Annex 4

POLICY OPTIONS TO ASSESS GRID EMISSION FACTORS PUBLISHED BY NATIONAL AUTHORITIES

Version (02)

I. Background

1. The "*Tool to calculate the emission factor for an electricity system*" (hereafter "Tool") provides detailed requirements for the calculation of grid emission factors to be used by CDM project activities which displace electricity from the grid or use electricity from a grid. The Validation and Verification Manual (VVM) also provides specific requirements on how DOEs should validate all data used in the calculation of emission reductions. In order to ease the implementation of CDM projects many designated national authorities (DNAs) have chosen to calculate and publish their own country grid emission factors. However, due to the confidential and/or proprietary data used in these calculations it may not be possible for DOEs to assess whether or not such calculation is in compliance with the Tool. The Board acknowledged this difficulty at its forty-third meeting and provided DOEs wiith options to implement the current requirements (EB43, paragraph 64).

2. A previous version of the "*Policy options to assess grid emission factors published by national authorities*" was discussed by the Executive Board at its fifty-third meeting. Following this discussion the Board requested the secretariat to further develop the paper.

3. This document provides an overview of the options available to the Executive Board for the resolution of this issue, and also addresses the matter of the difficulties in Least Developed Countries (LDCs).

II. Status quo - Validation of factors on a project by project basis

4. Under this option, DOEs shall confirm that the calculation of grid emission factors applied in the PDD under validation complies with the requirements of the Tool, and shall describe the means of validation employed to reach this conclusion, which shall include a full assessment of all data employed in the calculations.

5. If the grid emission factor used in the PDD has been published by a national authority , DOEs shall request the DNAs for an opportunity to assess that the Tool was correctly applied, in line with EB43 paragraph 64.i. This assessment shall be conducted at the offices of the DNA. The DNA shall make the database and calculation accessible to the DOE under specific requirements (e.g., confidentiality agreement, non-removal of data from the DNAs offices, etc).

6. In cases where the grid emission factor cannot be assessed by the DOE due to data inaccessibility, the DOE will not be able to issue a positive validation opinion regarding the compliance of the proposed grid emission factor with the requirements of the Tool. This status quo also requires each DOE to undertake the analysis, as it is not possible for one DOE to rely solely on the opinion of another entity for a previous project in making a final validation opinion.

7. For these reasons it is considered that maintaining the status quo is not desirable and therefore two possible solutions are proposed below.

III. Solution 1 – Acceptance of the grid emission factor given by DNAs

8. The Board could agree to accept any grid emission factor published by DNAs by default. Project participants can therefore use the data published by their own DNAs to calculate their own emission factors (e.g.: combined margin value) or directly use the value published by the DNA in their emission reduction calculations. This approach supports CDM implementation and avoids issues to be raised on the compliance of the calculation of such factors with the requirements of the tool. However, it does not ensure that the most appropriate data was used to estimate these factors. Hence, the grid emission factor estimation is subject to uncertainty on the level of conservativeness, transparency and accuracy.

IV. Solution 2 - Endorsement of grid emission factors following assessment

9. Considering that under the current requirements of the VVM, individual DOEs shall undertake the validation of the data used in the calculation of emission reductions for each project activity separately and that DOEs should not rely on other DOEs' assessment. This option therefore suggests tackling the repetitiveness of validating grid emission factors from different project activities which belong to one country; since it avoids the need for individual DOEs to validate the grid emission factor calculation for each single project under validation. An endorsed value for the grid emission factor will be available for the specific country during an established period. This option proposes a practical approach for DNAs to demonstrate that their grid emission factor calculation is in line with the requirements of the Tool.

10. This approach can be applied by assessment of either specific factors or assessment of the systems for the preparation of the factors.

11. This approach would consist of the following steps:

(a) The DNA would submit a request for grid emission factor estimation endorsement to the Board via an application form.

(b) The estimated grid emission factor or system would be assessed by an assessment team, which is previously appointed by the Board. The assessment team shall consist of at least two persons, who could be from the Meth Panel, RIT members, and/or a secretariat staff member.

(c) The DNA shall make all the necessary information accessible to the assessment team and respond to any request for clarification.

(d) The assessment team shall handle the information under a confidentiality agreement if it is required by the DNA. Data provided by the DNA will not be removed from the DNAs offices or copied and handled elsewhere.

(e) The assessment team shall finalize the assessment report of the calculation of the grid emission factor and recommend the Board to approve, request corrections or reject such estimation.

(f) The Board shall decide on the final recommendation given by the assessment team.

(g) In case the grid emission factor or system is endorsed by the Board, this shall be published on the UNFCCC CDM website.

12. The above approach will allow the Board to ensure that the grid emission factor is estimated based on data that is conservative, correctly gathered and handled in a proper way and entirely in line with the "*Tool to calculate the emission factor for an electricity system*" and the VVM requirements. This

approach will also streamline the process by avoiding DOEs' interaction with DNAs for the validation of individual project activities; hence improving efficiency. In order to implement this approach the DNAs shall support the procedure by providing data access to the assessment team.

V. Simplified approach to assist Least Developed Countries

13. In order to support the participation of Least Developed Countries in the CDM market the secretariat recommends the Board to consider a simplified approach to estimate the grid emission factors of such countries.

14. This approach may consist of a simplified "*Tool to calculate the emission factor for an electricity system"* to be developed by the Meth Panel and a specific procedure for gathering data and calculating the grid emission factor.

15. The Meth Panel shall develop a simplified tool considering the LDC possibilities and limitation for gathering specific data and information, and the country's characteristics, specifically the grid country distribution, the size, the main sources of fuels used for electricity generation, the capacity size and the annual generating capacity (electricity output), etc.

16. LDCs may be able to request special support from the secretariat to implement an adequate system for gathering the data/information required by the simplified tool such as a simple mathematical model.

17. Once the grid emission factor is estimated, it will be approved by the Board following the conventional steps of approval.

18. In case the grid emission factor is approved by the Board, this value shall be published on the UNFCCC CDM website by the secretariat in order to make it available to all project developers in the host country and worldwide.

VI. For Executive Board discussion

19. The Board may wish to decide whether or not to change the status quo for the validation of grid emission factors would be desirable. If the Board considers a change to be desirable it may wish to consider the merits of the two solutions proposed in this paper. In case the Board wished to proceed with solution 1 this could be immediately reflected in the report of EB54, and may require updates to the VVM. In case the Board wished to proceed with solution 2 this would require mandating the secretariat with the development of a full set of procedures for consideration at the future meeting.

20. The Board may also wish to discuss how to facilitate and assist LDCs in this context by:

(a) Deciding whether or not to request the Meth Panel to develop a simplified tool based on lower data availability requirements.

(b) Deciding whether or not the secretariat can be mandated to provide support to LDCs in the calculation of grid emission factors.

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History of the document

Version	Date	Nature of revision
02	Prepared for discussion at EB54 24 to 28 May 2010	Based on the Board suggestions, the revised version of the document proposes two policy options to the Board in order to assess grid emission factors published by DNAs, instead of three options as was proposed in the initial version and includes further changes as suggested by the Board. The document also highlights the pros and cons of maintaining the status quo on the validation of grid emission factors on a project by project basis.
01	Prepared for discussion at EB54 30 November to 4 December 2009.	Initial document.* Due to time restrictions, this document was not discussed at the fifty-first meeting of the Board (see EB51 Meeting Report, Paragraph 26), nor at its fifty-second meeting (see EB52 Meeting Report, Paragraph 58). The Board considered this document at its fifty-third meeting and requested the secretariat to revise the draft taking into account the comments provided by members for consideration at its fifty-fourth meeting (see EB53, Paragraph 74).
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