



**Programme design document form for
small-scale CDM programmes of activities
(Version 05.0)**

Complete this form in accordance with the Attachment "Instructions for filling out the programme design document form for small-scale CDM programmes of activities" at the end of this form.

PROGRAMME DESIGN DOCUMENT (PoA-DD)

Title of the PoA	Clean Energy Program Supported by Republic of Korea
Version number of the PoA-DD	01.9
Completion date of the PoA-DD	26/06/2018
Coordinating/ managing entity	ECOEYE Co., LTD
Host Party(ies)	The Republic of The Union of Myanmar
Applied methodology(ies) and, where applicable, applied standardized baseline(s)	AMS-II.G ver 08
Sectoral scope(s) linked to the applied methodology(ies)	AMS-II.G ver 08 Sectoral scope 3 (Energy Demand)

PART I. Programme of activities (PoA)

SECTION A. General description of PoA

A.1. Title of the PoA

>>Clean Energy Program Supported by Republic of Korea

Ver 1.9

Date 26/06/2018

A.2. Purpose and general description of the PoA

>>In Myanmar, commonly used fuel for cooking is fuelwood. As per *The 2014 Myanmar Population and Housing Census* report, as much as 86.2% of the rural households and 25.6% of the urban households use fuelwood for cooking¹.

This high dependence on solid biomass degrades local environments; demands considerable time in fuel collection and creates indoor air pollution that causes respiratory diseases. Further, the burning of fuelwood adds significantly to GHG emissions. Both in rural and urban areas, millions of households depend upon fuelwood as their primary fuel for cooking.

(a) Policy/ measure or stated goal of the PoA

The objective of the *Clean Energy Program Supported by Republic of Korea* (hereafter referred to as “the program”) is to promote dissemination of fuelwood burning improved cookstoves (ICS). The implementation of projects under this program will improve access to clean energy, diminish demand for fuelwood, mitigate impact of climate change and contribute in socio-economic development of the beneficiary communities.

(b) Framework for the implementation of the proposed PoA

ECOEYE Co., LTD as a coordinating and managing entity (CME) will implement the CDM PoA- *Clean Energy Program Supported by Republic of Korea*. ECOEYE Co., LTD is a leading carbon offset project developer and trader that assist for-profit and not for profit organizations to implement climate mitigation projects.

The program targets consumers that use fuelwood as their primary fuel for cooking to replace the existing technologies with ICS. The consumption of fuelwood degrade local environments creates indoor air pollution that causes respiratory diseases and adds significantly to GHGs emissions.

The program by replacing inefficient technology/measure such as three stone stove, tripod and traditional cookstoves shall result in clean environment, reduction of GHG emissions and enhanced living standards in the user households.

¹ The 2014 Myanmar Population and Housing Census Highlights of the Main Results Census Report Volume 2 – A, Pg 32 ([http://myanmar.unfpa.org/sites/asiapacific/files/pub-pdf/Census%20Highlights%20Report%20-%20ENGLISH%20\(1\).pdf](http://myanmar.unfpa.org/sites/asiapacific/files/pub-pdf/Census%20Highlights%20Report%20-%20ENGLISH%20(1).pdf))

Under the program, ECOEYE Co., LTD in association with producers, suppliers and implementers of ICS will develop component of project activities (CPAs). It will be responsible for communication with CDM Executive Board and coordinate the work relating to validation, registration, verification and issuance of carbon credits generated by the program.

Additional CPAs may associate with the program during its lifetime. They must adhere to the general implementing framework described in the PoA-DD.

As CME, ECOEYE Co., LTD will be responsible:

- To propose the PoA;
- To communicate with the Board, including on matters related to the distribution of Certified Emission Reductions (CERs);
- To review and assist in the selection and preparation of CPAs, ensuring that all CPAs under its PoA are neither registered as an individual CDM project activity nor included in another registered PoA and that the CPA is subscribed to the PoA;
- To ensure that the same approved baseline and monitoring methodology is applied to all the CPAs;
- To establish CER ownership agreements with the implementing partner organizations;
- To ensure that the project participants maintain and provide monitoring data for calculating CERs;
- To establish and manage the data base for calculating CERs based on data received from the CPA implementing partner organization; and
- To facilitate validation and verification of the program by a Designated Operational Entity.

The role of CPA implementers is detailed below:

- To disseminate ICS;
- To institute adequate record keeping and data monitoring systems for the compilation, computation and storage of data;
- To establish quality control procedures for all monitoring parameters;
- To monitor and record the data.

(c) Confirmation that the PoA is a voluntary action by the CME

There are no laws, policies or mandatory requirements in the country included in this PoA to ensure the use of ICS. This PoA is a voluntary action by ECOEYE Co., LTD. All project participants are voluntarily taking part under this program.

(d) Implementation of projects under the program will contribute in sustainable development of the society

- I. **Social Benefits:** It has been well documented that the burning of solid biomass for cooking is a serious hazard to health causing untimely death of over 4 million people every year and sickens millions more². In comparison, ICS cut fuel consumption and exposure to harmful smoke significantly.
- II. **Economic Benefits:** ICS can enhance the economic well-being of the user through savings in cooking time and recurring fuel expenditure. Time and money saved can be used for other essential activities like education and income generation. ICS can also reduce health risk thus improving the productivity of the user. The program would also lead to employment of large number of people engaged in activities like manufacturing, marketing, selling and servicing of ICS.
- III. **Environmental Benefits:** Traditional cooking technologies like three stone stoves are known to have undesirable effects on forest resources and indoor air quality. In comparison, ICS consumes less fuelwood thereby contributing in conservation of forest. Further, use of ICS produces less GHG emission by limiting the use of fuelwood.
- IV. **Technological Benefits:** ICS are more efficient, durable and safe. With the implementation of this program, the users would get access to a clean and efficient technology.

A.3. CME and participants of PoA

>> ECOEYE Co., LTD is the coordinating/managing entity (CME) of this PoA.

A.4. Party(ies)

Name of Party involved (host) indicates host Party	Private and/or public entity (ies) project participants, CME (as applicable)	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
The Republic of The Union of Myanmar (host)	ECOEYE Co., LTD (private entity)	No

A.5. Physical/ Geographical boundary of the PoA

>>Physical/ Geographical boundary of the PoA will be The Republic of The Union of Myanmar,

Latitude: 19° 04' 24.47" N

Longitude: 96° 40' 15.74" E

Source: <http://latitude.to/map/mm/myanmar>

²Household (Indoor) Air Pollution



A.6. Technologies/measures

>> The program will promote dissemination of fuelwood burning ICS in the program area. The program will replace the existing inefficient stoves with ICS. In any case the rated efficiency of ICSs included under the program will be at least 20 per cent.

Table 1: Technologies included under the PoA

Technology	Improved Cookstoves
Meth	AMS-II.G ver 08
Sectoral Scope	Sectoral scope 3 (Energy Demand)

In the baseline scenario, households are using variety of traditional inefficient technologies such as three stone stove, tripod and mud stove for cooking³. Traditional stoves consume more fuelwood as they are poorly designed and insulated: only a small proportion of the released energy makes it into the pot. ICS uses variety of design features like insulation around combustion chamber, good fast draft, grate to remove ash and others, to improve thermal efficiency. In comparison to traditional stove, ICS consumes less fuel to generate same amount of thermal energy.

Detailed description and technical features of the technologies/measure will be provided in the particular CPA.

All the technologies included under the program will adhere to the requirements of the applicable methodology.

A.7 Public funding of PoA

>>No public funding is made available to finance the program.

SECTION B. Demonstration of additionality and development of eligibility criteria**B.1. Demonstration of additionality for PoA**

>> This program is a voluntary initiative taken by the CME. There are no legal or regulatory requirements in the boundary of the PoA that directs mandatory implementation of activities of the PoA.

As per Standard for Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies for Programme of Activities⁴ *para 10- PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of the methodological tool “Demonstration of additionality of small-scale project activities”.*

As per Methodological tool to Demonstration of additionality of smallscale project activities version 11.0, para 11 Documentation of barriers is not required for the positive list of technologies and

³ Please refer table 3 for detail

⁴ Standard for Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies for Programme of Activities (Version 04.0) Para 9

project activity types that are defined as automatically additional for project sizes up to and including the small-scale CDM thresholds (e.g. installed capacity up to 15 MW). The positive list comprises of:

(a) The following grid-connected and off-grid renewable electricity generation technologies:

- (i) Solar technologies (photovoltaic and solar thermal electricity generation);*
- (ii) Off-shore wind technologies;*
- (iii) Marine technologies (wave, tidal);*
- (iv) Building-integrated wind turbines or household rooftop wind turbines of a size up to 100 kW;*
- (v) Biomass internal gasification combined cycle (BIGCC);*

(b) The following off-grid electricity generation technologies where the individual units do not exceed the thresholds indicated in parentheses with the aggregate project installed capacity not exceeding the 15 MW threshold:

- (i) Micro/pico-hydro (with power plant size up to 100 kW);*
- (ii) Micro/pico-wind turbine (up to 100 kW);*
- (iii) PV-wind hybrid (up to 100 kW);*
- (iv) Geothermal (up to 200 kW);*
- (v) Biomass gasification/biogas (up to 100 kW);*

(c) Project activities solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs) and where the size of each unit is no larger than 1 per cent of the small-scale CDM thresholds;

(d) Rural electrification project activities using renewable energy sources in countries with rural electrification rates less than 50 per cent; the most recent available data on the electrification rates shall be used to demonstrate compliance with the 50 per cent threshold. In no case shall data be used if older than three years from the date of commencement of validation of the project activity;

(e) Rural electrification project activities by grid extension when all the following criteria are met:

- (i) Rural electrification rate in the country is below 50 per cent;*
- (ii) Geography: Least developed countries (LDCs), Small Island Developing States (SIDS), Special Under Developed Zone (SUZ);*
- (iii) Recent trends: rural electrification rate has increased by less than 20 per cent over the past 10 years;*
- (iv) The extension of a grid for rural electrification of a community involves at least a distance of 3 km from the point of grid extension to the rural community at which the CDM project is implemented.*

According to the additionality tool any small-scale project activity is said to be deemed additional if technologies and/or measures included under it fulfil any **a,b,c,d** or **e** requirement mentioned above:

CPAs under this program will include ICS that adhere to applicable criteria **C** as stated above. The size or output of each ICS included under the CPAs will not be more than 1% of the small-scale CDM thresholds⁵ and satisfy the condition to qualify as a 'microscale CDM unit'⁶, whichever is lower.

Table 2: Thresholds for ICS included under the CPAs

Technology	Methodology	1% of the small-scale CDM thresholds ⁷	Microscale CDM unit ⁸	ICS Threshold
Improved Cookstove (ICS)	AMS-II.G ver 08	The aggregate energy savings of a single project device shall not exceed 1.8 GWh th /yr or 1,800 MWh th /yr	The aggregate energy savings of a single project device shall not exceed 1.8 GWh th /yr or 1,800 MWh th /yr	The aggregate energy savings of a single project device shall not exceed 1.8 GWh th /yr or 1,800 MWh th /yr

In addition, these criteria are listed as eligibility criteria for inclusion of a CPA in the program, thus, all the included CPA(s) in the PoA are deemed additional. Also, as this would be a characteristic of all the CPAs in the PoA, hence the additionality is demonstrated once at PoA level directly.

B.2. Eligibility criteria for inclusion of a CPA in the PoA

>>The eligibility criteria for inclusion of a CPA in the program have been developed as per the *Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities Version 4*. A CPA that is included in the program must meet the following criteria:

Table 3: CPA Eligibility Criteria

S.No	Criteria	Eligibility	Confirmation
a	The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	The technologies and/or measures implemented under CPA must operate within the geographical boundary of Myanmar, Latitude: 19° 04' 24.47" N	CPA-DD will contain description regarding geographical boundary of the CPA

⁵ CDM project standard Version 09.0. Paragraph 99

⁶ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

⁷ CDM project standard Version 09.0. Paragraph 99

⁸ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

		Longitude: 96° 40' 15.74" E ⁹	
b	Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);	<ul style="list-style-type: none"> Carbon emission reductions claimed by the CPA should be unique and not counted more than once; CPAs shall use only AMS-II.G ver 08.0; CPA can provide only one ICS to one household; If the life span of device is less than the crediting period it will be removed from the CPA after completing its lifespan and no emission reductions can be claimed beyond the life span of the project device 	<ul style="list-style-type: none"> To avoid double counting of ICS, all ICS under the PoA will bear the CME logo and 12 digit unique serial number. Unique serial number and user location details will identify the project devices individually and will separate it from other programs, if any in the present or in the future. The unique serial number can be verified with the product database; CPA-DD will contain description of applied methodology; CPA-DD, section A.5 will contain description of particular ICS included in the CPA. If it is found that household has received more than one ICS then additional ICS(s) will be removed from the project database and emission reduction calculation; Manufacturer's

⁹ Coordinates of Myanmar. <http://latitude.to/map/mm/myanmar>

			specification or third party report for the lifespan of the equipment will be provided in the specific CPA
c	The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;	<p>The ICS included under the CPA must adhere to following criteria:</p> <ul style="list-style-type: none"> a) Thermal efficiency should be at least 20 percent; b) ICS should be a single pot ,metallic, portable and fuelwood burning stove; c) The lifespan of ICS should be at least 4 years; d) The power of the ICS should not be more than 5 kW; e) The annual energy savings should not be more than 1800 MWhth/yr/unit; f) The ICS used under the proposed CPAs will be as per table 2, B.1 of the PoA-DD 	<p>CPA-DD, section A.5 will contain description of particular ICS included in the CPA.</p> <ul style="list-style-type: none"> a) Manufacturer's specification and/or third party report based on WBT protocol to confirm that the ICS used under the CPA has a thermal efficiency of at least 20 percent; b) Manufacturer's specification and/or third party report to confirm that the ICS used under the CPA will be a single pot ,metallic, portable and fuelwood burning stove; c) Manufacturer's specification and/or third party report to confirm that the ICS used under the CPA has a lifespan of at least 4 years; d) Manufacturer's specification and/or third party report to

			<p>confirm that the power of ICS used under the CPA is not more than 5 kW;</p> <p>e) ER calculation sheet. The annual energy savings of the ICS will be derived from Manufacturer's specification and/or third party report;</p> <p>f) The annual energy savings of the ICS will be derived from Manufacturer's specification and/or third party report to confirm that the ICS used under the CPA will be as per table 2, B.1 of PoA-DD</p>
d	Conditions to check the start date of the CPA through documentary evidence	Date on which first ICS was distributed. The start date of any proposed CDM CPA will be on or after the start date of the proposed CDM PoA	Sales agreement/voucher
e	Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs	CPAs shall use only AMS-II.G ver 08.0. For all CPAs that will be included in this program, the use of applicable methodology shall be justified	CPA-DD, section D.2 will contain justification for the applicability of the methodology
f	The conditions that ensure that the CPA meets the requirements	The additionality of the project activity is	CPA-DD section D.5 (f), will contain justification for

	<p>pertaining to the demonstration of additionality</p>	<p>demonstrated by a deemed additional approach. As per para C on page 11 of <i>Methodological tool to Demonstration of additionality of smallscale project activities version 11.0</i>¹⁰ project activity is deemed additional if:</p> <p><i>Project activities solely composed of isolated units where the users of the technology/measure are households or communities or small and medium enterprises (SMEs) and where the size of each unit is no larger than 1% of the small-scale CDM thresholds.</i></p> <p>The annual energy savings of each project device included under the CPAs will not be more than 1% of the small-scale CDM thresholds¹¹ and satisfy the condition to qualify as a 'microscale CDM unit'¹² and users will be</p>	<p>the additionality</p>
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¹⁰ Methodological tool: Demonstration of additionality of small-scale project activities Version 11.0. [Pg 4](#), para 11

¹¹ CDM project standard Version 09.0. Paragraph 99

¹² Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

		households or communities or small and medium enterprises (SMEs)	
g	The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis	<p>The local stakeholder consultation was conducted at the PoA level (Section F of the PoA-DD).</p> <p>The key stakeholders of the program both at PoA and CPA level are the same. However, the stakeholder consultation will be repeated at CPA level as soon as:</p> <ul style="list-style-type: none"> - A CPA is included with a boundary reaching outside Myanmar. <p>An environmental impact analysis is not required (section E.2 of the PoA-DD) if the geographic boundary of CPA in Myanmar or within Myanmar)</p> <p>In case, if the CPA geographic boundary is outside of Myanmar then CPA will justify environmental impact analysis based on regulation in that region</p>	CPA geographic boundary. Please refer section A.7 of the CPA-DD
h	Conditions to provide an affirmation that funding from Annex I Parties, if	Affirmation that funding from Annex I Parties, if	Declaration from CME and

	any, does not result in a diversion of official development assistance	any, does not result in a diversion of official development assistance	CPA implementer that no funds for official development assistance will be used for program implementation
i	Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation)	Target group will be fuelwood using households/SME and CPA implementer will distribute ICS through direct marketing and/or through separate entity	CPA-DD section A.3 will contain description of target group and distribution mechanism
j	Where applicable, the conditions related to sampling requirements for the PoA in accordance with the “Standard for sampling and surveys for CDM project activities and programme of activities”	CPAs under the program will adhere to all requirements as mentioned in <i>Standard for sampling and surveys for CDM project activities and programme of activities ver 07.0</i> ¹³	CPAs will follow monitoring plan based on applied methodology and <i>Standard for sampling and surveys for CDM project activities and programme of activities ver 07.0</i> ¹⁴ and described in CPA-DD section D.7.2

¹³Standard for Sampling and surveys for CDM project activities and programmes of activities version 07.0

¹⁴Standard for Sampling and surveys for CDM project activities and programmes of activities version 07.0

k	Where applicable, the conditions that ensure that every CPA meets the small-scale or microscale threshold and remains within those thresholds throughout the crediting period of the CPA. However, for a CPA that consists of only units that qualify as 'microscale CDM units' as defined in the methodological tool "Demonstration of additionality of microscale project activities", this condition is not required;	The annual energy savings of each project device included under the CPAs will not be more than 1% of the small-scale CDM thresholds ¹⁵ and satisfy the condition to qualify as a 'microscale CDM unit' ¹⁶ i.e. energy savings of each project device shall not exceed 1800 MWh th /yr. Therefore demonstration of a compliance of the CPA with the small-scale thresholds at the aggregate level of the CPA is not required	CPA-DD, section D.5 (k). Technical rating/performance of the technologies and/or measures used under the proposed CPA to confirm eligibility criteria that the size or output of each project device included under the CPAs is not be more than 1% of the small-scale CDM thresholds ¹⁷ and satisfy the condition to qualify as a 'microscale CDM unit' ¹⁸
l	Where applicable, the requirements for the debundling check, in case the CPA belongs to small-scale or microscale project categories. However, if a CPA solely consists of 'microscale CDM units', the requirement regarding debundling is not applicable	The annual energy savings of each project device included under the CPAs will not be more than 1% of the small-scale CDM thresholds ¹⁹ and satisfy the condition to qualify as a 'microscale CDM unit' ²⁰ so that the requirement regarding debundling is not applicable	CPA-DD, section D.5 (l). Technical rating/performance of the technologies and/or measures used under the proposed CPA to confirm eligibility criteria that the size or output of each project device included under the CPAs is not be more than 1% of the small-scale CDM thresholds ²¹ and satisfy the condition to qualify as a 'microscale CDM unit' ²²

¹⁵ CDM project standard Version 09.0. Paragraph 99

¹⁶ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

¹⁷ CDM project standard Version 09.0. Paragraph 99

¹⁸ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

¹⁹ CDM project standard Version 09.0. Paragraph 99

²⁰ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

²¹ CDM project standard Version 09.0. Paragraph 99

²² Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

m	CPA Inclusion	CME approval	<p>1. Letter of agreement is required in case CPA is implemented by the entity other than CME</p> <p>2. Self declaration is required in case CPA is implemented by the CME</p>
n	Carbon Emission Reduction Rights	End users of technology will cede their rights to claim and own carbon emission reductions to the CME	A default sales agreement for end users including the provision that emission reductions achieved by the technology are owned by the CME
o	Awareness and agreement of those operating a CPA on PoA subscription	Contractual provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA	Evidence for inclusion, in case CPA operators are different from the CME: A declaration/agreement from CPA operators, stating that they are aware and have agreed that their activity is being subscribed to the PoA will be provided for each CPA

B.3. Application of technologies/measures and methodologies

>> The program will introduce ICS in the program area.

Table 4: CPA Description

Technology	Baseline Scenario	Measure	Methodology	Sectoral Scope
Improved Cookstove	Baseline scenario would be the projected use of fossil fuels to meet similar thermal energy needs as those provided by the project devices	Introduction of more efficient technology without fuel switching	AMS-II.G ver 08	3 (Energy Demand)

Table 5: Justification for the Methodology

Applicable methodology is AMS-II.G Energy efficiency measures in thermal applications of non-renewable biomass ver 8.0²³

Methodology AMS-II.G ver 8.0 Applicability Criteria	Justification
<i>Para 2.</i> This methodology comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices and/or energy efficiency improvements in existing biomass fired cook stoves or ovens or dryers	CPA includes dissemination of ICS to replace the existing inefficient cook stoves
<i>Para 3.</i> The methodology is applicable to introduction of single pot or multi pot portable or in-situ cook stoves with rated efficiency of at least 20 per cent	CPA include single pot fuelwood ICSs with rated efficiency of at least 20 per cent
<i>Para 4.</i> The aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel input	<p>According to Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities Version 4 paragraph 18 (K) <i>“Where applicable, the conditions that ensure that every CPA meets the small-scale or microscale threshold and remains within those thresholds throughout the crediting period of the CPA. However, for a CPA that consists of only units that qualify as ‘microscale CDM units’ as defined in the methodological tool “Demonstration of additionality of microscale project activities, this condition is not required”.</i></p> <p>The technologies used under the proposed CPA qualify as microscale CDM units as the annual</p>

²³AMS.II-G ver 08

	energy saving of ICSs types included under the CPA will always be less than 1800 MWh ^{th24} /yr Therefore demonstration of a compliance of the CPA with the small-scale thresholds at the aggregate level of the CPA is not required
Para 5. Non-renewable biomass has been used in the project region since 31 December 1989, using survey methods or referring to published literature, official reports or statistics	According to the <i>Global Forest Resource Assessment 2015</i> report prepared by <i>Food and Agriculture Organization of the United Nations</i> -between 1990-2015, 10.17 million ha ²⁵ of forest area was lost whereas plantation in the same period was only 0.551 million ha ²⁶ . Thus, it is clear that deforestation rate is higher than reforestation and fuelwood extracted from forest is a non-renewable biomass. Thus extraction non-renewable biomass in project area is prevalent since 1989
<p><i>Para 42. The use of this methodology in a project activity under a programme of activities is legitimate if the following leakages are estimated and accounted for, as required on a sample basis using a 90/30 precision for the selection of samples:</i></p> <p><i>a) Use of non-renewable woody biomass saved under the project activity to justify the baseline of other CDM project activities can also be a potential source of leakage. If this leakage assessment quantifies a portion of non-renewable woody biomass saved under the project activity that is then used as the baseline of other CDM project activities then Bold,i,j is adjusted to account for the quantified leakage;</i></p> <p><i>b) Increase in the use of non-renewable woody biomass outside the project boundary to create</i></p>	CPA has adopted approach C to estimate leakages, a net to gross adjustment factor of 0.95 to account for both leakages, in which case surveys are not required

²⁴ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

²⁵ Global Forest Resource Assessment 2015. Pg 12, table 2. Year 1990 –Forest Cover 39.218 m ha and in year 2015- Forest Cover 29.04 m ha (39.218 – 29.04 = 10.17 m ha)

²⁶ Global Forest Resource Assessment 2015. Pg 55, table 10. Year 1990 –Planted Forest 0.393 m ha and in year 2015- Planted Forest 0.944 m ha (0.944- 0.393 = 0.551 m ha)

<p><i>non-renewable woody biomass baselines can also be a potential source of leakage. If this leakage assessment quantifies an increase in the use of nonrenewable woody biomass outside the project boundary then $Bold_{i,j}$ is adjusted to account for the quantified leakage;</i></p> <p><i>c) As an alternative to subparagraphs (a) and (b) $Bold_{i,j}$ can be multiplied by a net to gross adjustment factor of 0.95 to account for both leakages, in which case surveys are not required</i></p>	
<p><i>Para 43. To determine the value of the fraction of non-renewable biomass (fNRB) to be applied in a component project activity (CPA) of a POA, use one of the two options as follows:</i></p> <p><i>(a) Conduct local own studies to determine the local fNRB value (sub national values); or</i></p> <p><i>(b) Use default national values approved by the Board. The choice of which option to use shall be made ex ante.</i></p> <p><i>However, a switch from a national value of fNRB (i.e. option (b)) to sub-national values (i.e. option (a)) is permitted, under the condition that the selected approach is consistently applied to all CPAs</i></p>	<p>CPA has adopted approach as per option a i.e. <i>Conduct local own studies to determine the local fNRB value (sub national values).</i></p> <p>Methodological tool- Calculation of the fraction of non-renewable biomass version 01.0 is used to determine fNRB value</p>

B.4. Date of completion of application of methodology and standardized baseline and contact information of responsible person(s)/ entity(ies)

>> Date of completion 08/04/2017

Contact info: ECOEYE Co., LTD

email. sangsun.ha@ecoeye.com

www.ecoeye.com

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SECTION C. Management system

>> The management system is designed as per the Standard for Demonstration of Additionality, Development of Eligibility Criteria and Application of Multiple Methodologies for Programme of Activities, ver 04.0 paragraph 21.

a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies:

Entity	Role and Responsibility
ECOEYE Co., LTD	<p>As CME, ECOEYE Co., LTD will be responsible:</p> <ul style="list-style-type: none"> • To sign agreements with CPA implementers; • To sign agreements with DOE for inclusion and verification services; To communicate with the CDMEB, including on matters related to the distribution of Certified Emission Reductions (CERs); • To review and assist in the selection and preparation of CPAs, ensuring that all CPAs fulfils eligibility criteria and neither registered as an individual CDM project activity nor included in another registered PoA ; • To ensure that ICS under the PoA meets minimum thermal efficiency requirement of twenty percent and satisfy the condition to qualify as a 'microscale CDM unit'²⁷; • To ensure that the same approved baseline and monitoring methodology is applied to all the CPAs; • To establish CER ownership agreements with the CPA implementers; • To train and supervise CPA implementer in data collection and archiving; • To ensure that the CPA implementers maintain and provide monitoring data for calculating CERs; • To plan and manage validation and verification process; • To establish and manage the data base for calculating CERs based on data received from the CPA implementers
CPA implementers	<p>The role of CPA implementers is detailed below:</p> <ul style="list-style-type: none"> • To disseminate ICS; • To institute adequate data collection and archiving systems; • To establish quality control procedures for all monitoring parameters; • To monitor and record the data.

CME Competency

ECOEYE Co., LTD is a leading CDM project developer and trader that assist for-profit and not for profit organizations to implement climate mitigation projects. With over fifteen years of

²⁷ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

experience, CME has a team of experienced professionals which are highly skilled in CDM project identification and development, renewable energy technologies, rural markets and sampling techniques. Over the past fifteen years, CME has developed many carbon offset projects including CDM, PoA, Korea ETS Offset Scheme and KVER (Korea Voluntary Emission Reduction), in the fields of energy efficiency, waste management and renewable energy.

b) Records of arrangements for training and capacity development for personnel:

CME will provide capacity building and training to CPA implementer's team to enhance:

- ICS marketing and distribution; and
- Data collection and archiving capability;

CME will keep records of capacity building and training activities.

c) A procedure for technical review of inclusion of CPAs:

- CME will collect all documents/information necessary to check compliance of CPA with the eligibility criteria of the PoA;
- Checking whether the CPA and included technology fulfils eligibility criteria of the PoA or not;
- CME will review monitoring plan of the CPA to ensure that it is in line with the monitoring plan mentioned in section B.7.2 of the PoA DD.

d) A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or included as a CPA in another registered CDM PoA):

- Every new CPA will be compared to the already existing database and the list of similar project activities that are under validation or registered at the UNFCCC or any other mechanism to avail climate change mitigation benefits;;
- CPA implementers in the PoA will be made aware of the double counting principle i.e. CPA should neither a CDM project and/or as a part of any other CDM PoA and/or any other mechanism to avail climate change mitigation benefits;
- To avoid double counting of ICS, all ICS under the PoA will bear the CME logo and 12 digit unique serial number. The unique serial number will be a combination of numbers representing ICS's country of manufacturing, country of destination and manufacturing date. Unique serial number and user location details will identify the project devices individually and will separate it from other programs, if any in the present or in the future. The unique serial number can be verified with the product database.

Each ICS distributed will be entered into the PD with unique serial number and user details that will clearly and unmistakably keep track of the ICS in each CPA. Therefore it will not be possible for a particular ICS to be counted in two different CPAs.

e) Records and documentation control process for each CPA under the PoA:

The CME will train CPA implementer personnel in project implementation, particularly in data collection and archiving.

Step 1: Data collection

An ICS can be distributed either by the CPA implementer or through one of its distribution network (distributor, dealer, retailer network, intermediary etc). Relevant customer data such as name, address, signature, ICS type, unique serial number and sales date will be recorded by the CPA implementer's field personnel using either electronic or paper-based means at the time of ICS distribution.

Step 2: Data Archiving

The CME will maintain a record keeping system- Project Database (PD) for each CPA. The total number of ICS by type and age group deployed during period y is tracked in the PD, which is updated regularly. All ICS distributed will be recorded for sales date and user details. The sales date for each ICS listed in the PD signifies the start of operation. This information will allow the CME/CPA implementers to track particular ICS and/or user.

f) Measures for continuous improvements of the PoA management system:

PoA management system will be reviewed by the CME on regular basis for timely identification and resolution of issues. The review system will identify and resolve any problems related to ICS distribution and monitoring, data collection and maintenance. The review system will improve the PoA management system.

SECTION D. Duration of PoA**D.1. Start date of PoA**

>> 13/04/2017, date when the PoA-DD was published for the initial Global Stakeholder Consultation.

D.2. Duration of the PoA

>> 28 years

SECTION E. Environmental impacts**E.1. Level at which environmental analysis is undertaken**

>> The environmental analysis is undertaken at a PoA level only since all CPAs under the PoA will disseminate ICS and thus has the same impact as the program itself.

E.2. Analysis of the environmental impacts

>>The objective of the program is to promote dissemination of ICS in the program area. The positive environmental impacts of ICS are well known and recognized by the international agency²⁸. Therefore it is reasonable to expect that ICS impact will be positive on the environment of program area.

²⁸Inefficient stoves impact. <http://cleancookstoves.org/impact-areas/>

Table 6: Environmental Impact Analysis

Indicator	Impact	Justification
Air Quality	Positive	ICS produce less GHG emissions by limiting the use of fuelwood thereby improving the indoor air quality
Water Quality	Neutral	Installation or operation of ICS does not involve water in any significant manner. Thus it is reasonable to assume that impact of these technologies on water quality would be neutral
Biodiversity	Positive	The harvesting of fuelwood results in net loss of forested area or in degradation of ecosystem. ICS reduce pressure on forest resources for fuel as they are more fuel efficient than traditional stoves
Other Pollutants	Neutral	Installation or operation of ICS does not produce any hazardous material

In accordance with the Republic of the Union of Myanmar regulations, an environmental impact assessment (EIA) is not required for the distribution and implementation of improved cookstoves; these technologies are not included in the list of 141 sectors identified under EIA²⁹ rules.

SECTION F. Local stakeholder consultation

F.1. Solicitation of comments from local stakeholders

>>The stakeholder consultation was conducted at PoA level, since the technology and its impacts will be similar in the entire PoA.

The local stakeholder consultation meeting was held on 04/04/2017 at Chatrium Hotel, Yangon. Invitations were sent on 21/03/2017, two weeks prior to the meeting through emails and meeting notification was published on 31/03/2017 in two of the major newspapers; English and Burmese. Meeting was open to anybody willing to participate (private citizens, representatives of associations, interest groups, unions, public authorities, NGOs, etc).

Stakeholders belonging to different groups were invited to comment on the PoA by email and in the physical meeting. Twenty five people, representatives the following groups, took part in the local stakeholder consultation meeting:

1. Baseline stove users
2. ICS producers and suppliers
3. Local and international NGOs

²⁹ENVIRONMENTAL IMPACT ASSESSMENT PROCEDURE The Government of the Republic of the Union of Myanmar Ministry of Environmental Conservation and Forestry Notification No. 616 / 2015 Nay Pyi Taw, the 3 rd Waning Day of Nadaw, 1377 M.E. (29 December, 2015). .E. <http://www.myanmar-responsiblebusiness.org/resources/environmental-impact-assessment-procedures.html>

4. Multilateral agencies
5. Private sector
6. Sectoral experts, academicians and others

Stakeholder consultation meetings addressed:

1. Non-technical summary of the program (presented in English and Burmese)
2. Overview of the program and its implementers, objectives of the program and project activities, technologies to be disseminated, target areas and opportunities at local and national level
3. Project activities and impact on sustainable development
4. Stakeholders' questions and feedback on the perceived impacts of the project activities at local, national and regional levels.

F.2. Summary of comments received

>> Feedback from the meeting participants was very positive and the CME was encouraged to scale up the program as soon as possible. Participants commented and asked questions about the structure of the PoA, the expected price of the ICS and about several features of the ICS. Inclusion of local ICS under the PoA was also discussed. Moreover, participants asked what impacts the PoA would have on the local level, particularly regarding job creation.

S.No	Stakeholder Name	Designation	Comment
1	Mr Zaw Zaw Han	President, Ever Green Group	Program will improve local and indoor environment
2	Dr Zaw Min Sein	President Swanyee Group	Program will encourage private sector participation in ICS sector
3	Mr Donald K Hla	Mangroove Service Network	Local people will get job in ICS value chain
4	Mr Myint Than	Manager Sociolite Foundation	Households can get access to improved technology

F.3. Report on consideration of comments received

>> All questions asked were answered by the CME and the project participants. Since virtually all comments were positive, no change of the PoA design is required.

SECTION G. Approval and authorization

>> Host country approval letter was received on 21st Nov 2017.

PART II. Generic component project activity (CPA)

SECTION A. General description of a generic CPA

A.1. Purpose and general description of generic CPAs

>>The proposed CPA~~XX~~ is a part of “*Clean Energy Program Supported by Republic of Korea*” PoA. Purpose of the CPA is to disseminate Improved Cookstoves (ICS) to households that are using fuelwood as a cooking fuel.

Traditional stoves have poor design lowering heat transfer to the cooking pot. This results in heat loss and high consumption of fuelwood. The ICSs promoted under the CPA will reduce consumption of fuelwood and thus limiting emission of GHGs.

Technology

This CPA includes distribution of Improved Cookstoves (ICS) only. These are fuel efficient fuelwood burning stoves. An ICS has enclosure for the fire to reduce the loss of radiant heat and protect it against the wind. It increases transfer of heat to the cooking pot by guiding upward flow of the flue gases. ICS burns fuel more cleanly and efficiently reducing fuel consumption and GHG emissions, easing pressure on forest resources and reducing indoor air pollution.

CPA Boundary

The geographic boundary of the CPA is [name of region].

Target group

The CPA targets households that use fuelwood as their primary fuel for cooking to replace the existing technologies/measures with ICS. The consumption of fuelwood degrade local environments creates indoor air pollution that causes respiratory diseases and adds significantly to GHG emissions.

The CPA by replacing traditional cookstoves and cutting demand for fuelwood will result in clean environment, reduction of GHG emissions and enhanced living standards in the user households.

Environmental Well Being: as mentioned in section A.2 of PoA DD

Socio-economic Well Being: as mentioned in section A.2 of PoA DD

[Name of the CPA implementer(s)] as the CPA implementer will distribute ICS through direct marketing and or through separate entity.

SECTION B. Application of a baseline and monitoring methodology and standardized baseline

B.1. Reference of methodology(ies) and standardized baseline(s)

>>AMS-II.G Energy efficiency measures in thermal applications of non-renewable biomass ver 8.0³⁰. Sectoral scope 3.

³⁰AMS-II-G ver 08

B.2. Applicability of methodology(ies) and standardized baseline(s)

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Methodology AMS-II.G ver 8.0 Applicability Criteria	Justification
<p><i>Para 2.</i> This methodology comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices (cook stoves or ovens or dryers) to replace the existing devices and/or energy efficiency improvements in existing biomass fired cook stoves or ovens or dryers.</p>	<p>CPA includes dissemination of high efficiency fuelwood stoves to replace existing inefficient and smoky stoves</p>
<p><i>Para 3.</i> The methodology is applicable to introduction of single pot or multi pot portable or in-situ cook stoves with rated efficiency of at least 20 per cent</p>	<p>CPA include single pot portable fuelwood cook stoves with rated efficiency of at least 20 per cent</p>
<p><i>Para 4.</i> The aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel input</p>	<p>According to Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities Version 4, paragraph 18 (K) <i>“Where applicable, the conditions that ensure that every CPA meets the small-scale or microscale threshold and remains within those thresholds throughout the crediting period of the CPA. However, for a CPA that consists of only units that qualify as ‘microscale CDM units’ as defined in the methodological tool “Demonstration of additionality of microscale project activities”, this condition is not required”.</i></p> <p>The technologies used under the proposed CPA qualify as microscale CDM units as the annual</p>

	energy saving of ICS types included under the CPA will always be less than 1800 MWh ^{th31} . Therefore demonstration of a compliance of the CPA with the small-scale thresholds at the aggregate level of the CPA is not required
Para 5. Non-renewable biomass has been used in the project region since 31 December 1989, using survey methods or referring to published literature, official reports or statistics	Between 19XX-90, XXXX ha of forest area was lost whereas plantation in the same period was only XXXX ha or between 19XX-90, fuelwood demand was XXXX tonnes and in the same period fuelwood production was only XXXX tonnes. Thus, it is clear that deforestation rate/fuelwood extraction is higher than reforestation and non-renewable biomass extraction in project area is prevalent since 1989
<p>Para 42. The use of this methodology in a project activity under a programme of activities is legitimate if the following leakages are estimated and accounted for, as required on a sample basis using a 90/30 precision for the selection of samples:</p> <p>a) Use of non-renewable woody biomass saved under the project activity to justify the baseline of other CDM project activities can also be a potential source of leakage. If this leakage assessment quantifies a portion of non-renewable woody biomass saved under the project activity that is then used as the baseline of other CDM project activities then <i>Bold, i, j</i> is adjusted to account for the quantified leakage;</p> <p>b) Increase in the use of non-renewable woody biomass outside the project boundary to create non-renewable woody biomass baselines can also be a potential source of leakage. If this leakage assessment quantifies an increase in</p>	CPA has adopted approach as per option C to estimate leakages

³¹ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

<p>the use of nonrenewable woody biomass outside the project boundary then $Bold_{i,j}$ is adjusted to account for the quantified leakage;</p> <p>c) As an alternative to subparagraphs (a) and (b) $Bold_{i,j}$ can be multiplied by a net to gross adjustment factor of 0.95 to account for both leakages, in which case surveys are not required</p>	
<p>Para 43. To determine the value of the fraction of non-renewable biomass (fNRB) to be applied in a component project activity (CPA) of a POA, use one of the two options as follows:</p> <p>(a) Conduct local own studies to determine the local fNRB value (sub national values); or</p> <p>(b) Use default national values approved by the Board. The choice of which option to use shall be made ex ante.</p> <p>However, a switch from a national value of fNRB (i.e. option (b)) to sub-national values (i.e. option (a)) is permitted, under the condition that the selected approach is consistently applied to all CPAs</p>	<p>CPA has adopted approach as per option a i.e. Conduct local own studies to determine the local fNRB value (sub national values).</p> <p>Methodological tool- Calculation of the fraction of non-renewable biomass version 01.0 is used to determine fNRB value</p>

B.3. Sources and GHGs

>> The project boundary is the physical, geographical site of the use of the ICS.

Scenario	Source	Gas	Included	Justification
Baseline	Combustion of non-renewable biomass for cooking	CO ₂	Yes	Carbon dioxide is the main GHG from combustion of fossil fuel
		CH ₄	No	Minor emission source; this is conservative
		N ₂ O	No	Minor emission source; this is conservative
Project	Combustion of non-renewable biomass for cooking	CO ₂	Yes	Main source of emission
		CH ₄	No	Minor emission source; this is conservative
		N ₂ O	No	Minor emission source; this is conservative
Leakage	Leakage related to the use/ diversion of non-renewable woody biomass	CO ₂	Yes	Baseline fuel wood consumption is multiplied by

	saved under the project activity by non –project households/users			a net to gross adjustment factor of 0.95 to account for leakages
		CH ₄	No	Minor emission source; this is conservative
		N ₂ O	No	Minor emission source; this is conservative
	If equipment utilised under the project activity is transferred from outside the boundary	CO ₂	No	No transfer of equipment is involved
		CH ₄	No	No transfer of equipment is involved
		N ₂ O	No	No transfer of equipment is involved

B.4. Description of baseline scenario

>> As per paragraph 14, AMS-II.G ver 08- It is assumed that in the absence of the project activity, the baseline scenario would be the projected use of fossil fuels to meet similar thermal energy needs as those provided by the project devices. As specified in the methodology, default value 81.6 tCO₂/TJ is used as the emission factor for the substitution of non-renewable biomass by similar consumers (EF_{projected_fossilfuel}). Hence this default value will be used for baseline emission calculation for this CPA.

B.5. Demonstration of eligibility for a generic CPA

>>The eligibility criteria for inclusion of a CPA in the program have been developed as per the *Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities Version 04.0.A* CPA that is included in the program must meet the following criteria:

Table 7: CPA Eligibility Criteria

S.No	Criteria	Eligibility	Confirmation
a	The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	The technologies and/or measures implemented under CPA must operate within the geographical boundary of Myanmar, Latitude: 19° 04' 24.47" N Longitude: 96° 40' 15.74" E ³²	CPA geographic boundary is [name of the region] which is within geographic boundary of the program

³² Coordinates of Myanmar. <http://latitude.to/map/mm/myanmar>

b	<p>Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);</p>	<ul style="list-style-type: none"> • Carbon emission reductions claimed by the CPA should be unique and not counted more than once; • CPAs shall use only AMS-II.G ver 08.0; • CPA can provide only one ICS to one household; • If the life span of device is less than the crediting period it will be removed from the CPA after completing its lifespan and no emission reductions can be claimed beyond the life span of the project device 	<ul style="list-style-type: none"> • To avoid double counting of ICS, all ICS under the PoA will bear the CME logo and 12 digit unique serial number. Unique serial number and user location details will identify the project devices individually and will separate it from other programs, if any in the present or in the future. The unique serial number can be verified with the product database; • CPA-DD contains only one meth i.e. AMS-II.G ver 08; • CPA-DD, section A.5 will contain description of particular ICS included in the CPA. If it is found that household has received more than one ICS then additional ICS(s) will be removed from the project database and emission reduction calculation; • Manufacturer's specification or third party report for the lifespan of the equipment will be
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			provided in the specific CPA
c	The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;	<p>The ICS included under the CPA must adhere to following criteria:</p> <ul style="list-style-type: none"> a) Thermal efficiency should be at least 20 percent; b) ICS should be a single pot ,metallic, portable and fuelwood burning stove; c) The lifespan of ICS should be at least 4 years; d) The power of the ICS should not be more than 5 kW; e) The annual energy savings should not be more than 1800 MWhth/yr/unit; f) The ICS used under the proposed CPAs will be as per table 2, B.1 of the PoA-DD 	<p>CPA-DD, section A.5 will contain description of particular ICS included in the CPA.</p> <ul style="list-style-type: none"> a) Manufacturer's specification and/or third party report based on WBT protocol to confirm that the ICS used under the CPA has a thermal efficiency of at least 20 percent; b) Manufacturer's specification and/or third party report to confirm that the ICS used under the CPA will be a single pot ,metallic, portable and fuelwood burning stove; c) Manufacturer's specification and/or third party report to confirm that the ICS used under the CPA has a lifespan of at least 4 years; d) Manufacturer's specification and/or third party report to confirm that the power of ICS used under the CPA is not more than

			<p>5 kW;</p> <p>e) ER calculation sheet. The annual energy savings of the ICS will be derived from Manufacturer's specification and/or third party report;</p> <p>f) The annual energy savings of the ICS will be derived from Manufacturer's specification and/or third party report to confirm that the ICS used under the CPA will be as per table 2, B.1 of PoA-DD</p>
d	Conditions to check the start date of the CPA through documentary evidence	Date on which first ICS was distributed. The start date of any proposed CDM CPA will be on or after the start date of the proposed CDM PoA	Sales agreement/voucher
e	Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs	CPAs shall use only AMS-II.G ver 08.0. For all CPAs that will be included in this program, the use of applicable methodology shall be justified	CPA-DD, section D.2 contains evidence for the applicability of AMS-II.G ver 08.0
f	The conditions that ensure that the CPA meets the requirements pertaining to the demonstration of additionality	The additionality of the project activity is demonstrated by a deemed additional approach. As per para	CPA is solely composed of isolated units where the users of the ICS will be households. The annual energy saving of ICS types included

		<p>C on page 11 of <i>Methodological tool to Demonstration of additionality of smallscale project activities version 11.0</i>³³ project activity is deemed additional if:</p> <p><i>Project activities solely composed of isolated units where the users of the technology/measure are households or communities or small and medium enterprises (SMEs) and where the size of each unit is no larger than 1% of the small-scale CDM thresholds</i></p> <p>The annual energy savings of each project device included under the CPAs will not be more than 1% of the small-scale CDM thresholds³⁴ and satisfy the condition to qualify as a 'microscale CDM unit'³⁵ and users will be <i>households or communities or small</i></p>	<p>under the CPA will always be less than 1800 MWhth which is less than 1% of the small-scale CDM thresholds³⁶ and satisfy the condition to qualify as a 'microscale CDM unit'³⁷. The annual energy saving of ICS types will be derived from the technical specifications provided by the manufacturer or third party report</p>
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³³ Methodological tool: Demonstration of additionality of small-scale project activities Version 11.0. [Pg 4](#), para 11

³⁴ CDM project standard Version 09.0. Paragraph 99

³⁵ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

³⁶ CDM project standard Version 09.0. Paragraph 99

³⁷ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

		<i>and medium enterprises (SMEs)</i>	
g	The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis	<p>The local stakeholder consultation was conducted at the PoA level (Section F of the PoA-DD).</p> <p>The key stakeholders of the program both at PoA and CPA level are the same. However, the stakeholder consultation will be repeated at CPA level as soon as:</p> <ul style="list-style-type: none"> - A CPA is included with a boundary reaching outside Myanmar. <p>An environmental impact analysis is not required (section E.2 of the PoA-DD) if the geographic boundary of CPA in Myanmar or within Myanmar)</p> <p>In case, if the CPA geographic boundary is outside of Myanmar then CPA will justify environmental impact analysis based on regulation in that region</p>	CPA geographic boundary. Please refer section A.7 of the CPA-DD
h	Conditions to provide an affirmation that funding from Annex I Parties, if any, does not result in a diversion	Affirmation that funding from Annex I Parties, if any, does not result in a	Please refer Annex [XX]. Declaration from CME and

	of official development assistance;	diversion of official development assistance	CPA implementer that no funds for official development assistance will be used for program implementation
i	Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation)	Target group will be fuelwood using households/SME and CPA implementer will distribute ICS through direct marketing and/or through separate entity	Target group will be fuelwood using households. Please refer CPA-DD section A.3 for description on target group and distribution mechanism
j	Where applicable, the conditions related to sampling requirements for the PoA in accordance with the “Standard for sampling and surveys for CDM project activities and programme of activities”	CPAs under the program will adhere to all requirements as mentioned in <i>Standard for sampling and surveys for CDM project activities and programme of activities ver 07.0</i> ³⁸	CPAs will follow monitoring plan described in CPA-DD section B.7.2
k	Where applicable, the conditions that ensure that every CPA meets the small-scale or microscale threshold and remains within those thresholds throughout the crediting period of the CPA. However, for a CPA that consists of only units that qualify as ‘microscale CDM units’ as defined in the methodological tool “Demonstration of additionality of microscale project activities”, this condition is not required	The annual energy savings of each project device included under the CPAs will not be more than 1% of the small-scale CDM thresholds ³⁹ and satisfy the condition to qualify as a ‘microscale CDM unit’ ⁴⁰ i.e. energy savings of each project device shall not exceed 1800 MWh th /yr. Therefore demonstration of a compliance of the CPA	The annual energy saving of ICS types included under the CPA will always be less than 1800 MWh th which is less than 1% of the small-scale CDM thresholds ⁴¹ and satisfy the condition to qualify as a ‘microscale CDM unit’ ⁴² . The annual energy saving of ICS types will be derived from the technical

³⁸ Standard for Sampling and surveys for CDM project activities and programmes of activities version 07.0

³⁹ CDM project standard Version 09.0. Paragraph 99

⁴⁰ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

⁴¹ CDM project standard Version 09.0. Paragraph 99

⁴² Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

		with the small-scale thresholds at the aggregate level of the CPA is not required	specifications provided by the manufacturer or third party. Therefore compliance of the CPA with the small-scale thresholds at the aggregate level of the CPA is not required
I	Where applicable, the requirements for the debundling check, in case the CPA belongs to small-scale or microscale project categories. However, if a CPA solely consists of 'microscale CDM units', the requirement regarding debundling is not applicable.	The annual energy savings of each project device included under the CPAs will not be more than 1% of the small-scale CDM thresholds ⁴³ and satisfy the condition to qualify as a 'microscale CDM unit' ⁴⁴ so that the requirement regarding debundling is not applicable	The annual energy saving of ICS types included under the CPA will always be less than 1800 MWh th which is lower than 1% of the small-scale CDM thresholds ⁴⁵ and satisfy the condition to qualify as a 'microscale CDM unit' ⁴⁶ . The annual energy saving of ICS types will be derived from the technical specifications provided by the manufacturer or third party report. Being a microscale CDM units debundling check is not required
m	CPA Inclusion	CME approval	1. Letter of agreement is required in case CPA is implemented by the entity other than CME 2. Self declaration is required in case CPA is implemented by the

⁴³ CDM project standard Version 09.0. Paragraph 99

⁴⁴ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

⁴⁵ CDM project standard Version 09.0. Paragraph 99

⁴⁶ Methodological tool Demonstration of additionality of microscale project activities Version 08.0. Paragraph 8 (c,i), 9 (b,i) and 10 (b,i)

			CME
n	Carbon Emission Reduction Rights	End users of technology will cede their rights to claim and own carbon emission reductions to the CME	A default sales agreement for end users including the provision that emission reductions achieved by the technology are owned by the CME
o	Awareness and agreement of those operating a CPA on PoA subscription	Contractual provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA	Evidence for inclusion, in case CPA operators are different from the CME: A declaration/agreement from CPA operators, stating that they are aware and have agreed that their activity is being subscribed to the PoA will be provided for each CPA

B.6. Estimation of emission reductions of a generic CPA

B.6.1. Explanation of methodological choices

>>As per applicable meth, AMS-II.G ver 08.0; formula to calculate emission reductions (ERs) is:

$$ER_y = \sum_i \sum_j ER_{y,i,j} - LE_y \quad \text{Equation (1)}$$

Where

- i = Indices for the situation where more than one type of project device is introduced to replace the pre-project devices⁴⁷
- j = Indices for the situation where there is more than one batch of project device
- ER_y = Emission reductions during year y in t CO₂e
- $ER_{y,i,j}$ = Emission reductions by project device of type i and batch j during year y in t CO₂e
- LE_y = Leakage emissions in the year y

Where

$$ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossil\ fuel} \quad \text{Equation (2)}$$

⁴⁷ For example, in some instances, full replacement of the pre-project device would require the implementation of more than one project device (e.g. one stove suitable for cooking and the other stove suitable for cooking/boiling water)

Where

$B_{y,savings,i,j}$	=	Quantity of woody biomass that is saved in tonnes per cook stove device of type i and batch j during year y
$f_{NRB,y}$	=	Fraction of woody biomass that can be established as non-renewable biomass using survey methods or government data or default country specific fraction of non-renewable woody biomass (f_{NRB}) values available on the CDM website
$NCV_{biomass}$	=	Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried')
$EF_{projected_fossilfuel}$	=	Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 t CO ₂ /TJ
$N_{y,i,j}$	=	Number of project devices of type i and batch j operating during year y
μ_y	=	Adjustment to account for any continued use of pre-project devices during the year y when applying equations 6 and 8 (fraction). Use 1.0 in other cases

$B_{y,savings,i,j}$ is calculated as per equation 7 of option 3 of the AMS. II – G ver 08

$$B_{y,savings,i,j} = B_{y=1,new,i,j,survey} \times \left(\frac{\eta_{new,i,j}}{\eta_{old,i,j}} - 1 \right) \quad \text{Equation (7)}$$

Where

$B_{y=1,new,i,j,survey}$	=	Quantity of woody biomass used by project devices in tonnes per device of type i and batch j
$\eta_{new,i,j}$	=	Efficiency of the device of each type i and batch j implemented as part of the project activity
$\eta_{old,i,j}$	=	Efficiency of pre - project device, which is a three stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney;

Leakage

AMS.II-G ver 08.0 suggests two sources of leakage:

- a) Leakage related to the non-renewable woody biomass saved by the project activity. This can be assessed any one of the following methods:
 - I) *Ex post surveys of users and the areas from which this woody biomass is sourced (using 90/30 precision for a selection of samples).*
 - II) *$B_{y,savings,i,j}$ is multiplied by a net to gross adjustment factor of 0.95 to account for leakages, in which case surveys are not required..*

CPAs will adopt second (II) approach to determine project leakages

$$LE_y = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossil\ fuel}^* (1 - 0.95)$$

b) If devices currently being utilised outside the project boundary are transferred to the project activity, then leakage is to be considered:

No transfer of ICS from outside to the project activity area, hence this type leakage is not under consideration.

Table 8: Summary of Parameters for Emission Reductions Estimation (per unit)

S No	Description	Parameter	Unit	Comment
1	Quantity of woody biomass used by project devices in tonnes per device of type i and batch j	$B_{y=1,new,i,j,survey}$	<i>Tonnes per device</i>	To be calculated at CPA level
2	Efficiency of pre - project device, which is a three stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney;	$\eta_{old,i,j}$	<i>Fraction</i>	Default value
3	Efficiency of the device of each type i and batch j implemented as part of the project activity	$\eta_{new,i,j}$	<i>Fraction</i>	To be decided at CPA level
4	Quantity of woody biomass that is saved in tonnes per cook stove device of type i and batch j during year y	$B_{y,savings,i,j}$	<i>tonnes/yr</i>	Calculated
5	Adjustment to account for any continued use of pre-project devices during the year y when applying equations 6 and 8 (fraction). Use 1.0 in other cases	μ_y	<i>Fraction</i>	Default value fixed ex ante at PoA level
6	Fraction of non-renewable biomass	f_{NRB}	<i>Fraction</i>	To be decided at CPA level
7	Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried')	$NCV_{biomass}$	TJ/tonne	Default value fixed ex ante at PoA level
8	Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 t CO ₂ /TJ	$EF_{projected_fossilfuel}$	<i>tCO₂e/t</i>	Default value fixed ex ante at PoA level
9	Leakage Factor	LF	<i>Factor</i>	<i>Net to gross adjustment factor of 0.95. Fixed Ex ante at PoA level</i>

10	Number of project devices of type i and batch j operating during year y	$N_{y,i,j}$	Number	To be calculated at CPA level
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B.6.2. Data and parameters fixed ex-ante

>>

Data / Parameter:	f_{NRB}
Data unit:	Fraction
Description:	Fraction of woody biomass saved by the project activity during year y that can be established as non-renewable biomass
Source of data:	CPA has adopted approach as per option A of the applied meth i.e. <i>Conduct local own studies to determine the local f_{NRB} value (sub national values).</i> Methodological tool- Calculation of the fraction of non-renewable biomass version 01.0 is used to determine f_{NRB} value
Value(s) applied:	[XX]
Choice of data or Measurement methods and procedures:	<u>Choice of Data</u> Option A, paragraph 43 of the applied methodology AMS-II.G ver 08 "To determine the value of the fraction of non-renewable biomass (f_{NRB}) to be applied in a Component Project Activity (CPA) of a POA, use one of the two options as follows: (a) Conduct local studies to determine the local f_{NRB} value (sub national values); or (b) Use default national values approved by the Board (see footnote 3). The choice of which option to use shall be made ex ante. However, a switch from a national value of f_{NRB} (i.e. option (b)) to sub-national values (i.e. option (a)) is permitted, under the condition that the selected approach is consistently applied to all CPAs" <u>Measurement methods and procedure</u> Methodological tool-Calculation of the fraction of non-renewable biomass version 01.0
Purpose of data	Emission reduction calculation
Additional comment:	Parameter will be decided ex ante at CPA level

Data / Parameter:	$NCV_{biomass}$
Data unit:	TJ/tonne
Description:	Net calorific value of the non-renewable woody biomass, briquettes or charcoal used in project devices.
Source of data:	AMS-II.G ver 08- Pg 17, data/parameter table 12
Value(s) applied:	0.015

Choice of data or Measurement methods and procedures:	IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried' may be used if fuel used in project device is also woody biomass. If fuel used in the project device is charcoal, 0.029 TJ/tonne may be used
Purpose of data	Emission reduction calculation
Additional comment:	Fixed ex ante at PoA level

Data / Parameter:	η_{old}
Data unit:	Fraction
Description:	Efficiency of pre - project device, which is a three stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney; for other types of devices, a default value of 0.2 may be optionally used. Weighted average values will be used (taking the amount of woody biomass consumed by each device as the weighting factor) if more than one type of device is being replaced
Source of data:	AMS.II-G ver 08.0. Data/parameter table 17
Value(s) applied:	0.1
Choice of data or Measurement methods and procedures:	Default value suggested in AMS.II-G ver 08.0
Purpose of data	Emission reduction calculation
Additional comment:	The parameter value is fixed ex ante at CPA level

Data / Parameter:	$EF_{projected_fossilfuel}$
Data unit:	tCO ₂ e/t
Description:	Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers
Source of data:	AMS-II.G ver 08- Pg 5
Value(s) applied:	81.6
Choice of data or Measurement methods and procedures:	Default value suggested in AMS.II-G ver 08.0
Purpose of data	Emission reduction calculation
Additional comment:	The parameter value is fixed ex ante at PoA level

Data / Parameter:	LF_y
Data unit:	Fraction
Description:	Leakage adjustment factor

Source of data:	AMS II.G version 08. Para 42 c
Value(s) applied:	0.95
Choice of data or Measurement methods and procedures:	As per the methodology AMS II.G ver 08.0, Gross adjustment factor of 0.95 to account for leakages, in which case surveys are not required
Purpose of data	Leakage calculation
Additional comment:	The parameter value is fixed ex ante at PoA level

Data / Parameter:	Life Span
Data unit:	Number of years
Description:	The operating life time of the project device
Source of data:	Manufacturer specification or third party report
Value(s) applied:	[XX]
Choice of data or Measurement methods and procedures:	Fixed and recorded at the time of commissioning/distribution
Purpose of data	To determine life of the project device
Additional comment:	If the life span of devices is less than the crediting period it will be removed after the life span and no emission reductions will be claimed

Data / Parameter:	μ_y
Data unit:	Fraction
Description:	Adjustment to account for any continued use of pre-project devices during the year y
Source of data:	AMS II.G version 08. Data Parameter table 9
Value(s) applied	1
Choice of data or Measurement methods and procedures:	<p>AMS-II.G ver 08 Data/Parameter table 9 –“When applying equations 6 and 8, it (μ_y) is a fraction based on monitoring results. In other cases (i.e. applying equations 3, 5 and 7), use 1.0”.</p> <p>PoA is applying equation 7 to calculate</p> $B_{y,savings,i,j} = B_{y=1,new,i,j,survey} \times \left(\frac{\eta_{new,i,j}}{\eta_{old,i,j}} - 1 \right)$ <p>since equation 7 of AMS-II.G version 8 is applied, emission reductions are based on the woody biomass used in the project devices which is monitored accurately anyways</p>
Purpose of data	To calculate emission reductions
Additional comment:	Fixed ex ante at PoA level

B.6.3. Ex-ante calculations of emission reductions

>> As per applicable meth, AMS-II.G ver 8.0; formula to calculate emission reductions (ERs) is:

$$ER_y = \sum_i \sum_j ER_{y,i,j} - LE_y \quad \text{Equation (1)}$$

Where

i	=	Indices for the situation where more than one type of project device is introduced to replace the pre-project devices ⁴⁸
j	=	Indices for the situation where there is more than one batch of project device
ER_y	=	Emission reductions during year y in t CO ₂ e
$ER_{y,i,j}$	=	Emission reductions by project device of type i and batch j during year y in t CO ₂ e
LE_y	=	Leakage emissions in the year y

Where

$$ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossil\ fuel} \quad \text{Equation (2)}$$

Where

$B_{y,savings,i,j}$	=	Quantity of woody biomass that is saved in tonnes per cook stove device of type i and batch j during year y
$f_{NRB,y}$	=	Fraction of woody biomass that can be established as non-renewable biomass using survey methods or government data or default country specific fraction of non-renewable woody biomass (fNRB) values available on the CDM website
$NCV_{biomass}$	=	Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried')
$EF_{projected_fossilfuel}$	=	Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 t CO ₂ /TJ ⁴⁹
$N_{y,i,j}$	=	Number of project devices of type i and batch j operating during year y
μ_y	=	Adjustment to account for any continued use of pre-project devices during the year y when applying equations 6 and 8 (fraction). Use 1.0 in other cases

$$B_{y,savings,i,j} = B_{y=1,new,i,j,survey} \times \left(\frac{\eta_{new,i,j}}{\eta_{old,i,j}} - 1 \right) \quad \text{Equation (7)}$$

Where

$B_{y=1,new,i,j,survey}$	=	Quantity of woody biomass used by project devices in tonnes per device of type i and batch j
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⁴⁸ For example, in some instances, full replacement of the pre-project device would require the implementation of more than one project device (e.g. one stove suitable for cooking and the other stove suitable for cooking/boiling water)

⁴⁹ This value represents the emission factor of the substitution fuels likely to be used by similar users, on a weighted average basis. It is assumed that the mix of present and future fuels used would consist of a solid fossil fuel (lowest in the ladder of fuel choices), a liquid fossil fuel (represents a progression over solid fuel in the ladder of fuel use choices) and a gaseous fuel (represents a progression over liquid fuel in the ladder of fuel use choices). Thus a 50 per cent weight is assigned to coal as the alternative solid fossil fuel (96 t CO₂/TJ) and a 25 per cent weight is assigned to both liquid and gaseous fuels (71.5 t CO₂/TJ for kerosene and 63.0 t CO₂/TJ for liquefied petroleum gas (LPG))

- $\eta_{new,i,j}$ = Efficiency of the device of each type i and batch j implemented as part of the project activity.
- $\eta_{old,i,j}$ = Efficiency of pre - project device, which is a three stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney;

This is an example for ER calculation considering one ICS per household; calculation for one ICS will be:

Table 9: Data and Parameters for Calculating Emission Reductions for 1 ICS

S No	Description	Parameter	Unit	Value ⁵⁰
1	Quantity of woody biomass used by project devices in tonnes per device of type i and batch j	$B_{y=1,new,i,j,survey}$	Tonnes per device	1.5 ⁵¹
2	Efficiency of pre - project device, which is a three stone fire using firewood (not charcoal), or a conventional device with no improved combustion air supply or flue gas ventilation, that is without a grate or a chimney	$\eta_{old,i,j}$	Fraction	0.10
3	Efficiency of the device of each type i and batch j implemented as part of the project activity	$\eta_{new,i,j}$	Fraction	0.289
4	Quantity of woody biomass that is saved in tonnes per cook stove device of type i and batch j during year y	$B_{y,savings,i,j}$	tonnes/yr	2.835
5	Adjustment to account for any continued use of pre-project devices during the year y when applying equations 6 and 8 (fraction). Use 1.0 in other cases	μ_y	Fraction	1
6	Fraction of non-renewable biomass	f_{NRB}	Fraction	0.30
7	Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne, based on the gross weight of the wood that is 'air-dried')	$NCV_{biomass}$	TJ/tonne	0.015

⁵⁰ Placeholder values to calculate emission reductions. Real values will be used in specific CPA-DDs with supporting arguments/documents

⁵¹ Pilot field survey

8	Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 t CO ₂ /TJ	$EF_{projected_fossilfuel}$	tCO ₂ e/t	81.6
9	Leakage Factor	LF	Factor	Net to gross adjustment factor of 0.95. Fixed Ex ante at PoA level
10	Number of project devices of type i and batch j operating during year y	$N_{y,i,j}$	Number	1

Putting values in eq

$$B_{y,savings,i,j} = B_{y=1,new,i,j,survey} \times \left(\frac{\eta_{new,i,j}}{\eta_{old,i,j}} - 1 \right) \quad \text{Equation (7)}$$

$$B_{y,savings,i,j} = 1.5 * (0.289 / 0.1 - 1) = 2.835 \text{ tonnes/yr}$$

Putting values in eq

$$ER_{y,i,j} = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossilfuel} \quad \text{Equation (2)}$$

$$ER_{y,i,j} = 2.835 * 1 * 1 * 0.30 * 0.015 * 81.6 = 1.041 \text{ tCO}_2\text{e}$$

Putting the values in eq

$$LE_y = B_{y,savings,i,j} \times N_{y,i,j} \times \mu_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossilfuel} * (1 - LF)$$

$$LE_y = 2.835 * 1 * 1 * 0.30 * 0.015 * 81.6 * (1 - .95) = 0.052 \text{ tCO}_2\text{e}$$

Putting the values in eq

$$ER_y = \sum_i \sum_j ER_{y,i,j} - LE_y$$

$$ER_y = 1.041 - 0.052 = 0.989 \text{ tCO}_2\text{e/yr/unit}$$

B.7. Application of the monitoring methodology and description of the monitoring plan

B.7.1. Data and parameters to be monitored by each generic CPA

Data / Parameter:	$N_{y,i,j}$
Data unit:	Number of units
Description:	Number of project devices of type i and batch j operating during year y
Source of data:	Project database and survey report

Value(s) applied	[XX]
Measurement methods and procedures:	<p>All distributed ICS will be recorded in the project database for sales date and recipient location. The sales date for each ICS listed in the project database of each CPA signifies the start of operation. The total number of ICS by type and age group deployed during period y is tracked in the project database of the specific CPA, which is updated regularly.</p> <p>The number of ICS operating under the CPA will be determined by conducting a sampling survey. The exact number of ICS operating under the CPA will be based on fraction of ICS of type i and age group x found operational in the sampling survey multiplied by total number of ICS of type i and age group x in the project database.</p> <p>Sampling survey will be carried out according to the sampling plan mentioned in section B.7.2 of the PoA-DD</p>
Monitoring frequency:	At least once in every two years (biennial)
QA/QC procedures:	<p>When biennial inspection is chosen a 95 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampling parameter.</p> <p>In case, where survey results indicate that 95/10 precision are not achieved, the lower bound of the 95 per cent confidence interval of the parameter value will be chosen as an alternative to repeating the survey efforts to achieve the 95/10 precision⁵²</p>
Purpose of data	To calculate emission reductions
Additional comment:	Electronic copy of all data sources will be archived for two years

Data / Parameter:	$B_{y=1,new,i,j,survey}$
Data unit:	Tonnes per device
Description:	Quantity of woody biomass used by project devices in tonnes per device of type i
Source of data:	Direct measurement at representative households
Value(s) applied	[XX]

⁵² AMS-II.G ver 08 paragraph 40

Measurement methods and procedures:	<p>Kitchen Performance Test (KPT) as per the latest version will be conducted in the first year of the introduction of the devices (e.g. during the first year of the crediting period, $y=1$) to determine quantity of fuelwood used by the project device at representative households.</p> <p>Where project device are found not to be operational during monitoring, $B_{y=1,new,i,j,survey}$ will be considered as zero</p>
Monitoring frequency:	First year of installation
QA/QC procedures:	<p>If more than one ICS or another device that consumes fuelwood, are found to be used in project households, then the measurement campaigns will distinguish, measure and record the quantity of fuelwood used by the ICS only.</p> <p>A 95 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampling parameter.</p> <p>In case, where survey results indicate that 95/10 precision are not achieved, the lower bound of the 95 per cent confidence interval of the parameter value will be chosen as an alternative to repeating the survey efforts to achieve the 95/10 precision⁵³.</p> <p>The KPT will be carried out in accordance with national standards (if available) or international standards or guidelines (e.g. the KPT procedures specified by the partnership for clean indoor air (PCIA): http://www.pciaonline.org/node/1049).</p> <p>All testing equipments will be calibrated either in accordance with the specifications of the local/national standards, or as per the manufacturer specification. If local/national standards or the manufacturer specification is not available, international standards will be used</p>
Purpose of data	To calculate emission reductions
Additional comment:	Electronic copy of all data sources will be archived for two years

Data / Parameter:	$\eta_{new,i,j}$
Data unit:	Fraction
Description:	Efficiency of the project device of each type <i>i</i> and batch <i>j</i>
Source of data:	Third party certification
Value(s) applied:	[XX]

⁵³ AMS-II.G ver 08 paragraph 40

Measurement methods and procedures:	The efficiency of the project devices shall be based on certification by a national standards body or an appropriate certifying agent recognized by that body
Monitoring frequency:	(i) Recorded at the time of commissioning/distribution (ii) Adjusted for the loss of efficiency as per paragraph 25 (d) of the AMS-II.G ver 08
QA/QC procedures:	Third party certification must be based on WBT protocol
Purpose of data	To calculate emission reductions
Additional comment:	If thermal efficiency of the project devices falls below 20 percent no emission reductions will be claimed

Data / Parameter:	Date of commissioning of project device i
Data unit:	Date
Description:	Actual date of commissioning of the project device
Source of data:	Project database
Value(s) applied:	[XX]
Measurement methods and procedures:	Each sale will be recorded in Project database along with the name of recipient, contact details, location of household (village, district etc)
Monitoring frequency:	Recorded at the time of distribution of project devices
QA/QC procedures:	NA
Purpose of data:	To calculate emission reductions
Additional comment:	Electronic copy of record will be archived for 2 years

Data / Parameter:	Date of commissioning of batch j
Data unit:	Date
Description:	To establish the date of commissioning, the Project Participant may opt to group the devices in "batches" and the latest date of commissioning of a device within the batch shall be used as the date of commissioning for the entire batch
Source of data:	Project database
Value(s) applied:	[XX]
Measurement methods and procedures:	Each sale will be recorded in Project database along with the ICS type, name of recipient, contact details, location of household (village, district etc)

Monitoring frequency:	Fixed and recorded at the time of commissioning/distribution of the last project device in the batch
QA/QC procedures:	NA
Purpose of data:	To calculate emission reductions
Additional comment:	To be reported in the monitoring report

B.7.2. Description of the monitoring plan for a generic CPA

CPA will be monitored according to the following monitoring plan. The key elements of the monitoring plan are:

- Data collection and archiving
- Sampling plan for monitoring survey
- Monitoring report

Table 10: Principles of Monitoring Plan

Principle	Description
Monitoring Objective	The monitoring objective is to establish the quantity and functionality of ICS distributed and operating under the CPA. This would then be used to determine the volume of emission reductions that are attributable to the CPA
Monitoring Approach	In accordance with the monitoring requirements of the methodology used, sampling of all ICS distributed under the CPA will be carried out to establish number of ICS of each type distributed and operating under the CPA. The survey and sampling shall be carried out in accordance with the General guidelines for sampling and surveys for small-scale CDM project activities ⁵⁴ and Standard for sampling and surveys for small-scale CDM project activities ⁵⁵
Parameters	a) Number of project devices of type i and age group x operating during year y - $N_{y,i,j}$ b) Quantity of woody biomass used by project devices in tonnes per device of type i - $B_{y=1,new,i,j,survey}$ c) The mean value of loss of efficiency of the project device of each type i and age group x
Boundary	CPA geographical boundary
Monitoring	CPA implementer and/or appointed entity

⁵⁴ Guideline: Sampling and surveys for CDM project activities and programmes of activities Version 04.0

⁵⁵ Standard: Sampling and surveys for CDM project activities and programmes of activities Version 07.0

Entity	
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Data collection and archiving

The total number of ICS by type and age group deployed during period y is tracked in the PD of the specific CPA, which is updated regularly. All ICS distributed will be recorded for sales date and user details. The sales date for each ICS listed in the PD signifies the start of operation. PD will be updated and checked by the CME on ongoing basis. The CME will identify any discrepancy and the correct information will be entered into the database. PD will be made available to the DOE at the time of verification.

Sampling plan for the monitoring survey

In order to determine the values of parameter for calculating GHG emission reductions, the CME or an entity on behalf of the CME will conduct the monitoring survey. The survey will consist of locating the ICS, recording its functionality, checking ownership details, and others. The results of this survey will be used to determine the total number of ICS placed in service and operating under the CPA.

Sampling Plan

The CPA involves distribution of ICS throughout the project area thereby replacing traditional cooking devices. The population is heterogeneous in nature i.e. common technology with similar operating characteristics but dispersed i.e. distribution of ICS is spread across many provinces. The population consists of sub-populations which are homogeneous called as Strata. The characteristics of population (for example quantity of biomass consumed) are more similar within the stratum (ICS of same type, age group and provinces in which they are operating) than across the strata. Therefore, Stratified Sampling technique will be used to conduct sampling survey and a single sampling plan will cover all the CPAs operating under the PoA.

The populations of each CPA will be combined together, the sample size is determined and a single survey will be undertaken to collect data. According to para 21 of Standard Sampling and surveys for CDM project activities and programmes of activities Version 07.0- *a single sampling and survey effort spread across geographic regions of several CPAs when either homogeneity of included CPAs can be demonstrated or the **differences among the included CPAs is taken into account in the sample size calculation.*** To ensure representativeness of the population, dissimilarity (such as ICS type, age group and provinces in which they are operating) within the included CPAs will be taken into account in the sample size calculation. The ICS of same type, age group and province in which they are operating will be grouped in the same strata.

Procedure of Stratified Sampling

In stratified sampling, the population elements i.e. ICS will be grouped into mutually exclusive, non-overlapping groups of sample units called strata. Every ICS will be assigned to only one stratum in such a way that no ICS will be excluded.

- 1) Dividing the total number of ICS operating under the PoA into sub-groups or strata based on ICS type, age group and province where they are located;
- 2) Calculating coefficient of variation by stratum and a weighted coefficient of variation (CV) over all strata;
- 3) Calculating total sample size and then sample size for each strata;
- 4) Drawing sample from each stratum according to the sample size through simple random sampling method using random number generator.

Table 11: Example of ICS Age Group

ICS Type A		ICS Type B	
Operating number of days between	Age Group	Operating number of days between	Age Group
1 to 365	1 _a	1 to 365	1 _b
366 to 730	2 _a	366 to 730	2 _b
731 to 1095	3 _a	731 to 1095	3 _b
-- ---	--	-- ---	--
- life span of ICS	x_a	- life span of ICS	x_b

Table 12: Example of Stratification

Particular	PoA								Total
Number of ICS operating	20,000								
Province/State	I				II				
	12,000				8,000				20,000
ICS Type	A		B		A		B		
	8,000		4,000		5,000		3,000		20,000
ICS Age Group	1 _a	2 _a	1 _b	2 _b	1 _a	2 _a	1 _b	2 _b	
	5,000	3,000	2,000	2,000	3,000	2,000	2,000	1,000	20,000
Strata	1	2	3	4	5	6	7	8	

Sampling Objective

The main objective of the survey is to check a sample of ICS under the CPA⁵⁶ to determine the mean value of parameters used in the calculations of emission reductions.

Target Population

Users of ICS

Sample Frame

To formulate sample frame, all ICS operating under PoA will be combined together. The number of project devices operating and continued-use rate of displaced traditional cookstoves will vary with

⁵⁶ AMS.II-G ver 08 para 40

ICS type, age group and province where they are located and therefore ICS will be sub-grouped into strata based on type, age group and province where they are located.

Table 13: Example of Sample Frame for Monitoring Parameters

Particular	PoA								Total
Number of ICS operating	20,000								
Province/State	I				II				
	12,000				8,000				20,000
ICS Type	A		B		A		B		
	8,000		4,000		5,000		3,000		20,000
ICS Age Group	1 _a	2 _a	1 _b	2 _b	1 _a	2 _a	1 _b	2 _b	
	5,000	3,000	2,000	2,000	3,000	2,000	2,000	1,000	20,000
Strata	1	2	3	4	5	6	7	8	8
	Sample Frame								

Sampling frame will be kept in hard copy or a computer file of screen shot copy.

Sample Measurements

a) Number of project devices of type *i* and age group *x* operating during year *y*- $N_{y,i,j}$

Population	Number of project device distributed under the CPAs
Information Gathering Method	<p>On site survey will be conducted to check if ICS is operational and in use. End user will be interviewed to verify that ICS is still in use or not.</p> <p>Getting information in person is an effective way of gaining respondent's confidence and cooperation. Different methodologies such as hard-copy questionnaires or smart phones or tablet app modules can be employed to collect data. The physical on-site visit and face-to-face interview with the respondent minimizes non-sampling errors and non-response.</p> <p>The parameter of interest is not subjected to seasonal variations. If an ICS is no longer in use, it will be accounted as not in use over the entire period</p>
Sample Size Formula	<p><u>Total sample size</u></p> $n \geq \frac{(C^2 \times N \times V)}{((N-1) \times P^2) + (C^2 \times V)} \dots\dots\dots \text{Equation A}^{57}$ <p>Where:</p> <p>n = Total sample size C = Confidence level N = Population V = SD^2/p^2 SD = Weighted overall expected variation p = Weighted overall expected proportion squared P = Precision</p>

⁵⁷ Guideline: Sampling and surveys for CDM project activities and programmes of activities Version 04.0. Page 76, Equation 1,2,3,4,9

	$p = \frac{(ga \times pa) + (gb \times pb) + (gc \times pc) \dots (gk \times pk)}{N}$ $SD^2 = \frac{(ga \times pa (1 - pa)) + (gb \times pb (1 - pb)) + (gc \times pc (1 - pc)) + (gk \times pk (1 - pk))}{N}$ <p style="text-align: center;">Where:</p> <p>gi = Size of the i^{th} strata where $i=a, \dots, k$</p> <p>pi = Propitiation of the i^{th} strata where $i=a, \dots, k$</p> <p><u>Sample size for each strata</u></p> $n_i = \frac{gi}{N} \times n$ <p style="text-align: center;">Where:</p> <p>n_i Sample size of the i^{th} strata where $i=a, \dots, k$</p> <p>Samples will be drawn by using the random number generator of Microsoft Excel. The actual sample size will be scaled-up to nullify the non-response rate. Oversampling will compensate for any non-response associated with the sample.</p> <p>Estimates of the parameter of interest (proportion, mean and standard deviation) can be determined by one of the ways suggested below:</p> <p>(a) Result of previous studies;</p> <p>(b) A preliminary sample as a pilot and use that sample to provide estimates;</p> <p>(c) Best guesses based on experiences.</p> <p>If the sample size calculation returns a value of less than 30 samples, a minimum sample size of 30 will be chosen when the parameter of interest is a proportion. If the parameter of interest is a numeric mean value (i.e. not a proportion or percentage) the Student's t-distribution will be used if the resulting sample size is less than 30⁵⁸</p>
QA/QC Procedure	<p>95 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampling parameter. In case, where survey results indicate that 95/10 precision are not achieved, the lower bound of the 95 per cent confidence interval of the parameter value will be chosen as an alternative to repeating the survey efforts to achieve the 95/10 precision⁵⁹</p> <p>Selected sample size will be kept in hard copy or a computer file of screen shot copy</p>

b) Quantity of woody biomass used by project devices in tonnes per device of type i-

$$B_{y=1,new,i,j,survey}$$

⁵⁸ Standard Sampling and surveys for CDM project activities and programmes of activities Version 07.0. Paragraph 13

⁵⁹ AMS-II.G ver 08 paragraph 40

Population	Number of project device in first year of their installation
Information Gathering Method	<p>Kitchen Performance Test (KPT) as per the latest version will be conducted in the first year of the introduction of the devices (e.g. during the first year of the crediting period, $y=1$) to determine quantity of fuelwood used by the project device at representative households.</p> <p>Where project device are found not to be operational during monitoring, $B_{y=1,new,i,j,survey}$ will be considered as zero.</p> <p>KPT will be carried out in the summer season when fuelwood consumption is lowest in the whole year because of high ambient temperature. Hence the time period selected is conservative in nature⁶⁰</p>
Sample Size Formula	<p><u>Total sample size</u></p> $n \geq \frac{(C^2 \times N \times V)}{((N-1) \times P^2) + (C^2 \times V)} \dots\dots\dots \text{Equation C}^{61}$ <p>Where:</p> <p>n = Total sample size C = Confidence level N = Population $V = SD^2/\text{Mean}^2$ SD = Weighted overall expected variation Mean = Weighted overall expected mean squared P = Precision</p> $\text{Mean} = \frac{(ga \times ma) + (gb \times mb) + (gc \times mc) \dots (gk \times mk)}{N}$ $SD^2 = \frac{(ga \times SD^2a) + (gb \times SD^2b) + (gc \times SD^2c) \dots (gk \times SD^2k)}{N}$ <p>Where:</p> <p>gi = Size of the i^{th} strata where $i=a, \dots, k$ mi = Mean of the i^{th} strata where $i=a, \dots, k$ SDi = Standard deviation of the i^{th} strata where $i=a, \dots, k$</p> <p><u>Sample size for each strata</u></p> $n_i = \frac{gi}{N} \times n$ <p>Where:</p> <p>n_i = Sample size of the i^{th} strata where $i=a, \dots, k$</p> <p>Samples will be drawn by using the random number generator of Microsoft Excel.</p>

⁶⁰ Paragraph 35-Guideline: Sampling and surveys for CDM project activities and programmes of activities Version 04.0

⁶¹ Guideline: Sampling and surveys for CDM project activities and programmes of activities Version 04.0. Page 82, Equation 19,20,21,22,27

	<p>The actual sample size will be scaled-up to nullify the non-response rate. Oversampling will compensate for any non-response associated with the sample.</p> <p>Estimates of the parameter of interest (proportion, mean and standard deviation) can be determined by one of the ways suggested below:</p> <p>(a) Result of previous studies;</p> <p>(b) A preliminary sample as a pilot and use that sample to provide estimates;</p> <p>(c) Best guesses based on experiences.</p> <p>If the sample size calculation returns a value of less than 30 samples, a minimum sample size of 30 will be chosen when the parameter of interest is a proportion. If the parameter of interest is a numeric mean value (i.e. not a proportion or percentage) the Student's t-distribution will be used if the resulting sample size is less than 30⁶²</p>
QA/QC Procedure	<p>95 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampling parameter. In case, where survey results indicate that 95/10 precision are not achieved, the lower bound of the 95 per cent confidence interval of the parameter value will be chosen as an alternative to repeating the survey efforts to achieve the 95/10 precision⁶³</p> <p>Selected sample size will be kept in hard copy or a computer file of screen shot copy</p>

c) The mean value of efficient drop rate of ICS

Population	Number of project device distributed under the CPAs
Information Gathering Method	<p>To determine efficient drop rate of ICS, Water Boiling Test (WBT) will be conducted annually by taking a representative sample of each ICS type and age group and use the actual loss rate that is measured.</p> <p>The parameter of interest is not subjected to seasonal variations</p>
Sample Size Formula	<p><u>Total sample size</u></p> $n \geq \frac{(C^2 \times N \times V)}{((N-1) \times P^2) + (C^2 \times V)} \dots\dots\dots \text{Equation C}^{64}$ <p>Where:</p> <p>n = Total sample size C = Confidence level N = Population V = SD²/Mean² SD = Weighted overall expected variation Mean = Weighted overall expected mean squared P = Precision</p>

⁶² Standard Sampling and surveys for CDM project activities and programmes of activities Version 07.0. Paragraph 13

⁶³ AMS-II.G ver 08 paragraph 40

⁶⁴ Guideline: Sampling and surveys for CDM project activities and programmes of activities Version 04.0. Page 82, Equation 19,20,21,22,27

	$Mean = \frac{(ga \times ma) + (gb \times mb) + (gc \times mc) \dots (gk \times mk)}{N}$ $SD^2 = \frac{(ga \times SD^2a) + (gb \times SD^2b) + (gc \times SD^2c) \dots (gk \times SD^2k)}{N}$ <p>Where:</p> <p>gi = Size of the i^{th} strata where $i=a, \dots, k$</p> <p>mi = Mean of the i^{th} strata where $i=a, \dots, k$</p> <p>SDi = Standard deviation of the i^{th} strata where $i=a, \dots, k$</p> <p><u>Sample size for each strata</u></p> $n_i = \frac{gi}{N} \times n$ <p>Where:</p> <p>n_i = Sample size of the i^{th} strata where $i=a, \dots, k$</p> <p>Samples will be drawn by using the random number generator of Microsoft Excel. The actual sample size will be scaled-up to nullify the non-response rate. Oversampling will compensate for any non-response associated with the sample.</p> <p>Estimates of the parameter of interest (proportion, mean and standard deviation) can be determined by one of the ways suggested below:</p> <p>(a) Result of previous studies;</p> <p>(b) A preliminary sample as a pilot and use that sample to provide estimates;</p> <p>(c) Best guesses based on experiences.</p> <p>If the sample size calculation returns a value of less than 30 samples, a minimum sample size of 30 will be chosen when the parameter of interest is a proportion. If the parameter of interest is a numeric mean value (i.e. not a proportion or percentage) the Student's t-distribution will be used if the resulting sample size is less than 30⁶⁵</p>
QA/QC Procedure	<p>95 per cent confidence interval and a 10 per cent margin of error shall be achieved for the sampling parameter. In case, where survey results indicate that 95/10 precision are not achieved, the lower bound of the 95 per cent confidence interval of the parameter value will be chosen as an alternative to repeating the survey efforts to achieve the 95/10 precision⁶⁶</p> <p>Selected sample size will be kept in hard copy or a computer file of screen shot copy</p>

⁶⁵ Standard Sampling and surveys for CDM project activities and programmes of activities Version 07.0. Paragraph 13

⁶⁶ AMS-II.G ver 08 paragraph 40

Survey Team

The sample survey will be conducted by the CME and/or appointed entity. Survey team will be supervised and trained by the CME and/or appointed entity. Survey team will consist of one survey coordinator and number of supervisors and surveyors as required.

Table 14: Minimum Qualification for Survey Team

Survey Team				Minimum Qualification
Survey Coordinator				Post Graduate and experienced in conducting surveys
Supervisors		Supervisors		Graduate
Surveyors	Surveyors	Surveyors	Surveyors	Higher Secondary School Certificate

Training of survey team is the key to quality. CME and/or appointed entity will train the survey team in objectives and procedures of the survey. Instructions will be provided to the survey team. The training session will include mock interviews in which surveyors are paired up and take on the roles of interviewer and respondent. A pilot survey will be conducted to test skills of surveyors, survey materials and procedures.

Supervisor's Responsibilities

- To explain survey objectives and procedure to the survey team;
- Ensure availability of all materials for the team to complete its assigned survey;
- Assignment of work to each surveyor;
- Check all completed survey forms to make sure that all the data fields have been accurately filled in, any discrepancy shall be corrected;
- Takes responsibility for the safe collection, storage and transport of the completed survey forms.

Surveyor's Responsibilities

- To study instructions and follow them precisely;
- To know the substance of the survey form and the method for filling it out;
- To conduct interviews of respondents efficiently and with high quality and give the completed survey forms to the supervisor.

Instructions for Surveyors

- Explain the purpose of survey to the respondent;
- Don't change the order or wording of questions;
- Questions should be asked in the order in which they are listed;
- Question should be read properly so that the respondent can grasp its meaning;
- Make sure that respondent has understood the meaning of question;

- Make sure that respondent has signed the survey form and answered to all questions which the respondent is supposed to answer.

Survey Execution

1. A complete list of end users from PD will be compiled into strata to generate sample frame;
2. Consolidation of end user list by removing any ICS for which no end user details are available or provided. Duplicate end users will also be removed from the list;
3. Each end user on the sample frame will be provided with a unique reference code;
4. As per the over-sample size, end users will be selected by using a Microsoft Excel random number generator;
5. In the event that the provincial, district or local authorities deny approval for the surveyors to enter and survey a particular village, another village/end user will be randomly selected from the sample frame and the reasons for the change will be documented;
6. Should the selected end user is either not present at the time of the survey or unable to participate in the survey, other family member will be selected. A record will be made of how many end users are either not present at the time of the survey or unable to participate and his/her relationship with the actual respondent;
7. Should the end user or family members either not present at the time of the survey or unwilling to participate in the survey, the next end user on the list will be selected. A record will be made of how many end users are either not present at the time of the survey or expressed unwillingness to participate;
8. After ensuring that the end user is same as mentioned in the selected list, surveyor will ask questions as mentioned in the survey form and record the responses;
9. In the event that an inadequate number of end users are present or willing to participate to meet the sample requirements, additional end users will be selected from the sample frame;
10. Supervisor will check all completed survey forms to make sure that all the data fields have been accurately filled in. Any discrepancy such as typing errors or accidentally skipped questions shall be corrected by contacting the particular respondent;
11. Supervisor will ensure safe collection, storage and transport of the completed survey forms to the survey coordinator;
12. At the end of field survey, all survey forms will be collected and the results will be translated and registered in a datasheet(s) as appropriate. All data entry will be independently checked for errors.

Survey Analysis

1. After survey, data on the survey forms will be checked. In-completed or incorrect survey forms will be replaced by the correct forms from pool of oversampled forms. This step ensures that all necessary information has been received and recorded;
2. Electronic transfer of data into a computer;

3. Editing of electronic data to identify suspicious or extreme values. Original survey forms will be checked if suspicious or extreme value is identified;

The key findings of the survey activities will be analysed and summarised within the relevant report using means and standard deviations, etc. as appropriate. The entity conducting the survey will produce a survey report.

All survey forms will be archived for two years.

Monitoring Report

The survey report will set out the data for emission reduction calculation. The CME will produce a monitoring report.

Appendix 1. Contact information of coordinating/managing entity and responsible person(s)/ entity(ies)

CME and/or responsible person/ entity	<input checked="" type="checkbox"/> CME <input checked="" type="checkbox"/> Responsible person/ entity for application of the selected methodology(ies) and, where applicable, the selected standardized baseline(s) to the PoA
Organization	ECOEYE Co., LTD
Street/P.O. Box	70 Dusan-ro, Geumcheon-gu, Seoul. South Korea
Building	#1503, Hyundai Knowledge Industrial Center B
City	Seoul
State/Region	Seoul Capital Area
Postcode	
Country	Republic of Korea
Telephone	Office : +82- 2-6480-7346
Fax	
E-mail	sangsun_ha@ecoeye.com
Website	www.ecoeye.com
Contact person	Sangsun Ha
Title	Director
Salutation	Mr
Last name	Ha
Middle name	

Appendix 2. Affirmation regarding public funding

No funding has come from or will come from official development assistance (ODA) that has been or will be provided under the condition, whether express or implied, that any or all of the carbon credits issued as a result of the project's operation will be transferred directly or indirectly to the country of origin of the ODA.

Appendix 3. Applicability of methodology(ies) and standardized baseline(s)

This section is left blank intentionally.

Appendix 4. Further background information on ex ante calculation of emission reductions

This section is left blank intentionally.

Appendix 5. Further background information on the monitoring plan

This section is left blank intentionally.

Appendix 6. Summary of post registration changes

This section is left blank intentionally.

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
05.0	15 April 2016	Revision to ensure consistency with the "Standard: Applicability of sectoral scopes" (CDM-EB88-A04-STAN) (version 01.0).
04.0	9 March 2015	Revisions to: <ul style="list-style-type: none"> • Include provisions related to choice of start date of PoA; • Include provisions related to delayed submission of a monitoring plan; • Provisions related to local stakeholder consultation; • Add exception for generic CPA where technology is under positive lists; • Editorial improvement.
03.0	25 June 2014	Revisions to: <ul style="list-style-type: none"> • Include the Attachment: Instructions for filling out the programme design document form for small-scale CDM programme of activities (these instructions supersede the "Guideline: Completing the programme design document form for small-scale CDM programme of activities" (Version 03.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for the application of the methodology (ies) to the PoA in B.4 and Appendix 1; • Add general instructions on post-registration changes in paragraphs 2 and 3 of general instructions and Appendix 6; • Change the reference number from <i>F-CDM-SSC-PoA-DD</i> to <i>CDM-SSC-PoA-DD-FORM</i>; • Editorial improvement.
02.0	13 March 2012	EB 66, Annex 13 Revision required to ensure consistency with the "Guidelines for completing the programme design document form for small-scale CDM programmes of activities".
01.0	27 July 2007	EB33, Annex43 Initial adoption.

<i>Version</i>	<i>Date</i>	<i>Description</i>
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