



## Proposed standardized baseline submission form (Version 02.0)

*To be used by a designated national authority (DNA) when submitting a proposed standardized baseline in accordance with the "Procedure: Development, revision, clarification and update of standardized baselines" (CDM-EB63-A28-PROC).*

### INFORMATION TO BE COMPLETED BY THE DNA

<b>Title of the proposed standardized baseline:</b>	Standardised Baselines for cookstoves in Senegal
<b>Name(s) of the Party or Parties to which the proposed standardized baseline applies:</b>	Senegal
<b>DNA submitting this form:</b>	Direction de l'Environnement et des Etablissements Classés Senegal
<b>Is this one of the first three submissions for a Party with 10 or fewer than 10 registered CDM project activities as of 31 December 2010?</b> <i>(For such a Party, the submission of an assessment report may be omitted. Not required to check Yes or No if the submission is for a group of Parties.)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Attachments:</b>	
<input checked="" type="checkbox"/> Additional documentation supporting the submission (e.g. relevant data, documentation, statistics, studies, calculation tables, etc.), where applicable (Please specify below _____) <i>Calculation of the emission factors (Excel file)</i> <input type="checkbox"/> Data used to establish the proposed standardized baseline <input type="checkbox"/> An assessment report on the quality of the data collection, processing and compilation prepared by a designated operational entity (DOE) <input type="checkbox"/> Letters of approval of all the DNAs of the Parties to which the proposed standardized baseline applies, where the standardized baseline applies to a group of Parties	
<b>Name of authorized officer signing for the DNA:</b>	Mme Madeleine DIOUF SARR
<b>Date (DD/MM/YYYY) and signature for the DNA:</b>	
<b>Contact information of the focal point(s) of the DNA:</b> <i>(Names, email-addresses and phone contacts for procedural and technical communication on the submission)</i>	Direction de l'Environnement et des Etablissements Classés 106, Rue Carnot Dakar BP 6557 Dakar Etoile Sénégal Tél: (221) 821 07 25 Fax: (221) 822 62 12 denv@sentoo.sn

**PROPOSED STANDARDISED BASLINE  
(CDM-PSB) - Version 02.0**



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	Représentante de l'AND du Sénégal Mme Madeleine DIOUF SARR Mobile: (221) 770682533 madodioufsarr@yahoo.fr
<b>Name(s) of the proponent(s) of the proposed standardized baseline:</b>	The Designated National Authority of Senegal
<b>Affiliation of the proponent(s):</b> <i>(The definition of “admitted observer organization” can be found at <a href="http://unfccc.int/resource/ngo/art7_6.pdf">http://unfccc.int/resource/ngo/art7_6.pdf</a>)</i>	<input checked="" type="checkbox"/> Party <input type="checkbox"/> Project Participant (PP) <input type="checkbox"/> International Industry Organization <input type="checkbox"/> Admitted Observer Organization
<b>Contact information of the focal point(s) of the proponent (s):</b> <i>(Names, email-addresses and phone contacts for procedural and technical communication on the submission. Not required to complete this section if the DNA(s) is(are) the proponent(s) of the proposed standardized baseline.)</i>	N/A



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**Proposed standardized baseline submission form  
CDM-PSB-FORM (Version 02.0)**

**Title: “Standardised Baselines for cookstoves in Senegal”**

**Submission date: 15/06/2015**

**Version number: 1.2**

**Approach**

*The standardised baselines were developed using an approach contained in the following approved small-scale methodologies:*

- *AMS-II.G Energy efficiency measures in thermal applications of non-renewable biomass (version 6.0)*
- *AMS-I.E Switch from non-renewable biomass for thermal applications by the user (version 6.0)*

*For demonstration of additionality, the following guidelines are applied:*

- *Guidelines on the demonstration of additionality of small-scale project activities (version 9.0)*
- *Guidelines for sampling and surveys for CDM project activities and programme of activities (version 3.0).*

**Elements to be standardized**

*Please check below all the elements to be standardized by the proposed standardized baseline.*

- ☒ Additionality demonstration
- ☒ Baseline identification
- ☒ Baseline emission/removal estimation
- ☐ Land eligibility demonstration (applicable only to afforestation and reforestation project activities).

**Further inputs requested to the DNA (To be completed by the secretariat)**

*Please provide a list of additional information and/or modifications that are required.*



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- **Values for urban and rural areas:** The proposed default values of per-capita baseline woody biomass consumption are equally applicable to urban and rural areas. The report of the World Bank Survey (WB, 2014) entitled: “Réalisation d’une Enquête Nationale portant sur la Consommation et les Pratiques des Ménages en Combustibles Domestiques, Rapport Final, Août 2014” shows that the wood consumption is more predominant in rural areas whereas urban areas seem to account for higher charcoal consumption. In urban areas, there is also a non-negligible consumption of LPG. For example it is stated in the above report “86% of households in the urban area of the Dakar region were the main fuel Butane gas. Coal remains the main fuel 12% of households Dakar region. Wood is no longer the main fuel for a residual fringe (1% of households). In major cities there is a surge in coal and gas (timidly) and lower consumption of wood in domestic fuels level of the main cities of Senegal. Rural wood is the fuel principal for 81% of households. Only 4% of households use LPG as fuel principal. For the charcoal, the rate is 11%”. It is not explained how this issue has been taken into account. Therefore, further justification should be provided if country-level standardized values are proposed. Alternatively, the DNA may wish to consider proposing separate default values for urban and rural areas or exclude some areas through an applicability condition (See for example ASB0016 for Uganda and ASB0018 for Burundi approved by the Board).

Country-level standardized value (4.68 tons of wood per annum) has been proposed to aid the dissemination of improved cookstoves where wood or charcoal is being used. It is assumed that shift from a more convenient and cleaner fuel - LPG to charcoal/wood, is unlikely to happen. In other words, households using LPG will rather not be interested/involved in charcoal/wood stoves. Further, even if there is mix of fuel use (LPG and charcoal), it would result in lowering the average, thereby conservative. The use of the SBL is to the benefit of wood/charcoal using households irrespective of the rural-urban segregation.

Moreover, as observed in the data set, the values of wood/charcoal consumption in rural and urban is not much different. The wood consumption per household in rural areas is 4.73 tons of wood per annum as against 4.67 tons of wood per annum in urban area.

- **Sampling number and method:** Random sampling followed to avoid bias is not fully clear. It is understood from your submission that a random sub sample of 656 households was drawn from 4300 samples of WB survey cited above, however the process that resulted in random selection was not clear. The calculation of the size of the sample concluded 271 samples would be required for a survey to determine the share of households using wood stoves versus charcoal stoves while the survey is then used to determine the level of consumption of biomass per capita and the average efficiency of the existing cookstoves. This number is then increased to 656 without providing a proper explanation for the basis for the number. The author is requested to explain more clearly why it was not possible or necessary to use all the 4300 samples. Alternatively data from all the 4300 samples may be used or subsamples may be drawn applying a valid sampling method explained in the CDM sampling guidelines. Any rounding off or increase in sampling numbers should be logically explained.

The data extraction has been carried out as per the submitted documents (in French):

- GIZ NRN Foyers améliorés\_Collecte des données de L'Enquête de la BM\_5 juin 2014; and



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- GIZ NRN Foyers améliorés\_Procédure proposée pour l'extraction des données de L'Enquête de la BM\_5 juin 2014

These documents depict the 'Proposed procedure for extracting data the National Survey on consumption and Household practices' and 'Collection of data from the National Survey Household consumption and practices'.

An employee of the WB consultant used a software to randomly pick questionnaires in all areas of Senegal. The data of 700 odd questionnaires were then used picked from the original set of 4,500 questionnaires.

As subsequently, a country-level standardized value has been proposed therefore the rural/urban divide has been ignored. In such case, 271 as sample size would have provided the required 90/10 confidence/precision level. Nevertheless, higher sample size based on available data-set has been used.

- **Application of the defaults in  $B_{old,i,j}$ :** The proposed SB standardises baseline woody biomass consumption per person which when multiplied with the default household occupancy will yield the biomass consumption per household. The resultant value is to be used to determine  $B_{old,i,j}$  (in the case of AMS-II.G, as per data/parameter table 1 on page 10). The approach would work alright when only one project device per household is distributed by the project (i.e. either project device completely displaces all other devices consuming wood fuel in the household during the crediting period or if some baseline devices are continued to be used together with the sole project device, parameter table 6 of AMS-II.G will ensure that such usage is quantified and deducted from the baseline consumption value). Therefore, the author may consider introducing an applicability condition of the SB that only one project device per household is distributed. On the other hand if a situation is foreseen where more than one project device is distributed by the project in the same household, a method to allocate the household consumption to different devices would be required. The cited methodologies do not explicitly provide such a method. The author is requested to explain how the issue is addressed or confirm that only one project device will be distributed. For the former case, introduction of an equation may be considered that captures the capacity and usage hours of the project devices or alternatively if multiple baseline devices are involved and one to one relationship between project and baseline devices can be established, then allocation can be on the basis of relative consumption by different devices in the baseline. The DNA may also wish to consider the possibility of using the WB survey to directly derive and standardize a biomass consumption level per device  $B_{old,i,j}$  which would be appropriate if project devices replace existing devices on a one to one basis.

As per the revised SBL submission, country-level standardized value of 4.68 tons of wood per annum has been proposed, derived directly from the WB data-set.

- **Specific case of renewable energy based water treatment technologies (under AMS-I.E).** The proposed standardized values are not applicable to standalone renewable energy based water treatment technologies under AMS-I.E. The DNA may consider excluding the applicability of the standardized baseline to this case.

In the revised SBL submission, an applicability condition has been included in the SBL stating that it is not applicable to water treatment technologies.

**PROPOSED STANDARDIZED BASELINE SUBMISSION FORM  
(CDM-PSB-FORM) - Version 02.0**



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