Tool

"Tool for testing significance of GHG emissions in A/R CDM project activities" (Version 01)

I. SCOPE, APPLICABILITY AND PARAMETERS

Scope

This tool facilitates the determination of which GHG emissions by sources, possible decreases in carbon pools, and leakage emissions are insignificant for a particular CDM A/R project activity.

The sum of decreases in carbon pools and increases in emissions that may be neglected shall be less than 5% of the total decreases in carbon pools and increases in emissions, or less than 5% of net anthropogenic removals by sinks, whichever is lower.

Applicability

The tool shall be used in the application of an A/R CDM approved methodology to an A/R CDM project activity:

a) To determine which decreases in carbon pools, and increases in emissions of the greenhouse gases measured in CO_2 equivalents that result from the implementation of the A/R project activity, are insignificant and can be neglected.

b) To ensure that it is valid to neglect decreases in carbon pools and increases in GHG emissions by sources stated as being insignificant in the applicability conditions of an A/R CDM methodology.

Parameters

This procedure does not use its own parameters.

II. PROCEDURE

The following stepwise procedure (based on the key source analysis IPCC (2003)) shall be used for testing the significance of all GHG emissions by sources attributable to A/R CDM project activity (project emissions and leakage). The procedure shall be used separately for the *ex ante* and/or the *ex post* (monitoring) cases:

1. Estimate the A/R CDM project GHG emissions by sources (per each source) and possible decreases in carbon pools (e.g. due to site preparation, grazing, harvesting) based on site/project specific data, scientific literature, or the most recent default emission factors provided by IPCC (e.g. IPCC 1997, 2003, 2006) and site/project specific activities. Estimation shall follow the approved methodology.

2. Estimate leakage emissions per activity based on site/project specific data, scientific literature, or the most recent default emission factors provided by IPCC (e.g. IPCC 1997, 2003, 2006) and site/project specific activities. Estimation shall follow the approved methodology.

3. If the IPCC default emission factors are used then the same default value shall be used for the *ex ante* and the *ex post* estimates as appropriate.

4. Recalculate all GHG emissions into CO_2 equivalents using the GWP impact factors as decided by COP3[1] or as amended later.

5. Calculate the relative contributions of the project GHG emissions by sources and possible decreases in carbon pools and emissions by leakage activities according to the following equation (IPCC 2003, Eq. 5.4.1):

$$RC_{E_i} = \frac{E_i}{\sum_{i=1}^{I} E_i}$$

Where:

RC_{E_i} = Relative contribution of each source *i* to the sum of project and leakage GHG emissions*;*

E_i = GHG emissions by sources of project and possible decreases in carbon pools and leakage emissions *i* as estimated under steps 1 and 2;

i = Index for individual sources of project and leakage GHG emissions (I = total number of sources considered under step 1 and 2).

6. Rank the project and the leakage emissions in descending order of their relative contributions RC_{E_i} and order them according to their ranks (i.e. the lowest emission shall get the highest rank and shall occupy the last position in the ordered sequence of emissions).

7. Start calculating the cumulative sum of the relative contributions RC_{E_i} (ordered according to the step 6) beginning with the lowest rank. Mark each individual source of project and leakage emissions as it is included in the summation. Cease the summation when the cumulative sum reaches the lowest value not less than the threshold of 0.95.

The GHG emissions by sources, possible decreases in carbon pools and leakage emissions not marked in the step 7 are considered insignificant if their sum is lower than 5% of net anthropogenic removals by sinks. Otherwise, the procedure described in the step 7 shall be continued beyond the threshold of 0.95 until the above condition is met.

Literature

IPCC (1995) Climate Change 1995: The Science of Climate Change. Contribution of Working Group I to the Second Assessment of the Intergovernmental Panel on Climate Change. JT Houghton, LG Meira Filho, BA Callender, N Harris, A Kattenberg and K Maskell (Eds). Cambridge University Press, UK pp. 572.

IPCC (1997) Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories. Available at: www.ipcc-nggip.iges.or.jp/public/gl/invs1.htm.

IPCC (2003) Good Practice Guidance for Land Use, Land-Use Change and Forestry. Available at: www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf.htm.

[1] For the first commitment period, the GWP potentials with a 100-year time horizon shall be used as established by the IPCC in its Second Assessment Report - IPCC (1995) (see Decision 2/CP.3).

IPCC (2006) 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Available at: www.ipcc-nggip.iges.or.jp/public/2006gl/index.htm.