Information note

“Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period”

I. Scope of the note

1. The objective of this document is to highlight to the CDM Executive Board (the Board) the different views within the Meth Panel with regard to a need to amend the “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period” - annex 1 of the “Procedures for renewal of the crediting period of a registered CDM project activity”. One view in the Meth Panel was that an amendment would be useful, while another view was that an amendment is not needed. This note provides the arguments for both views. The draft revised tool, as supported by the view that an amendment would be useful, is included as an appendix to this information note.

II. Background

2. The Board, at its twenty-eighth meeting approved the “Procedures for renewal of the crediting period of a registered CDM project activity”. At its fifty-sixth meeting, the Board requested the Meth Panel to adjust all methodologies which are identified as not complying with the Board’s ruling on the reassessment of baseline scenario, by removing the reference to the reassessment of the baseline scenario. When undertaking this task, one view was that the “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period” does not provide enough information on the assessment of the impact of circumstances for the renewal of the crediting period, and for that reason the tool may be amended for this purpose. Another view was that firstly, such a revision is not required, and secondly, that the request by the Board at its fifty-sixth meeting is very clear and is limited to the revision of methodologies wherever appropriate.

III. Requirements in the current procedures for renewal of the crediting period

3. The procedures state that the renewal of the crediting period of a registered CDM project activity shall only be granted if a designated operational entity (DOE) determines and informs the Board that the original project baseline is still valid or has been updated taking into account new data where applicable. This is in accordance with paragraph 49 (a) of the modalities and procedures for the clean development mechanism.

4. Paragraph 7 of section C “Application for renewal of the crediting period”, of the procedures, provides guidance on which issues need to be assessed by the DOE when assessing the validity of the original baseline or its update:
   (a) An impact of new relevant national and/or sectoral policies and circumstances on the baseline taking into account relevant Board guidance with regard to the renewal of the crediting period at the time of requesting the renewal of crediting period; and
   (b) The correctness of the application of an approved baseline methodology for the determination of the continued validity of the baseline or its update, and the estimation of emission reductions for the applicable crediting period.
5. Furthermore, Step 1.2 of the “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period”, requests the assessment of the impact of circumstances existing at the time of requesting renewal of the crediting period on the current baseline emissions, without reassessing the baseline scenario. If the new circumstances make some of the conditions used to calculate the baseline emissions invalid, then the baseline needs to be updated for the subsequent crediting period. However, the tool does not provide further guidance on the type of circumstances to be considered in the assessment of the baseline.

6. The Meth Panel discussed the potential need to provide further guidance on the assessment of the impact of circumstances, and has two different views whether it is necessary to amend the tool which are explained below.

IV. Arguments supporting the amendment of the tool

6. One view was that circumstances such as the characteristics of the energy market and technology development should be explicitly addressed, as they may impact the baseline emissions for certain project activities, for instance project activities where the baseline scenario is the continuation of the current situation, requiring or not requiring any investment or expenses to maintain the current situation.

7. Not all types of CDM project activities would be affected by the change in circumstances. For example, for cases where the baseline scenario also requires a significant investment, such as the construction of a Greenfield plant (where in the baseline a more GHG intensive Greenfield plant would also have been built), the baseline is likely to be that plant for the lifetime of the project or the baseline plant, whichever is the shorter.

8. Another example where the circumstances outlined above would not affect the baseline emissions include a project activity generating renewable power and supplying to the grid. The methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” assumes that the baseline scenario is the generation of electricity by the grid including the development of new power plants reflected in the build margin. This means that investments are to be made in the baseline scenario to sustain the current practice.

9. Examples where the circumstances outlined above could affect the baseline emissions include:

   (a) Project activity: Switch from open cycle to combined cycle

   Baseline emissions at the start of the project activity: When implementing the CDM project activity the prices of the fuel were low and continuing to use an open cycle turbine was the economically most attractive option. Therefore, the baseline emissions corresponded to the current practice of an open cycle power plant.

   Baseline emissions at the renewal of crediting period: At the time of renewal of crediting period the fuel prices dramatically increased. Therefore, it may be likely that the project participants would, in the absence of the project try to improve the efficiency of their plants. In this regard, it could be the case that the baseline emission factor would decrease and needs to be updated, assuming efficiency improvements at the plant would have occurred over time in the absence of the project activity.
(b) **Project activity: Energy efficiency in an industrial facility**

**Baseline emissions at the start of the project activity:** A project participant could develop a CDM project to improve the energy efficiency of an industrial facility by implementing certain measures which were not commercially available in the host country at the time of the registration. Therefore, the baseline is the continued operation of the industrial facility as observed historically.

**Renewal of crediting period:** At the time of the renewal of the crediting period the technology providers have created a stronger commercial network in the country where the project activity is implemented and energy efficiency measures are now easily accessible for the industry. That is, the industry is now more likely to implement similar measures for energy efficiency, which may change the baseline emissions. As a consequence, the baseline emissions should consider the measures that at the time of the renewal of the crediting are commercially available in the market and possibly now common practice in the sector.

(c) **Project activity: Greenfield production of heat using a biomass boiler**

**Baseline emissions at the start of the project activity:** The project participant implements a project which is to install a new biomass boiler to produce heat. In the baseline, fuel oil is observed to be the main fuel in the sector.

**Renewal of crediting period:** At the time of the renewal of the crediting period a new natural gas field is being exploited and therefore natural gas is now available at a competitive price. It may be used as the reference to calculate the emission factor for the baseline instead of fuel oil for the renewed crediting period.

10. The Meth Panel members supporting this view therefore recommended to amend the tool, including further guidance on how to assess the impact of circumstances on the baseline for the situation where the continuation of the current practice was identified as the baseline scenario at the validation of the project activity. Circumstances that should be assessed at the time of the renewal of the crediting period are specified relating to economical, technological situations or market structure.

V. **Arguments supporting not to amend the tool**

11. The other view considers that there is no need to add further guidance into the tool because there is already a Board decision that at the time of the renewal of the crediting period only the baseline needs to be reassessed and not the baseline scenario. Further it is considered that the DOEs are successfully carrying out the task of assessment of circumstances on the baseline without any problems and no issue has been flagged by the DOEs in this regard.

12. In view of the mandate by the Board to the Meth Panel, while considering the change in circumstances to reassess the baseline, it is necessary to restrict the analysis to the reassessment of the baseline and not extend the consideration of the change in circumstances to the baseline scenario. In this regard, only the changed circumstances which have an impact on the baseline emissions and not the baseline scenario need to be considered. Some of the examples of circumstances which can have an impact both on the baseline and the baseline scenario include change in the technology, change in the relative prices of the fuels and the
cost of different energy technologies. In such cases, the impact of changed circumstances should be considered only for the baseline and not the baseline scenario.

13. For example, in case of a solar PV power plant the relative capital cost (as compared to the other power generation technologies) at the time of the renewable of the crediting period could have decreased to the levels that it becomes the baseline. This change in the circumstances does not allow the project participants to revert to the significantly higher capital investment which was made at the time of the decision to proceed with the project.

14. Another example is the installation of biomass fired heat and/or power generation equipment in spite of the significantly higher capital cost of such a power plant. With the development of technology the capital cost may reduce to the level where it is comparable to the capital cost of fossil fuel based power plants. As the decision taken in the past cannot be changed at the renewal of the crediting period, it may not be appropriate to penalise the project participants for taking this decision considering the CDM.
Appendix

“Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period”

This tool provides a stepwise procedure to assess the continued validity of the baseline and to update the baseline at the renewal of a crediting period, as required by paragraph 49 (a) of the modalities and procedures of the clean development mechanism.

The tool consists of two steps. The first step provides an approach to evaluate whether the current baseline is still valid for the next crediting period. The second step provides an approach to update the baseline in case that the current baseline is not valid anymore for the next crediting period.

Step 1: Assess the validity of the current baseline for the next crediting period

The “Procedures for the renewal of the crediting period of a registered CDM project activity” approved by the CDM Executive Board require assessing the impact of new relevant national and/or sectoral policies and circumstances on the baseline.

The validity of the current baseline is assessed using the following Sub-steps:

Step 1.1: Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies

If the current baseline complies with all relevant mandatory national and/or sectoral policies which have come into effect after the submission of the project activity for validation or the submission of the previous request for renewal of the crediting period and are applicable at the time of requesting renewal of the crediting period, go to Step 1.2.

If the current baseline does not comply with relevant mandatory national and/or sectoral policies, then assess based on the examination of current practice in the country or region in which the policies apply, whether those policies are systematically not enforced and that non-compliance with those requirements is widespread in the country or region.

If the current baseline is not in compliance with the relevant mandatory national and/or sectoral policies or if it cannot be shown that the policies are systematically not enforced and that non-compliance with those policies is widespread in the country or region, then the current baseline needs to be updated for the subsequent crediting period.

Step 1.2: Assess the impact of circumstances

Assess the impact of circumstances existing at the time of requesting renewal of the crediting period on the current baseline emissions, without reassessing the baseline scenario.

[In the situation where the baseline scenario identified at the validation of the project activity was the continuation of the current practice without any investment, the assessment of the following circumstances is required for the renewal of the crediting period:

- Change in market characteristics. Evaluate if the conditions used to determine the baseline emissions in the previous crediting period are still valid. Assess the availability of new fuels or raw materials and the impact of electricity or fuel prices in the identification of the current practice for the baseline emissions;

- Take into consideration market penetration of different technologies. Evaluate the penetration rate of different technologies that are available in the market and evaluate how they could affect the baseline.]
If the new circumstances make a continued validity of the current baseline not plausible, then the current baseline needs to be updated for the subsequent crediting period.

**Step 1.3: Assess whether the continuation of the use of current baseline equipment(s) is technically possible**

This Sub-step should only be applied if the baseline is the continuation of the current practice.\(^1\)

Assess whether the remaining technical lifetime of the equipment that would have continued to be used in the absence of the project activity, as determined in the CDM-PDD or CDM-PDD-REN, exceeds the crediting period for which renewal is requested.

*If the remaining end of technical lifetime of the baseline equipment occurs is less earlier than the end of the additional crediting period for which renewal is requested, then the current baseline needs to be updated for this crediting period or the crediting of emission reductions should be limited to the end of the technical lifetime of the baseline equipment.*

**Step 1.4: Assessment of the validity of the data and parameters**

Assess whether data and parameters that were only determined at the start of the crediting period and not monitored during the crediting period are still valid or whether they should be updated. Updates should be undertaken in the following cases:

- Where IPCC default values are used, the values should be updated if any new default values have been adopted and published by the IPCC, for example, in guidelines for national GHG inventories, IPCC assessment report or special reports by the IPCC;
- Where emission factors, values or emission benchmarks are used and determined only once for the crediting period, they should be updated, except if the emission factors, values or emission benchmarks are based on the historical situation at the site of the project activity prior to the implementation of the project and can not be updated because the historical situation does not exist anymore as a result of the CDM project activity.

*If any of the data and parameters that were only determined at the start of the crediting period and not monitored during the crediting period are not valid anymore, the current baseline needs to be updated for the subsequent crediting period.*

*If the application of Steps 1.1, 1.2, 1.3 and 1.4 confirmed that the current baseline as well as data and parameters are still valid for the subsequent crediting period, then this baseline, data and parameters can be used for the renewed crediting period. Otherwise, proceed to Step 2.*

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\(^1\) This applies, for example, to project activities that i) reduce the release of waste gases (e.g. HFC-23, N\(_2\)O, CH\(_4\)) which would have continued to be released in the absence of the project activity; ii) retrofit a plant which would have continued to operate in the same manner in the absence of the project activity; iii) construct a new plant where, in the absence of the project activity, the project participants would not have constructed the plant but where the product (e.g. electricity, cement, aluminium, etc) would have been generated in other existing plants and/or in new plants constructed by third parties elsewhere.
Step 2: Update the current baseline and the data and parameters

This step is only applicable if any of the Steps 1.1, 1.2, 1.3 and/or 1.4 showed that the current baseline needs to be updated.

Step 2.1: Update the current baseline

Update the current baseline emissions for the subsequent crediting period, without reassessing the baseline scenario, based on the latest approved version of the methodology applicable to the project activity. The procedure should be applied in the context of the sectoral policies and circumstances that are applicable at the time of request for renewal of the crediting period.

Step 2.2: Update the data and parameters

If the application of Step 1.4 showed that the data and/or parameter(s) that were only determined at the start of the crediting period and not monitored during the crediting period are not valid anymore, project participants should update all applicable data and parameters, following the guidance in Step 1.4.