



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

Submitting DNA:	Philippines
Title/version of the EB guideline/procedure this submission relates to:	Guidelines for demonstrating additionality of microscale project activities (version 04) Procedure for submission and consideration of microscale renewable energy technologies for automatic additionality (version 02.0)
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Summary of the proposal:

The Philippine DNA submission of this proposal recommends some of the country's specific renewable energy technologies particularly, hydropower and biomass, for approval by the CDM Executive Board as eligible for automatic additionality on microscale CDM project activities and/or programme of activities being implemented in the Philippines as compliant to "GUIDELINES FOR DEMONSTRATING ADDITIONALITY OF MICROSCALE PROJECT ACTIVITIES (Version 04.0)". The submission is substantiated by the attached data received from the Department of Energy (DOE) indicating project activities with installed capacity of up to more than 5MW utilizing renewable energy technologies (RET) such as **hydropower** and **biomass**.

The country has vast potential of renewable energy sources which could definitely augment the current energy mix thus address the current energy demand. However, although the RE sector is still faced with the high costs of energy supply and capital investments including the technology itself. With CDM, such costs would somehow be alleviated through effective streamlining of the approval process without going through the rigorous process of determining the project's additionality. Further, CDM could facilitate prospects/other windows for financing renewable energy projects/technologies and consequently, identify measures to enhance its viability. As such, this shall enable to attract and increase more CDM investments in renewable energy project activities in the Philippines.

Additional clarification requested in May 2013

General:

- (i) The submission under table 1 item 1.5 "Renewable Biomass", differentiates landfill gas from renewable biomass. Please note that the total capacity of 'Renewable Biomass' is a sum of all the sub-sets: (i) 1.5.1. Biogas which further includes 'Landfill gas' and 'Sludge gas', (ii) 1.5.2. Wood/Wood Wastes/Other Solid Wastes, and (iii) 1.5.3. Other renewable biomass. Please mention the capacity of each sub-set separately under column (A) and (B) of the table and estimate percentage ratio for each subset (i.e. Biogas, Wood/Wood Wastes/Other Solid Wastes and Other renewable biomass) accordingly.
- (ii) As per footnote 6 of the 'F-CDM-PRT' 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 technology in the total installed capacity of grid connected electrical generation technologies. Thus the corrected ratio for wind technology (item 1.3 of table 1 of Annex) would be 0.2%.
- (iii) The DNA is also requested to use the correct template of 'F-CDM-PRT' as the footnotes 4 to 6 under table 1 of Annex of the form are missing in the submission form used by the DNA.

Response from the DNA received in June 2013, together with an attached document containing corrected data as requested in the information.

- (i) DNA mentioned the capacity of each sub-set related to item 1.5 "Renewable Biomass" under table 1, separately under column (A) and (b) of the table and also estimated the percentage ratio for each sub-set (i.e. Biogas, Wood/Wood Wastes/Other Solid Wastes and Other renewable biomass).
- (ii) The ratio under column (B) of table 1 related to wind energy technology, of the submission is revised in accordance with the footnote 6 of the submission form 'F-CDM-PRT'.
- (iii) The revised version of the submission uses the correct version of the 'F-CDM-PRT'.

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 available, till April 2012 which was considered as the reference year for this submission. It is considered that the above requirement is 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 **16162.46 MW**.

- (i) **Hydro:** Based on the data provided by the DNA, the installed capacity of grid connected hydro plants with less than 5 MW was 28.04 MW leading to a **ratio of 0.17%** (28.04/16162.46) in the reference year. Thus, it is considered that the requirement for Hydro technologies (i.e. ratio under 3 per cent) has been met;
- (ii) **Geothermal:** Based on the data provided by the DNA, the installed capacity of grid connected geothermal plants with less than 5 MW was 0 MW, leading to a **ratio of 0 %** in the reference year. Thus, it is considered that the requirement for Geothermal technologies (i.e. ratio under 3 per cent) has been met;
- (iii) **Wind:** Based on the data provided by the DNA, the aggregate plant capacity of all grid connected wind turbine installations in the country was 33 MW, leading to a **ratio of 0.2 %** (33/16162.46) in the reference year. Thus, it is considered that the requirement for Wind technologies (i.e. ratio under 3 per cent) has been met;
- (iv) **Renewable Biomass:** Based on the data provided by the DNA, the installed capacity of grid connected renewable biomass technologies equal to or less than 5 MW was 8.21 MW, leading to a **ratio of 0.05%** (8.21/16162.46) in the reference year. Thus, it is considered that the requirement for renewable biomass technologies (i.e. ratio under 3 per cent) has been met;

The reported data and calculations provided by DNA of Philippines have been verified by reviewing publicly available report on '2010 Philippine Power Sector Situationer', published by Power Planning and Development Division, Electric Power Industry Bureau, Department of Energy available at <http://www.doe.gov.ph/EP/2010%20Power%20Situationer.pdf> and the list of existing power plants in different regions in the Philippines is available at <http://www.doe.gov.ph/power-and-electrification/list-of-existing-power-plants?limitstart=0>.

- (d) It is noted that a call for public input was open from 8 – 22 April 2013 as per the “Procedure for submission and consideration of microscale renewable energy technologies for automatic additionality” and no comments were received.

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 Philippines following the “Procedure for submission and consideration of microscale renewable energy technologies for automatic additionality” (version 02) and the “Guidelines for demonstrating additionality of microscale project activities” (version 04), may be considered by the Board as eligible for conferring automatic additionality in the host country:

- Hydro;
- Geothermal;
- On-shore Wind; and
- Renewable Biomass

The following electricity generation technologies with an 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 additional¹:

- (a) Solar technologies (photovoltaic and solar thermal electricity generation);
- (b) Off-shore wind technologies;
- (c) Marine technologies (wave, tidal); and
- (d) Building and household rooftop wind turbines up to 100 kW.

Therefore, these technologies do not need to be recommended under the scope of these guidelines.

SECTION TO BE FILLED IN BY THE UNFCCC SECRETARIAT

F-CDM-PRT doc id number:	PRT_012
Date when the form was received by UNFCCC secretariat:	31 January 2013
Date of transmission to the EB:	31 January 2013
Date of posting on the UNFCCC CDM website:	31 January 2013

History of the document

Version	Date	Nature of revision(s)
01.1	12 April 2012	Editorial changes to include new logo and other improvements.
01.0	13 January 2012	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Methodology		

¹ See “Guidelines on the demonstration of additionality of small-scale project activities” (available at: <http://cdm.unfccc.int/Reference/Guidclarif/index.html#meth>).