

## **CDM Validation and Verification Manual (CDM-VVM)**

Comments by Öko-Institut as invited by the call for public comments from 16 May to 15 June 2008

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## 1 General remarks

Öko-Institut welcomes the elaboration of a draft CDM Validation and Verification Manual (VVM) and the invitation by Executive Board's Decision to launch a public call for inputs. Öko-Institut herewith wishes to contribute to the refinement of the draft VVM by providing detailed comments and suggestions for further improvement of the document.

We believe that the VVM is urgently needed to improve the quality of the validation and verification process. The current draft is a good start, but needs in our view still substantial improvements. In particular:

- Several parts of the draft are **internally inconsistent**. For example, the scope of validation is defined differently in several parts of the document. The risk-based approach – which is generally appropriate – remains rather unclear.
- The draft is in parts **inconsistent** with guidance in approved methodologies, approved tools as well as other EB guidance.
- We believe that **site visits** are key to ensure a thorough assessment of project activities. However, they are currently not clearly required.
- The **structure of the document** should be improved. This relates in particular to sections III and IV which have considerable overlap and for which the scope is not fully clear.
- A key deficit in the current process is the poor information in many validation reports how the UNFCCC requirements were actually validated. In the draft VVM guidance on documentation focuses sometimes on whether the DOE assessed an issue and not on **how** the DOE assessed the issue. We believe that additional reporting requirements should be introduced in various parts.
- In several parts of the document it is unclear, whether guidance is provided to DOEs or to project participants. General principles should be made operational and put into clear and unambiguous requirements and procedures for DOEs.
- The **definition of CARs** is ambiguous and should be improved.
- The guidance on local stakeholder consultation should be improved to ensure that all local stakeholders actually had an opportunity to provide comments and that their comments were reasonably considered by the project participants.
- The current draft requires the DOE to check whether the project activity impacts any emission sources that are not estimated in the approved baseline and monitoring methodology. This requirement should be limited to **significant** emission sources and to **project** and **leakage** emission sources. All approved baseline and monitoring methodology neglect minor emission sources. Neglecting minor emission sources is appropriate in order to keep methodologies sufficiently simple and straight-forward and to keep transaction costs low. The proposed requirement, if taken seriously, would make all methodologies inapplicable to all project activities.

- Currently, many validation processes have a long duration and it is likely that many validations will never be finished. We believe that for purposes of market transparency it is important that DOEs report to the UNFCCC on the outcome of validation, even if it is negative. In addition, we suggest that a validation should not last longer than 18 months. Such a provision is not necessary for the integrity of the process but will increase significantly the market transparency. Increased transparency on the outcome of validations will also facilitate more consistency among DOEs.

Given the substantial quality problems with the current validation process and the many requests for reviews by the CDM Executive Board, we believe that the above-mentioned issues should urgently be addressed to improve the quality of the draft VVM. We therefore provide detailed suggestions to improve the current draft in the following sections. These suggestions include proposals for text changes and amendments. We focus our proposals on the general sections and validation and do not provide comments on verification.

## 2 Specific comments

### 2.1 Structure of the document

The structure of the document should be improved.

The scope of sections III and IV and their difference is not very clear. It is not clear why “principles of the CDM” are established in a document that should contain guidance to DOEs. Principles of the CDM were laid out in the modalities and procedures for the CDM, subsequent decisions by COP/MOP and relevant guidance by the CDM Executive Board. General guidance on the CDM should be part of a separate document. A number of the issues raised under section III could be included in the CDM glossary where concepts, such as “conservativeness”, have already been defined. Moreover, section III and section IV are partly repetitive and address the same issues.

While the document contains specific guidance on validation (section V) and verification (section VI), a chapter with general requirements for DOEs in undertaking validation and verification functions is lacking. The current section III contains only very general information. A number of issues that are currently contained in both section V and section VI could be merged in one new section III. We therefore propose to merge the current sections III and IV in one section entitled “General requirements for DOEs in performing validation and verification functions”.

We also believe that the structure within section V, subsection E, is confusing. The Project Design Document (item 3) is an overarching element of many other more specific elements. If the DOE first checks the correct completion of the CDM-PDD, and subsequently specific requirements within the CDM-PDD, this may result in considerable overlap.

Generally, we suggest that the whole section V is restructured in a manner that it follows the sections of the CDM-PDD. This would considerably facilitate the work of the DOEs, the EB, the UNFCCC secretariat and the RIT.

### 2.2 Clearer guidance on key terms

Generally, we appreciate the high level of detail of the draft VVM which will certainly improve the quality of validation and verification. In order to further improve consistency among DOEs in using the VVM we suggest adding several general clarifications.

We recommend that a **definition of instructions** be made at the outset of the VVM. For instance, it should be clarified what requirements such as “assess”, “describe” or “confirm” mean in the context of validation and verification. For instance, “describe” could mean that the validation *procedure* is described (such as “baseline parameters were checked against UNFCCC requirements”) or that more *in-depth analysis and discussion* is provided (such as “The following parameters were checked: 1.) MCF for the project site, 2.)... [...]. The parameters were validated in the following way: 1.) The chosen MCF for Brazilian conditions was checked against IPCC Good Practice Guid-

ance, p. X, table Y. It was discussed whether “temperate” was the right choice of climate for the project location. However, the PP clarified that the specific location could either be classified as “temperate” or “warm” according to annual average temperature charts provides. Since the MCF is lower for “temperate” climate, related emission reduction estimates can be considered conservative. The MCF chosen by the PP can therefore be considered appropriate”).

### **2.3 Completeness (paragraphs 20 – 22)**

The guidance provided here is not consistent with approved baseline and monitoring methodology and the guidelines for completing the CDM-PDD and can pose a high additional burden on project participants. In merely all approved baseline and monitoring methodologies, only key emission sources are estimated and many minor emissions sources are neglected. This is a reasonable simplification in order to reduce transaction costs. Estimating all GHG emission sources affected by the project activity would imply that project participants would need to carry out a Life Cycle Assessment (LCA) for the project activity. The three paragraphs should therefore be entirely re-drafted, possibly as follows:

*20. In performing validations and verifications functions, DOEs should assess whether the information provided in the CDM-PDD and any other documents is complete. This should include the requirements by the approved baseline and monitoring methodology, the requirements in the guidelines for completing the CDM-PDD and any other requirements resulting from applicable guidance by the CDM Executive Board. In particular, the DOE should ensure that, inter alia:*

*(a) All sections of the relevant forms (e.g. CDM-PDD) are completed by the project participants in line with any guidelines for completing the form;*

*(b) All assumptions made by the project participants are justified and supported by written evidence;*

*(c) All data used are clearly referenced and their use is justified;*

*(d) All equations are presented in a manner that the calculation of emission reductions can be reproduced by the reader;*

### **2.4 Conservativeness (paragraphs 23 – 25)**

Paragraph 25 is not drafted clearly. It implicitly suggests that baseline removals should rather be under-estimated than over-estimated. However, this is not conservative. In addition, the paragraph does neither address project emissions and removals nor leakage emission sources. Finally, it is important that the principle of conservativeness is ensured for a reasonable variation of assumptions. We therefore suggest modifying paragraph 25 after “so that” in the following way and adding a new paragraph:

25. “(...) so that

- (a) *baseline emissions or project removals are more likely to be under-estimated than over-estimated*
- (b) *project emissions and baseline removals are more likely to be over-estimated than under-estimated, and*
- (c) *that leakage emissions are more likely to be over-estimated than under-estimated.*

*25bis. The principle of conservativeness should be ensured over a plausible range of key assumptions.*

In order to implement the principle of conservativeness, it is important that DOEs make conservative interpretations of assumptions and evidence. For example, in a case of doubt or in cases where information could be interpreted in different ways, the DOE should ensure that conservative interpretations are made. We therefore suggest adding a new paragraph 26ter:

*26ter. In performing validations and verifications functions, DOEs should make conservative interpretations of assumptions made in the CDM-PDD and of evidence provided to support these assumptions. For example, where two different values for one parameter are similarly plausible and accurate (e.g. if two meters are installed to measure one parameter and two different meter readings are available), the more conservative value should be chosen.*

## **2.5 Consistency (paragraphs 26 & 27)**

The paragraphs are not fully clear.

- It is not clear what is meant with “project documents” in paragraph 26. If this relates to the CDM-PDD, it should not be part of this guidance but part of the guidelines for completing the CDM-PDD.
- In sub-paragraph 26(a), it is not clear what is meant with “different periods”. If different crediting periods is meant, this may not be appropriate, as the most recent methodology version is applied to second and third crediting periods.
- Subparagraph 26(b) suggests that guidance and knowledge should be applied in a similar way among similar projects. It is not clear what guidance is meant. If it is guidance by the EB, it should always be applied.

We suggest rephrasing paragraph 26 to clarify the objective and what exactly needs to be bensored by DOEs. A possible way forward could be the following sentence.

*26. In performing validation and verification functions, DOEs should ensure consistency at different levels, including, inter alia:*

- *Internal validation and verification procedures and quality assurance and quality control procedures of the DOE should be applied consistently among projects;*

- *For similar assumptions or parameters a similar level and type of evidence should be required, subject to more specific requirements by the underlying methodology;*
- *In assessing the baseline scenario and additionality, the DOE should check that tests (e.g. barrier test, investment analysis) are applied consistently to all credible and plausible alternatives, including the proposed CDM project activity;*

## 2.6 Relevance (paragraphs 28 & 29)

While the principle of relevance is important, the paragraphs are not very clear. Paragraph 28 seems to limit the scope of relevance to the calculation of emission reductions. This is not appropriate. The fact that the information should not be misleading is not directly linked to the relevance. We suggest to replace the two paragraphs by the following new paragraphs:

*28. All information that may have an impact on the validation or verification opinion should be considered as relevant.*

*28. In performing validation and verification functions, the DOEs should ensure that they identify and assess all relevant information. Information that is not relevant, i.e. information that can not have an impact on the validation opinion, should not be considered in the validation or verification process.*

## 2.7 Transparency (paragraphs 30 – 32)

The first sentence in paragraph 30 is misleading. In the context of validation and verification, transparency is not necessary for the purpose that “users” (the reader?) take decisions but transparency is important that the market and all relevant stakeholders have trust in the system because they can understand that decisions are based on clear rules and rationales.

As the previous paragraphs, this section is not clear whether it provides guidance to project participants or DOEs. As the document should be a standard for DOEs (see the relevant COP/MOP decision), the language should clearly refer to how DOEs should ensure transparency in the validation and verification process. This is currently not the case.

We suggest the following changes:

30. delete the first sentence

*32. In performing validation and verification functions, DOEs should ensure that all steps of the validation and verification process are documented transparently. This should include:*

(...)

*(c) Ensure that all equations and data used are presented in a transparent manner, in a way that the calculations can be reproduced by the reader;*

(...)

## 2.8 Impartiality and independence

We recommended introducing as clarification to this requirement that the DOE shall, for each validation and verification, state explicitly that it is impartial with regard to the validation and verification and that it does not have a conflict of interest. Criteria which have to be met for accreditation of the DOE should be briefly discussed again with regard to the specific project activity. We suggest to introduce a new paragraph 36bis:

*36bis: In its validation or verification report, the DOE should explicitly state that it does not have any conflict of interest. For this purpose the DOE should confirm in written that*

- (a) the DOE is not involved by any other means than its validation and verification function in the project activity;*
- (b) The DOE and any related company to the DOE (e.g. the mother company) does not have any other contracts with any of the project participants, except any other validation and verification contracts;*
- (c) the members of the assessment team in charge have not had any contractual contacts with any of the project participants in the past five years;*
- (d) the payment of the validation/verification by the project participants is independent of the success of the validation or verification (no success fee);*
- (e) the DOE is free of any other real or potential conflict of interest with regard to the project activity.*

## 2.9 Competence (paragraph 40)

We recommended adding as clarification that the DOE should describe in the validation or verification report the competences of the members of the assessment team in charge for the respective project activity. The competences should be substantiated by evidence (CVs, training certificates, etc.) that demonstrate that the team is capable of performing the validation/verification for this specific project in a professional manner. The following paragraph is proposed:

*40bis. In its validation or verification reports, the DOE should document the composition and qualification of the assessment team. This documentation should include information on the skills, experience and educational background of the team members.*

## 2.10 CDM validation objective (paragraphs 40 – 44)

Paragraph 40 should be improved editorially: Replace “all the identified and applicable criteria” with “all requirements as laid out in COP/MOP decisions, decisions by the CDM Executive Board, including the approved baseline and monitoring methodology, any tools or other methodologies referred, the guidelines for completing the CDM-PDD and any other applicable guidance by the CDM Executive Board.

Paragraph 41 lists a number of issues, which are partly overlapping. E.g. the calculation of emission reductions (f) and the assessment of additionality (a) are all part of the application of the approved methodology, which is part of item (b). Moreover, the mentioning of particular aspects (e.g. the assessment of additionality) while omitting other aspects (e.g. the baseline scenario selection, the definition of the project boundary) makes the list somewhat arbitrary. Such guidance to DOEs is misleading, as it may suggest that other aspects are of less importance. The paragraph should therefore be restructured.

In addition, the word “inter alia” makes the list open. This creates uncertainty for DOEs as to which other requirements they would need to check. It is therefore suggested to provide a closed list and to delete the word “inter alia”.

The paragraph should also identify more clearly the parts of the emission reduction calculation that are important at the stage of validation. At validation stage, emission reductions are only calculated ex-ante, sometimes using simple assumptions. This is appropriate, as long as the ex-post calculation of emission reductions is fully in line with the methodology. Therefore, less emphasis should be posed on the level of calculated emissions reductions, rather it should be ensured that key parameters that will not be updated during the crediting period, are validated. This includes the “data and parameters not monitored” included in respective tables in approved baseline methodologies.

Finally, in paragraph (a) it is stated that additionality should be assessed through professional scepticism. Professional scepticism should indeed be a generic approach of how DOEs work. However, this should not be limited to the assessment of additionality but rather be included as a general requirement in section III/IV.

It is suggested to re-draft paragraph 42 as follows:

*42. This assessment by the DOE shall include the following:*

*(a) Assess whether the approved baseline and monitoring methodology which is being applied is applicable to the underlying project activity;*

*(b) Assess whether any tools that are referred to in the approved baseline and monitoring methodology and that are used by the underlying project activity, are applicable to the underlying project activity;*

*(c) Assess whether the approved baseline and monitoring methodology as well any tools are being applied correctly and conservatively, including an assessment of whether*

*(i) the project activity is described in a clear and transparent manner;*

*(ii) the project boundary has been defined correctly;*

*(iii) the baseline scenario is selected correctly and can be deemed to reasonably represent the emissions that would occur in the absence of the registered CDM project activity*

- (iv) *the project is additional and would not take place without the benefits of the CDM;*
  - (v) *the ex-ante calculation of emission reductions is applied correctly and in a conservative manner;*
  - (vi) *all data and parameters that are not monitored and determined once for the crediting period are determined as per the specifications of the methodology and in a conservative manner;*
  - (vii) *the monitoring plan has been developed in accordance with the requirements;*
  - (viii) *any other requirements of the methodology have been met;*
- (d) *assess whether the CDM-PDD, including relevant annexes, has been completed in line with the guidelines for completing the CDM-PDD and any further guidance by the CDM Executive Board;*
- (e) *assess whether the approval of Parties involved has been received;*
- (f) *assess whether adequate local stakeholder consultation has been undertaken;*
- (g) *assess whether an analysis of environmental impacts has been undertaken and if those impacts are considered significant by the host Party or the PPs, that an environmental impact assessment has been undertaken in accordance with procedures as required by the host Party;*
- (h) *assess whether all other relevant decisions of the COP/MOP and the CDM Executive Board have been complied with.*

Finally, the validation objective should clarify in which case the DOE can provide a positive validation opinion. This may be obvious but should be clarified by the following new paragraph:

*44bis. A positive validation opinion should only be provided if all requirements referred to in paragraph 42 are fully complied with by the proposed project activity.*

## **2.11 Validation approach (paragraphs 45 – 49)**

The validation approach, in particular the differentiation in “key areas” and “quantitative data”, is unclear, inconsistent and needs substantial improvement.

The main problem is that the “key areas” (as specified in paragraph 49) are not clearly identified and have considerable overlap with the “quantitative data” (as referred to in paragraph 48b) where a risk-based approach is allowed. For example: Paragraph 49b refers to the application of the baseline methodology, which specifies the data and procedures used to calculate emission reductions, while for the calculation of emission reductions a risk-based approach is allowed. Similarly, the monitoring plan in paragraph 49d is closely linked to the data that is used to calculate emission reductions, which is again mentioned in paragraph 48b and thus eligible for a risk-based approach.

Furthermore, the current language on when DOEs should not omit evidence is inconsistent. In paragraph 48a, the language refers to “evidence that **is likely** to alter the assessment”. In contrast, paragraph 49 refers evidence which **may** result in a change of opinion”. This is a major difference. The wording “is likely” is not appropriate, as this would limit the cases where evidence needs to be provided substantially. This would not be line with other guidance within the VVM.

Finally, the wording in paragraph 48a implicitly suggests that “full” compliance with UNFCCC criteria is only necessary for the key areas. This should not be the basis for any risk based approach. All UNFCCC criteria should remain mandatory and the project participants should comply with them. The risk based approach should refer to the level of effort undertaken by the DOE to check the requirement. Consistent with language elsewhere in the document, rather a deviation request should be submitted if a requirement can not be met by the project activity.

In summary, the proposed approach is currently inconsistent and contradictory and will not help to improve the validation process. A risk based approach is generally reasonable and consistent with other verification protocols. The focus of the validation effort should be on key areas that pose a high risk to the system. If such an approach is introduced, it needs to differentiate much clearer what are key areas and what level of risk is acceptable.

We suggest defining the key areas as follows in paragraph 49:

- (a) *Assumptions, data and information used to demonstrate the additionality of the project activity;*
- (b) *Assumptions, data and information used to determine the most plausible baseline scenario;*
- (c) *Assumptions, data and parameters that are made/used to determine emission reductions and which may affect the level of emission reductions by more than 2% for large scale project activities and more than 5% for small-scale project activities;*
- (d) *The adequacy of local stakeholder consultation;*
- (e) *The analysis of environmental impacts;*

## 2.12 General means of validation

The suggested means of validation are generally quite limited and we would propose that additional means be included.

We believe that **site visits** are a key prerequisite for a thorough assessment of a project activity. Site visits provide the opportunity to the DOE to actually check whether the project activity is operating (as part of verification), to identify any relevant emission sources that were not considered (e.g. emissions from an anaerobic waste water treatment or an on-site diesel generator), to interview staff of the company one by one

and to check original documentation of the company. Site visits should therefore become a mandatory requirement of both validation and verification.

In addition, interviews with independent experts for the relevant industry sector and interviews with other stakeholders that are directly or indirectly involved in the project activity should be additional means for validation. This may include interviews with the bank that provides loans for the project, interviews with the technology provider or interviews with relevant industry associations in the country. Generally, information provided by the project participants should be cross-checked with independent information gathered by the DOE, wherever possible. It should be clarified to what depth of analysis “standard auditing techniques” should be applied.

*(a) Document review*

*(i) Review of additional data and information from the project participants which is not provided in the CDM-PDD;*

*(ii) Crosschecks between information provided in the CDM-PDD and information from other stakeholders and institutions, such as scientific papers and reports, statistics, applicable laws, regulations, national or international standards, reports from third party institutions, such as industry associations or non-governmental institutions, etc*

*(a)bis On-site visits to the site where the project is implemented or operated and/or to the site of stakeholders involved with the planning and implementation of the project activity in order to assess whether the information presented in the CDM-PDD adequately reflects the real circumstances;*

(b) Delete “email”, as email conversation is not an interview.

(c) (...)

(d) Delete as this relates to the content of the validation but not the means.

(e) Delete as this is covered by (c)

*(f) Written questions to the project participants in the form of clarification requests or corrective action requests;*

*50bis. As part of the validation of a project activity, the DOE shall undertake an on-site visit to the site where the project activity is implemented and/or to the site of key stakeholders involved in the project activity. For example:*

*(a) a visit to the site of project implementation is necessary where the confirmation of the historical situation prior to the implementation of the project activity is an important aspect in assessing the applicability of the project activity to the approved baseline and monitoring methodology, in choosing the most likely baseline scenario, in determining the additionality of the project activity or in quantifying the emission reductions;*

*(b) a visit to the company which undertakes the engineering planning of the project activity may be necessary where engineering aspects of the project activity are a key issue of validation;*

The level of information provided in paragraph 51 does not fit with the level of information that is provided in paragraph 50. Many similar data sources could be considered for different sectoral scopes for non-AR project activities. It is not clear why much more detailed information is provided for AR project activities than for other CDM project activities.

### **2.13 Clarification requests, corrective action requests and forward action requests (paragraphs 52 – 60)**

This section has inappropriate definitions of the scope of validation should be substantially redrafted. The section is partly inconsistent with other sections in the document.

In paragraph 52, the scope for identifying any issues in the validation process has been limited in a very narrow manner to the project's baseline, and "implementation and operation issues". This is inappropriate and inconsistent with the much broader definition of the scope of validation, as it has been provided in paragraph 49 and elsewhere in the document.

Moreover, this guidance broadens the scope of validation to operation issues, which may refer to the proper operation of the plant. This may include many issues, such as the proper maintenance of the project plant, which should not be part of the validation. Hence, this paragraph is also inconsistent with the principle of relevance, as established in paragraph 29.

Finally, the paragraph is drafted in a way that understates that issues identified by the DOE can always be solved by the project participants by "further elaboration or research". In other words, the paragraph understates a positive outcome of the validation process. It should be made clear that a further action should only be requested in cases, where the project can be expected to meet the requirement if further documentation is provided or if errors in the CDM-PDD are corrected.

The definition of corrective action requests in paragraphs 53 and 54 is misleading and not consistent with the scope of validation as defined elsewhere in the document, for various reasons:

- Paragraph 53 refers to "project requirements" and "project's objectives". A project activity may have quite different requirements than the criteria by COP/MOP and the EB, as defined in paragraph 42. Moreover, the project objectives are partly not an issue for the validation process. A project may have many objectives that do not matter for the purpose of validation. For example, if the project has as an objective to have leadership in the industry or to increase the salary of its employees, this may matter for the DNA when assessing the contribution of the project to achieving sustainable development, but it is not

necessary for the DOE to raise a corrective action request if these objectives are at risk, as is suggested in paragraph 53.

- Paragraph 54(a) is misleading, as the scope of CARs is limited to mistakes that “will have a direct influence on project results”. Again this is not consistent with the principle of relevance. For example, the use of a wrong emission factor may not impact the performance of the project (e.g. its power generation) but can have an impact on the level of CERs issues. Moreover, it is not clear what is meant with “direct influence”.
- Paragraph 54(b) is quite unclear as it refers to “requirements deemed relevant for validation”. Again, the requirements should be clear from the methodology as well as EB and COP/MOP guidance and should not be subject to whether the project participants or the DOE “deem” the requirements relevant.
- Paragraph 54(c) should not matter at all. A risk that CERs are not issued may be associated with the proper operation and maintenance of a plant – which should not be subject of the validation process. Probably the paragraph should refer to the ability to monitor and calculate emission reductions (if this was intended by the authors).

To address these issues, it is proposed to modify the paragraphs as follows:

*52. During the validation process, any issues regarding the requirements defined in paragraph 42 shall be transparently identified, discussed and concluded in the validation report and opinion.*

53. Delete the paragraph

*54. The DOE shall issue a corrective action request (CAR) where*

*(a) mistakes have been made in the application of the approved baseline and monitoring methodology, in the preparation of the CDM-PDD, in the elaboration of the monitoring plan or in the application of any other relevant EB guidance;*

*(b) the project activity does not fully comply with one of the requirements defined in paragraph 42; OR*

*(c) there is a risk that the emission reductions can not be correctly monitored and determined during the crediting period as per the approved baseline and monitoring methodology and the monitoring plan.*

*54bis. Corrective action requests should only be issued where the project participants could potentially correct the issue by revising the relevant documentation or changing the project design. Where an issue has been identified that can not be addressed by the project participants, the DOE shall issue a negative validation opinion.*

*55. The DOE shall issue a clarification request (CLA) where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.*

Paragraph 59 again limits the scope of corrective action that may be taken by the project participants. This is not appropriate, as project participants may also provide cor-

rective action on other issues than those mentioned in paragraph 59. We suggest to either delete the paragraph or to make clear that these are examples. The latter may be done by inserting an open list of examples of corrective action by project participants.

## 2.14 Stakeholder consultation process

The draft guidance on the stakeholder consultation is now provided in two different parts. Although there are two different processes (the publication of the PDD by the DOE and the consultation of local stakeholders by the project participants), we would recommend to put them in two similar places or at least to reference the other section.

An evaluation by Öko-Institut on the stakeholder consultation process of about 100 registered projects has shown that often little or no information is provided in validation reports whether local stakeholders (as defined in the CDM modalities and procedures) have adequately been invited and whether any comments were taken due account of.

We therefore suggest to provide further clarity as to what the DOEs should check:

*65. After closure of the commenting period, the DOE shall document in the validation report*

*(a) which stakeholders have submitted comments;*

*(b) the content of the comments received*

*(c) how each issue raised in the comments was due account of taken by the DOE in the validation process;*

66. Delete, as this is covered by the new paragraph 65 above.

*148. The DOE shall also assess whether project participants have adequately consulted local stakeholders and adequately taken due account of the comments received during the local stakeholder consultation.*

*149. The DOE shall, by means of document reviews and/or interviews with local stakeholders as appropriate, determine whether:*

*(a) the means used by the project participants for inviting comments from local stakeholders were appropriate and that these means ensured that all stakeholders, as defined in paragraph 1(e) of the modalities and procedures for the CDM, have had an opportunity to provide their comments;*

*(b) the project participants have correctly and appropriately summarized in the CDM-PDD all comments that were received during the local stakeholder consultation;*

*(c) the project participants have taken due account of all comments that were received and documented this appropriately in the CDM-PDD, including appropriate justifications where comments have not resulted in any changes and appropriate explanations of changes that have been undertaken as a result of the stakeholder consultation process.*

150. *The validation report shall*

(a) *describe the means used to invite the stakeholders and confirm that the means were appropriate to ensure that all stakeholders have had an opportunity to provide comments;*

(b) *confirm that all stakeholder comments were summarized appropriately in the CDM-PDD;*

(c) *confirm that the way how due account was taken of the comments is appropriate and that the justifications and explanations in the CDM-PDD are appropriate.*

## 2.15 Applicability conditions

We welcome and support very much the approach that DOEs do not only check whether each of the applicability conditions are met but also have to confirm that the project activity does not cause other significant emission sources which may not have been considered when approving the methodology. Often the approval of a methodology is very much based on the project that is attached to the methodology proposal, making it difficult to consider all possible project activities which may use the methodology in the future.

The content of the third sentence in paragraph 89 is not very clear. Please rephrase.

In paragraph 90, we suggest to replace “identification of emission sources” by “*identification of any significant project or leakage emission sources*”. This insertion aims to address two issues:

- Firstly, the DOE should not be requested to undertake a full Life Cycle Assessment (LCA) which would be necessary to analyse all possible emission sources. Only significant emission sources should be considered. Often, methodologies ignore minor emission sources and this practice should be continued in order to keep transaction costs at a reasonable level.
- Secondly, ignoring baseline emission sources is a conservative simplification and therefore appropriate. In this regard, the DOE only needs to check whether there are important project or leakage emission sources that are not considered.

One further option to provide clarity to DOEs would be to define “significance” further. An emission source could, for example, be considered as significant if it contributes with more than 2% or 5% in case of small-scale project activities to overall emission reductions.

## 2.16 Project boundary (paragraphs 96 - 98)

The same issue as raised above in section 2.16 applies to paragraph 98. Replace the wording: “*In cases where the DOE identifies emission sources which are impacted by the project activity (...)*” by “*in cases where the DOE identifies significant project or leakage emission sources which are impacted by the project activity (...)*”.

## 2.17 Baseline identification

Paragraph 105a should be changed. Currently, the paragraph only refers to whether assumptions and data are listed and referenced but not as to whether these assumptions and data are justified appropriately, supported by evidence and if they can be deemed reasonable and appropriate. We suggest the following changes to the sub-paragraphs:

- (a) *All the assumptions and data used by the PPs are transparently documented in the CDM-PDD and supported by justifications and evidence, including the references and sources;*
- (b) *The documentation and data used are relevant for the purpose of establishing the baseline and are correctly used, correctly quoted, and interpreted conservatively;*
- (b)bis *The documentation and data used to justify the assumptions and to provide evidence for the assumptions clearly confirm that all assumptions and data used by the project participants are appropriate and conservative;*
- (c) (...)
- (d) (...)

## 2.18 Emission reductions

Editorial suggestion: Change in paragraph 109 in the last lines: “*the DOE should confirm that the emission reductions estimates in the PDD are reasonable*” to “*the DOE should confirm that the estimates for these data and parameters, as provided in the CDM-PDD, are reasonable.*”

## 2.19 Prior consideration of the CDM

Regarding paragraph 124, it should be noted that lead times are not only necessary for projects that require construction but also for projects that considerably retrofit or modify existing installations. The last sentence should therefore be changed as follows: “*In particular, the DOE should note that for projects which require construction or significant retrofit or other modifications, the date of commissioning (...)*”.

In order to enhance the transparency in determining the start date, we propose that the DOEs document in the validation report the dates of all major steps in making the project activity happening, e.g. the date when the planning was completed, the date of start of construction, etc. We therefore suggest to insert a new sub-paragraph (a) in paragraph 128 regarding the reporting requirements

*128(a)(new). The DOE shall document transparently in the validation report the dates of all major steps that have been undertaken to implement the project activity, including, for example, initiation and finalization of planning, engineering, construction, public authority approval, test operation and commercial operation.*

## 2.20 Investment analysis (133 & 134)

The guidance on the investment analysis is in several aspects inconsistent with the guidance provided in the additionality tool and the combined tool. This should be corrected and the whole text should be redrafted carefully to avoid contradictory guidance by the CDM Executive Board. In particular:

- The chapeau of paragraph 132 is inconsistent with the additionality tool in which two approaches may be used in the investment analysis (see scope of investment analysis in the additionality tool)
- The first bullet in paragraph 132 is inconsistent with the additionality tool which has different criteria to trigger the use of the simple cost analysis (see respective paragraphs in the additionality tool).

In order to improve comparability, we suggest orienting the rationale towards sectoral circumstances. We therefore suggest replacing “specific project activity” in paragraph 134 (b) by the following text: “project activities of the same or similar type under similar sectoral and regional circumstances”.

In paragraph 134 (c), the assumption that only the company can make the investment is not consistent with the additionality tool. In contrary, the additionality tool requires, except for particular cases, the sector-specific data is not considered and not company-specific data. The paragraph should be re-drafted in that respect.

## 2.21 Barriers analysis (paragraphs 136 – 138)

We think that the proposed guidance on the barrier analysis is very useful to clarify to DOEs how the “preventive character” of any barriers should be validated.

As a minor editorial comment, the scope of the barrier analysis is not fully consistent with the additionality tool. Make the wording consistent with the additionality tool by adding the following text at the end of paragraph 136: “*and do not prevent the implementation of at least one of the alternatives*”.

## 2.22 Common practice analysis (paragraphs 139 – 141)

When analysing “common practice”, it should be ruled out that “normal” technological improvements which take place autonomously with every kind of technology are considered “first of its kind”. The definition of project activity should therefore not be too narrowly defined. We therefore suggest introducing the following text after “differs” in paragraph 140 (c): “substantially (i.e. beyond normal technological improvements of technology over time)”.

Similarly, “region” should not be too narrowly defined since many developments take part in the same country, but maybe some hundred kilometres away in a different region. We therefore suggest adding the following sentence at the end of paragraph 140 (a): “In the absence of further guidance in the methodology, the region should be de-

fined as the host country or the geographical area within the host country with similar economic and regulatory circumstances.”

## 2.23 Validation report

A key deficit in the current procedures is that the documentation of the validation process is sometimes poor. The reader can not understand to which issues have been checked and how they have been checked. To increase transparency and trust in the CDM system, it is important to improve the documentation.

To improve the documentation of the validation process, we suggest the following provisions: The DOE should list each requirement it has validated, including assumptions, parameters, data, documents, equations, etc. The DOE should then, for each of these requirements, **describe** how the validation was carried out by explaining what sources were reviewed, what the **key findings** of these sources were and how these were discussed against other available sources (see as an example the above-mentioned detailed discussion on the definition of an MCF).

The procedure for each requirement could follow the following general **step-wise approach**:

- Name the requirement as stipulated
- Describe key parameters, data, formulae, documents, etc. which are relevant in the CDM-PDD in order to validate whether the requirement has been met
- Describe all sources reviewed for validating the different aspects.
- Discuss key information included in the sources with respect to the identified key aspects.
- Provide conclusion on validity of each key aspect.

**It should be avoided that mere yes/no answers are provided** in the validation report without further discussion as it is currently found in many validation reports. For example: “We have validated the requirements related to the project boundary as stipulated in the VVM. We confirm that the justification provided by the PP is reasonable. For this purpose we have assessed supporting documents. We therefore conclude that this requirement is met.” Such information is clearly not sufficient to enable the reader to understand how this requirement was checked.

Paragraph 165 suggests that the validation report should only provide an overview on the validation process. This is inconsistent with other parts of the draft VVM, where rather specific information is requested for the validation process.

We suggest the following changes and new paragraphs on the documentation of the validation process:

165. The validation report shall include a summary report where the main issues and findings are summarized and full report where all validation issues, steps and findings are documented, subject to the provisions in this document. The full report shall include

a documentation of the *steps, content and results of the validation process in a transparent manner for each section of the CDM-PDD. For each section of the CDM-PDD, the DOE shall identify and document in the validation report each requirement that has to be met for the project activity. This shall include all key assumptions, data and choices in the application of the approved baseline and monitoring methodology and in completing the CDM-PDD, such as, inter alia,*

- (a) implicit or explicit key assumptions made for the purpose of*
  - demonstrating that the methodology is applicable to the project activity,*
  - demonstrating the additionality of the project activity,*
  - indentifying the baseline scenario,*
  - calculating emission reductions*
- (b) the choice of values for key parameters, such as emission factors or other parameters;*
- (c) choices between different methodological approaches in the methodology, etc.;*

*165bis. For each requirement identified in accordance with paragraph 165, the DOE should document in the validation report*

- (a) what means were used to validate the requirement, e.g. which documents and data were used, which experts were interviewed, which sites were visited.*
- (b) summarize and discuss key information that was gathered in the validation of the requirement (e.g. what type of key data was found);*
- (c) explain on this basis why the requirement is fully complied with.*

## **2.24 Duration of the validation process**

Currently, many validation processes have a long duration and it is likely that many validations will never be finished. We believe that for purposes of market transparency it is important that DOEs report to the UNFCCC on the outcome of validation, even if it is negative. In addition, we suggest that a validation should not last longer than one year and after that period the validation shall be considered if the validation can not be finalized 18 months after the publication of the CDM-PDD. Such a provision is not necessary for the integrity of the process but will increase significantly the market transparency. Increase transparency on which projects can still be expected to be registered will help all market participants. We also believe that validation reports with negative outcome should be made publicly available. This will help other project participants to better understand key requirements and increase transparency and consistency in the way that DOEs work. We therefore suggest introducing the following new paragraph:

*167bis. The validation shall be finalized by the DOE at the latest 18 months after the commencement of the validation process (publication of the CDM-PDD). If issues raised by the DOE can not be solved with the project participants within this time frame, the validation opinion shall be negative. Upon finalization of the validation, the DOE*

*shall send the validation report to the project participants and the UNFCCC secretariat, for publication on the UNFCCC website.*

### 3 Further improvements beyond the VVM

We consider the VVM as an extremely important tool for the consistent implementation of validation and verification. In order to further improve its usefulness, we recommend providing **mandatory validation report and verification report templates** in which relevant provision from the VVM are included.

The structure of the requirements checklist in the validation protocol could, for instance, have the following structure:

Checklist question	Reference VVM	Related CDM decision (MP, additional guidance, ...)	Key features identified for this project activity	Data sources reviewed	Key information in data sources reviewed	Conclusion
Has the baseline scenario been determined using conservative assumptions where possible?	5.3.4, etc.	MP, paragraphs 44 – 48, etc.	Methane conversion factor (MCF), etc.	<ul style="list-style-type: none"> <li>• PDD</li> <li>• Climate chart for Brazil</li> <li>• IPCC Good Practice Guidance, p. X, table Y</li> <li>• ETC.</li> </ul>	The chosen MCF for Brazilian conditions was checked against IPCC Good Practice Guidance, p. X, table Y. It was discussed whether “temperate” was the right choice of climate for the project location. However, the PP clarified that the specific location could either be classi-	The MCF chosen by the PP can therefore be considered appropriate

					<p>fied as “temperate” or “warm” according to annual average temperature charts provides. Since the MCF is lower for “temperate” climate, related emission reduction estimates can be considered conservative.</p>	
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Furthermore, in order to improve the possibility to assess the validation and verification process by the EB, the RIT and the secretariat, all **additional documents** reviewed by the DOE **shall be made available** to the EB, the RIT and the secretariat (although these will not become publicly available).