



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

Submitting DNA:	Peru
Title/version of the EB guideline/procedure this submission relates to:	Guidelines for demonstrating additionality of microscale project activities (version 03) EB 65
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Summary of the proposal:	
<p>We are writing to you as the Designated National Authority for Peru, in regard to the "Guidelines for demonstrating additionality of microscale project activities (EB 63 -Annex 23)" (hereinafter, the "Guidelines"), which we have taken notice of, and which section II states the following:</p> <p><i>(d) The project activity employs specific renewable energy technologies/measures recommended by the host country designated national authority (DNA) and approved by the Board to be additional in the host country. The following conditions shall apply for DNA recommendations:</i></p> <p><i>(i) "Specific renewable energy technologies/measures" refers to grid connected renewable energy technologies of installed capacity equal to or smaller than 5 MW.</i></p> <p>The present demonstration of additionality used the most recent data available from year 2011 from the "Comité de Operación Económica del Sistema Interconectado Nacional" (Economic Operation .Committee for the National Interconnected System, hereinafter, "COES"), the Peruvian electricity market and national electricity grid operator.</p> <p>According to our Renewable Energy Law (hereinafter, the "RER Law"), Legislative Oecree No. 1002, renewable energy resources (hereinafter, "RER") are defined as (i) biomass, (ii) wind, (iii) solar, (iv) geothermal (v) marine and (vi) hydro power plants that do not exceed an installed capacity of 20 MW (hereinafter "RER Projects").</p> <p>From the above, and according to the RER Law and the Guidelines, the Ministry of the Environment, in its condition of Clean Development Mechanism Peruvian DNA, hereby recommends that the RER Projects with installed capacity's of up to 5 MW should be considered additional and therefore requests the CDM Executive Board to approve the additionality of RER Projects that meet the above mentioned criteria set forth in the Guidelines,</p> <p>For further references, please review the following attachment: CDM Proposed specific renewable technologies measures submission form, spreadsheet named "PERU_demonstration additionality microscale"; the letter COESID-DP-637-2012 dated July 13, 2012 (which informed about the total installed capacity of RER technologies/measures and the percentage of their contribution in the Peruvian annual electricity generation); and the RER Law.</p> <p>Additional Clarification requested on 28-Sept-12</p> <p>This is with reference to your submission on the proposal for automatic additionality of renewable energy technologies (RET) for microscale projects in Peru.</p> <p>In accordance with section V and paragraph 19 of the "Procedure for 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 as outlined below to facilitate the consideration of your submission.</p>	

General:

Please confirm that the information provided on renewable energy plants with capacity lower than 5 MW includes all grid connected renewable energy plants. We noted, based on the annex 5 of the report “Anuario Estadístico de Electricidad 2010” provided under the Ministry of energy, <<http://www.minem.gob.pe/publicacion.php?idSector=6&idPublicacion=405>>, that the information is limited to plants connected to the SEIN. In this regard, we would appreciate your confirmation that only one single interconnected national Grid exists in Peru and there are no other grids (e.g. regional grids that are not connected to a national/interconnected grid). If this is not the case, the capacity of all the plants connected to other grids should also be added.

Hydro:

The total installed capacity of hydro plants of less than 5 MW was reported to be 5.6 MW, resulting in a ratio of 0.08% in the reference year. However, it is noted from the excel sheet accompanying the submission, that this figure was derived based on whether the aggregate installed hydro capacity of each power company is less than 5 MW rather than individual hydro plants less than 5 MW. When recalculated based on the size of individual hydro plants, the total installed capacity of hydro plants with less than 5 MW capacity is 22.33 MW, resulting in a ratio of 0.33% instead of 0.08%. (See attached excel sheet under Tab “Final”). Though this calculated ratio is still under the threshold of three per cent, we would appreciate receiving your confirmation.

Biomass:

It appears that the biomass data for biomass plants less than 5 MW includes the Paramonga plant (bagasse) which is 23 MW. This does not affect the ratio, but it is not clear why it is included under column A of Table 1 of your submission form.

You are requested to provide the information requested above as soon as possible but not later than 26 October 2012.

Response from DNA submitted 25-Oct-12

I would like to thank you for the feedback to our proposal for automatic additionality of renewable energy technologies (RET) for microscale projects in Peru and also answer your questions.

1. General: Peru has one single interconnected national Grid but there are some small isolated grids in regions. Therefore, we considered to use 2010 data which include the national grid and isolated networks; this information was provided under the Ministry of Energy, <http://www.minem.gob.pe/descripcion.php?idSector=6&idTitular=3903> (section 3).
2. Hydro: We recalculated with the new data and the hydro plants with less than 5 MW capacity is 99.19 MW, resulting in a ratio of 1.36%.
3. Biomass: We recalculated this issue in order to considered biomass plant with less than 5 MW capacity, resulting in a ratio of 0.0%.

Please, see in attachment all the change. If you need more information, don't hesitate to ask us.

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:** The most recent data available on the percentage of contributions of specific renewable energy technologies shall be provided to demonstrate compliance with the 3 per cent threshold. No data older than three years from the date of the submission shall be used.

- (c) The submission has provided the most recent data available, from 2011. It is considered that the above requirement is met, based on the information in the submission.
- (d) **Criteria 3:** The ratio of the 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 **6746.3 MW**.
- (i) **Hydro:** The total installed capacity of hydro plants of less than 5 MW was reported to be **99.19 MW** resulting in a ratio of **1.36%** in the reference year. This calculated ratio is under the threshold of three per cent and thus, it is considered that the requirement for hydro technologies (i.e. threshold under three per cent) has been met.
 - (ii) **Renewable Biomass:** the aggregate plant capacity of all renewable biomass technologies equal to or less than 5MW was reported to be **zero** in the reference year. The SSC WG thus considered that the requirement for renewable biomass technologies (i.e. threshold under three per cent) has been met;
 - (iii) **Wind (on-shore):** the aggregate plant capacity of all grid connected total wind turbine installations in the country was reported **zero** in the reference year. It is considered that the requirement for wind technologies (i.e. threshold under three per cent) has been met;
 - (iv) **Geothermal:** the total installed capacity grid connected geothermal power plants in the country was reported to be **zero** in the reference year. It is considered that the requirement for geothermal technologies (i.e. threshold under three per cent) has been met;
- The reported data and calculations provided by DNA of Peru have also been verified by reviewing publicly available report "Anuario Estadístico de Electricidad 2010" provided under the Ministry of energy available at: <http://www.minem.gob.pe/publicacion.php?idSector=6&idPublicacion=405>
- (e) It is noted that a call for public input was open from **6 August 2012 to 19 August 2012** 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 Peru following the "Procedure for submission and consideration of microscale renewable energy technologies for automatic additionality" 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;
- Onshore Wind;
- Geothermal;
- 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.

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

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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