

CDM-EB85-AA-A02

Concept note

Database of project information

Version 01.0



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1. Procedural background

1. Paragraph 5 (i) of the “Modalities and procedures for a clean development mechanism” (decision 3/CMP.1, annex) mandates the Executive Board of the clean development mechanism (CDM) (hereinafter referred to as the Board) to assist in arranging funding for CDM projects as necessary: “The Executive Board shall make publicly available relevant information, submitted to it for this purpose, on proposed CDM project activities in need of funding and on investors seeking opportunities, in order to assist in arranging funding of CDM project activities, as necessary.”
2. The Board at EB 82 considered the concept note on this MAP project and agreed that the work on this matter should not lead to any classification of projects and the proposed development of a statistical model should not be pursued. The outcomes of this project may include:
 - (a) Factual information, such as a list of the CDM registered project activities that have not requested issuance for at least for one year;
 - (b) Responses to a neutral survey sent to all project developers of registered CDM project activities processed in a neutral way without any assumptions, interpretation or classification.
3. Furthermore, the Board requested the secretariat to prepare a concept note on reaching out to financial institutions on their needs, with the design of the survey to be sent to project developers, including the questions and the format in which the outcome of the survey will be made available.
4. The Board at EB 84 considered a concept note on information needs for project evaluation by climate financing institutions including a proposed survey. With regard to the proposed database, the Board requested the secretariat to come back to the Board at its next meeting with a revised proposal, including the type of information to be in the database, any resource implications, and options to make the information publicly available also taking into account possibilities to use and adapt databases already managed by the secretariat.
5. This work relates to the activity ‘Increased support for stranded project’ under goal 2: “Nurture policies to broaden demand for, and participation in, the CDM” with a resource allocation as referred to in table 5 of the Management plan 2015 (EB81, annex 1).

2. Purpose

6. This concept note aims to propose different options to implement an integrated database of linked information about CDM project activities and programmes of activities (PoAs).

3. Key issues and proposed solutions

7. To facilitate the Board to provide guidance on what type of information is to be provided in the database, the data sources and estimated costs for implementation and maintenance are described for each element of information on CDM project activities and PoAs.

8. In addition, two options to make the information publicly available are proposed, including the description of their cost implications.

3.1. Collection and maintenance of the information in a database

9. The appendix to the present note (a copy of appendix 1 to annex 5 to the annotated agenda of EB 84) lists the factual information (data elements) that example financial institutions¹ indicated they would need. The data elements are ranked by importance for project evaluation for the five financial institutions as determined by the number of institutions requiring the element, and the data source for each data element has been identified and summarized in table 1 below.

Table 1. List of data elements and their sources of information

Data element of CDM project / PoA	Ranked importance	Data sources
CDM status	4	CDM-IS, ODS
Other instrument status	4	3rd party registries
Host country, region, LDC/SIDS status	4	CDM-IS, ODS
Type (technology measure action), methodology, scope, scale	3	CDM-IS, ODS, UNEP
Sustainable development criteria, loan scheme usage	3	ODS
Emission reductions expected & issued	2	CDM-IS, ODS
Dates of key project stages (submission, registration, issuance etc.)	2	CDM-IS, ODS
Project is operational or ceased operation, maturity/viability	2	Survey
Financial information from PDD/other sources	2	CDM-IS, ODS, UNEP, IGES
No ERPA signed	2	Survey
Use of technology in positive lists or as First of its kind (FoiK)	2	UNEP, CDM guidance
Alignment with host country technology & SD priorities	2	Host Parties, LOAs
Project activity or programme of activities (PoA)	1	CDM-IS, ODS
Non-renewable crediting period	1	CDM-IS, ODS
Monitoring period within given period, CER status	1	CDM-IS, ODS
Suppressed demand	1	UNEP, CDM booklet
Benefits for women/children	1	CDM booklet
Project type success in the region	1	CDM-IS, ODS

¹ Carbon Market Foundation, funded by the German government, Nordic Climate Facility, Norwegian Carbon Procurement Facility (NEFCO), Carbon Initiative for Development (Ci-Dev), Pilot Auction Facility of the World Bank (PAF).

Data element of CDM project / PoA	Ranked importance	Data sources
Use of standardized approach for baseline or additionality	1	CDM-IS, ODS

3.1.1. Data sources

10. The last column of table 1 indicates the sources of information for each data element and includes internal data sources and external data sources, as well as the ongoing survey of the project participants.
11. Internal sources of data include: (1) the CDM Information System (CDM-IS), which refers to the CDM project information databases produced from workflows and any associated analytical databases constructed for various mandates/reports; and (2) the Operational Data Store (ODS), which denotes the new but much smaller database available for processes such as PoA issuance, stakeholder interactions, Modalities of Communication and Sustainable Development (SD) Tool data only. The main difference between the two systems for data extraction lies in the quality and completeness of the data. The CDM-IS holds primarily project activity data, which requires additional work to ensure all data are complete and logical.
12. External data sources would provide the status of projects in other crediting or trading schemes. Depending on information extracted from the registries of these schemes, it may involve acquiring data from commercial entities that offer these data services. Finally, it may be necessary to match these projects, as the CDM project number is not necessarily referenced.
13. Project status and Emission Reduction Purchase Agreement (ERPA) information will be obtained from the survey sent to the project participants. These data will be publicly available only if the project participants provide the information and do not indicate their objection to such information being published.

3.1.2. Cost implications

14. The total effort required to extract and consolidate all data elements is approximately an additional 4.9 staff months and monthly maintenance to update the data is 0.5 staff months per year. A non-staff cost of approximately USD 1,000 per year is needed for an external data service provider.
15. The cost and efforts for implementation for each data element in table 1 are estimated according to the type of operations necessary to create each data item in the database and to maintain them up to date. The various types of operations are described below:
 - (a) "Consolidation and integration" typically involves actions such as: merge database/datasets by key variables, by observations; join datasets; outer join, append datasets; and append time series;
 - (b) "Create index" denotes simplification of complex data (e.g. SD Tool multiple-criteria per project) to provide the most utility for the user, avoiding extensive analysis or construction of complex relationship queries;

- (c) “Pre-analysis” includes row–column transpositions, data reshaping, stacking of variables, collapsing into means, totals, etc., and is typically done when data from several sources are non-contiguous;
- (d) “QA/QC” may be implemented to assess whether datasets are homogenous across time and space, have missing variables or observations or do not follow the chronological sequence correctly (e.g. registration after withdrawal);
- (e) “Manual review” of individual project design documents (PDDs) may be needed to identify “the treatment of baselines and additionality (specifically the use of standardized approach for baseline, baseline scenario or additionality)”, unless a project activity or component project activity (CPA) belongs to a project type to which only project-specific assessment is applicable;
- (f) “Manual review” of letters of agreement (LoAs) may be required to determine “alignment with host country technology and SD priorities”, for each project type and each host country;
- (g) “Matching” by methodologies is needed for projects which may address suppressed demand or bring benefits for women/children. Such indicators are specified for each methodology in the CDM methodology booklet.

3.2. Making the necessary information publicly available

- 16. Two options are proposed to make the information contained in such a database available by making the information readily accessible on the UNFCCC website, at monthly update intervals:
 - (a) This would require developing a dedicated interface, which would allow stakeholders to retrieve all information in a convenient format, for multiple relevant projects and at a single location. Information that is currently available through the project search interface could also be available through this interface; or
 - (b) A spreadsheet containing the project information listed above could be downloaded from the UNFCCC website.
- 17. Some information, such as contact details or any other designated information upon request by project participants, shall remain confidential and will not be published or shared outside the secretariat.
- 18. Development costs for option (a) are estimated at between 50,000 and 75,000 USD (to be confirmed by IT) and for (b) less than 1000 USD.

4. Impacts

- 19. The information-gathering exercise from within the secretariat, from external sources and from CDM project participants, will make factual information about CDM projects, which is currently not available or difficult to obtain, available to stakeholders including financial institutions.
- 20. The proposed work does not foresee any cost implications for third-parties/stakeholders.

5. Subsequent work and timelines

21. The following work is envisaged, dependent upon further guidance from the Board:
- (a) Developing a database to enable the tracking and recording of the information that will be collected;
 - (b) Developing an information-gathering system, including automated connections with internal and external sources of information;
 - (c) Conducting the survey of project participants (not covered by this document);
 - (d) Presenting the information through the option agreed by the Board;
 - (e) After the initial information-gathering exercises, the Board may wish to consider a process for regular updates as part of the secretariat's routine activities.
22. The timeline of the work will depend on the urgency of requests for factual information from climate financing institutions interested in financing CDM projects.

6. Budget and costs

23. The 2015 MAP budgeted 5.9 staff months for this project (Project 245), and approximately 3.6 staff months have been spent to date, including the resources spent on two concept notes not contained in the initial project planning. In addition, one staff month is required for conducting the survey of the project participants. Therefore, 1.3 staff months are available for the remainder of the work to develop the database on project information.
24. The total effort required for implementing all data elements is approximately an additional 4.5 staff months, and the effort required for subsequent maintenance is 0.5 staff months per year. The remaining resources only allow the implementation for the top six data elements in table 1.

7. Recommendations to the Board

25. The secretariat recommends that the Board provide guidance on what factual information about CDM projects may be collected and presented to financial institutions and how.
26. The Board may wish to consider two options to implement the database containing information about CDM project activities and PoAs:
- (a) To include all the data elements which may be relevant for project evaluation by financial institutions. Under this option, the Board would need to allow a budget increase of 3.2 staff months and 1,000 USD non-staff costs for this MAP project;
 - (b) To include the top six data elements in table 1. Under this option, the MAP project can stay within budget and no budget increase is needed.
27. To make the information publicly available, the Board may wish to agree to a spreadsheet of the project information that can be downloaded from the UNFCCC

website. Depending on the frequency of future use by the public, the Board may consider the development of a more sophisticated user interface in the future.

8. References

28. Example calls for proposals that are relevant for CDM projects that could depend on additional financing opportunities for their operation can be found at:
- (a) <http://www.carbonmarket-foundation.org/userfiles/zdk/Funding-Guidelines_Foundation.pdf>;
 - (b) <http://www.nefco.org/financing/nordic_climate_facility>;
 - (c) <<https://norcap-org.loopiasecure.com/cfpnorcap/proponentinformation.php>>;
 - (d) <<http://www.ci-dev.org/sites/cidev/files/documents/Criteria%20for%20Ci-Dev%20Project%20Selection.pdf>>;
 - (e) <<http://www.pilotauctionfacility.org/content/first-auction-criteria>>.

Appendix. Financial institutions criteria

1. The calls for proposals detailed in section 8 above were analysed to: (1) compile and categorize the criteria required to identify projects for financing; and (2) identify factual information that may be relevant for these criteria. This is summarized in table 1 below.

Table 1. Financing criteria and corresponding factual information

Type of criteria	Institutions					Relevant factual information
	CMF ¹	NCF ²	NorCaP ³	Ci-Dev ⁴	PAF ⁵	
CDM project	x		x	x	x	Project registration status; project registered/issuing in another mechanism (not eligible to issue under CDM)
Country, region, least developed country (LDC) status		x	x	x	x	Host country; continent; region; whether located in an LDC/small island developing country (SIDC)
Project activity or programme of activities (PoA) or applies standardized baseline				x		Whether the project is stand-alone or included as a component project activity (CPA) under a PoA; use of standardized approach for baseline, baseline scenario or additionality
Small-scale project, average emission reductions	x			x		Project scale; ex ante emission reductions; issued CERs

¹ Carbon Market Foundation, funded by the German government.

² Nordic Climate Facility.

³ NEFCO Norwegian Carbon Procurement Facility.

⁴ Carbon Initiative for Development.

⁵ Pilot Auction Facility of the World Bank.

Type of criteria	Institutions					Relevant factual information
	CMF ¹	NCF ²	NorCaP ³	Ci-Dev ⁴	PAF ⁵	
Registration date within given period	x			x		Date of registration of the project activity
Non-renewable crediting period				x		Type of crediting period selected
Monitoring period within given period, CER status					x	Status and monitoring period of issuance requests
Project is operational or ceased operation due to financing issues, project maturity/viability	x		x			Operation information from questionnaire; project status in CDM; date of last issuance (request); ERPA or contract signed for CDM output (e.g. renewable electricity), from questionnaire; project registered/issuing in another mechanism; project type statistics on last issuance; financial information from PDD/other sources; CDM Loan Scheme application
Methodology/GHG/technology			x	x	x	CDM methodology; GHG ; project type
Suppressed demand				x		Use of methodologies that address the issue of suppressed demand according to the CDM methodology booklet
Net present value (NPV) break-even	x			x		Financial information from PDD/other sources
Benefits for women/children	x					Use of methodologies with a potential to directly improve the lives of women and children according to the CDM methodology booklet
Project type success in the region				x		Projects of the same type in region
No ERPA signed			x		x	ERPA information from questionnaire
Sustainable development	x		x	x		Technology type; methodology; Gold Standard CERs; sustainable development indications as declared in the project description report of sustainable development co-benefits; information contained in PDDs
Innovative technology	x			x		First of its kind (FoiK); use of technology in positive lists

Type of criteria	Institutions					Relevant factual information
	CMF ¹	NCF ²	NorCaP ³	Ci-Dev ⁴	PAF ⁵	
Project is replicable in host country	x					PoA; PoA in host country; standardized approaches
Further development of carbon markets	x					Standardized approaches; PoA
Project aligned with host country priorities	x		x			Technology type (to check alignment with host country priorities); host country letter of approval

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