



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

<b>Submitting DNA:</b>	Republic of Macedonia
<b>Title/version of the EB guideline/procedure this submission relates to:</b>	<p>Procedure for submission and consideration of microscale renewable energy technologies for automatic additionality" (Annex 33, EB 65)</p> <p>Guidelines for demonstrating additionality of microscale project activities" (ver.4.0, Annex 26 of EB68)</p>
<b>Contact Information:</b> <i>(name of person or office, e-mail addresses and phone contacts)</i>	<p>Teodora Obradovikj-Grncharovska, M.Sc State Counselor on Climate change Ministry of Environment and Physical Planning Goce Delcev bb, 1000 Skopje Republic of Macedonia</p> <p>Phone: +389 2 3251 455 Fax: +389 2 3220 165 teodoragrncarovska@yahoo.com</p> <p>Dr. Natasa Markovska, Scientific Advisor and Professor at the Research Center for Energy, Informatics and Materials of the Macedonian Academy of Sciences and Arts (ICEIM-MANU). natasa@manu.edu.mk</p>
<b>Summary of the proposal:</b>	
<p>1. Following the "Procedure for submission and consideration of microscale renewable energy technologies for automatic additionality" (Annex 33, EB 65) and taking into account the decision of the Board (EB 65, paragraph 114), the DNA of the Republic of Macedonia proposes the following specific renewable technologies/measures for consideration by the Board for automatic additionality:</p> <ul style="list-style-type: none"> <li>a) Hydro</li> <li>b) Geothermal</li> <li>c) On-shore wind</li> <li>d) Renewable Biomass</li> </ul> <p>2. In accordance with the most recent "Guidelines for demonstrating additionality of microscale project activities" (ver.4.0, Annex 26 of EB68), specifically point 2(d), the DNA confirms that:</p> <ul style="list-style-type: none"> <li>(i) The proposed specific renewable energy technologies are to be limited to projects for grid connected installed capacities equal to or smaller than 5 MW.</li> <li>(ii) The ratio of installed capacity of the proposed grid-connected technologies in the most current official available data on the total installed grid connected power generation of Macedonia (i.e., for 2011) is equal to or less than 3%, which is demonstrated in column (C) of Table 1 in the Annex, namely: <ul style="list-style-type: none"> <li>a) Hydro (Annex, Table 1, 1.1) = 1.63%</li> <li>b) Geothermal (Annex, Table 1, 1.2) = 0%</li> <li>c) On-shore wind (Annex, Table 1, 1.3.2) = 0%</li> <li>d) Renewable Biomass (Annex, Table 1, 1.5) = 0%</li> </ul> </li> </ul>	

(iii) The most recent available data, namely from 2011, has been used to calculate the percentage of contributions of specific renewable energy technologies (refer to Annex).

3. The following grid-connected renewable energy technologies have been excluded from this recommendation as they are already automatically additional in accordance with the most recent "Guidelines on the demonstration of additionality of small scale project activities (ver.9.0, Annex 27, EB68):

- a) Solar technologies (Annex, Table 1, 1.4)
- b) Off-shore wind technologies (Annex, Table 1, 1.3.1)
- c) Marine technologies (wave, tidal) (Annex, Table 1, 1.6)
- d) Building and household rooftop wind turbines up to 100 kW (Annex, Table 1, 1.7)

#### 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 2011. 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 **1896.16 MW**.

- (i) **Hydro:** The installed capacity of hydro plants with less than 5 MW capacity was 30.889 MW leading to a **ratio of 1.63%** (30.889/1896.16) in the reference year. Thus, it is considered that the requirement for Hydro technologies (i.e. ratio under three per cent) has been met;
- (ii) **Geothermal:** The installed capacity of geothermal plants with less than 5 MW capacity 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 three per cent) has been met;
- (iii) **On-shore Wind:** the aggregate plant capacity of all total wind turbine installations in the country was 0 MW, leading to a **ratio of 0%** in the reference year. Thus, it is considered that the requirement for Wind technologies (i.e. ratio under three per cent) has been met;
- (iv) **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 0 MW, leading to a **ratio of 0%** in the reference year. Thus, it is considered that the requirement for renewable biomass technologies (i.e. ratio under three per cent) has been met.

The reported data and calculations provided by DNA of Macedonia have been verified by reviewing publicly available report for year 2011 on the work of the Macedonian Energy Regulatory Commission, available at: <<http://www.erc.org.mk/vertikal.asp?verID=37>>.

- (d) It is noted that a call for public input was open from 14 to 27 September 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 Macedonia 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;
- 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 additional<sup>1</sup>:

- (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

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

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.

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