CDM-EB110-AA-A06

Concept note

Revision of Project 256: Digitalization of CDM methodologies

Version 01.0



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1. Background

- 1. Digitalization of the clean development mechanism (CDM) methodologies was requested and further reiterated by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP) through its decisions on "Guidance relating to the clean development mechanism" at CMP 10, CMP 11 and CMP 12¹.
- 2. The Executive Board of the CDM (the Board), at its eighty-seventh meeting (EB 87), considered a concept note prepared by the secretariat on a tool for digitalization of the CDM methodologies. The Board requested the secretariat to develop a web-based version of the tool and road-test its final version with stakeholders.
- 3. The Board, at EB 102, took note of a demonstration of the web-based tool for generating project design documents (PDDs) incorporating the digitalized version of the methodology "ACM0002: Grid-connected electricity generation from renewable sources", and requested the secretariat to undertake the road-testing of the digitalized methodology with CDM stakeholders.
- 4. The secretariat undertook the road-testing of the digitalized methodology ACM0002 and prepared a report on the outcome of the road-testing for the Board's consideration at EB 107 and EB 108. The report could not be considered by the Board due to lack of time and is to be considered at EB 110.

2. Mandate

- 5. The CDM two-year business and management plan 2020–2021² provides that the Board intends, inter alia, to continue the development of digitalized PDD and programme-of-activities design document (PoA-DD) forms for CDM project activities and programmes of activities (PoAs).
- 6. Following the CDM Executive Board workplan 2021,³ a concept note is to be presented at EB 110 on the revision of "Project 256 Digitalization of methodologies for web-based generation of project design documents and monitoring templates".
- 7. The present document responds to the above mandate provided by the Board.

3. Purpose

8. The purpose of this concept note is to present to the Board an analysis of possible options for the revision of "Project 256 Digitalization of methodologies for web-based generation of project design documents and monitoring templates".

¹ Decision 4/CMP.10, paragraph 15; Decision 6/CMP.11, paragraph 14; and Decision 3/CMP.12, paragraph 9.

² CDM-EB104-A01 CDM two-year business and management plan 2020–2021.

³ CDM-EB109-A02 CDM Executive Board workplan 2021.

4. Key issues and proposed solutions

4.1. The digitalization platform and its capabilities

- 9. The digitalization platform is a piece of software that enables the creation of web-based applications (tools) for digitalization of the requirements contained in the CDM methodologies and other CDM regulatory documents. The platform was developed with the help of an information technology vendor and, after ih-house testing, was strengthened to improve its performance. The platform has capabilities of meeting the needs for digitalization of the full range of CDM regulations. It can be used for developing, without intervention of any external agency or a vendor, web-based tools for automatic generation of:
 - (a) PDDs;
 - (b) PoA-DDs;
 - (c) Component project activity design documents (CPA-DDs);
 - (d) Proposed standardized baselines (PSBs);
 - (e) Other documents whose structure and format have been standardized, such as monitoring reports, validation reports and verification reports.

4.2. The PDD-generating tool and its capabilities

- 10. The web-based PDD-generating tool developed by the secretariat incorporates the relevant requirements contained in the CDM regulatory documents, applies these to the user data related to a project activity, and generates a PDD.
- 11. The tool presents dynamically selected questions⁴ to the user, through which the user is requested to input the data related to a project activity and the choices made by the user. In contrast to the manual process of preparing a PDD, the user is no longer required to identify the methodology or to demonstrate its applicability, or the additionality of the project activity. Instead, the user is only required to provide information specific to the project activity based on which the tool automatically generates a PDD for download by the user.
- 12. The current version of the PDD-generating tool incorporates, in digitalized form, the requirements from the following CDM regulatory documents:
 - (a) Methodology: "ACM0002: Grid-connected electricity generation from renewable sources" all requirements;
 - (b) CDM project standard for project activities relevant requirements;
 - (c) CDM validation and verification standard for project activities relevant requirements;
 - (d) The PDD form and the instructions contained therein;

⁴ That is, the next question to be displayed is determined on the basis of the response provided to the previous questions.

(e) CDM tools: all the methodological tools applicable to ACM0002 – 12 tools, 2 guidelines.

4.3. Evidenced benefits

- 13. The outcome of road-testing of the web-based tool for generating PDDs incorporating the requirements of the methodology "ACM0002: Grid-connected electricity generation from renewable sources" confirms that the tool fully achieves, and in fact exceeds, the intended benefits.
- 14. The tool shifts the complexity of the application of CDM methodologies away from the user, thus facilitating the accessibility of the CDM and enabling broadened stakeholder participation. In addition, the tool provides other benefits to a wide range of CDM stakeholders (e.g. project participants, designated operational entities, the general public), including⁵:
 - (a) Improved stakeholder experience; faster turn-around times; reduced project development costs for project participants and project developers;
 - (b) Increased productivity of the validators and the secretariat staff engaged in the task of project assessment;
 - (c) Improved quality of the PDDs;
 - (d) Improved quality of the regulatory documents⁶ and more dynamic updating; improved compliance; fostering of innovation;
 - (e) Improved efficiency of the implementation the CDM procedures and workflows (e.g. creating audit trails, creating a single source of truth⁷; integration of business systems).

4.4. Next steps

- 15. As the digitalization platform has been fully developed, only maintenance of the platform or fixing of errors is envisaged in the future. No further active development of the platform is foreseen.
- 16. Digitalization of the CDM methodologies can be moved forward through one or more of the following options:
 - (a) Add more methodologies to the PDD-generating tool:
 - (i) Add all the methodologies related to electricity generation;

Further information on how these benefits are evidenced is presented in CDM-EB107-AA-A05: Progress report on digitalization of methodologies for web-based generation of project design documents and monitoring templates.

⁶ For example, digitalization enforces objectivity, completeness and consistency, since ambiguities and gaps would make the regulatory requirements unsuitable for conversion into an algorithmic form.

⁷ That is, everyone in the organization, as well as the stakeholders, base their business decisions on the same data since every data element is created or edited in only one place.

- (ii) Add the next most-used CDM methodology, i.e. the waste sector methodology "ACM0001: Flaring or use of landfill gas";
- (iii) Add both of the above.
- (b) Create tools for generating PoA-DDs, CPA-DDs and PSBs using the methodology ACM0002.
- 17. Going forward, there will be a need for amending the regulatory documents, in particular the CDM project standard, the CDM validation and verification standard and the CDM project cycle procedures, to accommodate the needs of the users who wish to use the web-based PDD-generating tool.
- 18. Should either of the options under paragraph 16 are implemented, the next deployment steps could consist of making the tool publicly available in three phases:
 - (a) Phase 1: Pilot phase

Project developers can use the web-based tool to automatically generate a PDD (the automated PDD) that will be submitted alongside a manually prepared PDD (the manual PDD), with their feedback on the ability of the automated PDD to reflect the information contained in the manual PDD and on the extent of the effort saved. Both the automated and the manual PDD will be assessed.

(b) Phase 2: Assessment phase

Project developers submitting an automated PDD do not need to submit the manual PDD. However, the automated PDD will be assessed as a normal PDD. In this way, the quality of the PDDs generated by the tool can be assessed.

(c) Phase 3: Regular-use phase

The web-based PDD-generating tool is launched as a regular option available to project participants who wish to use it. The generated PDDs will be assessed taking into account the fact that such PDDs already comply with certain methodological requirements. This will mean that compliance will be assessed with respect to only those requirements that are not automatically met.

5. Impacts

19. Digitalization will result in making business processes faster, more effective, and more efficient. It will enable wider stakeholder participation in the CDM through enhancing the objectivity, credibility, and accessibility of the mechanism.

6. Subsequent work and timelines

- 20. The subsequent work, if mandated by the Board, could include:
 - (a) Revision of Project 256 by incorporating the options presented under paragraphs 16 and 17 above;
 - (b) Implementation of the revised project.

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7. Recommendations to the Board

21. The secretariat recommends that the Board consider this concept note and provide guidance on the next steps in digitalization of the CDM methodologies as outlined in subsection 4.4 above.

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Document information

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