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Standard

CDM project standard for project activities

Version 03.0



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TABLE OF CONTENTS	Page
1. INTRODUCTION	6
1.1. Background.....	6
1.2. Objectives	6
2. SCOPE, APPLICABILITY AND ENTRY INTO FORCE	7
2.1. Scope.....	7
2.2. Application	7
2.3. Entry into force.....	7
3. NORMATIVE REFERENCES	7
4. TERMS AND DEFINITIONS	7
5. PRINCIPLES	8
5.1. General	8
5.2. Relevance	8
5.3. Completeness.....	8
5.4. Consistency	8
5.5. Accuracy and conservativeness	8
5.6. Transparency.....	8
6. GENERAL REQUIREMENTS.....	9
6.1. Use of and compliance with applicable standards	9
6.2. Use of applicable forms	9
6.3. Use of applicable global warming potentials	9
7. DESIGN OF PROJECT ACTIVITY	10
7.1. Demonstration of prior consideration of the clean development mechanism	10
7.2. Identification of project type	11
7.3. Description of project activity	11
7.4. Selection of methodologies and standardized baselines	15
7.5. Application of methodologies and standardized baselines.....	16
7.5.1. General requirements	16

7.5.2.	Project boundary, sources and greenhouse gases	17
7.5.3.	Baseline scenario	17
7.5.4.	Demonstration of additionality	18
7.5.5.	Estimation of emission reductions or net anthropogenic removals	19
7.5.6.	Monitoring plan	20
7.6.	Start date, crediting period type and duration	22
7.7.	Environmental impacts.....	22
7.8.	Local stakeholder consultation.....	23
7.8.1.	General requirements	23
7.8.2.	Scope of local stakeholder consultation.....	23
7.8.3.	Minimum group of stakeholders to be involved	23
7.8.4.	Means for inviting stakeholders' participation.....	23
7.8.5.	Information to be made available to stakeholders.....	23
7.8.6.	Conduct of consultation.....	24
7.8.7.	Summary of comments received.....	24
7.8.8.	Consideration of comments received.....	24
7.8.9.	Timing of local stakeholder consultation	24
7.8.10.	Activities after local stakeholder consultation.....	25
7.9.	Sustainable development co-benefits	25
7.10.	Approval and authorization	25
7.11.	Modalities of communication.....	26
7.12.	Specific design requirements for small-scale project activities	26
7.12.1.	General requirements	26
7.12.2.	Project type and eligibility.....	26
7.12.3.	Bundling of project activities.....	28
7.12.4.	Debundling of project activities	29
7.12.5.	Description of project activity	29
7.12.6.	Application of methodologies and standardized baselines.....	29
7.12.7.	Environmental impacts.....	30

7.13.	Specific design requirements for afforestation and reforestation project activities	30
7.13.1.	Description of project activity	30
7.13.2.	Project boundary	30
7.13.3.	Eligibility of land	31
7.13.4.	Addressing non-permanence	32
7.13.5.	Application of methodologies and standardized baselines.....	32
7.13.6.	Crediting period type and duration	33
7.13.7.	Environmental impacts.....	34
7.13.8.	Socio-economic impacts	34
7.14.	Specific design requirements for small-scale afforestation and reforestation project activities	34
7.15.	Specific design requirements for carbon dioxide capture and storage project activities	35
7.15.1.	Definitions for carbon dioxide capture and storage project activities	35
7.15.2.	Description of project activity	36
7.15.3.	Host Party participation requirements	37
7.15.4.	Selection and characterization of geological storage site	38
7.15.5.	Project boundary	41
7.15.6.	Risk and safety assessment	41
7.15.7.	Monitoring	43
7.15.8.	Requirements for financial provision	46
7.15.9.	Liability	47
7.15.10.	Environmental and socio-economic impact assessments.....	47
7.15.11.	Verification and certification	48
7.16.	Validation for registration of project activity.....	48
8.	POST-REGISTRATION CHANGES	49
8.1.	General requirements	49
8.2.	Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents	50
8.3.	Permanent changes.....	51

8.3.1.	Corrections.....	51
8.3.2.	Changes to the start date of the crediting period	51
8.3.3.	Inclusion of monitoring plan	52
8.3.4.	Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents	52
8.3.5.	Changes to project design	52
8.4.	Validation of post-registration changes	55
9.	IMPLEMENTATION AND MONITORING.....	55
9.1.	General requirements	55
9.2.	General description.....	56
9.3.	Description of implemented registered project activity	57
9.4.	Description of monitoring system.....	57
9.5.	Data and parameters	57
9.6.	Calculation of emission reductions or net anthropogenic removals	60
9.7.	Verification of implementation of registered project activity and monitored emission reductions or net anthropogenic removals	61
10.	RENEWAL OF CREDITING PERIOD	62
11.	VOLUNTARY DEREGISTRATION OF PROJECT ACTIVITY.....	65
APPENDIX.	INDICATIVE LIST OF POST-REGISTRATION CHANGES THAT MAY BE SUITABLE FOR APPROVAL UNDER THE ISSUANCE TRACK.....	66

1. Introduction

1.1. Background

1. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP) established the basis of the regulatory framework for the clean development mechanism (CDM) to implement Article 12 of the Kyoto Protocol through the following:
 - (a) Annex to decision 3/CMP.1: Modalities and procedures for a clean development mechanism (hereinafter referred to as the CDM M&Ps);
 - (b) Annexes to decision 4/CMP.1, including annex II: Simplified modalities and procedures for small-scale clean development mechanism project activities (hereinafter referred to as the CDM SSC M&Ps);
 - (c) Annex to decision 5/CMP.1: Modalities and procedures for afforestation and reforestation project activities under the clean development mechanism (hereinafter referred to as the CDM A/R M&Ps);
 - (d) Annex to decision 6/CMP.1: Simplified modalities and procedures for small-scale afforestation and reforestation project activities under the clean development mechanism (hereinafter referred to as the CDM SSC A/R M&Ps);
 - (e) Decision 7/CMP.1: Further guidance relating to the clean development mechanism;
 - (f) Annex to decision 10/CMP.7: Modalities and procedures for carbon dioxide capture and storage in geological formations under the clean development mechanism (hereinafter referred to as the CDM CCS M&Ps).
2. The CMP revised some of the provisions in these decisions through new decisions in subsequent sessions.
3. Pursuant to its mandate from the CMP to operationalize the CDM, the Executive Board of the CDM (hereinafter referred to as the Board) has adopted various standards (including baseline and monitoring methodologies (hereinafter referred to as methodologies) and standardized baselines), methodological tools, guidelines, procedures, clarifications and forms, and revised them, as appropriate, with a view to improving the CDM process.

1.2. Objectives

4. The objectives of the “CDM project standard for project activities” (hereinafter referred to as this standard) are to:
 - (a) Provide for requirements applicable to all types of CDM project activities, and facilitate and promote a clear and common understanding by all parties involved in the CDM;
 - (b) Ensure the quality of project design documents (PDDs) and monitoring reports prepared by project participants and submitted in the CDM project cycle;
 - (c) Ensure the overall efficiency and integrity of the CDM.

2. Scope, applicability and entry into force

2.1. Scope

5. This standard provides project participants with minimum requirements for designing and implementing a CDM project activity and seeking issuance of certified emission reductions (CERs).

2.2. Application

6. Sections 5 and 6 set out principles and general requirements for designing, implementing and reporting on a CDM project activity.
7. Section 7 contains requirements for designing a project activity for registration under the CDM. Compliance with these requirements needs to be demonstrated by providing the relevant information in the PDD and other documents specified in this section. The requirements in sections 7.1–7.11 and 7.16 below apply to any type of project activities, while the requirements in sections 7.12, 7.13, 7.14 and 7.15 apply specifically to small-scale project activities, large-scale afforestation and reforestation (A/R) project activities, small-scale A/R project activities, and carbon dioxide capture and storage (CCS) project activities, respectively.
8. Sections 8 and 10 provide for requirements for post-registration changes and renewal of crediting period of a registered CDM project activity, respectively. Compliance with these requirements needs to be demonstrated by providing the relevant information in the revised PDD and other documents specified in these sections.
9. Section 9 contains requirements for implementation of a registered CDM project activity and monitoring and reporting of achieved greenhouse gas (GHG) emission reductions or net anthropogenic GHG removals for obtaining CERs. Compliance with these requirements needs to be demonstrated by providing the relevant information in the monitoring report and other documents specified in these sections.
10. Section 11 contains requirements for voluntary deregistration of a registered CDM project activity.

2.3. Entry into force

11. Version **02.0-03.0** of this standard enters into force on **1 January 2019-7 October 2021**.

3. Normative references

12. The following referenced documents are indispensable for the application of this standard:
 - (a) “Procedure: CDM project cycle procedure for project activities”;
 - (b) “Glossary: CDM terms”.

4. Terms and definitions

13. In addition to the definitions contained in the “Glossary: CDM terms”, the following terms apply in this standard:

- (a) “Shall” is used to indicate requirements to be followed;
- (b) “Should” is used to indicate that among several possibilities, one course of action is recommended as particularly suitable;
- (c) “May” is used to indicate what is permitted.

5. Principles

5.1. General

- 14. The following principles¹ guide the design and implementation of a CDM project activity and the monitoring of GHG emission reductions or net anthropogenic GHG removals, and contribute to enhancing the environmental integrity of CDM project activities.

5.2. Relevance

- 15. Select the GHG sources, GHG sinks, GHG reservoirs, data, methodologies and all other information that is appropriate to the needs of the intended user.²

5.3. Completeness

- 16. Include all relevant GHG sources and sinks, and information to support compliance with all requirements.

5.4. Consistency

- 17. Enable meaningful comparisons in project activity-related information.

5.5. Accuracy and conservativeness

- 18. Reduce bias and uncertainties as far as it is practical/cost-effective, or otherwise use conservative assumptions, values and procedures to ensure that GHG emission reductions or net anthropogenic GHG removals are not overestimated.

5.6. Transparency

- 19. Disclose sufficient and appropriate project activity-related information in a truthful manner to allow intended users to make decisions with reasonable confidence. Do not disclose proprietary or confidential information marked as such by project participants without the written consent of the provider of the information, except as required by national law. In this context, information used to determine additionality, to describe the baseline

¹ This text is adapted to the CDM and is taken from ISO 14064-2:2006 – Greenhouse gases – Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements; it is reproduced with the permission of the International Organization for Standardization (ISO). This standard can be obtained from any ISO member and from the website of the ISO Central Secretariat at the following address: <<http://www.iso.org>>. Copyright remains with ISO.

² “Intended users” include project participants, designated operational entities (DOEs), the Board, the UNFCCC secretariat, designated national authorities (DNAs) and local and other stakeholders.

methodology and its application, and to support an environmental impact assessment shall not be considered as proprietary or confidential.

6. General requirements

6.1. Use of and compliance with applicable standards

20. While designing as well as implementing and monitoring a CDM project activity, the project participants shall consider and use any applicable standards, methodologies, standardized baselines, methodological tools, guidelines and other regulatory documents adopted by the CMP or the Board³ in accordance with this standard.
21. The project participants shall ensure that the proposed CDM project activity complies with all requirements in the CDM M&Ps applicable to the project activity, as referred to in paragraph 1 above, all applicable requirements in this standard and all other applicable CDM rules and requirements adopted by the CMP or the Board.

6.2. Use of applicable forms

22. The project participants wishing to have a proposed CDM project activity validated by a designated operational entity (DOE) shall prepare a PDD, using the valid version of the applicable PDD form.⁴
23. When completing the PDD form, the project participants shall provide all necessary information and documentation to demonstrate compliance of the proposed CDM project activity with all applicable requirements in this standard and other CDM rules and requirements.
24. The project participants wishing to have the GHG emission reductions or net anthropogenic GHG removals achieved by the implemented registered CDM project activity verified by a DOE shall prepare, for each monitoring period, a monitoring report using the valid version of the monitoring report form.
25. When completing a monitoring report form, the project participants shall provide all necessary information and documentation to demonstrate compliance of the implemented registered CDM project activity and monitored GHG emission reductions or net anthropogenic GHG removals with all applicable requirements in this standard and other applicable CDM rules and requirements.
26. When completing the PDD or monitoring report form, the project participants shall follow the instructions therein.

6.3. Use of applicable global warming potentials

27. The project participants shall use the global warming potentials (GWPs) adopted by the CMP at its seventh session, in accordance with decision 4/CMP.7, to calculate the GHG emission reductions or net anthropogenic GHG removals achieved by the CDM project activity in the second commitment period of the Kyoto Protocol. This requirement shall

³ These documents are available on the UNFCCC CDM website.

⁴ All types of PDD forms are available on the UNFCCC CDM website.

apply from 1 January 2013, notwithstanding any GWPs stated to be applicable in the relevant standards, methodologies, standardized baselines, methodological tools, guidelines, procedures and other rules being used in relation to that project activity.

28. The project participants shall apply the GWPs valid for the second commitment period for the purposes of demonstrating additionality and the ex-ante calculation of GHG emission reductions or net anthropogenic GHG removals, if the PDD to be published for global stakeholder consultation or the request for registration of the proposed CDM project activity is submitted on or after 1 January 2013. A request for registration submitted before 1 January 2013 that has applied the GWPs valid for the first commitment period in relation to additionality demonstration is not required to re-assess additionality or redo the ex ante calculation of GHG emission reductions or net anthropogenic GHG removals applying the GWPs valid for the second commitment period.
29. The PDDs for CDM project activities registered before 1 January 2013 are not required to be amended, republished for global stakeholder consultation, or revalidated using the GWPs as applied by decision 4/CMP.7.
30. All references in standards, methodologies, standardized baselines, methodological tools, guidelines and procedures to one or more GWPs, including specific references to GWPs valid for the first commitment period, from 1 January 2013, shall be read as references to the relevant GWPs valid for the second commitment period.

7. Design of project activity

7.1. Demonstration of prior consideration of the clean development mechanism

31. If the start date of a proposed CDM project activity, as determined in accordance with paragraph 85 below, is prior to the date of publication of the PDD for global stakeholder consultation, the project participants shall demonstrate that the CDM benefits were considered necessary in the decision to undertake the project as a CDM project activity in accordance with paragraphs 32 or 33 below. If the start date of the project activity is on or after the date of publication of the PDD for global stakeholder consultation, such demonstration is not necessary.
32. For a proposed CDM project activity with a start date on or after 2 August 2008, the project participants shall notify the designated national authority (DNA) of the host Party of the project activity, if such DNA exists, and the UNFCCC secretariat (hereinafter referred to as the secretariat), in writing of the commencement of the project activity and their intention to seek the CDM status for the project activity, or, through a DOE, publish the PDD for global stakeholder consultation, **within no later than** 180 days **of-after** the start date in accordance with the “CDM project cycle procedure for project activities”.
33. For a proposed CDM project activity with a start date before 2 August 2008 and prior to the date of publication of the PDD for global stakeholder consultation, the project participants shall demonstrate that the CDM was seriously considered in the decision to implement the project activity. Such demonstration requires the following elements to be satisfied:

- (a) The project participants shall provide evidence of their awareness of the CDM prior to the start date of the project activity, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project activity;⁵
- (b) The project participants shall provide evidence that continuing and real actions were taken to secure the CDM status for the project activity in parallel with its implementation;⁶
- (c) The project participants shall provide an implementation timeline of the project activity. The timeline should include, where applicable, the date when the investment decision was made, the date when the construction work started, the date when commissioning started, and the date of start-up (e.g. the date when commercial production started). The project participants shall provide a timeline of events that have occurred and actions that have been taken to achieve CDM registration, with a description of the evidence used to support these actions.

7.2. Identification of project type

34. The project participants shall determine the type of the CDM project activity they intend to design and implement from the following:
- (a) Large-scale project activity;
 - (b) Small-scale project activity;
 - (c) Large-scale A/R project activity;
 - (d) Small-scale A/R project activity;
 - (e) CCS project activity.

7.3. Description of project activity

35. The project participants shall describe the proposed CDM project activity in the PDD to provide an understanding of the nature and the implementation of the project activity.
36. When describing the proposed CDM project activity, the project participants shall provide, inter alia, the following information:
- (a) The title for the project activity;

⁵ Evidence to support this could include minutes and/or notes related to the consideration of the decision by the board of directors, or equivalent, of the project participants to undertake the project as a CDM project activity.

⁶ Evidence to support this should include one or more of the following: contracts with consultants for CDM/PDD/methodology/standardized baseline services; draft versions of PDDs and underlying documents such as letters of authorization, and, if available, letters of intent; emission reduction purchase agreement (ERPA) term sheets, ERPAs, or other documentation related to the sale of the potential CERs (including correspondence with multilateral financial institutions or carbon funds); evidence of agreements or negotiations with a DOE for validation services; submission of a new methodology or standardized baseline, or requests to the Board for clarification or revision of an existing methodology, methodological tool or standardized baseline; publication in a newspaper; interviews with the DNA; and earlier correspondence on the project activity with the DNA or the secretariat. Letters, e-mail exchanges and other documented communications may help to substantiate the evidence.

- (b) The sectoral scopes linked to the methodologies applied and relevant to the project activity;
 - (c) The purpose and a general description of the project activity, including how it contributes to the sustainable development of the host Party;
 - (d) The physical/geographical location of the project activity;
 - (e) The technologies/measures to be employed and/or implemented by the project activity, including:
 - (i) A list of the facilities, systems and equipment that will be installed and/or modified by the project activity;
 - (ii) The types and levels of services (such as the amount of a certain type of cement produced or the amount of electricity fed into the electricity grid) provided by the facilities, systems and equipment and their relation, if any, to other facilities, systems and equipment outside the project boundary;
 - (iii) The arrangement of the facilities, systems and equipment;
 - (iv) The age and average lifetime of the equipment based on the manufacturer's specifications and industry standards;
 - (v) The installed capacities, load factors and efficiencies;
 - (vi) The energy and mass flows and balances of the facilities, systems and equipment, if necessary;
 - (vii) The monitoring equipment and their location in the systems;
 - (f) The technologies/measures existing prior to the implementation of the project activity at the same site, as applicable, including the equivalent information listed in subparagraph (e) above on the facilities, systems and equipment;
 - (g) A short summary of the baseline scenario as established in accordance with section 7.5.3 below, including the equivalent information listed in subparagraph (e) above;
 - (h) A description of how the technologies/measures and know-how for their use are transferred to the host Party, where applicable.
37. The project participants shall identify:
- (a) The Parties involved in the proposed CDM project activity, including the host Party;
 - (b) The project participants of the proposed CDM project activity.
38. The project participants shall provide information on sources of public funding for the proposed CDM project activity. If public funding from Parties included in Annex I to the United Nations Framework Convention on Climate Change (hereinafter referred to as the Convention) is involved, the project participants shall provide an affirmation obtained from the Annex I Parties that such funding does not result in a diversion of official development assistance, and is separate from and not counted towards the financial obligations of those Parties.

39. The project participants shall confirm that the proposed CDM project activity is neither registered as a CDM project activity nor included as a component project activity (CPA) in a registered CDM PoA.
40. The project participants shall confirm that the proposed CDM project activity is not a project activity that has been deregistered.
41. If the proposed CDM project activity was a CPA that has been excluded from a registered CDM programme of activities (PoA), the project participants shall ensure that:
- (a) The PDD transparently declares that the project activity was a CPA that has been previously excluded from a registered CDM PoA, either voluntarily or due to erroneous inclusion;
 - (b) The crediting period type (i.e. renewable or fixed), ~~and duration~~ and ~~its~~ the end-date of the crediting period are the same as ~~before~~ those of the crediting period valid for the CPA at the time of the exclusion, noting that CERs may be claimed for the period only from or after the effective date of registration as a CDM project activity as per the “CDM project cycle procedure for project activities” and::
 - (i) If the crediting period is renewable, the request for registration shall be submitted by the validating DOE within one year of the end-date of the crediting period valid for the CPA at the time of the exclusion, noting that missing the deadline no longer allows the submission of the request for registration;
 - (ii) If the crediting period is fixed, the request for registration shall be submitted by the validating DOE prior to the end-date of the crediting period valid for the CPA at the time of the exclusion, noting that missing the deadline no longer allows the submission of the request for registration;
 - (c) The project activity meets all relevant requirements for registration of project activities valid at the time of submission of the request for registration as a CDM project activity;
 - (d) If the project activity applies a methodology that potentially accrues negative GHG emission reductions, GHG emission reductions have been continuously monitored in accordance with the monitoring plan as described in the CPA-DD and verified by a DOE since the end of the monitoring period in the last published monitoring report for the CPA, including the exclusion period. For such project activity, if there were net negative GHG emission reductions during the period before the registration as a CDM project activity, the amount shall be deducted from the first requests for issuance of CERs after the registration;
 - (e) If the CPA has been excluded as a result of erroneous inclusion and if CERs have been issued for the CPA, an equivalent amount of Kyoto credits has been compensated by the DOE that included the CPA, or that validated the CPA at its first verification if it was included by the coordinating/managing entity, to the CDM registry in accordance with the “CDM project cycle procedure for programmes of activities”.
42. The project participants shall declare, if applicable, the existence of a registered CDM project activity or a CPA under a registered CDM PoA whose crediting period has or has

not expired (hereinafter referred to as former project) in the same geographical location⁷ as that of the proposed CDM project activity.

43. If the project participants identify that the proposed CDM project activity is in the same geographical location as that of a former project, they shall declare that the proposed CDM project activity will not lead to the discontinuation or modification of the former project and does not decrease the GHG emission reductions or net anthropogenic GHG removals by the former project, and that the proposed CDM project activity complies with the following conditions:
- (a) It utilizes both a different measure and a different technology from those of the former project;
 - (b) It does not share or utilize any of the assets of the former project;
 - (c) It utilizes a different resource type compared to the former project.
44. The following definitions shall apply for paragraph 43 above:
- (a) Measure:⁸ fuel/feedstock switch, technology switch, methane destruction and methane avoidance;
 - (b) Technology: equipment or conversion process used for the production of goods or provision of services. Two ~~different project activities/CPAs technologies~~ are considered to be ~~using~~ the same technology(ies) if they:
 - (i) Provide the same kind of output and use the same kind of equipment and conversion process; or
 - (ii) Undertake the same course of action that results in the same kind of effect ~~(e.g. two projects using the same management practice such as fuel switching);~~
 - (c) Assets: resources with economic value that an individual, corporation or country owns or controls with the expectation that it will provide future benefit; the assets could be physical such as project equipment, or non-corporeal such as permits and exclusive position in legislation. The definition of assets in this context excludes land;
 - (d) Output: amount of goods or services produced by a technology;
 - (e) Resource: a source of supply or support needed for the production of an output. It may include categories of goods, energy and energy carriers that are supplied into the project location and are required for the implementation of the project activity/CPA, such as fossil fuel, by-product of a process, biomass, solar, wind, geothermal heat.

⁷ The geographical location includes the project boundary excluding the location of non-project-specific equipment such as electricity grid and district heating. It does not apply to distributed unit projects in which the project boundary consists of a region.

⁸ "Guidelines for determining baselines for measure(s)"
<http://cdm.unfccc.int/Reference/Guidclarif/meth/meth_guid50.pdf>.

45. If the proposed CDM project activity involves the implementation of distributed units in households and the conditions in paragraph 43(a)–(c) above are not met, the project participants shall request a DOE to validate and confirm by other means that the project activity will not lead to the discontinuation or modification of the former project, and does not decrease the GHG emission reductions or net anthropogenic GHG removals by the former project, in accordance with the “CDM validation and verification standard for project activities”.
46. In all other cases, the project participants may submit a communication to the Board to request clarification in accordance with the “Procedure: Direct communication with stakeholders”, prior to the submission of a request for registration.

7.4. Selection of methodologies and standardized baselines

47. The project participants shall select methodologies that have been approved by the Board and that are valid⁹ and applicable to the proposed CDM project activity.
48. In selecting a methodology for the proposed CDM project activity, the project participants may:
 - (a) Propose a new methodology in accordance with the “Procedure: Development, revision and clarification of methodologies and methodological tools”;
 - (b) Propose a revision to an approved methodology or methodological tool in accordance with the procedure referred to in subparagraph (a) above;
 - (c) Seek clarification of an approved methodology or methodological tool in accordance with the procedure referred to in subparagraph (a) above; or
 - (d) Request approval of deviation from an approved methodology or methodological tool in accordance with the “CDM project cycle procedure for project activities”.¹⁰
49. The project participants may select a standardized baseline that has been approved by the Board if it is valid¹¹ and applicable to the proposed CDM project activity and to the selected methodology in accordance with the applicability section of the standardized baseline (hereinafter referred to as selected standardized baseline).
50. Notwithstanding paragraph 49 above, the project participants shall select an approved standardized baseline for the proposed CDM project activity if the standardized baseline

⁹ The valid version of a methodology is its latest version, or a previous version if the submission of the request for registration of the proposed CDM project activity to the secretariat in accordance with the “CDM project cycle procedure for project activities” is still within the grace period of the previous version(s) for use in accordance with the “Procedure: Development, revision and clarification of methodologies and methodological tools”.

¹⁰ See the relevant provisions in the “CDM validation and verification standard for project activities” for examples of deviation in project-specific situations.

¹¹ The valid version of a standardized baseline is its latest version, or a previous version if the submission of the request for registration of the proposed CDM project activity to the secretariat in accordance with the “CDM project cycle procedure for project activities” is still within the grace period of the previous version(s) for use in accordance with the “Procedure: Development, revision, clarification and update of standardized baselines”.

is valid, and applicable to the proposed CDM project activity and to the selected methodology, and the selection of the standardized baseline is mandatory in accordance with the applicability section of the standardized baseline.¹²

51. Notwithstanding paragraphs 49 and 50 above, the project participants shall not select an approved standardized baseline that standardizes additionality for the proposed CDM project activity if the start date of the project activity is before the date when the standardized baseline becomes valid.
52. If a PDD has been published for global stakeholder consultation when no applicable approved standardized baseline was valid, and if, after the publication of the PDD for global stakeholder consultation but before the submission of a request for registration of the proposed CDM project activity, an applicable approved standardized baseline whose selection is mandatory has become valid, the request for registration may be submitted without selecting the standardized baseline if the submission is made within 240 days after the standardized baseline became valid.
53. In selecting a standardized baseline for the proposed CDM project activity, the project participants may, in accordance with the “Procedure: Development, revision, clarification and update of standardized baselines”:
 - (a) Propose a new standardized baseline;
 - (b) Propose a revision to an approved standardized baseline;
 - (c) Seek clarification of an approved standardized baseline; or
 - (d) Propose an updated standardized baseline.

7.5. Application of methodologies and standardized baselines

7.5.1. General requirements

54. The project participants shall provide the references (titles, versions and UNFCCC reference numbers) of the selected methodologies and, where applicable, of the selected standardized baselines that are applied to the proposed CDM project activity, including any other methodologies or methodological tools to which the selected methodologies refer.
55. The project participants shall demonstrate why the selected methodologies and, where applicable, the selected standardized baselines and any other standards, methodologies, methodological tools and guidelines applied in accordance with the selected methodologies (hereinafter “any other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the selected(applied) methodologies” are collectively referred to as the other (applied) methodological regulatory documents), are applicable to the proposed CDM project activity by showing that the project activity meets all applicability conditions of these regulatory documents.

¹² Such standardized baselines may, for example, state in their applicability section that the latest approved and valid values of the standardized baseline are the only values of the carbon dioxide (CO₂) emission factor(s) that shall be applied for the project electricity system.

56. The project participants shall ensure that the proposed CDM project activity complies with all the requirements of the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents.

7.5.2. Project boundary, sources and greenhouse gases

57. The project participants shall describe the project boundary of the proposed CDM project activity, including the physical delineation of the project activity, and which sources and GHGs are included in the project boundary in accordance with the applied methodologies and the applied standardized baselines.
58. If the applied methodologies or the applied standardized baselines allow the project participants to choose whether a source or GHG is to be included in the project boundary, the project participants shall explain and justify the choice.

7.5.3. Baseline scenario

59. The project participants shall establish and describe the baseline scenario for the proposed CDM project activity in accordance with the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents, and the provisions in paragraphs 60–66 below.
60. The project participants shall provide information on the facilities, systems and equipment to be operated under the proposed CDM project activity and in the baseline scenario, and clearly explain how the same types and levels of services provided by the project activity would have been provided in the baseline scenario.
61. When establishing the baseline scenario, if the project participants foresee that future anthropogenic emissions by sources are projected to rise above current levels due to the specific circumstances of the host Party, they may follow the “Guidelines on the consideration of suppressed demand in CDM methodologies” to propose a revision to an approved methodology to cover such scenario if it is not covered in the methodology.
62. In case of replacement of existing equipment, the project participants shall estimate the point in time when the existing equipment would be replaced in the absence of the proposed CDM project activity in accordance with the “Tool to determine the remaining lifetime of equipment”.
63. As a general principle, relevant national and/or sectoral policies, regulations and circumstances shall be taken into account in the establishment of the baseline scenario, without creating perverse incentives that may impact host Parties’ contributions to the ultimate objective of the Convention.
64. When establishing the baseline scenario, the project participants shall take into account the following two types of national and/or sectoral policies or regulations:
- (a) National and/or sectoral policies or regulations that give comparative advantages to more emissions-intensive technologies or fuels over less emissions-intensive technologies or fuels;¹³

¹³ Such policies, which increase GHG emissions, are called E+ policies.

- (b) National and/or sectoral policies or regulations that give comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programmes).¹⁴
65. The project participants shall address the two types of policies or regulations described in paragraph 64 above as follows:
- (a) Only national and/or sectoral policies or regulations described in 64(a) above that have been implemented before the adoption of the Kyoto Protocol by the Conference of the Parties (hereinafter referred to as the COP) (decision 1/CP.3, 11 December 1997) shall be taken into account when establishing the baseline scenario. If such national and/or sectoral policies or regulations were implemented since the adoption of the Kyoto Protocol, the baseline scenario should refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place;
 - (b) National and/or sectoral policies or regulations described in paragraph 64(b) above that have been implemented since the adoption by the COP of the CDM M&Ps (decision 17/CP.7, 11 November 2001) need not be taken into account in establishing the baseline scenario. If such national and/or sectoral policies or regulations were implemented since the adoption of the CDM M&Ps, the baseline scenario could refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place.
66. Notwithstanding paragraphs 59–65 above or 149–151 below, if the proposed CDM project activity applies an approved standardized baseline that standardizes baseline scenario, the project participants shall describe the baseline scenario as per the applied standardized baseline.

7.5.4. Demonstration of additionality

67. The project participants shall demonstrate, in accordance with the applied methodologies, the other applied methodological regulatory documents and the requirements relating to prior consideration of the CDM contained in section 7.1 above, that the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the proposed CDM project activity.
68. For demonstration of additionality of the proposed CDM project activity, and if it is required by the applied methodologies or the other applied methodological regulatory documents, the project participants shall follow:
- (a) “Methodological tool: Investment analysis”;
 - (b) “Guidelines for objective demonstration and assessment of barriers”.
69. For demonstration of additionality of the proposed CDM project activity, the project participants may also consider following:
- (a) “Methodological tool: Additionality of first-of-its-kind project activities”;

¹⁴ Such policies, which decrease GHG emissions, are called E- policies.

(b) “Methodological tool: Common practice”.

70. Notwithstanding paragraphs 67–69 above and 134 and 152 below, if the proposed CDM project activity applies an approved standardized baseline that standardizes additionality, the project participants shall demonstrate that the project activity meets the additionality criteria (e.g. positive lists of technologies) identified in the applied standardized baseline as well as the requirements relating to prior consideration of the CDM contained in section 7.1 above.

7.5.5. Estimation of emission reductions or net anthropogenic removals

71. The project participants shall describe how to undertake the ex post calculation of baseline, project and leakage GHG emissions, as well as GHG emission reductions, to be achieved by the proposed CDM project activity, and provide the ex ante calculation of them for each year of the crediting period, in accordance with the applied methodologies and the applied standardized baselines. If the proposed CDM project activity contains more than one component, the project participants shall apply this requirement for each component separately. The project participants shall describe all steps to be undertaken for these calculations and provide all results.

72. If the applied methodologies, the applied standardized baselines or other applied methodological regulatory documents include different scenarios or cases, or provide different options and/or default values to choose from, the project participants shall justify their choice.

73. To determine the performance of the equipment used in the proposed CDM project activity, if required for the calculation of GHG emission reductions, the project participants shall use:

- (a) The appropriate values, or the values calculated based on the methods, specified in the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents;
- (b) The national standard for the performance of the equipment type (the project participants shall identify the standard used) if the value referred to in subparagraph (a) above is not available;
- (c) An international standard for the performance of the equipment type, such as International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) standards (the project participants shall identify the standard used) if the values referred to in subparagraphs (a) and (b) above are not available;
- (d) The manufacturer’s specifications, provided that they are tested and certified by national or international certifiers, if the values referred to in subparagraphs (a)–(c) above are not available;
- (e) Performance data from test results conducted by an independent entity for the equipment to be installed under the project activity, if the values referred to in subparagraphs (a)–(d) above are not available.

74. The project participants shall use the valid version of the norms, specifications, standards and test procedures referred to in the applied methodologies, the applied standardized

baselines and the other applied methodological regulatory documents, as available at the time of submission of the PDD to a DOE for validation.

75. The project participants shall, in accordance with the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents, provide the data and parameters that will not be monitored but are determined before the registration of the proposed CDM project activity and remain fixed throughout the crediting period. These data and parameters shall be available at the time of the validation of the project activity for registration.
76. The project participants shall ensure that the application of default data in the estimation of GHG emission reductions or net anthropogenic GHG removals for the proposed CDM project activity results in conservative estimates.
77. The project participants may use sampling for the determination of parameter values for calculating GHG emission reductions if the applied methodologies, the applied standardized baselines or the other applied methodological regulatory documents allow this. In such cases, the project participants shall develop and describe a sampling plan in accordance with the “Standard: Sampling and surveys for CDM project activities and programmes of activities”.

7.5.6. Monitoring plan

78. The project participants shall develop and describe a monitoring plan for the proposed CDM project activity in accordance with the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents, all other applicable CDM rules and requirements, and the provisions in paragraphs 79–82 below.
79. In developing a monitoring plan for the proposed CDM project activity, the project participants shall apply the following unless the applied methodologies, the applied standardized baselines or the other applied methodological regulatory documents state otherwise:
 - (a) Data variables that impact the GHG emission reductions continuously (e.g. quantity of fuel inputs, amount of heat or electricity produced, gas captured) shall be measured continuously and recorded at appropriate intervals;
 - (b) Data variables that are generally constant (e.g. emission factors, calorific value, system efficiencies) shall be measured or calculated at least once a year;
 - (c) Measuring equipment shall be certified to national or IEC standards;
 - (d) The calibration of measuring equipment shall be carried out by an accredited person or institution;
 - (e) Measured data with high levels of uncertainty shall be compared with data from other sources to check the consistency.

80. For parameters to be measured in accordance with the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents, the monitoring plan shall include the following:
- (a) The measurement methods and procedures, including accepted industry standards or national or international standards that will be applied; the measuring equipment that will be used; how the measurements will be undertaken; the accuracy of the measurement methods; the measurement intervals; and the responsible person/entity who/that will undertake the measurements;
 - (b) The calibration procedures to be applied and the responsible person/entity who/that will perform the calibration.
81. The monitoring plan shall include all data, parameters and related information required by the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents, including:
- (a) Quality assurance and quality control (QA/QC) procedures;
 - (b) Uncertainty levels, methods and the associated accuracy level of measuring instruments to be used for various parameters and variables;
 - (c) Specifications of the calibration frequency for the measuring equipment. If neither the applied methodologies, the applied standardized baselines, the other applied methodological regulatory documents, nor the Board's guidance specify any requirements for calibration frequency for measuring equipment, the project participants shall ensure that the equipment is calibrated either in accordance with the local/national standards or the manufacturer's specifications. If local/national standards or the manufacturer's specifications are not available, international standards may be used.
82. The monitoring plan shall also include the following other elements:
- (a) The operational and management structure to be put in place to implement the monitoring plan;
 - (b) Provisions to ensure that data monitored and required for verification and issuance are kept and archived for at least two years after the end of the final crediting period or the last issuance of CERs, whichever occurs later;
 - (c) Definition of responsibilities and institutional arrangements for data collection and archiving.
83. The project participants may choose to make a delayed submission of the monitoring plan, that is, after the registration of the proposed CDM project activity and:
- (a) At any time prior to the submission of the request for issuance of CERs for the first monitoring period; or
 - (b) Together with the request for issuance of CERs for the first monitoring period.
84. If the project participants choose to make a delayed submission of the monitoring plan in accordance with paragraph 83 above, they shall clearly state that the submission of the

monitoring plan is delayed and that the PDD submitted for registration of the proposed CDM project activity does not contain information related to the monitoring plan.

7.6. Start date, crediting period type and duration

85. The project participants shall determine the start date of the proposed CDM project activity and provide a description of how this start date has been determined in accordance with the definition of start date in the “Glossary: CDM terms”.
86. The project participants shall specify the expected operational lifetime of the proposed CDM project activity.
87. The project participants shall select a type (renewable or fixed) and specify the duration of the crediting period for the proposed CDM project activity, taking into account that:
 - (a) Each renewable crediting period shall be at most seven years and may be renewed at most two times, for a maximum total length of 21 years;
 - (b) A fixed crediting period shall be at most 10 years;
88. The project participants shall determine the start date of the crediting period of the proposed CDM project activity, which shall be on or after the date of registration of the project activity as a CDM project activity.
89. The project participants shall determine only one start date for the crediting period of the proposed CDM project activity, even in cases of phased implementation of the project activity.
90. The project participants shall state the start date of the crediting period of the proposed CDM project activity in the format dd/mm/yyyy, and shall not attach any qualifications to the start date, such as “expected”.¹⁵
91. A project activity that has been registered as a CDM project activity may not be re-registered after the expiry of its final crediting period.

7.7. Environmental impacts

92. The project participants shall carry out an analysis of the environmental impacts of the proposed CDM project activity, including transboundary impacts, and provide a summary of the analysis and references to all related documentation.
93. If, as a result of the analysis referred to in paragraph 92 above, the project participants or the host Party consider the environmental impacts of the proposed CDM project activity significant, the project participants shall carry out an environmental impact assessment in accordance with the relevant procedures of the host Party and provide all conclusions and references to all related documentation.

¹⁵ The start date of the crediting period provided in the PDD by the project participants is an indicative date. If it is prior to the date of registration of the project activity, it will be updated by the secretariat as the effective date of registration in accordance with the “CDM project cycle procedure for project activities”. This update will not affect the specified length of the crediting period, nor will this affect the rights of the project participants to subsequently request a change of the start date in accordance with the same procedure.

7.8. Local stakeholder consultation

7.8.1. General requirements

94. The project participants shall invite local stakeholders to provide comments on the proposed CDM project activity and shall demonstrate how due steps/actions were taken to appropriately engage stakeholders and solicit comments in accordance with this section.

7.8.2. Scope of local stakeholder consultation

95. The scope of the local stakeholder consultation shall comprise, as a minimum, the potential direct positive and negative impacts that the proposed CDM project activity may have.
96. The project participants shall conduct the local stakeholder consultation in accordance with applicable host Party rules, if any. Where host Party rules on local stakeholder consultation are applicable, the project participants shall provide, in the PDD, a summary of the consultations carried out under the host Party rules, including the direct positive and negative impacts identified and how the negative impacts identified will be addressed.

7.8.3. Minimum group of stakeholders to be involved

97. For the purpose of the local stakeholder consultation, the project participants shall invite, as a minimum, representatives of local stakeholders directly impacted by the proposed CDM project activity and representatives of local authorities relevant to the project activity.
98. The project participants shall provide evidence that invitations were sent to the relevant stakeholders and that their comments were invited. If any of the relevant stakeholders were not invited, the project participants shall provide appropriate justification.

7.8.4. Means for inviting stakeholders' participation

99. The project participants shall invite local stakeholders to provide comments on the proposed CDM project activity in an open and transparent manner, in a way that facilitates comments to be received from local stakeholders and allows for a reasonable time for comments to be submitted. The project participants shall describe the steps/actions taken to invite comments, taking into account local and national circumstances.
100. The project participants shall convey information to stakeholders about the local stakeholder consultation and the proposed CDM project activity. This should include information disseminated in ways that are appropriate for the community that is directly affected by the project activity. In areas where a significant part of the population is illiterate, the information shall be provided orally.

7.8.5. Information to be made available to stakeholders

101. The project participants shall describe the proposed CDM project activity in a manner that allows local stakeholders to understand the project activity. The information to be made available to stakeholders shall include, inter alia:

- (a) A summary of the proposed CDM project activity, explaining the project activity in simple, non-technical terms, and containing a description of the direct positive and negative impacts;
- (b) Information on the projected scope, lifetime, and direct positive and negative impacts of the proposed CDM project activity;
- (c) Other relevant information about the proposed CDM project activity, taking into account confidentiality provisions of the applicable CDM M&Ps referred to in paragraph 1 above;
- (d) The means to provide comments about the proposed CDM project activity.

7.8.6. Conduct of consultation

- 102. The project participants shall conduct the local stakeholder consultation through means that are appropriate for the local and national circumstances.
- 103. The project participants shall provide local stakeholders with the opportunity to comment in writing or via other means, and gather their comments about the proposed CDM project activity and its direct impacts.
- 104. The project participants shall request the DNA of the host Party to forward any and all comments from local stakeholders to them.

7.8.7. Summary of comments received

- 105. The project participants shall prepare a summary report of the comments received from local stakeholders.

7.8.8. Consideration of comments received

- 106. The project participants shall consider the comments provided by local stakeholders and report on how they have taken them into account in the PDD or in the revised PDD. The project participants shall provide justification if any comments were not incorporated.

7.8.9. Timing of local stakeholder consultation

- 107. The project participants shall complete the local stakeholder consultation process at the timing required by the rules of the host Party on local stakeholder consultation, if such rules exist. If host Party rules do not exist, the project participants shall complete the process before, whichever the earlier of:
 - (a) The start date of the project activity as defined in the “Glossary: CDM terms”; or
 - (b) The date of submitting the PDD of the proposed CDM project activity to a DOE for validation.
- 108. For the project activities that do not meet the requirement referred to in paragraph 107(a) above, but for which notifications of prior consideration of the CDM have been submitted to the secretariat in accordance with the “CDM project cycle procedure for project activities” before 23 February 2017, the project participants may, in accordance with the “Procedure: Direct communication with stakeholders”, submit a request for exemption from the requirement to the Board for its consideration on a case-by-case basis.

7.8.10. Activities after local stakeholder consultation

109. If, during the validation of the proposed CDM project activity, complaints submitted to the DNA of the host Party on the handling of the outcome of the local stakeholder consultation are forwarded to the project participants through the DOE in accordance with the “CDM project cycle procedure for project activities”, the project participants shall take due account of such complaints and modify the PDD as appropriate before the DOE concludes the validation.
110. If significant changes to the project design occur after the invitation of comments from local stakeholders, the project participants shall conduct a new local stakeholder consultation with relevant stakeholders.

7.9. Sustainable development co-benefits

111. The project participants may, separately from the monitoring plan referred to in section 7.5.6 above, develop a document describing how they intend to monitor sustainable development co-benefits of the proposed CDM project activity, including the frequency of reporting of monitoring results and whether they intend to have monitoring results independently verified.

7.10. Approval and authorization

112. The project participants shall obtain a letter of approval¹⁶ from the DNA of each Party involved in the proposed CDM project activity that:¹⁷
- (a) Confirms that the Party is a Party to the Kyoto Protocol;
 - (b) Confirms that the participation in the proposed CDM project activity is voluntary;
 - (c) Refers to the precise title of the proposed CDM project activity.
113. Each project participant shall be authorized by at least one Party involved in the proposed CDM project activity to participate in the project activity, to be confirmed in the letter of approval referred to in paragraph 112 above or in a separate authorization letter.
114. In addition to the requirement in paragraph 112 above, the letter of approval from the host Party shall confirm that the proposed CDM project activity assists the host Party in achieving sustainable development.

¹⁶ For a proposed CDM project activity supported by a multilateral fund, involving many host Parties does not necessarily require letters of approval from the DNAs of all Parties not all Parties participating in the fund need to be “Parties involved” and provide a letter of approval. However, those not providing a letter may be giving up some of their rights and privileges in terms of being a Party involved in the project activity.

A letter of approval from a Party may cover more than one proposed CDM project activity, provided that the project activities are clearly listed in the letter.

¹⁷ At the time of making the PDD public at the stage of validation, a Party involved may or may not have provided its approval of the proposed CDM project activity, but by the time of requesting registration, approval from all Parties involved including the host Party shall be obtained.

115. A CDM project activity or a bundle of small-scale CDM project activities shall have only one host Party, which is the Party in which the project activity(ies) is(are) located as set out in the PDD.
116. Where the methodologies or the other methodological regulatory documents applied to the proposed CDM project activity provide for the application of a system, such as an electricity grid, and that system extends across more than one Party, a letter of approval is required from the host Party and all other Parties involved in the system as indicated in the PDD.¹⁸

7.11. Modalities of communication

117. The project participants shall define for the proposed CDM project activity their modalities of communication with the Board, and present them in a “Modalities of communication statement” (MoC statement), with the following content:
- (a) The title of the proposed CDM project activity (and UNFCCC reference number if available);
 - (b) The date of submission of the MoC statement (to a DOE for inclusion in the request for registration or to the secretariat for changes after registration);
 - (c) The designation of a focal point for each scope of authority, contact details and specimen signatures of the authorized signatories of each focal point entity;
 - (d) A list of all project participants, contact details and specimen signatures of their authorized signatories;
 - (e) The signature of an authorized signatory (electronic if available) of all project participants confirming their agreement with the MoC statement.

7.12. Specific design requirements for small-scale project activities

7.12.1. General requirements

118. The project participants designing a small-scale CDM project activity following the CDM SSC M&Ps and other CDM rules and requirements for small-scale project activities shall only use small-scale methodologies. However, the project participants may use large-scale methodologies, for a project activity that is within the small-scale project activity thresholds if the project activity follows the CDM M&Ps and other CDM rules and requirements for large-scale project activities.

7.12.2. Project type and eligibility

119. The project participants shall indicate, from the following, the small-scale project type applicable to the proposed small-scale CDM project activity, and demonstrate that the project activity qualifies as the indicated type:
- (a) Type I: Renewable energy project activities with a maximum output capacity of 15 MW (or an appropriate equivalent). In this context:

¹⁸ This requirement replaces the clarification provided by the Board at its twenty-eighth meeting, as recorded in paragraph 14 of the meeting report.

- (i) “Output” is the installed/rated capacity as indicated by the manufacturer of the equipment or plant, irrespective of the actual load factor of the plant. The installed/rated capacity of renewable electricity generating units that involve turbine generator systems shall be based on the installed/rated capacity of the generator;
 - (ii) Regarding the “appropriate equivalent” of 15 MW, decision 17/CP.7, paragraph 6(c)(i) refers to MW, but the project participants may refer to MW(p),¹⁹ MW(e) or MW(th). As MW(e) is the most common denomination, MW is defined as MW(e), and otherwise an appropriate conversion factor shall be applied;
 - (iii) For biomass, biofuel and biogas project activities, the maximal limit of 15 MW(e) is equivalent to a 45 MW thermal output of the equipment or the plant (e.g. boilers). For thermal applications of biomass, biofuels or biogas (e.g. cookstoves), the limit of 45 MW(th) is the installed/rated capacity of the thermal application equipment or device(s) (e.g. biogas stoves). For electrical or mechanical applications, the limit of a 15 MW installed/rated output shall be used. In the case of co-firing renewable and fossil fuels, the rated capacity of the system when using fossil fuel shall apply;
 - (iv) For thermal applications of solar energy project activities, “maximum output” shall be calculated using a conversion factor of 700 W(th)/m² of aperture area of glazed flat plate or evacuated tubular collector, that is, the eligibility limit in terms of aperture area is 64,000 m² of the collector.²⁰ The project participants may also use other conversion factors determined as per the requirements in paragraph 73 above, but shall then justify why the chosen conversion factor is more appropriate to the project activity;
- (b) Type II: Energy-efficiency improvement project activities that reduce energy consumption, on the supply and/or demand side, with a maximum energy saving of 60 GWh per year (or an appropriate equivalent) in any year of the crediting period. In this context, for project activities that improve thermal energy efficiency, the maximum energy saving of 60 GWh(e) per year is equivalent to 180 GWh(th) per year saving; or
- (c) Type III: Other project activities not included in Type I or Type II that result in GHG emission reductions not exceeding 60 kt CO₂e per year in any year of the crediting period.
120. In selecting a small-scale project type for the proposed small-scale CDM project activity, the project participants shall consider that:
- (a) The three project types referred to in paragraph 119 above are mutually exclusive;
 - (b) A small-scale CDM project activity may contain more than one component, each belonging to one of the three project types referred to in paragraph 119 above. In

¹⁹ For solar photovoltaic applications, 15 MW(p) may be defined by manufacturers’ specifications under testing conditions of 1000 W/m² and 25 deg C or 600 W/m² and 35 deg C.

²⁰ This conversion is not applicable for solar thermal parabolic and trough-type collectors used for high-grade solar thermal energy applications.

this case, the sum of the scale of components belonging to the same project type shall not exceed the limit of that project type.

121. Within each small-scale project type referred to in paragraph 119 above, if the scale of the proposed small-scale CDM project activity is under the corresponding threshold below, the project participants may benefit from simplified CDM rules and requirements for microscale project activities. In order to do so, the project participants shall indicate and demonstrate that the project activity qualifies for the microscale project type:
- (a) Type I: project activities with up to 5 MW output capacity that employ renewable energy as their primary technology;
 - (b) Type II: project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year; or
 - (c) Type III: Other project activities not included in Type I or Type II that aim to achieve GHG emission reductions at a scale of no more than 20 kt CO₂e per year.

7.12.3. Bundling of project activities

122. More than one proposed small-scale CDM project activity may be bundled and registered as a single small-scale CDM project activity.
123. For a bundle of proposed small-scale CDM project activities applying the same set of methodologies and technologies/measures:
- (a) The project participants shall prepare a single PDD covering all project activities in the bundle or separate PDDs, each of which corresponds to each project activity in the bundle;
 - (b) The project activities in the bundle may use the same baseline. In such case, the project participants shall justify the use of the same baseline, considering the particular situation for each project activity in the bundle;
 - (c) If the project activities in the bundle use different baselines and the project participants use a sampling approach, such approach shall address specificities of different baselines, including the proportionate representative samples of each baseline used;
 - (d) The project participants shall prepare a common monitoring plan in the single PDD or separate monitoring plans in the separate PDDs.
124. For a bundle of proposed small-scale CDM project activities applying different set of methodologies and/or technologies/measures:
- (a) The project participants shall prepare a PDD for each project activity in the bundle;
 - (b) The project activities in the bundle may use the same baseline. In such case, the project participants shall justify the use of the same baseline, considering the particular situation for each project activity in the bundle;
 - (c) The project participants shall prepare a separate monitoring plan in a separate PDD and a separate monitoring report for each project activity in the bundle.

125. All proposed small-scale CDM project activities in the bundle shall have the same crediting period (i.e. the same start date and duration of the crediting period).
126. The letter of approval from the host Party shall indicate that the Party is aware that the proposed small-scale CDM project activities taking place in its territory are part of the bundle.
127. The project participants shall complete the “CDM small-scale project activities bundling form” (CDM-SSC-BUN-FORM) and provide all necessary information and documentation to demonstrate compliance of the bundle of proposed small-scale CDM project activities with all applicable CDM rules and requirements.
128. As an element to be part of the request for registration of the bundle of proposed small-scale CDM project activities, the project participants shall provide a written statement indicating:
 - (a) The agreement of all project participants to bundle their individual project activities;
 - (b) One project participant who represents all the project participants to communicate with the Board and the secretariat, in accordance with the “CDM project cycle procedure for project activities”.
129. A single DOE may validate the bundle of proposed small-scale CDM project activities.

7.12.4. Debundling of project activities

130. The project participants shall demonstrate that the proposed small-scale CDM project activity is not a debundled component of a large-scale project activity in accordance with the applicable provisions in the “Methodological tool: Assessment of debundling for SSC project activities”.

7.12.5. Description of project activity

131. If the project participants wish to include more than one component in the proposed small-scale CDM project activity, they shall provide information on the small-scale project type (i.e. Type I, II and/or III), technologies/measures and applied methodologies separately for each component.

7.12.6. Application of methodologies and standardized baselines

7.12.6.1. General requirements

132. If leakage is to be considered, the project participants shall consider leakage only within the boundaries of non-Annex I Parties, unless otherwise required by the applied methodologies, the applied standardized baselines or the other applied methodological regulatory documents.
133. Concerning the requirement in paragraph 62 above, for household devices/appliances to be used in the proposed small-scale CDM project activity, the project participants may disregard the remaining lifetime.

7.12.6.2. Demonstration of additionality

134. For demonstration of additionality of the proposed small-scale CDM project activity, the project participants shall apply one of the following:
- (a) The additionality sections of the applied methodologies;
 - (b) “Methodological tool: Demonstration of additionality of small-scale project activities”. In such case, the project participants should also follow the “Non-binding best practice examples to demonstrate additionality for SSC project activities” and, where necessary, any applicable additionality tool, if the additionality sections of the applied methodologies do not exist;
 - (c) “Methodological tool: Demonstration of additionality of microscale project activities”, if the scale of the project activity is under the thresholds referred to in paragraph 121 above.

7.12.7. Environmental impacts

135. Notwithstanding paragraphs 92 and 93 above, the project participants shall carry out an analysis of the environmental impacts of the proposed small-scale CDM project activity if required by the host Party. If the analysis is carried out, the project participants shall provide a summary of the analysis and the references to all related documentation.

7.13. Specific design requirements for afforestation and reforestation project activities

7.13.1. Description of project activity

136. When describing a proposed A/R CDM project activity, the project participants shall:
- (a) Describe the present environmental conditions of the area planned for the project activity, including the climate, hydrology, soils and ecosystems;
 - (b) Describe the presence, if any, of rare and endangered species and their habitats;
 - (c) Describe the species and varieties selected for the project activity;
 - (d) Describe the measures and know-how that will be transferred to the host Party, if applicable;
 - (e) Describe or list the legal title(s) to the land, current land tenure and rights enabling determination of the owner of the temporary CERs (tCERs) or long-term CERs (ICERs) to be issued for the project activity.

7.13.2. Project boundary

137. The project participants shall define the project boundary that geographically delineates the proposed A/R CDM project activity under the control of the project participants, including information allowing for the unique identification of the project activity. If the proposed A/R CDM project activity contains more than one discrete area of land, each discrete area of land shall have a unique identification.

138. The project participants shall demonstrate that, for all areas of land planned for the proposed A/R CDM project activity, the control over afforestation or reforestation as required by the CDM A/R M&Ps is already established or is expected to be established. The control of the project participants over afforestation or reforestation shall be considered as established if the project participants have the exclusive right to implement the proposed A/R CDM project activity, defined in a way that is acceptable under the legal system of the host Party.
139. When submitting the PDD to a DOE for validation, the project participants shall have established the control over afforestation or reforestation for at least two-thirds of the total area of land planned for the proposed A/R CDM project activity.
140. When submitting the PDD to a DOE for validation, the project participants shall demonstrate that all areas of land planned for the proposed A/R CDM project activity comply with all relevant CDM requirements, except for those related to the control.
141. If the control over afforestation or reforestation has not been established for all areas of land planned for the proposed A/R CDM project activity when submitting the PDD to a DOE for validation, the project participants shall:
- (a) Demonstrate additionality separately for:
 - (i) The area of land for which the control over the project activity has already been established;
 - (ii) The entire area of land;
 - (b) Estimate the baseline net GHG removals by sinks separately for:
 - (i) The area of land for which the control over the project activity has already been established;
 - (ii) The entire area of land;
 - (c) Express each of the estimates of baseline net GHG removals by sinks referred to in subparagraph (b) above on a per-hectare basis. The larger of these estimates shall be used to determine the baseline net GHG removals by sinks for the project activity.
142. For all areas of land for which the control over the A/R CDM project activity has not yet been established when the PDD is submitted to a DOE for validation, the project participants shall provide evidence of control at the latest by the time of submitting the first monitoring report to a DOE for verification.
143. When submitting the first monitoring report to a DOE for verification, the project boundary of the proposed A/R CDM project activity shall be fixed in such a way that it covers only the area of land for which the control over the project activity has been established.

7.13.3. Eligibility of land

144. The project participants shall demonstrate that each discrete area of land to be included in the project boundary is eligible for an A/R CDM project activity in accordance with the applied methodologies, the “A/R methodological tool: Demonstration of eligibility of lands for A/R CDM project activities” and the applied standardized baselines. If the A/R

methodological tool is used for such demonstration, for both large-scale and small-scale A/R CDM project activities, it is sufficient to comply with this tool and it is not essential to differentiate between afforestation and reforestation project activities.

7.13.4. Addressing non-permanence

145. The project participants shall specify which of the following approaches to address non-permanence has been selected for the proposed A/R CDM project activity, considering that the selected approach shall remain fixed for the crediting period, including its renewals:
- (a) Issuance of tCERs; or
 - (b) Issuance of ICERs.

7.13.5. Application of methodologies and standardized baselines

7.13.5.1. Carbon pools and greenhouse gases

146. Paragraphs 147 and 148 below shall apply instead of paragraphs 57 and 58 above, respectively.
147. The project participants shall select the carbon pools, emission sources and GHGs to account for in the project boundary of the proposed A/R CDM project activity in accordance with the applied methodologies and the applied standardized baselines.
148. If the applied methodologies or the applied standardized baselines allow the project participants to choose whether a carbon pool or GHG is to be excluded from the project boundary, they shall justify the choice.

7.13.5.2. Baseline scenario

149. Paragraphs 150 and 151 below shall apply instead of paragraphs 59 and 62–65 above, respectively.
150. The project participants shall establish and describe the baseline scenario separately for each stratum in the proposed A/R CDM project activity, including the land use that would occur in the absence of the project activity, in accordance with the applied methodologies, the applied standardized baselines, and the provisions in paragraph 151 below.
151. In establishing the baseline scenario, the project participants shall take into account relevant national and/or sectoral policies, regulations and circumstances, such as historical land-use practices, without creating perverse incentives that may impact the host Party's contributions to the ultimate objective of the Convention. However, national and/or sectoral land-use policies or regulations, which give comparative advantages to A/R activities and have been implemented since the adoption by the COP of the CDM M&Ps (decision 17/CP.7, 11 November 2001) need not be taken into account in developing the baseline scenario. If such national and/or sectoral policies or regulations have been implemented since the adoption of the CDM M&Ps, the baseline scenario could refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place.

7.13.5.3. Demonstration of additionality

152. Notwithstanding paragraph 67 above, the project participants shall demonstrate, in accordance with the applied methodologies and the other applied methodological regulatory documents and the requirements relating to prior consideration of the CDM contained in section 7.1 above, that the actual net GHG removals by sinks are increased above the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of the proposed A/R CDM project activity.

7.13.5.4. Estimation of net anthropogenic removals

153. Paragraphs 154 and 155 below shall apply instead of paragraphs 71 and 77 above, respectively.
154. The project participants shall describe how to undertake the ex post calculation of baseline and actual net GHG removals by sinks and leakage, as well as net anthropogenic GHG removals to be achieved by the proposed A/R CDM project activity, and provide the ex ante calculation of them for each year of the crediting period, in accordance with the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents. The project participants shall describe all steps to be undertaken for these calculations and provide all results.
155. The project participants may use sampling for the determination of parameter values for calculating net anthropogenic GHG removals if the applied methodologies, the applied standardized baselines or the other applied methodological regulatory documents, allow this. In such cases, the project participants shall develop and describe a sampling plan.

7.13.5.5. Monitoring

156. The project participants shall plan management activities, including harvesting cycles, and verifications such that a systematic coincidence of verifications and peaks in carbon stocks is avoided.
157. The project participants shall monitor forest establishment and management, if required for compliance with the applicability conditions of the applied methodologies.
158. The project participants shall describe how the geographic coordinates of the project boundary, including boundaries of strata if any, are determined and recorded.
159. The project participants shall describe, or provide reference to, standard operating procedures and QA/QC procedures for data monitoring, as required by the applied methodologies.
160. The project participants shall identify measures to minimize potential leakage and describe how these will be implemented.
161. The project participants shall specify the procedures for periodic review of the implementation of activities and measures to minimize leakage, if required by the applied methodologies.

7.13.6. Crediting period type and duration

162. Paragraph 86 above shall not apply to A/R CDM project activities.

163. Notwithstanding paragraph 87 above, the project participants shall select a type (renewable or fixed) and specify the duration of the crediting period for the proposed A/R CDM project activity, taking into account that:
- (a) Each renewable crediting period shall be at most 20 years and may be renewed at most two times, for a maximum total length of 60 years;
 - (b) A fixed crediting period shall be at most 30 years;
 - (c) The provisions of paragraphs 12 and 13 of decision 17/CP.7 do not apply to A/R CDM project activities. An A/R project activity starting after 1 January 2000 can also be validated and registered after 31 December 2005 as long as the first verification for the project activity occurs after the date of registration of this project activity. Given that the crediting period starts on the same date as the starting date of the project activity, an A/R project activity starting in 2000 onwards can accrue tCERs/ICERs as of the starting date.

7.13.7. Environmental impacts

164. Paragraphs 165 and 166 below shall apply instead of paragraphs 92 and 93 above.
165. The project participants shall carry out an analysis of the environmental impacts of the proposed A/R CDM project activity, including impacts on biodiversity and natural ecosystems and impacts outside the project boundary. The project participants shall provide a summary of the analysis and references to all related documentation.
166. If the project participants or the host Party consider the environmental impacts of the proposed A/R CDM project activity significant, they shall carry out an environmental impact assessment in accordance with the relevant procedures of the host Party, and provide all conclusions and references to all related documentation and a description of the planned monitoring and remedial measures to address these significant impacts.

7.13.8. Socio-economic impacts

167. The project participants shall carry out an analysis of the major socio-economic impacts of the proposed A/R CDM project activity, including impacts outside the project boundary. The project participants shall provide a summary of the analysis and references to all related documentation.
168. If, as a result of the analysis referred to paragraph 167 above, the project participants or the host Party consider any negative impact as significant, the project participants shall carry out a socio-economic impact assessment in accordance with the relevant procedures of the host Party. The project participants shall provide all conclusions and references to all related documentation and a description of the planned monitoring and remedial measures to address these significant impacts.

7.14. Specific design requirements for small-scale afforestation and reforestation project activities

169. The project participants shall demonstrate that the proposed small-scale A/R CDM project activity:

- (a) Complies with the definition and limit for small-scale A/R CDM project activities specified in decision 9/CMP.3,²¹ which states that “‘Small-scale afforestation and reforestation project activities under the CDM’ are those that are expected to result in net anthropogenic GHG removals of less than 16 kilotonnes of CO₂ per year and are developed or implemented by low-income communities and individuals as determined by the host Party. If a small-scale afforestation or reforestation project activity under the CDM results in net anthropogenic greenhouse gas removals by sinks greater than 16 kilotonnes of CO₂ per year, the excess removals will not be eligible for the issuance of tCERs or ICERs”;
 - ~~(b) Qualifies to apply one of the simplified methodologies for small-scale A/R CDM project activities;~~
 - (c) Is not part of a debundled large-scale A/R CDM project activity in accordance with the rules defined in appendix C of the annex to decision 6/CMP.1.
170. The project participants shall provide a written declaration that the proposed small-scale A/R CDM project activity is developed or implemented by low-income communities and individuals as determined by the host Party.
171. The project participants shall determine the start date of the crediting period of the proposed small-scale A/R CDM project activity, which shall be the start date of the proposed small-scale A/R CDM project activity determined in accordance with the definition of start date in the “Glossary: CDM terms”.

7.15. Specific design requirements for carbon dioxide capture and storage project activities

7.15.1. Definitions for carbon dioxide capture and storage project activities

172. **Carbon dioxide capture and storage:** the capture and transport of carbon dioxide from anthropogenic sources of emissions, and the injection of the captured carbon dioxide into an underground geological storage site for long-term isolation from the atmosphere.
173. **Geological storage site:** a paired geological formation, or a series of such formations, consisting of an injection formation of relatively high porosity and permeability into which carbon dioxide can be injected, coupled with an overlying cap rock formation of low porosity and permeability and sufficient thickness which can prevent the upward movement of carbon dioxide from the storage formation.
174. **Operational phase:** the period that begins when carbon dioxide injection commences and ends when carbon dioxide injection permanently ceases.
175. **Closure phase:** the phase that follows the operational phase and is the period that begins when carbon dioxide injection permanently ceases and ends when the geological storage site has been closed.
176. **Closure of a geological storage site:** the completion of the sealing of the geological storage site, including the appropriate plugging of wells relating to the geological storage site.

²¹ Decision 9/CMP.3 revised the limit for small-scale A/R CDM project activities defined in the annex to decision 5/CMP.1.

177. **Post-closure phase:** the phase that follows the closure phase and is the period that begins when the geological storage site has been closed.
178. **Seepage:** a transfer of carbon dioxide from beneath the ground surface or seabed ultimately to the atmosphere or ocean.
179. **Site development and management plan:** the documented description of how a geological storage site will be operated and managed.
180. **History matching:** the process of comparing observed results from the monitoring and measurement of a geological storage site with the results of the predictive numerical modelling of the behaviour of carbon dioxide injected into the geological storage site, and the use of the observed results to calibrate and update numerical models and modelling results. It can involve multiple iterations.
181. **Liability:** the legal responsibility arising from the CCS project activity or the relevant geological storage site, with the exception of the obligations arising from a net reversal of storage as set out in section "Addressing non-permanence in CCS project activities" of the "CDM project cycle procedure for project activities" but including all obligations related to the operation of the storage site (e.g. monitoring, remedial measures), to compensate for or remedy any significant damages, including damage to the environment, such as ecosystem damage, other material damages or personal injury.
182. **Remedial measures:** actions and measures intended to stop or control any unintended physical leakage or seepage of carbon dioxide, to restore the integrity of a geological storage site, or to restore long-term environmental quality significantly affected by a CCS project activity.
183. **Net reversal of storage of carbon dioxide** means that:
- (a) For a verification period during the crediting period, the accumulated verified reductions in anthropogenic emissions by sources of GHGs that have occurred as a result of a registered CCS CDM project activity are negative (i.e. the seepage from the geological storage site of the CCS project activity exceeds the remainder of the GHG emission reductions achieved by the CCS project activity);
 - (b) For a verification period after the end of the last crediting period, seepage has occurred from the geological storage site of the CCS project activity.

7.15.2. Description of project activity

184. In addition to the requirements mentioned in section 7.3 above, for a proposed CCS CDM project activity, the project participants shall:
- (a) Provide a description and analysis of the environmental conditions in the area of the geological storage site prior to any storage of carbon dioxide, including a description of the following:
 - (i) The hydrology, aquifer and groundwater properties, such as acidity and dissolved gases;
 - (ii) Where appropriate, the soils and soil gas properties, such as a carbon dioxide isotope analysis and carbon dioxide flux rate;

- (iii) The ecosystems and the possible presence of rare or endangered or sensitive species and their habitats;
 - (iv) Climatic data;
- (b) Demonstrate that the project activity²² does not involve:
 - (i) The transport of carbon dioxide from one country to another; and/or
 - (ii) A geological storage site that is located in more than one country.

7.15.3. Host Party participation requirements

185. The project participants implementing a CCS CDM project activity shall demonstrate that the host Party of the project activity has:

- (a) Submitted an expression of its agreement to the UNFCCC secretariat to allow the implementation of CCS project activities on its territory; and
- (b) Established laws or regulations in accordance with the host Party participation requirements set out in section “Participation requirements of host Party for CCS project activities” of the “CDM project cycle procedure for project activities”, which state that, prior to the publication of the PDD for global stakeholder consultation for the first proposed CCS CDM project activity within its jurisdiction, a host Party shall ensure that it has established laws and/or regulations that:
 - (i) Set procedures that include provisions for the appropriate selection, characterization and development of geological storage sites, recognizing the project requirements for CCS project activities under the CDM set out in section 7.15.4 below;
 - (ii) Define means by which rights to store carbon dioxide in, and gain access to, a subsurface pore space can be conferred to project participants;
 - (iii) Provide for timely and effective redress for affected entities, individuals and communities for any significant damages, such as environmental damage, including damage to ecosystems, other material damages or personal injury, caused by a CCS project activity, including in the post-closure phase;
 - (iv) Provide for timely and effective remedial measures to stop or control any unintended seepage of carbon dioxide, to restore the integrity of a geological storage site, and to restore long-term environmental quality significantly affected by a CCS project activity;
 - (v) Establish means for addressing liability arrangements for carbon dioxide geological storage sites, taking into account the provisions set out in section 7.15.9 below;

²² As per paragraphs 10 and 41 of decision 5/CMP.8; the CMP decided that the eligibility of these types of project activities shall be considered by the Subsidiary Body for Scientific and Technological Advice at its forty-fifth session, and also decided that although these types of project activities would merit inclusion under the CDM, more practical experience of carbon dioxide capture and storage project activities in geological formations under the CDM would be beneficial.

- (vi) For a host Party that accepts the obligation to address a net reversal of storage, establish measures to fulfil such an obligation.

186. In addition to the requirements for approval and authorization set out in section 7.10 above, the project participants shall seek written confirmation of the following from the DNA of the host Party:

- (a) That the right to store carbon dioxide in, and gain access to, the proposed geological storage site has been conferred to them;
- (b) That the host Party agrees to the financial provision described in the PDD (see section 7.15.8 below);
- (c) That the host Party accepts the allocation of liability as proposed in the PDD and the transfer of liability (see section 7.15.9 below);
- (d) Whether the host Party accepts the obligation to address a net reversal of storage in the situation referred to in the section “Addressing non-permanence in CCS project activities” of the “CDM project cycle procedure for project activities”.

7.15.4. Selection and characterization of geological storage site

187. The project participants shall describe the selection and characterization of geological storage site. The project participants shall demonstrate that they have selected a geological storage site:

- (a) In which, under the proposed conditions of use:
 - (i) There is no significant risk of seepage (as evidenced by the results of the risk and safety assessment carried out in accordance with section 7.15.6 below);
 - (ii) No significant environmental or health risks exist (as evidenced by the risk and safety assessment carried out in accordance with section 7.15.6 below);
 - (iii) The selected geological storage site complies with all laws and regulations of the host Party, as applicable;
- (b) That is not located in international waters.

188. When selecting a geological storage site, the project participants shall evaluate:

- (a) All available evidence, such as data, analysis and history matching, indicating that the injected carbon dioxide will be completely and permanently stored such that, under the proposed or actual conditions of use, no significant risk of seepage or risk to human health or the environment exists. The results of this evaluation should be supported by, and consistent with, the results of the risk and safety assessment carried out in accordance with section 7.15.6 below;
- (b) Whether the geological storage site is suitable for potable water supply.

189. If the proposed geological storage site is suitable for potable water supply, a decision about whether the site is eligible for geological storage shall be made by the host Party, taking into account the results of the site characterization and the risk and safety assessment of the proposed geological storage site, following the procedures outlined in the CDM CCS M&Ps.

190. When characterizing the geological storage site, the project participants shall take the following steps:

- (a) Step 1: data and information collection, compilation and evaluation. The project participants shall collect sufficient data and information to characterize the geological storage site and determine potential seepage pathways. The project participants shall evaluate: (i) the collected data and information in order to make a preliminary assessment of the site's storage capacity and to assess the viability of monitoring; and (ii) the quality of the data and information and, where required, collect new data;
- (b) Step 2: characterization of the geological storage site architecture and surrounding domains. The project participants shall assess the known and inferred structures within the injection formation(s) and cap rock formation(s) that would act as barriers to, or facilitators of, the migration of injected carbon dioxide. The project participants shall compile a numerical three-dimensional static earth model (or models) of the geological storage site. The project participants shall assess the uncertainty associated with key parameters used to build the model. The model shall be used by the project participants to characterize, inter alia:
 - (i) The structure of the geological containment;
 - (ii) All relevant geological properties of the injection formation(s);
 - (iii) The cap rock formation(s) and overburden;
 - (iv) The fracture system;
 - (v) The areal and vertical extent of the geological storage site (e.g. the injection formation, the cap rock formation, overburden, secondary containment zones and surrounding domains);
 - (vi) The storage capacity in the injection formation(s);
 - (vii) The fluid distribution and physical properties;
 - (viii) Other relevant characteristics;
- (c) Step 3: characterization of dynamic behaviour, sensitivity characterization and risk assessment. The project participants shall assess how the injected carbon dioxide can be expected to behave within the geological storage site architecture and surrounding domains, with a particular focus on the risk of seepage. The project participants shall utilize numerical dynamic modelling of the injected carbon dioxide using the static model developed in step 2 above to assess:
 - (i) Coupled processes (i.e. the interaction between each single process in the model);
 - (ii) Where possible, reactive processes (e.g. the interaction of injected carbon dioxide with in situ minerals in the numerical model);
 - (iii) Short-term and long-term simulations.

Such numerical modelling shall be used to provide insight into the pressure

and extent of carbon dioxide in the geological storage site over time, the risk of fracturing the cap rock formation(s) and the risk of seepage. Multiple simulations shall be conducted to identify the sensitivity of the assessments to assumptions made. The simulations carried out in this step shall form the basis for risk and safety assessments, detailed in section 7.15.6 below;

- (d) Step 4: establishment of a site development and management plan. Drawing on steps 1–3 above, the project participants shall establish a site development and management plan. The site development and management plan shall address the proposed conditions of use for the geological storage site and include, inter alia, descriptions of:
 - (i) The preparation of the site;
 - (ii) Well construction, such as materials and techniques used, and the location, trajectory and depth of the well;
 - (iii) Injection rates and the maximum allowable near-wellbore pressure;
 - (iv) Operating and maintenance programmes and protocols;
 - (v) The timing and management of the closure phase of the proposed CCS CDM project activity, including site closure and related activities.
191. When characterizing and selecting a geological storage site, the project participants shall use a wide range of data and information, including, inter alia:
- (a) Geological information, such as descriptions of the overburden and cap rock formation(s) and injection formation(s), locations of mapped faults, subsurface well and wellbore information, permeability and porosity, which are important in determining the injectivity of the injection formation, and the cap rock formation containment capacity, and information about regional tectonics, including the stress field and historical seismic activity;
 - (b) Geophysical information, such as the thickness and lateral extent of the storage and cap rock formation(s), pressure, temperature, the existence of faults, and reservoir heterogeneity. Sources of data may include, inter alia, well logs, sonic logs and seismic surveys;
 - (c) Geomechanical information, such as the stress state and the rock fracture pressure within the injection formation(s) and the cap rock formation(s). Sources of data include borehole data, such as breakouts inferred from calliper and televiwer logs, minifrac results, information about anisotropy within the reservoir, and mud loss events;
 - (d) Geochemical information, such as information on rock and fluid properties and mineralogy. Fluid properties, such as the brine salinity, should also be used to determine dissolution trapping rates;
 - (e) Hydrogeological information, such as aquifer characteristics and aquifer flow direction and rates within the geological storage site, the overburden and surrounding domains.

192. The project participants shall demonstrate that they have selected and characterized the geological storage site in accordance with the requirements referred to in paragraphs 187–191 above and provide all relevant supporting documents. The project participants shall describe and document transparently the methods, assumptions and models used, the type and sources of information and data used, as well as the process and steps taken to characterize and select the geological storage site, including the findings and outcomes from each step.

7.15.5. Project boundary

193. The following applies in addition to paragraphs 57 and 58 above: the project participants shall define the boundary of the proposed CCS CDM project activity to include:
- (a) Where applicable, the following:
 - (i) The installation where the carbon dioxide is captured;
 - (ii) Any treatment facilities;
 - (iii) Transportation equipment, including pipelines and booster stations along a pipeline, or offloading facilities in the case of transportation by ship, rail or road tanker;
 - (iv) Any reception facilities or holding tanks at the injection site;
 - (v) The injection facility;
 - (vi) Subsurface components, including the geological storage site and all potential sources of seepage, as determined during the characterization and selection of the geological storage site;
 - (b) The vertical and lateral limits of the carbon dioxide geological storage site that are expected when the carbon dioxide plume stabilizes over the long term during the closure phase and the post-closure phase.

7.15.6. Risk and safety assessment

194. The project participants shall carry out a comprehensive risk and safety assessment in order to assess the integrity of the geological storage site and potential impacts on human health and ecosystems in proximity to the proposed CCS CDM project activity. The risk and safety assessment shall also be used to inform environmental and socio-economic impact assessments. The risk and safety assessment shall:
- (a) Consider specific risks associated with containment failure resulting in emissions of GHGs from above-ground installations and seepage from subsurface installations, and the potential effects on, inter alia:
 - (i) The contamination of underground sources of drinking water;
 - (ii) The chemical properties of seawater;
 - (iii) Human health and ecosystems (e.g. as a result of carbon dioxide accumulations at dangerous levels in non-turbulent air);

- (b) Consider the risk of continuous slow seepage from a geological storage site. This type of event can arise due to, inter alia:
 - (i) Seepage along injection well(s) or abandoned well(s);
 - (ii) Seepage along a fault or fracture;
 - (iii) Seepage through the cap rock formation;
 - (c) Consider the risk of sudden mass release of carbon dioxide from surface CCS installations, for example due to pipeline rupture;
 - (d) Cover the full chain of CCS, including surrounding environments;
 - (e) Provide assurance of safe operational integrity regarding the containment of carbon dioxide, based on site-specific information about the geological storage site, potential seepage pathways, and secondary effects of storing carbon dioxide in the geological storage site, such as brine migration;
 - (f) Be used to determine operational data for the application of the site development and management plan, such as to set the appropriate maximums of injection pressure that will not compromise the confining cap rock formation(s) and the overburden of the geological storage site;
 - (g) Take account of the effects of potential induced seismicity or other geological impacts, as well as any other potential consequences to the environment, including on local ecosystems, property and public health, and global environmental effects on the climate directly attributable to the project activity, including effects due to seepage;
 - (h) Be used to help prioritize locations and approaches for enhanced monitoring activities;
 - (i) Provide a basis for remedial measures, including plans for responses that can stop or control any unintended emissions from surface CCS installations and seepage of carbon dioxide, restore the integrity of a geological storage site, and restore long-term environmental quality significantly affected by the project activity. Such measures and plans shall accompany monitoring plans;
 - (j) Include a communication plan.
195. In order to assess the potential risks of carbon dioxide capture, transportation and storage in a geological storage site, the project participants shall take the following steps:
- (a) Step 1: hazard characterization. The project participants shall analyse the following:
 - (i) Potential hazards resulting from the capture, transportation and injection of carbon dioxide;
 - (ii) Potential seepage pathways from the geological storage site;
 - (iii) The magnitude of potential seepage for identified potential seepage pathways;

- (iv) Critical parameters affecting potential seepage, such as the maximums of injection formation pressure, injection rates and temperature;
 - (v) The sensitivity to various assumptions made during numerical modelling;
 - (vi) Any other factors which could pose a hazard to human health and the environment;
 - (b) Step 2: exposure assessment. The project participants shall undertake an exposure assessment based on the characteristics of surrounding populations and ecosystems, the potential fate and behaviour of any seeped carbon dioxide, and other factors;
 - (c) Step 3: effects assessment. The project participants shall undertake an effects assessment based on the sensitivity of species, communities or habitats linked to potential seepage events identified during the hazard characterization and the effects of elevated carbon dioxide concentrations in the atmosphere, biosphere and hydrosphere;
 - (d) Step 4: risk characterization. The project participants shall assess the safety and integrity of the geological storage site in the short, medium and long terms, including an assessment of the risk of seepage under the proposed conditions of use set out in the site development and management plan;
 - (e) Step 5: contingency plan for large incidents, including seepage. The project participants shall prepare all the necessary plans that are to be put in place in case of large incidents, including availability of trained personnel, materials and equipment and financial means to mitigate adverse impacts of the incident, and teams prepared to act as swiftly as possible.
196. The project participants shall provide:
- (a) A detailed description of the risk and safety assessment referred to in paragraphs 194 and 195 above;
 - (b) A copy of the communication and contingency plans referred to in paragraphs 194 and 195 above, respectively; and
 - (c) References to all relevant supporting documents.

7.15.7. Monitoring

197. The project participants shall include in the PDD provisions for monitoring the proposed CCS CDM project activity that meet the following objectives:
- (a) To provide assurance of the environmental integrity and safety of the geological storage site;
 - (b) To confirm that the injected carbon dioxide is contained within the geological storage site and within the project boundary;
 - (c) To ensure that injected carbon dioxide is behaving as predicted in order to minimize the risk of any seepage or other adverse impacts;

- (d) To ensure that good site management is taking place, taking into account the proposed conditions of use set out in the site development and management plan, established in step 4 of section 7.15.4 above;
 - (e) To detect and estimate the flux rate and total mass of carbon dioxide from any seepage;
 - (f) To determine whether timely and appropriate remedial measures have been carried out in the event of seepage;
 - (g) To determine the reductions in anthropogenic emissions by sources of GHGs that have occurred as a result of the project activity.
198. In developing the monitoring plan for the proposed CCS CDM project activity, the project participants shall meet the objectives set out in paragraph 197 above by:
- (a) Reflecting the principles and criteria of international good practice for the monitoring of geological storage sites and consider the range of technologies described in the relevant sections of the Intergovernmental Panel on Climate Change (IPCC) 2006 Guidelines for National Greenhouse Gas Inventories and other good practice guidance;
 - (b) Transparently specifying which parameters and information will be monitored and collected, and the location and frequency of application of different monitoring techniques during the operational phase, closure phase and post-closure phase;
 - (c) Providing for specific techniques and methods that can:
 - (i) Detect and estimate the quantity of carbon dioxide stored in the geological storage site;
 - (ii) Detect potential seepage via pathways in the cap rock formation(s) and in the overburden and surrounding domains in the geological storage site;
 - (iii) Estimate the flux rate and total mass of carbon dioxide from any seepage;
 - (d) Including provisions for history matching, by using the monitoring results to calibrate and update the numerical models that were used to characterize the geological storage site;
 - (e) Providing for measurement of the carbon dioxide stream and composition, including impurities, at various points in the carbon dioxide capture, transportation and storage chain, including at the point(s) of injection into the geological storage site, at an appropriate frequency;
 - (f) Providing for measurement of the temperature and pressure at the top and bottom of the injection well(s) and observation well(s), at an appropriate frequency;
 - (g) Providing for the monitoring and measurement of various geological, geochemical and geomechanical parameters, such as fluid pressures, displaced fluid characteristics, fluxes and microseismicity, at an appropriate frequency;
 - (h) Providing for the monitoring and measurement of relevant parameters in the overburden and surrounding domains of the geological storage site, such as the monitoring of groundwater properties, soil gas measurements and measurements

- of the surface concentrations of carbon dioxide in the air, which shall be calibrated to detect signs of seepage, at an appropriate frequency;
- (i) Providing for the detection of corrosion or degradation of the transport and injection facilities;
 - (j) Providing for an assessment of the effectiveness of any remedial measures taken in the event of seepage.
199. The project participants shall, for each verification period, carry out history matching and, where necessary, update the numerical models used to characterize the geological storage site by conducting new simulations using the monitored data and information. The project participants shall adjust the numerical models if significant deviations (as defined in the approved CCS methodology applied by the CCS project activity) occur between observed and predicted behaviour. The project participants shall immediately notify the host Party and the Board in writing if a significant deviation occurs at any stage of the project cycle.
200. Where significant deviations are observed during history matching or when requesting renewal of the crediting period for the registered CCS CDM project activity, the project participants shall, as appropriate:
- (a) Re-characterize the geological storage site in accordance with section 7.15.4 above;
 - (b) Revise the project boundary;
 - (c) Update the risk and safety assessment in accordance with section 7.15.6 above;
 - (d) Update the environmental and socio-economic impact assessments referred to in section 7.15.10 below;
 - (e) Revise the monitoring plan, in order to improve the accuracy and/or completeness of data and information, taking into account observed deviations determined during history matching, changes to the project boundary, changes to the risk and safety assessment, changes to the environmental and socio-economic impact assessments, new scientific knowledge, and improvements in the best available technology;
 - (f) Update the site development and management plan, taking into account the results of the activities described in subparagraphs (a)–(e) above, where appropriate.
201. Where the information prepared in accordance with paragraph 200 above indicates that the geological storage site no longer meets the requirements set out in paragraphs 187 and 188 above, the issuance of CERs shall cease.
202. The project participants shall account for any seepage that occurs during the crediting period(s) of the CCS CDM project activity as project or leakage emissions in the calculation of monitored reductions in anthropogenic emissions by sources of GHGs that have occurred as a result of the project activity. Any seepage that occurs after the end of the last crediting period shall be quantified and reported in monitoring reports.

203. The monitoring of the geological storage site shall:
- (a) Begin before injection activities commence, to ensure the allowance of adequate time for the collection of any required baseline data;
 - (b) Be conducted at an appropriate frequency during and beyond the crediting period(s) of the CCS CDM project activity;
 - (c) Not be terminated earlier than 20 years after the end of the last crediting period of the CCS CDM project activity or after the issuance of CERs has ceased, whichever occurs first;
 - (d) Only be terminated if no seepage has been observed at any time in the past 10 years and if all available evidence from observations and modelling indicates that the stored carbon dioxide will be completely isolated from the atmosphere in the long term. This may be demonstrated through the following evidence:
 - (i) History matching confirms that there is agreement between the numerical modelling of the carbon dioxide plume distribution in the geological storage site and the monitored behaviour of the carbon dioxide plume;
 - (ii) Numerical modelling and observations confirm that no future seepage can be expected from the geological storage site.
204. The project participants liable for the geological storage site, or an entity that is under contract to the project participants, shall conduct the monitoring of the geological storage site unless and until the transfer of liability to the host Party is effected in accordance with section 7.15.9 below.

7.15.8. Requirements for financial provision

205. The project participants shall establish a financial provision that:
- (a) Meets all obligations in accordance with the laws and regulations of the host Party arising from the establishment and operation of the proposed CCS CDM project activity;
 - (b) Allows for the ongoing safe operation of the geological storage site in accordance with the laws and regulations of the host Party;
 - (c) Addresses the risk of project participant insolvency in accordance with the laws and regulations of the host Party;
 - (d) Offers a means of redress for affected communities and ecosystems in the event of seepage from a geological storage site of the proposed CCS CDM project activity in accordance with the laws and regulations of the host Party;
 - (e) Enables the host Party to discharge its obligations arising in connection with the transfer of liability.
206. The financial provision shall cover:
- (a) The cost of ongoing monitoring, at an appropriate frequency, of the geological storage site and of verification and certification by a DOE for at least 20 years after

the end of the last crediting period of the CCS CDM project activity or after the issuance of CERs has ceased, whichever occurs first;

- (b) In the event of seepage, the cost associated with the obligations set out in section “Addressing non-permanence in CCS project activities” of the “CDM project cycle procedure for project activities”;
 - (c) The cost of any remedial measures required by laws and regulations of the host Party;
 - (d) Any other requirements determined by the host Party that are agreed at the time of the host Party approval and described in the PDD.
207. The project participants shall describe the type and amount of the financial provision and provide a detailed cost estimate for each of the requirements referred to in paragraph 206 above, including underlying assumptions and justifications.
208. The financial provision shall, in accordance with the laws and regulations of the host Party, be transferable to the host Party upon fulfilment of all obligations of the project participants in accordance with the CDM rules and requirements and the laws and regulations of the host Party, or upon insolvency of the project participant(s).

7.15.9. Liability

209. The project participants shall clearly document in the PDD how the liability obligations arising from the proposed CCS CDM project activity or its geological storage site are allocated during the operational phase, closure phase and post-closure phase.
210. Relevant provisions of laws and regulations of the host Party, including those referred to in section 7.15.3 above, shall apply to matters related to liability.
211. During the operational phase and any time thereafter until a transfer of liability to the host Party has been effected in accordance with paragraph 212 below, liability shall reside with the project participants.
212. A transfer of liability from project participants to the host Party shall be effected after:
- (a) The monitoring by the project participant of the geological storage site has been terminated in accordance with the conditions for such termination, as set out in section 7.15.7 above;
 - (b) The host Party has established that the conditions set out by the DNA in its written confirmation, referred to in section 7.15.3 above, and those set out in the relevant laws and regulations applicable to the geological storage site, have been complied with.
213. The project participants shall notify the Board in writing, through the relevant DNA, not less than six months before the transfer of liability is scheduled to occur.

7.15.10. Environmental and socio-economic impact assessments

214. The following applies instead of paragraphs 92 and 93 above: the project participants shall carry out comprehensive environmental and socio-economic impact assessments in accordance with the laws and regulations of the host Party, including with regard to

potential transboundary impacts, drawing upon the risk and safety assessment referred to in section 7.15.6 above. Such assessments shall:

- (a) Include a detailed description of the planned monitoring and remedial measures to address any environmental and socio-economic impacts identified, and be compiled in accordance with procedures as required by the host Party;
 - (b) Analyse thoroughly and exhaustively air emissions (e.g. nitrogen oxides, sulphur oxides, dust, mercury, polycyclic aromatic hydrocarbons), solid waste generation, and water use associated with current CCS technologies;
 - (c) Be conducted applying the best available techniques in order to facilitate a high level of protection of the environment as a whole and of communities;
 - (d) Include at least a comprehensive analysis of the environmental and socio-economic impacts, including consideration of the potential impacts of carbon dioxide storage on potable water supply.
215. The project participants shall provide a detailed summary of the environmental and socio-economic impact assessments and provide references to all relevant supporting documents.

7.15.11. Verification and certification

216. The project participants may select the time for the initial verification and certification of monitored GHG emission reductions for a registered CCS CDM project activity by a DOE, taking into account that subsequent verification and certification reports shall be submitted by a DOE to the Board not later than five years after the end of the previous verification period.
217. Verification and certification of monitored GHG emission reductions for a registered CCS CDM project activity shall continue, in accordance with paragraph 203 above, beyond the end of the last crediting period by the DOE appointed by the project participants and until such time as the monitoring of the geological storage site has been terminated in accordance with the conditions for the termination of monitoring, as set out in paragraph 203 above.

7.16. Validation for registration of project activity

218. The project participants shall select a DOE, accredited ~~for the validation function and~~ in the sectoral scopes²³ linked to the applied methodologies and relevant to the proposed CDM project activity, for validation of the project activity for registration. The project participants shall have a contractual arrangement with the DOE for the validation.
219. The project participants shall submit to the selected DOE the completed PDD, together with supporting documentation, for validation and publication for global stakeholder consultation. If the project participants developed a document for voluntary monitoring of sustainable development co-benefits in accordance with paragraph 111 above, they may also submit it to the selected DOE for publication.

²³ The list of all 16 sectoral scopes, the DOEs accredited in each scope as well as the approved methodologies linked with these sectoral scopes, are provided on the UNFCCC CDM website.

220. If the PDD contains confidential or proprietary information, the project participants shall submit documentation in the following two versions:
- (a) A version in which all parts containing confidential/proprietary information are redacted (e.g. by covering those parts with black ink) so that the version can be made publicly available without displaying confidential/proprietary information;
 - (b) A version containing all information that is to be treated as confidential /proprietary by all parties handling this documentation (DOEs; Board members and alternate members; CDM panel and working group members; external experts requested to consider such documents in support of the work of the Board; and the secretariat).
221. Information used to demonstrate additionality, to describe the application of the selected methodologies, the selected standardized baselines and the other applied methodological regulatory documents and to support an environmental impact assessment shall not be considered proprietary or confidential. Any data, values and formulae included in electronic spreadsheets provided shall be made accessible and verifiable.
222. Before publishing the PDD for global stakeholder consultation in accordance with the “CDM project cycle procedure for project activities”, the project participants may request the DOE to seek guidance from the Board on the acceptability of deviation from:
- (a) A selected methodology or methodological tool; or
 - (b) Sections in the selected methodology or methodological tool that are not standardized by the selected standardized baselines, if the proposed CDM project activity applies standardized baselines.
223. If, after the publication of the PDD for global stakeholder consultation, the project participants have changed any of the applied methodologies or the combination thereof for the proposed CDM project activity, the project participants shall prepare a revised PDD and submit it to any DOE for publication for a new global stakeholder consultation in accordance with the “CDM project cycle procedure for project activities”, and request the DOE to restart validation.
224. The project participants may request the DOE to withdraw the published PDD before the submission of a request for registration of the proposed CDM project activity in accordance with the “CDM project cycle procedure for project activities”.
225. The project participants may request the DOE to withdraw the request for registration in accordance with the “CDM project cycle procedure for project activities”.
226. The project participants may change the DOE after the publication of the PDD in accordance with the “CDM project cycle procedure for project activities”.

8. Post-registration changes

8.1. General requirements

227. If there is any change regarding the modalities or information in the MoC statement or its annexes after the request for registration has been submitted, the project participants shall revise the MoC statement in accordance with the “CDM project cycle procedure for project activities”.

228. The project participants shall identify ~~and document~~ any ~~actual or~~ proposed ~~or actual~~ changes to the implementation, operation or monitoring of the registered CDM project activity.

228^{bis}. The project participants shall determine whether the proposed or actual changes are temporary deviations referred to in section 8.2 below, or permanent changes referred to in section 8.3 below, and whether they require approval by the Board. Unless otherwise stated in the respective provisions in sections 8.2 and 8.3 below, post-registration changes require approval by the Board.

229. For temporary deviations, the project participants are not required to prepare a revised PDD, but shall describe the actual changes in the monitoring report. ~~If there is any actual or proposed change to the implementation, operation or monitoring of the registered CDM project activity~~ For permanent changes, the project participants shall prepare a revised PDD (in both track-change and clean versions) that reflects the ~~actual or~~ proposed ~~or actual~~ changes, using the valid version of the applicable PDD form. The project participants shall provide a summary of the changes, including the reasons for the changes and any additional information relating to the changes to the PDD.

230. ~~The project participants shall determine whether the actual or proposed changes are temporary deviations referred to in section 8.2 below, or permanent changes referred to in section 8.3 below, and whether they require approval by the Board. Unless otherwise stated in the respective provisions in sections 8.2 and 8.3 below, post-registration changes require approval by the Board.~~

8.2. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents

231. If the project participants are temporarily unable to monitor the registered CDM project activity in accordance with the monitoring plan in the registered PDD (hereinafter referred to as the registered monitoring plan), the applied methodologies, the applied standardized baselines, or the other applied methodological regulatory documents, the project participants shall describe the nature, extent and duration of the non-conforming monitoring period in the monitoring report, and:

- (a) Propose alternative monitoring arrangements for the non-conforming monitoring period. In this case, the project participants shall apply conservative assumptions or discount factors to the calculations to the extent required to ensure that GHG emission reductions or net anthropogenic GHG removals will not be over-estimated as a result of the deviation; or
- (b) Apply the following most conservative values approach when alternative monitoring arrangements are not proposed. This does not require approval by the Board:
 - (i) Apply zero for baseline GHG emissions for the entire non-conforming monitoring period; and/or
 - (ii) Apply the values assuming that the source of GHG emissions is operated at the maximum capacity for the entire non-conforming monitoring period. In

the case of project GHG emissions related to the consumption of electricity, add 10 per cent to account for transmission and distribution losses.

8.3. Permanent changes

8.3.1. Corrections

232. If the project participants make any corrections to the project information or parameters fixed at registration of the CDM project activity as described in the registered PDD, the project participants shall document these corrections in a revised PDD.²⁴

8.3.2. Changes to the start date of the crediting period

233. The project participants of a registered A/R CDM project activity may not request any changes to the start date of the crediting period of the project activity if the start date of the crediting period was prior to the date of registration.
234. The project participants of a registered CDM project activity are not required to request approval from the Board for the following changes to the start date of the crediting period of the project activity, but shall notify the secretariat of the changes in accordance with the "CDM project cycle procedure for project activities":
- (a) Bringing forward the start date up to one year earlier than that indicated in the registered PDD, taking into account that the start date shall not be earlier than the effective date of registration of the project activity;
 - (b) Postponing the start date by up to one year, or by up to two years for a project activity hosted by a least developed country, later than that indicated in the registered PDD.
235. If the proposed change to the start date of the crediting period of a registered CDM project activity is between one and two years, or between two and four years for a registered CDM project activity hosted by a least developed country, the project participants shall:
- (a) Demonstrate that no changes have occurred to the project activity that would result in a less conservative baseline, or update the baseline using conservative data;
 - (b) Demonstrate that substantive progress has been made by the project participants to start the project activity.
236. If the proposed change to the start date of the crediting period of a registered CDM project activity is more than two years, or more than four years for a registered CDM project activity hosted by a least developed country, the project participants shall:
- (a) Demonstrate that the project activity remains additional;
 - (b) Demonstrate that the original baseline scenario established in the registered PDD remains valid, or update the baseline scenario using the latest data, as appropriate;
 - (c) Demonstrate that substantive progress has been made by the project participants to start the project activity.

²⁴ This provision does not allow the parameter values fixed ex ante ~~to be updated~~ at the time of the registration of the CDM project activity ~~to be updated~~, as it is not regarded as a correction.

8.3.3. Inclusion of monitoring plan

237. The project participant may submit the monitoring plan of a CDM project activity after its registration in accordance with paragraph 83 above.

8.3.4. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents

238. If the project participants are unable to implement the registered monitoring plan, or the monitoring would permanently deviate from the applied methodologies, the applied standardized baselines, or the other applied methodological regulatory documents, the project participants shall describe the nature and extent of the non-conforming monitoring in a revised PDD and the proposed alternative monitoring for the project activity in a revised PDD.
239. The project participants shall apply conservative assumptions or discount factors to the calculations in the proposed alternative monitoring to the extent required to ensure that GHG emission reductions or net anthropogenic GHG removals will not be overestimated as a result of the permanent change or deviation.

8.3.5. Changes to project design

240. Where there are changes to the project design of a registered CDM project activity, the project participants shall prepare a revised PDD that describes the nature and extent of the proposed or actual changes.
241. Changes to a registered CDM project activity may include:
- (a) Increase in the capacity²⁵ specified in the registered PDD with the following conditions:
 - (i) If the project activity is large-scale:
 - a. CERs may be claimed up to an amount calculated based on the increased capacity by 20 per cent of the capacity specified in the originally registered PDD;²⁶ or
 - b. CERs may be claimed for the full amount calculated based on the increased capacity if the project participants can demonstrate that the reason for the increase is not within the control of the project participants;
 - (ii) If the project activity is small-scale, CERs may be claimed for the full amount calculated based on the increased capacity, provided that the resulting

²⁵ Installed/rated capacity that directly impacts emission reductions or net anthropogenic removals.

²⁶ For registered CDM project activities for which any capacity increase had been approved by the Board based on the post-registration change requests submitted before 1 January 2019 (i.e. the date when this rule of capping the claimable CERs entered into force), the 20 per cent capping in this subparagraph is in reference to the capacity specified in the latest approved version of the PDD as a result of those requests.

project activity does not exceed the small-scale threshold for the corresponding small-scale project type (i.e. Type I, II or III);

- (b) Decrease in the capacity specified in the registered PDD;
- (c) Addition of new components or extension/addition of technologies/measures that introduce:
 - (i) Complementary technologies/measures involving mass and/or energy transfer to/from the technologies/measures specified in the originally registered PDD;²⁷ or
 - (ii) More advanced version of the same technologies as per the definition of “the same technologies” in paragraph 44(b) above (e.g. improved performance in emission reductions, efficiency, health, safety and durability evidenced in reference to a relevant national or international standard);²⁸
- (d) Removal of a component or technology/measure specified in the registered PDD;
- (e) Changes to the technologies/measures that result in the same technologies/measures as in the originally registered technologies/measures as per the definition of “the same technologies” in paragraph 44(b) above;²⁹
- (f) Removal or addition of one or more site(s) of the project activity registered with multiple sites;
- (g) Removal of a project activity from a bundle of small-scale CDM project activities;
- (h) Actual operational parameters that are within the control of the project participants, differing from the expected parameters;
- (i) Any consequential changes to the application of methodologies, standardized baselines and/or other methodological regulatory documents resulting from the changes referred to in subparagraphs (a)–(d)(e) above, including change to or addition of other methodologies, other standardized baselines and/or other methodological regulatory documents, or application of a baseline scenario that is more appropriate as a result of the proposed or actual modifications to the project activity;

²⁷ Examples include:

- (a) A landfill gas capture and electricity generation activity using three electricity generating units adds an additional electricity generating unit without altering the quantity of landfill gas extracted (i.e. the capacity of the landfill gas extraction system remained the same);
- (b) Addition of a back-up electricity generating source to supply electricity during exigencies when the project activity fails to meet the demand or is not available due to operational reasons.

²⁸ Examples include an activity registered with methodology AMS-III.AR disseminating lamps with useful life of two years, changing to distribute lamps with useful life of seven years.

²⁹ Examples include changing the mode of utilization of recovered methane from a landfill such as shifting from flaring to heat generation or from heat generation to electricity generation. This may involve the addition/change of Type I methodology to the registered project activity applying Type III waste methodology.

- (j) Voluntary update of the applied methodologies or the other applied methodological regulatory documents to a later valid version of them, or voluntary change to other methodologies, provided all requirements in the updated/changed methodologies and the other applied methodological regulatory documents are met.
242. The project participants shall report in the revised PDD the impacts of the proposed or actual changes to the registered CDM project activity on the following:
- (a) The applicability and application of the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents with which the project activity has been registered;
 - (a)_{bis.} The project boundary and any implications on the inclusion or exclusion of emissions sources and leakage emissions;
 - (b) The compliance of the monitoring plan with the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents;
 - (c) The level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan;
 - (d) The additionality of the project activity;
 - (e) The scale of the project activity.
243. If the proposed or actual changes affect the additionality of the registered CDM project activity as referred to in paragraph 242(d) above, the demonstration of the impacts of the changes on the additionality shall be based on all original input data. In addition:³⁰
- (a) If investment analysis was used, the project participants shall only modify the key parameters in the original spreadsheet calculations affected by the proposed or actual changes to the project activity;
 - (b) If only barriers were claimed to demonstrate additionality, the project participants shall demonstrate that the barriers are still valid under the new circumstances.
244. Notwithstanding paragraph 243 above, if a registered CDM project activity applies an approved standardized baseline that standardizes additionality, and if the proposed or actual changes affect the additionality of the registered CDM project activity, as referred to in paragraph 242(d) above, the demonstration of the impacts of the changes on the additionality shall be based on the additionality criteria (e.g. positive lists of technologies) identified in the applied standardized baseline.
245. Where the project participants cannot demonstrate compliance with the requirements of the applied methodologies, the applied standardized baselines or the other applied

³⁰ If a proposed or actual modification adversely impacts the additionality of the project activity, subsequent requests for issuance of CERs based on such modifications will be rejected.

methodological regulatory documents with which the CDM project activity has been registered, the project participants shall:

- (a) Revise the PDD applying:
 - (i) A later valid version of the applied methodologies, the applied standardized baselines or the other applied methodological regulatory documents; or
 - (ii) Other methodologies, other standardized baselines or other methodological regulatory documents that are applicable to the project activity; and
- (b) Demonstrate compliance with the requirements of the newly applied methodologies, the newly applied standardized baselines and the other applied methodological regulatory documents in the revised PDD.

8.4. Validation of post-registration changes

- 246. For changes that require approval by the Board, the project participants may choose to submit a request for approval of a post-registration change prior to proceeding with a request for issuance of CERs (the prior-approval track) or to combine a request for approval of a post-registration change with a request for issuance of CERs (the issuance track), irrespective of the types of changes. In doing so, the project participants may take into account the appendix, which contains an indicative list of types of post-registration changes that may be suitable for approval under the issuance track.
- 247. For post-registration changes to the registered CDM project activity, the project participants shall:
 - (a) Under the prior-approval track, request any DOE to assess whether the post-registration changes comply with the relevant requirements and to obtain approval of the changes from the Board at any time prior to the submission of the next request for issuance of CERs; or
 - (b) Under the issuance track, request the DOE contracted to perform verification for the next request for issuance of CERs to also assess whether the post-registration changes comply with the relevant requirements.
- 248. The project participants shall ensure that the DOE selected for validation of the post-registration change to the registered CDM project activity is accredited ~~for the validation function and~~ in the sectoral scopes linked to the applied methodologies and relevant to the registered CDM project activity.

9. Implementation and monitoring

9.1. General requirements

- 249. The project participants shall implement and operate the registered CDM project activity in accordance with the description in the registered PDD, including all physical features.
- 250. The project participants shall monitor the registered CDM project activity and its GHG emission reductions or net anthropogenic GHG removals in accordance with the registered monitoring plan. **Monitoring results in different crediting periods shall be separated into different monitoring reports.**

251. For a registered bundle of small-scale CDM project activities, the project participants shall prepare, for each monitoring period:
- (a) A single monitoring report covering all project activities in the bundle, if a single PDD for the bundle was prepared in accordance with paragraph 123(a) above; or
 - (b) Multiple separate monitoring reports, each of which corresponds to each project activity in the bundle, if separate PDDs for the bundle were prepared in accordance with paragraph 123(a) or 124(a) above.
252. If the project participants choose to prepare separate monitoring reports for a registered bundle of small-scale CDM project activities in accordance with paragraph 251 above, each project activity shall be included in only one of the monitoring reports and all the monitoring reports shall collectively contain all monitoring results of all project activities in the bundle (i.e. all the monitoring reports shall contain mutually exclusive project activities). Also, all the monitoring reports shall have the same monitoring period for each monitoring period. The multiple separate monitoring reports covering the same monitoring period may be grouped and published in batches, and the corresponding requests for issuance of CERs may be submitted to the secretariat separately at different points in time.
253. All monitoring, verifications and requests for issuance of CERs in respect of GHG emission reductions and net anthropogenic GHG removals achieved by CDM project activities in the second commitment period (from 1 January 2013) shall be calculated using the GWPs as applied by decision 4/CMP.7 in accordance with section 6.3 above.

9.2. General description

254. The project participant shall describe the implemented registered CDM project activity and monitored GHG emission reductions or net anthropogenic GHG removals in the monitoring report to provide an understanding of how the implementation and monitoring were conducted.
255. When describing the implementation and monitoring, the project participants shall provide the following information regarding the implemented registered CDM project activity:
- (a) Title and UNFCCC reference number of the project activity;
 - (b) Name of the project participants involved;
 - (c) Location of the project activity;
 - (d) Titles, versions and UNFCCC reference numbers of the applied methodologies and, where applicable, the applied standardized baselines including any other methodologies or methodological tools to which the applied methodologies refer;
 - (e) Type, start date and duration of the crediting period;
 - (f) Monitoring period number and dates of coverage;
 - (g) Monitoring report number for the monitoring period, if multiple separate monitoring reports for the monitoring period are prepared.

9.3. Description of implemented registered project activity

256. The project participants shall provide a description of the implemented registered CDM project activity as follows:
- (a) Description of the installed technologies, technical processes and equipment;
 - (b) Information on the implementation and actual operation of the project activity, including relevant dates (e.g. construction, commissioning, start of operation). For a project activity that consists of more than one site, the project participants shall describe the status of implementation and start date of operation for each site. For a project activity with phased implementation, the project participants shall indicate the progress of the project activity achieved in each phase.
257. The project participants shall indicate whether there are any temporary deviations from the registered monitoring plan, the applied methodologies, the applied standardized baselines or the other applied methodological regulatory documents, or permanent changes to the registered CDM project activity (hereinafter referred to as post-registration changes). For post-registration changes that have been approved by the Board, the project participants shall indicate the dates of approval.

9.4. Description of monitoring system

258. The project participants shall describe the monitoring system and provide line diagrams (graphical schemes) showing all relevant monitoring points. This description may include data collection procedures (information flow including data generation, aggregation, recording, calculations and reporting), organizational structure, roles and responsibilities of personnel, and emergency procedures for the monitoring system.

9.5. Data and parameters

259. The project participants shall provide all parameters used to calculate the baseline, project and leakage GHG emissions by sources, or the baseline and actual net GHG removals by sinks, as well as other relevant parameters for the monitoring period as required by the registered monitoring plan, the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents. The project participants shall provide information on how data and parameters have been monitored.
260. For each parameter, the project participants shall:
- (a) Provide the values of the monitored parameter for the purpose of calculating GHG emission reductions or net anthropogenic GHG removals. Where data are measured continuously, they shall be presented using an appropriate time interval (e.g. monthly for a monitoring period of six months or more; weekly for a monitoring period of less than six months; daily for a monitoring period of one month or less). For a default value that is not fixed at the time of registration of the CDM project activity, the most recent value shall be applied;
 - (b) Describe the equipment used to monitor each parameter, including details on accuracy class, and calibration information (frequency, date of calibration and validity), if applicable as per the registered monitoring plan;

- (c) Describe how the parameter is measured/calculated and the measurement and recording frequency;
 - (d) Provide and/or identify the sources of data (e.g. logbooks, daily records, surveys);
 - (e) Provide the calculation method of the parameter, where relevant;
 - (f) Describe the QA/QC procedures applied (if applicable as per the registered monitoring plan);
 - (g) Provide information about appropriate emission factor, IPCC default value and any other reference value.
261. If data and parameters monitored are determined by a sampling approach, the project participants shall describe how the sampling has been conducted in accordance with the sampling plan in the registered monitoring plan.
262. For a registered CDM project activity that applied a methodology or methodological tool providing a choice between an ex ante and an ex post determination of parameter values for calculating baseline emissions and that chose the ex ante determination, or that applied a methodology or methodological tool requiring a determination of these values ex ante, and applied an applicable standardized baseline valid at the time of the submission of the request for registration for this purpose, the project participants shall apply the same version of the standardized baseline for the purpose of monitoring until the end of the first crediting period. ~~applying an approved standardized baseline that standardizes baseline emissions, the project participants shall apply, in the first monitoring report of the first crediting period, the version of the applied standardized baseline that contains the more conservative standardized value(s)³⁴ of the parameter(s) (e.g. emission factors) between those in the latest version³² applicable on the first day of the first monitoring period and those in the latest version applicable on the last day of the first monitoring period.³³ In the~~

³⁴ ~~A more conservative value(s) provides lower baseline emissions. However, if standardized parameters (e.g. the grid emission factors) as an approved standardized baseline are also used for the purpose of determining the project emissions and/or leakage emissions, a more conservative value(s) provides lower GHG emission reductions.~~

³² ~~The latest version of the applied standardized baselines, referred to in paragraphs 262 and 263, does not refer to the previous version that is still valid after a major and/or minor revision in accordance with the "Procedure: Development, revision, clarification and update of standardized baselines" but refers to the latest version only.~~

³³ ~~See EB 70 meeting report, paragraph 45(c). For example, if version 01.0 is the latest version of the applied standardized baseline at the first day of the first monitoring period, while version 02.0 is the latest version at the last day of the first monitoring period and contains more conservative values, version 02.0 applies to the first monitoring report. However, if version 0.10 is the latest version both at the first and last days of the first monitoring period, then version 01.0 applies to the first monitoring report.~~

subsequent monitoring reports for the first crediting period, the project participants shall apply:

- (a) The same version of the standardized baseline as the one applied in the first monitoring report, if the registered CDM project activity applies:
 - (i) An approved constant standardized baseline that standardizes baseline emissions and that does not require an ex post application of the standardized values; or
 - (ii) An approved dynamic standardized baseline³⁴ that standardizes baseline emissions; or
- (b) The latest version of the standardized baseline applicable on the first day of each monitoring period, if the registered CDM project activity applies an approved constant standardized baseline that standardizes baseline emissions and that requires an ex post application of the standardized values.³⁵

262^{bis}. For a registered CDM project activity that applied a methodology or methodological tool providing a choice between an ex ante and an ex post determination of parameter values for calculating baseline emissions and that chose the ex post determination where there was no applicable standardized baseline valid at the time of registration, the project participants may, at any time during the first crediting period, switch to the ex ante determination by applying an applicable standardized baseline that becomes available after the registration and is valid at the time of the switch, and apply the same version of the standardized baseline for the purpose of monitoring for the remainder of the same crediting period.³⁶ Such switch and application of a standardized baseline shall undergo the post-registration change approval process in accordance with the “CDM project cycle procedure for project activities”, and the standardized baseline shall be valid at the time when the post-registration change approval request is submitted.

263. For a registered CDM project activity applying an approved standardized baseline that standardizes baseline emissions that applied a methodology or methodological tool providing a choice between an ex ante and ex post determination of parameter values for calculating baseline emissions, if the selected type of crediting period is renewable, the project participants shall, at each renewal of the crediting period, choose the ex ante or ex

³⁴ See EB 70 meeting report, paragraph 45(f). A “constant standardized baseline” refers to a standardized baseline without a dynamic factor(s), such as approved standardized baselines ASB0001, ASB0002, ASB0003 and ASB0004. On the other hand, a “dynamic standardized baseline” refers to a standardized baseline with a dynamic factor(s) (e.g. autonomous improvement factors). For example, one option in the calculation of baseline emissions in the methodology AM0070 requires that a specific electricity consumption of a certain class and design of refrigerators be reduced annually by a fixed percentage of autonomous improvement factors. Therefore, a standardized baseline developed using the methodological approach of AM0070 can be a dynamic standardized baseline.

³⁵ This refers to an approved standardized baseline that requires project participants to use the latest standardized value(s) of baseline emission parameter(s) in the latest version of the standardized baseline for the monitoring reports subsequent to the first monitoring report.

³⁶ Switching from the ex post to ex ante option during a crediting period is already allowed as clarified by the MP and approved by the Board at EB 102 (AM_CLA_0280: Clarifications on updating DATEBaselineRetrofit of ACM0002 and on changing the grid emission factor calculation approach from ex post to ex ante) < <https://cdm.unfccc.int/methodologies/PAmethodologies/clarifications/69901>>.

post determination, unless otherwise required by the applied methodology or methodological tool, and shall follow the same rules in terms of the use and validity of standardized baselines as in paragraphs 262 and 262^{bis} above. ~~apply, in the first monitoring report for the second and third crediting periods, the version of the applied standardized baseline that contains the more conservative standardized value(s) of the parameter(s) (e.g. emission factors) between those in the latest version applicable on the submission date of the request for renewal of the crediting period and those in the latest version applicable on the first day of the first monitoring period in the new crediting period.³⁷ In the subsequent monitoring reports for the second and third crediting periods, the project participants shall apply:~~

- ~~(a) The same version of the standardized baseline as the one applied in the first monitoring report of the respective crediting period, if the registered CDM project activity applies:
 - ~~(i) An approved constant standardized baseline that standardizes baseline emissions and that does not require an ex post application of the standardized values; or~~
 - ~~(ii) An approved dynamic standardized baseline that standardizes baseline emissions; or~~~~
- ~~(b) The latest version of the standardized baseline applicable on the first day of each monitoring period, if the registered CDM project activity applies an approved constant standardized baseline that standardizes baseline emissions and that requires an ex post application of the standardized values.~~

9.6. Calculation of emission reductions or net anthropogenic removals

264. The project participants shall, for the registered CDM project activity for the monitoring period, identify the formulae used for, and provide the calculations of, the following:
- (a) Baseline GHG emissions or baseline net GHG removals;
 - (b) Project GHG emissions or actual net GHG removals;
 - (c) Leakage GHG emissions;
 - (d) GHG emission reductions or net anthropogenic GHG removals.
265. If the monitoring period starts before 1 January 2013 and ends any time thereafter, the project participants shall calculate GHG emission reductions or net anthropogenic GHG removals in the following manner:
- (a) The amount of (raw) GHG emission reductions achieved in the monitoring period for each GHG shall be allocated proportionally to the duration of the period up to 31 December 2012 and the period from 1 January 2013 onwards before multiplying with the GWPs for the respective periods in accordance with paragraph 251 above;
 - (b) If annual caps are applied in the calculation of GHG emission reductions, the annual caps shall be pro-rated to the periods before and from 1 January 2013. If

³⁷ See EB 70 meeting report, paragraph 45(d).

further apportionment is required, the total GHG emission reductions shall be pro-rated;

(b)_{bis} The monitoring results calculated in accordance with subparagraphs (a) and (b) above shall be presented in the monitoring report separately for the period up to 31 December 2012 and the period from 1 January 2013;

(c) For a registered A/R CDM project activity:

- (i) For ICERs, if the monitoring period falls partly in the first commitment period and partly in the second commitment period of the Kyoto Protocol, all net anthropogenic GHG removals achieved since the last verification shall be allocated to the second commitment period;
- (ii) For tCERs, for any issuance, all net anthropogenic GHG removals achieved since the start of the project activity shall be allocated to the commitment period in which the monitoring period ends.

266. The project participants shall provide a comparison of the GHG emission reductions or net anthropogenic GHG removals achieved by the registered CDM project activity with the estimates in the registered PDD.

267. For any registered CDM project activity, except for A/R project activities, the project participants shall explain the cause of any increase in the actual GHG emission reductions achieved during the monitoring period (e.g. higher water availability, higher plant load factor), including all information (i.e. data and/or parameters) that is different from that stated in the registered PDD.

268. For a registered small-scale CDM project activity or a registered bundle of small-scale CDM project activities, the project participants shall:

- (a) Demonstrate that the combined scale of the activities belonging to the same small-scale project type (Type I, II or III) referred to in paragraph 119 above remained under the limit of that type every year during the crediting period; or
- (b) If, during any year of its crediting period, the combined scale goes beyond the limit of that type, cap the GHG emission reductions that are claimed for that year at the amount calculated with the limit of its type.

9.7. Verification of implementation of registered project activity and monitored emission reductions or net anthropogenic removals

269. The project participants shall maintain all monitoring results of the registered CDM project activity in accordance with the record-keeping system identified in the registered PDD.

270. The project participants shall select a DOE, accredited for the verification function and in the sectoral scopes linked to the applied methodologies and relevant to the registered CDM project activity, for verification of the implementation of the project activity and monitored GHG emission reductions or net anthropogenic GHG removals for the monitoring period. The project participants shall have a contractual arrangement with the DOE for the verification.

271. The project participants shall submit to the selected DOE a completed monitoring report of the implemented registered CDM project activity for the monitoring period, together with

supporting documentation, for their publication and verification. If the project participants voluntarily monitored sustainable development co-benefits of the implemented registered CDM project activity, including those monitored in accordance with the document referred to in paragraph 111 above, they may also submit the monitoring results to the selected DOE for their publication and verification.

- 272. The project participants shall make available all monitoring results to the DOE upon its request for verification purposes.
- 273. The project participants may request the DOE to withdraw the published monitoring report in accordance with the “CDM project cycle procedure for project activities”.
- 274. The project participants may change the DOE after the publication of the monitoring report in accordance with the “CDM project cycle procedure for project activities”.
- 275. The project participants may request the DOE to withdraw the request for issuance of CERs in accordance with the “CDM project cycle procedure for project activities”. In this case, the project participants may prepare a revised monitoring report with the same, reduced or extended monitoring period for publication and verification by the same or a different DOE.
- 276. If the DOE’s verification of the monitoring report has been selected by the secretariat for a performance assessment under the “CDM accreditation procedure”, the project participants shall facilitate access to the project site for the CDM assessment team.
- 277. For an A/R CDM project activity, the project participants may select a time for the DOE to undertake the initial verification and certification. If tCERs are issued, subsequent verification and certification may be carried out at most once in each subsequent commitment period, at a time selected by the project participants. If ICERs are issued, the subsequent verifications and certifications shall be carried out within eight years of the date when the previous certification report was submitted until the end of the crediting period.³⁸

10. Renewal of crediting period

- 278. The crediting period of a registered CDM project activity that has not been implemented in the first crediting period may be renewed if the project participants, through a DOE, obtain approval from the Board to proceed with a request for renewal of crediting period prior to the submission of such request in accordance with the “CDM project cycle procedure for project activities”. For a CDM project activity that will not have income other than that from CERs to be issued for the project activity, this prior approval of the Board is not required, therefore the project participants may, through a DOE, directly proceed with a request for renewal of crediting period.
- 279. To support a request for renewal of crediting period of a registered CDM project activity, the project participants shall, using the valid version of the applicable PDD form, update the sections of the PDD of the project activity relating to the baseline, estimated GHG

³⁸ Decision 4/CMP.10 revised the timing of verification for A/R CDM project activities defined in the annex to decision 5/CMP.1.

emission reductions or net anthropogenic GHG removals, the monitoring plan and the crediting period, applying methodologies in one of the following manners:

- (a) The project participants shall use the valid version of the methodologies and methodological tools applied in the registered PDD, that is, the latest version at the time of the submission of the request for renewal of crediting period or the previous version if the submission of the request for renewal of the crediting period is still within the grace period of the previous version for use;
 - (b) If any of the methodologies applied in the registered PDD was withdrawn after the registration of the project activity and was replaced by consolidated methodologies, the project participants shall use the valid version of the consolidated methodologies; or
 - (c) If the project activity does not meet the applicability conditions of the methodologies or methodological tools under the options in subparagraphs (a) or (b) above due to their revisions or due to the update of the baseline, the project participants shall either:
 - (i) Select other applicable approved methodologies; or
 - (ii) Request, through the DOE that conducts validation for renewal of crediting period, a deviation from the valid version of the methodologies (including consolidated methodologies thereof) or the methodological tools applied in the registered PDD, or from any other selected methodologies, or any other methodological tools applied in accordance with the selected methodologies.
280. For renewal of crediting period of a registered CDM project activity, the project participants are not required to reassess the additionality of the project activity nor update the section of the PDD relating to additionality.
281. In updating the PDD of the registered CDM project activity in accordance with paragraph 279 above, the project participants shall consider the application of an approved standardized baseline to the project activity as follows:
- (a) The project participants shall use the valid version of an approved standardized baseline if:
 - (i) The standardized baseline is applied in the registered PDD and the valid version of the standardized baseline is applicable to the project activity and to the methodologies applied in accordance with paragraph 279 above; or
 - (ii) The standardized baseline is not applied in the registered PDD but the valid version of the standardized baseline whose selection is mandatory³⁹ is applicable to the project activity and to the methodologies applied in accordance with paragraph 279 above. However, the project participants may update the PDD without selecting such standardized baseline if the submission of the request for renewal of crediting period is made within 240 days after the standardized baseline became valid;

³⁹ For an explanation on the standardized baseline whose selection is mandatory, see footnote 12 above.

- (b) If the valid version of the standardized baseline applied in the registered PDD is no longer applicable to the project activity and/or to the valid version of the methodologies applied in the registered PDD due to a revision of the standardized baseline after the registration of the project activity, the project participants shall:
 - (i) Select another applicable approved standardized baseline; or
 - (ii) Use only the valid version of the methodologies applied in the registered PDD, that are still applicable to the project activity and that can be used independently for estimating GHG emission reductions or net anthropogenic GHG removals without using the standardized baseline applied in the registered PDD;
 - (c) The project participants may use the valid version of an applicable approved standardized baseline if:
 - (i) The standardized baseline is not applied in the registered PDD; and
 - (ii) The standardized baseline standardizes baseline emissions only and does not require its mandatory selection, and is applicable to the project activity and to the methodologies applied in accordance with paragraph 279 above;
 - (d) The project participants shall not use an applicable approved standardized baseline if:
 - (i) The standardized baseline is not applied in the registered PDD; and
 - (ii) The standardized baseline standardizes additionality and/or baseline scenario and does not require its mandatory selection, and is applicable to the project activity and to the methodologies applied in accordance with paragraph 279 above.
282. The project participants shall demonstrate the validity of the original baseline or update it in accordance with paragraphs 283–286 below.
283. To demonstrate the validity of the original baseline or its update, the project participants are not required to reassess the baseline scenario. Instead, the project participants shall assess the GHG emission reductions or net anthropogenic GHG removals that would have resulted from that scenario.
284. The project participants shall assess and incorporate the impact of national and/or sectoral policies and circumstances, existing at the time of requesting renewal of crediting period, on the current baseline GHG emissions, without reassessing the baseline scenario.
285. The requirements contained in paragraph 284 above are not applicable to a registered CDM project activity applying the valid version of an applicable approved standardized baseline that standardizes baseline scenario in accordance with paragraph 281 above.
286. If data and parameters used for determining the original baseline, that were determined ex ante and not monitored during the crediting period, are no longer valid, the project participants shall update such data and parameters in accordance with the “Methodological tool: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period”.

287. The result of the process described in paragraphs 278–286 above defines a new version of the PDD.
288. The project participants shall ensure that the MoC statement is up to date.
289. The project participants wishing to combine a request for approval of any types of changes to the registered CDM project activity with a request for renewal of the crediting period may submit combined requests in accordance with the “CDM project cycle procedure for project activities”.
290. The project participants shall select a DOE, accredited ~~for the validation function and~~ in the sectoral scopes linked to the applied methodologies and relevant to the registered CDM project activity, and submit the updated PDD, together with supporting documentation, to the DOE for validation for renewal of the crediting period of the project activity. The project participants shall have a contractual arrangement with the DOE for the validation.
291. At any time before the adoption of the decision on the request for renewal of crediting period of the registered CDM project activity, the project participants may contact the DOE to withdraw the request.

11. Voluntary deregistration of project activity⁴⁰

292. At any time after the registration of a CDM project activity, the project participants may request the secretariat to deregister the project activity in accordance with the “CDM project cycle procedure for project activities”.
293. A CDM project activity that has been deregistered may not be reregistered as a CDM project activity nor included as a CPA in a registered CDM PoA.

⁴⁰ For related information, see EB 81 report, paragraph 79.

Appendix. Indicative list of post-registration changes that may be suitable for approval under the issuance track

1. A request for approval of a post-registration change may be suitable to be submitted under the issuance track referred to in paragraph 230 of this procedure for:
 - (a) Any corrections to project information¹ of a registered clean development mechanism (CDM) project activity that do not affect the design of the project activity;
 - (b) Temporary deviations from the registered monitoring plan for which alternative monitoring arrangements are proposed, if the proposed alternative monitoring arrangements produce a conservative estimate of greenhouse gas (GHG) emission reductions or net anthropogenic GHG removals;
 - (c) Changes to the monitoring of a registered CDM project activity that have no material impact² on the applicability of the applied methodologies or the other applied methodological regulatory documents, or the accuracy and completeness of the monitoring;
 - (d) Changes to the project design of a registered CDM project activity that do not adversely impact any of the following:
 - (i) The applicability and application of the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents with which the project activity has been registered;
 - (ii) The additionality of the project activity;
 - (iii) The scale of the project activity.
 - (e) Changes to the project design to use the positive list for demonstrating additionality in the latest valid version of the “Methodological tool: Demonstration of additionality of small-scale project activities” or the “Methodological tool: Demonstrating additionality of microscale project activities”;
 - (f) The types of changes listed in the “Guidelines on accounting of specified types of changes in A/R CDM project activities from the description in registered project design document”.

¹ Such corrections may include typographical errors, location, names and numbers of components, etc.

² The same materiality thresholds for verification contained in the “CDM validation and verification standard” should apply.

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	9 September 2021	<p>EB 111, Annex 1</p> <p>Revision to:</p> <ul style="list-style-type: none"> • Incorporate the “Amendments to version 02.0 of the CDM project standard for project activities on post-registration changes of capacity increase” (CDM-EB106-A06-AMEN) (version 01.0); • Incorporate the “Amendments to version 02.0 of the CDM project standard for project activities on application of standardized baselines” (CDM-EB108-A02-AMEN) (version 01.0); • Incorporate the “Amendments to version 02.0 of the CDM project standards for project activities on addition/change of technologies” (CDM-EB109-A05-AMEN) (version 01.0); • Clarify the conditions for requesting for registration of a project activity that was a CPA and has been previously excluded from a registered PoA, and the deadline for such requests; • Make the clarification on letters of approval of a proposed project activity supported by a multilateral fund consistent with that in the PS-PoA; • Remove the reference to “validation function” or “verification function” when referring to the accreditation status of DOEs; • Clarify that, for temporary deviations from the registered monitoring plan, a revised PDD is not required but the changes are to be described in the monitoring report; • Make the list of impacts of proposed or actual changes to the registered project activity that are required to be reported in the revised PDD consistent across the PS-PA, VVS-PA and PCP-PA; • Add a provision that requires the separation of monitoring results in different crediting periods into different monitoring reports; • Add a provision for a monitoring period that starts before 1 January 2013 and ends anytime thereafter to separate monitoring results in the periods before and after 1 January 2013 in a monitoring report; • Make editorial improvements.
02.0	29 November 2018	<p>EB 101, Annex 1</p> <p>Revision to:</p> <ul style="list-style-type: none"> • Introduce a cap on claimable CERs due to the capacity increase for large-scale project activities through post-registration changes if the increase is within the control of the project participants;

<i>Version</i>	<i>Date</i>	<i>Description</i>
		<ul style="list-style-type: none"> • Clarify the conditions for addition of and/or changes to technologies/measures as post-registration changes; • Expand the list of post-registration changes to cover other possible types of post-registration changes; • Delete the requirement limiting the types of small-scale A/R activities; • Insert the specific rule on the start date of the crediting period for small-scale A/R project activities; • Insert a provision that requires the project participants to confirm that the proposed CDM project activity is neither registered as a CDM project activity nor included as a CPA in a registered CDM PoA; • Streamline the required information on “technologies/measures” and “facilities, equipment and measures”; • Move general requirements from the sections applicable specifically for small-scale project activities to the sections applicable to all project types; • Clarify that updating the parameter values fixed ex ante at the time of the registration of the CDM project activity is not allowed as correction; • Streamline the process of renewal of crediting period; • Introduce a window for submission of a request for renewal of crediting period; • Consistently refer to the relevant regulatory documents such as “methodological tools” and “guidelines” in the paragraphs that refer to “methodologies” throughout the document; • Make editorial improvements.
01.0	3 March 2017	<p>EB 93, Annex 4</p> <p>Initial adoption.</p> <p>This document, together with the “CDM project standard for programme of activities” (CDM-EB93-A07-STAN), was part of a single document titled: CDM project standard (CDM-EB65-A05-STAN) until version 09.0.</p> <p>This document, together with the “CDM validation and verification standard for project activities” (CDM-EB93-A05-STAN), “CDM project cycle procedure for project activities” (CDM-EB93-A06-PROC), “CDM project standard for programme of activities” (CDM-EB93-A07-STAN), “CDM validation and verification standard for programmes of activities” (CDM-EB93-A08-STAN), and “CDM project cycle procedure for programmes of activities (CDM-EB93-A09-PROC), supersedes and replaces the following documents on the date when these six documents enter into force:</p> <ul style="list-style-type: none"> • “Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for

<i>Version</i>	<i>Date</i>	<i>Description</i>
		<p>programme of activities” (CDM-EB65-A03-STAN) (version 04.0);</p> <ul style="list-style-type: none"> • “Standard: General principles for bundling” (CDM-EB21-A21-STAN) (version 03.0); • “Amendment to version 09.0 of the CDM project standard” (CDM-EB86-A05-AMEN) (version 01.0); • “Amendment to version 09.0 of the CDM project cycle procedure” (CDM-EB86-A06-AMEN) (issued at EB 86); • “Clarification: Renewal of crediting period of registered CDM project activity that has not been implemented in the first crediting period” (CDM-EB82-A16-CLAR) (version 01.0); • “Clarification: New project activity in the same physical or geographical location at which a project activity whose crediting period has expired existed” (CDM-EB83-A01-CLAR) (version 02.0). <p>This document also reflects various changes for simplifying and streamlining the CDM as agreed by the Board during EB 86–EB 93.</p>
<p>Decision Class: Regulatory Document Type: Standard Business Function: Issuance, Registration Keywords: project activities, project eligibility</p>		