxious substances to air? | | |
| 4. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation? | | |
| 5. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea? | | |
| 6. Are there any areas on or around the location which are protected under international or national or local legislation for their ecological value, which could be affected by the project? | | |
| 7. Are there any other areas on or around the location, which are important or sensitive for reasons of their ecology, e.g. wetlands, watercourses or other water bodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project? | | |
| 8. Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project? | | |
| 9. Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project? | | |
| 10. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems? | | |

Socioeconomic and Health Impacts

| | | |
|---|--|--|
| 11. Will the Project involve use, storage, transport, handling, production or release of substances or materials (including solid waste) which could be harmful to human health or raise concerns about actual or perceived risks to human health? | | |
| 12. Will the Project release pollutants or any hazardous, toxic or noxious substances to air that could adversely affect human health? | | |
| 13. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation that could adversely affect human health? | | |
| 14. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea that could adversely affect human health? | | |
| 15. Will there be any risk of accidents during construction or operation of the Project which could affect human health? | | |
| 16. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment? | | |
| 17. Are there any areas on or around the location, protected or not under international or national or local legislation, which are important for their landscape, historic, cultural or other value, which could be affected by the project? | | |
| 18. Are there any transport routes or facilities on or around the location which are used by the public for access to recreation or other facilities and/or are susceptible to congestion, which could be affected by the project? | | |
| 19. Is the project in a location where it is likely to be highly visible to many people? | | |
| 20. Are there existing or planned land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project? | | |
| 21. Are there any areas on or around the location which are densely populated or built-up, or occupied by sensitive uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project? | | |
| 22. Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism and minerals, which could be affected by the project? | | |
| 23. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present socioeconomic problems? | | |

(Adapted from: CEC (1993) 'Environmental Manual: Environmental Procedures and Methodology Governing Lomé IV Development Cooperation Projects' DGVIII, CEC, Brussels, Belgium.)

Appendix D: Gold Standard Terms and Conditions for CDM and JI

The following Terms and Conditions are written to protect the reputation and market differentiation of the Gold Standard brand and all those using it.

A. Introduction

I. The Gold Standard Terms and Conditions for CDM and JI (“Terms and Conditions”) represent a binding arrangement between the Gold Standard Foundation, based in Basel, Switzerland (“The Gold Standard”) and the legal owner (“Project Proponent”) of the CDM or JI project registering to the Gold Standard (“Project”).

II. Acceptance of the Terms and Conditions in writing is an integral part of the Gold Standard registration process. Acceptance is signaled by signing each page of Appendix F by a legally entitled representative of the project owner and returning these signed pages to the Gold Standard via mail (The Gold Standard, 22, Bäumleingasse, 4051 Basel, Switzerland), Fax (+41 61 271 10 10) or scanned as email (info@cdmgoldstandard.org) at the time of submission of the validated Gold Standard PDD.

III. The rules laid out in this document apply for registration as well as the subsequent operational period of the project during which Gold Standard credits are issued.

IV. The document also provides guidance on the use of the Gold Standard logo (see figure below), which is a protected trademark. This guidance applies to all parties wishing to use the Gold Standard logo for any purpose. Usage of the logo implies acceptance of the complete Terms and Conditions.



The Gold Standard logo (protected trademark)

V. Unless otherwise stated, all definitions, rules and procedures applying and referred to in the Terms and Conditions are those presented in the Gold Standard Project Developer’s Manual (including Appendices).

VI. Any dispute arising from non-compliance with the Terms and Conditions requiring jurisdiction shall be resolved by a court of choice of the Gold Standard. Sanctions are listed in section F. of the Gold Standard Terms and conditions.

VII. Acceptance of the Terms and References is project-specific and must be repeated for every project even if several projects are submitted for registration.

IV. The Terms and Conditions apply to the following extent to project proponents submitting projects and other parties using the Gold Standard logo and/or name:

- Projects starting Gold Standard certification process after May 1st 2006: all sections.

- Projects not having submitted their documentation for validation by May 1st 2006: all sections, except, where not applicable or agreed otherwise with the Gold Standard, rules as laid out in section B..
- Projects having submitted their documentation for validation to an accredited DOE, but not for Gold Standard registration by May 1st 2006: all sections except section B.
- Projects having submitted their documentation for registration to the Gold Standard: all sections except sections B. and C.I-IV.
- Gold Standard registered projects: All sections except sections B. and C.
- Buyers and other parties using or wishing to use the Gold Standard logo and/or name in any way: All sections.

B. Gold Standard applicant projects (prior to registration)

- a) Project proponents wishing to register a CDM or JI project to the Gold Standard in the future may use the Gold Standard logo for marketing purposes at all times of the project development process under the following conditions:
- i) Submission of a document describing the project (e.g. PIN etc.); including identification of any party involved or being part of a transaction of the project. Should additional parties get involved with the project or in a transaction of the project prior to successful completion of the initial stakeholder consultation, the Gold Standard must be informed of this.
 - ii) Commitment to submit the relevant project for DOE-validation within 12 months upon acceptance of the Gold Standard Terms and Conditions. Upon presentation of credible reasons the Gold Standard may extend the deadline for submission by 6 months once.
 - iii) Clear and explicit statement in all communications, whether publicly accessible or not, that the relevant project has only Gold Standard applicant status (i.e. “Gold Standard applicant”; “project is applying for Gold Standard registration”, “Gold Standard application under preparation” etc.). This statement must be made whenever the project is named in connection with the Gold Standard and whenever the Gold Standard logo is used, and the information must be provided in a way that it is clearly visible that the project has only applicant status.
 - iv) Submission of copies of all documents, materials or websites where the project is mentioned as an applicant to Gold Standard registration.

II. Project proponents may register their projects in the Gold Standard project database after having completed the initial stakeholder consultation (see section 3.4.3 Gold Standard project developer manual). The Gold Standard will publish the relevant information in the database as soon as it has successfully been involved in the initial stakeholder consultation. The Gold Standard can refuse to publish incomplete database entries and cannot be held liable for any damage occurring based on wrong or fraudulent information provided in the Gold Standard database entry. It also retains the right to make changes to all database entries. In that event, the project proponent will be informed of the changes through the designated contact person in the database.

III. Projects having completed the initial stakeholder consultation according to the Gold Standard Project Developer Manual and having registered to the Gold Standard database may use the Gold Standard logo and/or name in the communications of the project, provided the rules given in section B.I., b) and c) are considered.

IV. Projects wishing to apply for Gold Standard registration in the future but not wishing to use the Gold Standard logo and/or name before or after the Gold Standard initial stakeholder consultation are exempted from the rules listed under section B.I.

C. Validation and Registration to the Gold Standard

I. Project proponents have to submit the project documentation to a UNFCCC-accredited DOE for validation, indicating that the documentation shall be validated to both the conventional CDM and Gold Standard requirements. If necessary, project proponents may also choose to only submit the project's documentation for validation against the Gold Standard requirements after successful validation against the conventional CDM requirements. Different DOEs may be chosen for these two validation steps, but accreditation of the DOE to the UNFCCC is mandatory for DOE eligibility. The DOE must be made aware that the validation documentation must clearly indicate compliance with the Gold Standard requirements.

II. Any validated project in compliance with the rules and procedures of the Gold Standard can be submitted for registration to the Gold Standard. Registration depends on compliance with the criteria set out in the Gold Standard Project Developer's Manual, notably

- a) Submission of a PDD validated by a UNFCCC-accredited DOE in compliance with the Gold Standard requirements, and including all necessary supporting documentation (finance plan, validation letter etc.)
- b) Acceptance of the Gold Standard Terms and Conditions for CDM and JI by the project proponent
- c) Registration of the project in the Gold Standard project database through the project proponent
- d) Non-objection of the relevant Gold Standard institutions as set out in section 3.5.3 in the Gold Standard Project Developer's Manual

III. Projects need to be submitted for registration within 6 weeks after validation, but independent of the registration timetable under the UNFCCC's CDM. Registration to the Gold Standard is contingent on host country approval of the project and CDM registration. Projects not registering under the CDM may choose at any time to pursue registration under the Gold Standard VES scheme (for more information, see <http://www.cdmgoldstandard.org> or contact info@cdmgoldstandard.org). Registration under this scheme however requires acceptance of the relevant Terms and Conditions.

IV. The project proponent is notified of the outcome of the registration process (described in section 3.5.3 of the Gold Standard Project Developer's Manual) at the latest 6 weeks after submission of the relevant documents. The Gold Standard has no obligation to register a project and refuses all liability incurring due to non-registration of a project.

V. Registration of a project to the Gold Standard is free of charge.

VI. Once registered, project proponents may use the Gold Standard label without restriction for marketing purposes of the relevant project. Developers have to submit a copy of all materials that feature the Gold Standard logo and that are publicly accessible (i.e. at conferences, on websites, annual reports, brochures etc.) upon request of the Gold Standard.

VI. The Gold Standard must be informed once the project becomes operational, i.e. starts to reduce emissions. The date at which the project becomes operational marks the start of a one-year period after which the project needs to submit its first monitoring report for verification.

VII. The project proponent is required to keep the Gold Standard project database entry up to date at all times. The Gold Standard refuses all liability from damages incurring due to wrong or fraudulent information in the Gold Standard project database entry. It also retains the right to make changes to all database entries. In that event, the project proponent will be informed of the changes through the designated contact person in the database.

VIII. The project proponent, in all its marketing activities, is requested to point out to buyers that credits sold at this stage are forward transactions only and that no actual emission reductions under the Gold Standard scheme have been achieved and verified to date. The project proponent shall also offer to self-motivated inform any buyer of the registered project's forward credits of successful verification and issuance in the future (i.e. by communicating the relevant CER serial numbers). The Gold Standard declines all liability for damages incurring due to wrongful or fraudulent claims by project proponents regarding the status of Gold Standard-registered projects and expected future Gold Standard credits.

D. Verification, Reporting and Issuance

I. Project proponents have to submit to a UNFCCC-accredited DOE monitoring reports satisfying both the conventional and the Gold Standard reporting requirements periodically, usually after each year of operation unless otherwise agreed upon with the DOE selected for verification.

II. Project proponents have to inform their selected DOE that verification shall be conducted both in compliance with the CDM EBs and the Gold Standard rules and procedures and that the DOE shall compile and, after successful verification, send to the Gold Standard (info@cdmgoldstandard.org) a verification report clearly indicating compliance with Gold Standard requirements.

III. Verification reports, together with the underlying project reporting documents, need to be submitted to the Gold Standard at the latest 6 weeks after the DOE has completed verification. . Projects not wanting to apply for credit issuance under the CDM may choose at any time to apply for credit issuance under the Gold Standard VER scheme (for more information, see <http://www.cdmgoldstandard.org> or contact info@cdmgoldstandard.org). Credit issuance under this scheme however requires acceptance of the relevant Terms and Conditions.

IV. The project proponent is notified of the outcome of the Gold Standard verification review period process (described in section 3.5.4 of the Gold Standard Project Developer's Manual) at the latest 2 weeks after submission of the relevant documents. The Gold Standard has no obligation to accept a verification report and refuses all liability incurring due to subsequent non-issuance of a Gold Standard credits to a project.

V. If requested by the Gold Standard or the verifying DOE, the project proponent has to credibly demonstrate the initiation of mitigation and / or compensation measures needed to ensure compliance with the Gold Standard requirements.

V. Upon acceptance of the verification report, and, if applicable, credible demonstration of initiated mitigation and/or compensation measures, the Gold Standard will request submission of the relevant CER serial numbers of the credits issued by the CDM EB based on the verification report. The project proponent is requested to submit these numbers upon the relevant communication of the CDM EB.

VI. Based on the number of credits issued by the CDM EB, the Gold Standard will charge an issuance fee of 0.01 US\$ for the first 15'000 CERs issued and a fee of 0.02 US\$ for all credits above 15'000 CERs. Payment of the issuance fee by the project proponent will be deferred to subsequent years of verification until a minimum total fee of 50 US\$ is reached. The Gold Standard will communicate bank contacts and payment details immediately after communication of the number of credits issued by the CDM EB. The issuance fee is due for payment within 5 working days after the communication of the bank contacts and payment details. For late payments an additional fee of 5% per 5 working days delay will be charged.

VII. Upon confirmation of payment, the Gold Standard will list the range of CER serial numbers certified to the Gold Standard in the Gold Standard project database and issue a confirmation letter to the project proponent. The relevant CERs may then be considered as actual Gold Standard credits.

VII. The project proponent is required to keep the Gold Standard project database entry up to date at all times (i.e. reflecting changes in the project design over time). The Gold Standard refuses all liability from damages incurring due to wrong or fraudulent information in the Gold Standard project database entry. It also retains the right to make changes to all database entries. In that event, the project proponent will be informed of the changes through the designated contact person in the database.

E. General conditions for the use of the Gold Standard logo and name

I. The Gold Standard logo is shown in section A. of the Gold Standard Terms and Conditions. References to the Gold Standard in writing could be "The Gold Standard", "The Gold Standard Foundation" or any other similar terms clearly associating a party with the Gold Standard, its rules and procedures as laid out in the Gold Standard Project Developer's Manual.

II. Project proponents may use the Gold Standard logo and name(s) according to the rules set out in sections A.-D. above.

III. Buyers of Gold Standard credits, both for forward transactions and issued credits, may use the Gold Standard logo and/or name(s) in their communications and materials to demonstrate their engagement with the Gold Standard. Buyers of Gold Standard credits are encouraged to disclose the relative share of Gold Standard credits to their total portfolio of credits. To avoid wrongful or fraudulent usage of the Gold Standard logo and/or name(s), any party using the Gold Standard logo and/or name(s) to claim previous purchases of Gold Standard credits (both on a forward basis and issued credits) must be prepared to demonstrate to the Gold Standard a proof of the actual purchase of the relevant credits. This proof may be altered to keep commercial details of this transaction in confidence, but must at least show a date of the transaction, the name of the seller or project and the amount of credits transacted.

IV. All other parties may use the Gold Standard logo and/or name if they inform the Gold Standard prior to use and if no wrongful claims are associated with this use. Particularly, it is not permitted to use the Gold Standard logo and/or name in association with claims on a Gold Standard project or a portfolio of Gold Standard projects on offer for resale if not backed by appropriate contracts and purchase agreements with project proponents compliant with sections B., C. or D.; unless with prior consent of the Gold Standard.

F. Sanctions

I. Project proponents failing to submit their project designs for DOE validation within the timeframe as laid out in section B. of the Gold Standard Terms and Conditions without presenting credible reasons explaining why no submission has been made will need to announce failure to achieve Gold Standard registration to all parties that have been previously involved in the project as well as post a clear statement of withdrawal from Gold Standard registration on the web-based newlist climate-l. Failure to comply within 10 working days of the request from the Gold Standard to do so will result in the Gold Standard announcing withdrawal of the project itself through channels of its own choice. The Gold Standard refuses all liability from damage incurring due to withdrawal of a project from the registration process and the respective announcement.

II. Projects that are not validated to the Gold Standard because of DOE objection due to clear non-compliance or unsatisfactory reaction to corrective action requests or clarification requests will have to announce their withdrawal from Gold Standard according to the guidelines given in section F.I.

III. For projects failing to be registered to the Gold Standard because of unresolvable objections by the relevant Gold Standard institutions or because of non-compliance with Gold Standard registration procedures, the Gold Standard will substantiate the reasons for denial of registration in writing and communicate to all parties involved in any way with the project, based on a list of parties to be informed by the Gold Standard. The Gold Standard may also choose to publicly announce the reasons for denial of registration. In any case, the project's project database entry – if available – will feature a written substantiation of the denial for registration by the Gold Standard.

IV. Projects failing to be registered to the CDM by the CDM EB will be requested to choose the Gold Standard VER option for their projects. This process will only be initiated by the Gold Standard after final rejection of the project by the CDM EB. In case the project rejects choosing the Gold Standard VER option by signing the Gold Standard Terms and Conditions for VER projects, the project must withdraw its registration to the Gold Standard according to the guidelines set out in section F.I.

V. Project proponents failing to submit Gold Standard-compliant verification reports within 6 weeks after DOE Verification will be issued a reminder by the Gold Standard to immediately do so. Failure to comply with this reporting requirement within 10 working days following the reminder will result in the project's credits of the relevant period being denied Gold Standard status in any instance. This will be announced to all known parties previously involved with the project, as well as on the Gold Standard website and project database and in the Gold Standard newsletter. Project proponents failing to comply with this requirement twice will be banned from future submission of projects for Gold Standard registration.

VI. Project proponents failing to initiate mitigation and/or compensation measures following a request for corrective action following verification or during the verification review process within a timeframe to be mentioned in the corrective action request will result in the project's credits of the relevant period being denied Gold Standard status in any instance. This will be announced to all known parties previously involved with the project, as well as on the Gold Standard website and in the Gold Standard newsletter. No verification and issuance of credits will be possible in the future until the request for corrective action has been credibly satisfied.

VII. Project proponents having initiated mitigation and/or compensation measures following verification or verification review will have to demonstrate successful implementation of the respective measure(s) within a timeframe agreed between the project proponent and the Gold Standard in order to be allowed to request issuance of credits of subsequent crediting periods. If compliance with Gold

Standard requirements cannot be re-established the project will not be allowed to request further issuance of Gold Standard credits.

VIII. Project proponents failing to pay the issuance fee in due time will not be issued Gold Standard credits for the relevant and any subsequent crediting periods until the fee has been paid. Cumulative penalties of 5% per 5 working days delay will be applicable.

IX. Project proponents having made wrongful or fraudulent claims in connection with their project and its status regarding the Gold Standard certification procedure will be asked by the Gold Standard to renounce these claims through appropriate channels to be defined by the Gold Standard. Repeated wrongful or fraudulent claims may lead to a ban on submission of further project for certification. The Gold Standard reserves further legal action at all times and refuses all liability associated with these steps.

X. Buyers of credits making wrongful or fraudulent claims in connection with their project portfolio and relative share of Gold Standard credits will be asked by the Gold Standard to renounce these claims through appropriate channels to be defined by the Gold Standard. The Gold Standard reserves further legal and other action at all times and refuses all liability associated with these steps.

XI. Other parties making wrongful or fraudulent claims in connection with the Gold Standard will be asked by the Gold Standard to renounce these claims through appropriate channels to be defined by the Gold Standard. The Gold Standard reserves further legal and other action at all times and refuses all liability associated with these steps.

Appendix E: Examples of Risk

In the following pages, examples are given of risks encountered during the validation of baseline studies and monitoring plans of CDM projects related to the:

1. Accuracy of baseline emissions
2. Uncertainty of external data sources used
3. Coverage of leakage in the baseline scenario
4. Baseline emission assumptions
5. Sustainable development assumptions
6. Robustness of demonstration and assessment of additionality

1: Accuracy of baseline emissions

| High | Moderate | Low |
|--|---|--|
| <p>The accuracy of the emissions in the selected baseline is low. Emissions are estimated or calculated.</p> <p><i>Example: A baseline scenario was based on emissions determined from a registration system of a production unit. The system of registration was weak and/or the documented systems were lacking. To reduce the risks substantive data testing was required in order to verify the emission level per tonne of product produced</i></p> | <p>The accuracy of the emissions in the selected baseline is limited, but the impact of this issue on the overall emission level was equally limited (<5%).</p> <p><i>Example: The measuring devices for the coal consumption in the baseline of a fuel switch project were old and not very accurate. As a result of this the estimated error in the baseline emission data was $\pm 5\%$. In order to be conservative emissions in the baseline were reduced with 5%.</i></p> | <p>The accuracy of the emissions in the selected baseline is limited but the impact of this issue on the overall emission levels is negligible (<1%).</p> <p><i>Example: The baseline situation involves on-site transport of coal, but this is not monitored. The total estimated impact of the transport is less than 1% of total baseline emissions.</i></p> |

2: Uncertainty of external data sources used

| High | Moderate | Low |
|---|---|--|
| <p>External unverified data sources are used. An error in these data would have a material impact (>5%) on the baseline emissions.</p> <p><i>Example: In a wind farm project the produced electricity will replace a similar amount of fossil fuel based electricity. The national emission data that were used for calculating the baseline emissions have never been verified. This could have a material impact on the calculated baseline emissions.</i></p> | <p>External unverified data sources are used. An error in these data would have a limited impact (<5%) on the baseline emissions.</p> <p><i>Example: IPCC default values for the carbon content and the net calorific value of coal were used for the calculation of baseline emissions of a fuel switch combustion project. No check was made whether these values were applicable for the type of coal used in this specific case.</i></p> <p><i>To reduce this risk, the project proponent was requested to provide analyses from the coal used by the project.</i></p> | <p>External unverified data sources are used. An error in these data would have a negligible impact (< 1%) on the baseline emissions.</p> <p><i>Example: Default values from the "Cement industry GHG protocol" were used for the determination of the CO₂ emissions of the decarbonisation of limestone in a cement plant. Checking the analyses of the raw materials used in the project showed that the real data gave comparable results with the default values</i></p> |

3: Coverage of leakage in the baseline scenario

| High | Moderate | Low |
|--|---|---|
| <p>Leakage has not been included in the baseline study and material leakage can be expected in the project. (>5% of project emissions).</p> <p><i>Example: As the result of a fuel switch project (from coal to gas) an organic waste stream that used to be blended with coal before combustion is now landfilled. This leads to additional landfill emissions</i></p> | <p>Leakage has not been included and limited (<5%) leakage is expected.</p> <p><i>Example: In a fuel switch project, coal is replaced by natural gas. However the natural gas pipeline system is not well-maintained and substantial leakage of gas occurs from this system. The supply chain of both 1) coal for the baseline scenario and 2) gas for the project scenario have been excluded from the scope of the project</i></p> | <p>Leakage has not been included, but the effects of leakage are negligible (<1%).</p> <p><i>Example: The use of biomass as fuel in a project leads to additional transport. If this transport is material the additional transport emissions should be included in the project scenario. The project developers made an estimation of the impact of this issue on the overall emissions, showing that the impact on the presented emission reductions will be less than 1%.</i></p> |

4: Baseline emission assumptions

| High | Moderate | Low |
|---|--|---|
| <p>There is insufficient evidence for parts of the baseline emissions existence.</p> <p><i>Example: The baseline scenario of a bio-fuel project has been based on the assumption that the wood cuttings are landfilled, and thus lead to methane emissions. During the validation site-visit it appeared that the bio-fuel material was not land filled but used for the production of chipboard. As a result of this, no evidence was found for more than 40% of the assumed baseline emissions.</i></p> | <p>There is insufficient evidence for parts of the baseline emissions existence, which has a limited impact on the baseline emissions (<5%).</p> <p><i>Example: In a landfill gas recovery project one assumed that landfill gas was emitted to the atmosphere in the baseline. During the validation site-visit it appeared that during the warm season some of the gas was flared to reduce odour. Therefore in the most likely baseline, flaring had to be taken into account. Since only a part of the gas was expected to be flared, the impact of this issue on the baseline emissions was limited.</i></p> | <p>The amount of emission reductions is uncertain due to an uncertain baseline situation. This has no impact on the accuracy of emission reductions, as the emission variations will be covered through the monitoring plan.</p> <p><i>Example: A cement plant might produce at lower production levels or even be shut down for economical reasons. Consequently, the projected emission reductions will not occur. However, this does not affect the risk of misstating the emission reductions because the production level is one of the parameters of the monitoring plan.</i></p> |

5: Sustainable development assumptions

| High | Moderate | Low |
|---|---|---|
| <p>There is insufficient evidence for a score of –1 for one of the indicators of a small- or large-scale project.</p> <p><i>Example: A biomass project will be fed by sustainably grown biomass. However, the documentation does not indicate how the sustainability of the biomass plantation is assessed or ensured</i></p> | <p>There is insufficient evidence for a positive score (0, +1 or +2) of one of the indicators of a small- or large-scale project, while the sub-total score of the component is 0.</p> <p><i>Example: The impact on water quality and quantity of a biomass project is stated to have a score of 0, but this has not been verified by an EIA. The plant does however require substantial amounts of cooling water. If the score needs to be adapted to –1 the sub-score will be negative.</i></p> | <p>There is insufficient evidence for a positive score (0, +1 or +2) of one of the indicators of a small- or large-scale project, while the sub-total score of the component is +4.</p> <p><i>Example: An off-grid PV project leads to access to energy services in a rural community (score +2) and creates opportunities for employment (+2), but this is not substantiated by independent sources.</i></p> |

6: Robustness of demonstration and assessment additionality

| High | Moderate | Low |
|---|---|--|
| <p>Insufficient evidence is provided of the main barrier that is overcome by the voluntary offset project.</p> <p><i>Example: The investment analysis is applied to show additionality, but the project developer has not made the financial details of the project alternatives available.</i></p> | <p>Sufficient evidence of a barrier is provided, but the project turns out to be profitable without the credit revenues.</p> <p><i>Example: it is demonstrated that the application of innovative technology involves various operating risks. The fact that the project is also profitable without it being a voluntary offset project does not cancel out the additionality of the project.</i></p> | <p>Sufficient evidence of a barrier is provided, but a bank guidance related to the barrier is lacking</p> <p><i>Example: it is demonstrated that the project's technology has not been applied before in the country, but no bank guidance on financing of projects with new technology is available.</i></p> |

Abbreviations

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| CDM | Clean Development Mechanism |
| CAR | Corrective Action Request |
| CEF | Carbon Emission Factor |
| CER | Certified Emission Reduction |
| CL | Clarification Request |
| CO2 | Carbon dioxide |
| CoP | Conference of the Parties to the UNFCCC |
| DNA | Designated National Authority |
| EB | CDM Executive Board |
| EIA | Environmental Impact Assessment |
| ERU | Emission Reduction Unit |
| FAR | Forward Action Request |
| GHG | Greenhouse gas(es) |
| GWP | Global Warming Potential |
| JI | Joint Implementation |
| KP | Kyoto Protocol |
| LoA | Letter of Approval CDM |
| Lol | Letter of Intent |
| MoU | Memorandum of Understanding |
| MP | Monitoring Plan |
| ODA | Official Development Assistance |
| PDD | Project Design Document |
| UNFCCC | United Nations Framework Convention for Climate Change |