



**CDM Proposed specific renewable technologies/
measures recommendation form
(Version 01.1)**

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| Submitting DNA: | Brazil |
| Title/version of the EB guideline/procedure this submission relates to: | Guidelines for demonstrating additionality of microscale project activities, Version 03 (EB 63 - Annex 23) |
| Contact Information: <i>(name of person or office, e-mail addresses and phone contacts)</i> | Sonia Regina Bittencourt, DNA Representative , Brazil sregina@mct.gov.br Phone : +55-161-3317-7512 |
| Summary of the proposal: | |
| <p>According to the guideline for demonstrating additionality of microscale project activities(version 03) and the decision of the Board (refer to the paragraph 114 of the 65th CDM EB meeting report), the Brazilian DNA hereby submits the required information concerning the total installed capacity of the following recommended renewable energy technologies.</p> <p>According to paragraph 37 of the meeting report of the thirty-sixth small-scale working group (SSC WG) and with respect to the paragraph 2(d)(i) of the guidelines for the demonstration of additionality of microscale project activities, the SSC WG agreed to clarify that in the case of wind energy technology, all the wind installations in the country shall be considered for the analysis, irrespective of the size of the wind farm, in order to derive the percentage share of wind technologies in the total installed capacity of grid connected electricity generation technologies. This being considered, it is necessary to reinforce that ALL wind power plants sum 1.576 MW, which represents 1.3% of the Brazilian total installed capacity.</p> <p>The recommended technologies:</p> <ul style="list-style-type: none"> • Hydro • Wind • Renewable Biomass <p>Additional clarification requested 11-May-12:</p> <p>This is with reference to you submission on the proposal for automatic additionality of renewable energy technologies (RET) for microscale projects in Brazil.</p> <p>In accordance with section IV and paragraph 10 of “Submission and consideration of microscale renewable energy technologies for automatic additionality”, http://cdm.unfccc.int/Reference/Procedures/methSSC_proc04.pdf, you are requested to provide additional information below to facilitate the consideration of your submission.</p> <p>DNA response submitted 08-Jun-12:</p> <p>In response to the questions and requests sent to the Brazilian National Authority, we have made changes in order to fulfill the requests made to the Form “Proposed specific renewable technologies/measures submission form (version 01.0)”. Other measures were additionally taken as listed below.</p> <p>We have reproduced all your requests alternating them with our answers to each of them, as it follows.</p> <p>With reference to Table 1 of the submission form, a further clarification is required on how the data in columns A and B of the table from the source www.aneel.gov.br (Brazilian Electricity Regulatory Agency (ANEEL)) are derived. You may wish to provide separate excel files that support the reported data and provide the exact link from where the data/information sources are derived. Where applicable, kindly provide additional documentation supporting the submission (e.g. relevant data, documentation, statistics, studies, etc.).</p> <p>We have included in Table 1 of the Form the specific source of all data used in its making. The source of the</p> | |

data is the Generation Information Database (“BIG - Banco de Informações de Geração” in Portuguese), contained in the Brazilian Electricity Regulatory Agency (ANEEL) webpage, which can be reached through the link below:

<http://www.aneel.gov.br/aplicacoes/capacidadebrasil/capacidadebrasil.asp>

All data contained in this database is updated periodically, therefore some differences can be found between the data used to compose Table 1, from January 2012, and the data that will be found in any future research in the website. In the upper right corner of the homepage of the BIG, it is possible to find the date when it was last updated, in the format DD/MM/YYYY after the expression “Atualizado em” (“Updated on”).

Along with the Form, we send an Excel file containing all data used in Table 1 of the form, which is reproduced in its last sheet. In addition, to make the reading of the information contained in BIG’s homepage more comprehensible, alongside each sheet’s name follows the Portuguese acronym (in brackets) to which the table is referred. For instance, “PV (UFV)”, meaning Photovoltaic (UFV = Usina Fotovoltaica).

With respect to the paragraph 2(d)(i) of the “Guidelines for the demonstration of additionality of microscale project activities”, please note that in the specific case of wind energy technology, all the wind installations in the country shall be considered for the analysis, irrespective of the size of the wind farm, in order to derive the percentage share of wind technologies in the total installed capacity of grid connected electricity generation technologies. In other words, in the case of wind, the ratio shall be $1576/144104 = 1.1\%$.

The Generation Information Database contains installed capacity data for all generation technologies authorized to operate by the Brazilian National Electricity Agency (ANEEL). Thus, the Table 1 of the form we now send contains data of all wind power plants which were authorized to operate in January 2012, irrespective of their size and including all plants registered under the CDM.

Additionally, we appreciate your information about the mistake noticed in the version of the form we sent previously. In that version, the total installed capacity of thermal non-renewable technologies was double counted, which led to the grand total of 144,104MW. That grand total was excluded in the present version of the form in order to confirm that the total national installed capacity by January 2012 amounted to 119,321 MW.

Please refer to paragraph 37 of the meeting report of the thirty-sixth small-scale working group (SSC WG) <http://cdm.unfccc.int/Panels/ssc_wg> and paragraph (c)(ii) and footnote 1 of the SSC WG recommendation to the submission by the DNA of the Republic of Chili (PRT_002) available at <<http://cdm.unfccc.int/DNA/submissions/index.html>>.

The form we send now also contains the information that all the wind installations in the country were considered for the analysis, irrespective of the size of the wind farm.

Please confirm that the data reported in the Table 1 also covers projects in the CDM pipeline (registered/at validation) that are already in operation. It is not clear whether the most recent data available in the country is from 2009. Please confirm.

All data used to compose the Table 1 in the form was collected in the Generation Information Database, above mentioned. All data contained in this database is updated periodically, therefore some differences can be found between the data used to compose Table 1, from January 2012, and the data that will be found in any future research in the website.

The database contains installed capacity data for all generation technologies authorized to operate by the Brazilian National Electricity Agency (ANEEL). Thus, the Table 1 of the form we now send contains data of all wind power plants which were authorized to operate in January 2012, irrespective of their size and including all plants registered under the CDM.

Please note that the following electricity generation technologies of installed capacity up to 15 MW are already included in the positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional:

- (a) Solar technologies (photovoltaic and solar thermal electricity generation);
- (b) Offshore wind technologies; and
- (c) Marine technologies (wave, tidal).

Therefore, these technologies need not be recommended under the scope of the guidelines “Guidelines for demonstrating additionality of microscale project activities”.

We have excluded from the listed recommended technologies the generation technologies that are automatically defined as additional:

- (a) Solar technologies (photovoltaic and solar thermal electricity generation);
- (b) Offshore wind technologies; and
- (c) Marine technologies (wave, tidal).

Recommendation to EB:

The Board at its sixty-third meeting specified three criteria to be satisfied by the DNA recommendations in order that automatic additionality is conferred to microscale renewable energy projects in the host country. The submission is assessed below against these criteria:

- (a) **Criteria 1:** DNA submissions shall include the specific grid connected renewable electricity generation technologies that are being recommended and provide the required data (e.g. wind power, biomass power, geothermal power, hydropower);
The submission has provided segregated data per technology and is in accordance with the above requirement.
- (b) **Criteria 2:** Most recent available data on the percentage of contributions of specific renewable energy technologies shall be provided to demonstrate compliance with the 3 per cent threshold. Data older than three years from the date of the submission shall in no case be used.
The submission has provided the most recent data that is available from 2012. It is considered that the above requirement was met, based on the information in the submission.
- (c) **Criteria 3:** the ratio of installed capacity of the specific grid connected renewable energy technology in the total installed grid connected power generation capacity in the host country shall be equal to or less than 3 per cent; Specific renewable energy technologies/measures refers to grid connected renewable energy technologies of installed capacity equal to or smaller than 5 MW. Total installed capacity of ALL grid-connected technologies in the country in the reference year was **119, 321 MW**.
 - (i) **Hydro:** The installed capacity of hydro plants with less than 5 MW capacity was 761.15 MW leading to a threshold ratio of 0.64% (761.15/119,321) in the reference year. Thus, it is considered that the requirement for Hydro technologies (i.e. threshold ratio under three per cent) has been met.
 - (ii) **Wind:** the **aggregate plant capacity of all total wind turbine installations in the country was 1576 MW, leading to a ratio of 1.3%¹**. It is considered that the requirement for Wind technologies (i.e. threshold ratio under three per cent) has been met;
 - (iii) **Renewable Biomass:** based on the data provided by the DNA, aggregate plant capacity of all renewable biomass technologies equal to or less than 5MW was 516.12 MW, leading to a ratio of 0.43%. The SSC WG thus considered that the requirement for renewable biomass technologies (i.e. threshold ratio under three per cent) has been met;
- (d) It is noted that a call for public input was open from 14 June 2012 to 27 June 2012 as per the “Procedure for submission and consideration of microscale renewable energy technologies for automatic additionality” and no comments were received.

¹ With respect to the paragraph 2(d)(i) of the guidelines for the demonstration of additionality of microscale project activities, the SSC WG clarified that in the case of wind energy technology, all the wind installations in the country shall be considered for the analysis, irrespective of the size of the wind farm, in order to derive the percentage share of wind technologies in the total installed capacity of grid connected electricity generation technologies. Please refer to paragraph 37 of the meeting report of the thirty-sixth small scale working group < http://cdm.unfccc.int/Panels/ssc_wg >

Recommendation to the Board

The following grid connected microscale renewable energy technologies of a capacity equal to or less than 5 MW, recommended by the DNA of Brazil following the “Procedure for submission and consideration of microscale renewable energy technologies for automatic additionality” and the “Guidelines for demonstrating additionality for microscale projects (version 03), may be considered by the Board as eligible for conferring automatic additionality in the host country:

- Hydro;
- Onshore Wind;
- Renewable Biomass.

Note: Some other electricity generation technologies of installed capacity up to 15 MW are already included in the positive list that are automatically defined as additional. Kindly refer to the latest version of the “Guidelines on the demonstration of additionality of small scale project activities” (EB68, Annex 27). These technologies therefore need not be recommended under the scope of this submission.

SECTION TO BE FILLED IN BY THE UNFCCC SECRETARIAT

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History of the document

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| 01.1 | 12 April 2012 | Editorial changes to include new logo and other improvements. |
| 01.0 | 13 January 2012 | Initial publication. |
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