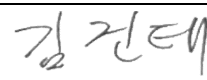




**Validation report form for renewal of CDM programme of activities period
(Version 02.0)**

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

Title and UNFCCC reference number of the programme of activities (PoA)	Programme of Activities for Small Scale Hydropower CDM in Sri Lanka (9705)
Number and duration of the next period	2 nd , 06/08/2020- 05/08/2027
Version number of the validation report	2.0
Completion date of the validation report	08/11/2019
Version number of PoA-DD to which this report applies	5.0
Coordinating/managing entity (CME)	Sri Lanka Climate Fund (Private) Limited
Host Parties	Sri Lanka
Applied methodologies and standardized baselines	AMS-I.D Grid connected renewable electricity generation (Version 18.0)
Mandatory sectoral scopes	Sectoral Scope : 1 – Energy industries (renewable / non-renewable sources)
Conditional sectoral scopes, if applicable	-
Estimated amount of annual average GHG emission reductions or GHG removals by sinks in the next programme of activities period	-
Name and UNFCCC reference number of the DOE	Korea Testing & Research Institute (KTR) / E-0056
Name, position and signature of the approver of the validation report	Jintae KIM, Director 

SECTION A. Executive summary

KTR has performed the validation of renewal of PoA period of the aforementioned CDM PoA “Programme of Activities for Small Scale Hydropower CDM in Sri Lanka”. The validation is based on the currently valid documentation of the United Nations Framework Convention on Climate Change (UNFCCC).

The validation process includes three phases:

- Desk review of documents;
- Follow-up interviews with the relevant personnel;
- Resolution of outstanding issues and the issuance of final inclusion report and opinion.

The PoA is a voluntary initiative by Sri Lanka Climate Fund (Private) Limited to promote small scale hydropower generation geographically located in Sri Lanka through Clean Development Mechanism and to reduce GHG emissions.

The PoA is geographically located in Sri Lanka. The generated electricity will be supplied to the national grid owned by Ceylon Electricity Board (Hereafter called CEB), the national utility.

In renewal of PoA period, the emission factor has been calculated based on the ‘Tool to calculate the emission factor for an electricity system version 07.0’, Statistical Digest 2013~2017 issued by CEB, ‘Sri Lanka Energy Balance 2017’ issued by Sri Lanka Sustainable Energy Authority following the requirement of the applied methodology AMS I-D Version. 18.

The first PoA period (7years) started on 06/08/2013. Second PoA period will be started from 06/08/2020. 3 Clarification Requests (CLs) and 4 Corrective Action Requests (CARs) were raised during the course of validation process of renewal of PoA period and has been successfully closed.

SECTION B. Validation team, technical reviewer and approver**B.1. Validation team member**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interview(s)	Validation findings
1.	Team Leader	IR	JUNG	Kyuhong	KTR	X	X	X	X
2.	Validator	IR	LEE	Jeongil	KTR	X	X	X	X

B.2. Technical reviewer and approver of the validation report for renewal of PoA period

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1	Technical reviewer	IR	LEE	Bongjae	KTR
2	Approver	IR	KIM	Jintae	KTR

SECTION C. Means of validation**C.1. Desk/document review**

The information presented in the PoA-DD on the technical design has been assessed for accuracy and completeness using standard auditing techniques including: (a) Document review including x A review of data and information; x Cross checks between information provided in the PoA-DD and information from sources other than those used, the DOE's sectoral or local expertise. If necessary, independent background investigations were performed. (b) Follow-up actions including: x Interviews with relevant stakeholders in the host country, personnel with knowledge of the PoA and implementation; x Cross checks between information provided by interviewed personnel (i.e. by checking sources or other interviews) to ensure that no relevant information has been omitted. (c) Reference to available information relating to projects or technologies similar to the PoA under validation.

In opinion of the validation team, PoA description, as included in the PoA-DD, is accurate and complete; and it provides a correct understanding of the PoA. A complete list of all documents reviewed is attached as Appendix 3 to this report.

C.2. On-site inspection

Duration of on-site inspection: 05/09/2019 to 05/09/2019				
No.	Activity performed on-site	Site location	Date	Team member
1.	Office visit to validate the PoA description, baseline, equipment, implementation and monitoring. Monitoring plan updates, Document review and check of all supporting documentation, ER calculations and PoA-DD review.	Sri Lanka Climate Fund (Private) Limited	05/09/2019	Kyuhong JUNG Jeongil LEE
2	Validity of the original baseline impact of new relevant national and/or sectoral policies/ circumstances on the baseline, correctness of the application of the approved methodologies and EF values assessment	Sri Lanka Sustainable Energy Authority	05/09/2019	Kyuhong JUNG Jeongil LEE

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Mahesh	Chamara Ariyathilaka	Sri Lanka Climate Fund (Pvt)Ltd.	05/09/2019	1. Validity of the original baseline impact of new relevant national and/or sectoral policies and circumstances on the baseline, correctness of the application of the approved methodologies - EF values assessment 2. Monitoring plan updates, Document review and check of all supporting documentation, procedures of ER calculations and PoA-DD review 3. relevant national and/or sectoral policies and circumstances on the baseline, correctness of the application of the approved methodologies - Validity of the original baseline	Kyuhong JUNG Jeongil LEE
2.	Hong	Myungock	Koho T&C (Pvt)Ltd.			
3.	Park	Beomwoong	Korea Environment Corporation			
4.	Jung	Miran	Korea Environment Corporation			
5.	Kim	Hyoungchan	KPMG Korea			
6.	Lee	Ah Ryung	KPMG Korea			
7.	Nimashi	Fernando	Sri Lanka Sustainable Energy Authority	05/09/2019	1. Regional/National government policies/sectoral	Kyuhong JUNG Jeongil LEE

					policies/tariff related to Nonconventional Renewable Energy (NCRE) projects 2. Emission Factor calculation process assessment	
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C.4. Sampling approach

Not Applicable.

C.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Area of validation findings	No. of CL	No. of CAR	No. of FAR
Programme of activities			
Compliance with PoA-DD form	0	0	0
Programme of activities period	0	0	0
Coordinating/managing entity and the project participants	1	1	0
Post-registration changes	0	0	0
Generic component project activities			
Application and selection of methodologies and standardized baselines	0	0	0
Validity of original baseline or its update	1	2	0
Estimated emission reductions or net anthropogenic removals	0	0	0
Validity of monitoring plan	0	0	0
Eligibility criteria for inclusion of CPAs	1	1	0
Others (please specify)	0	0	0
Total	3	4	0

SECTION D. Validation findings

D.1. Programme of activities

D.1.1. Compliance with PoA-DD form

Means of validation	The validation team has checked the final PoA-DD form provided by the CME against the latest version of the PoA-DD form in order to determine, whether the PoA-DD form is in compliance with it and confirms the following: a) The CME is mentioned in the relevant sections of the PoA-DD in accordance with the relevant requirements in PS for PoA version 02.0. .b) The most recent version of the PoA-DD form is used.
Findings	There are no CARs/CLs raised in this section.
Conclusion	The PoA-DD is compliant with relevant form and guidance as provided by UNFCCC. Hence the validation team confirmed that the CME used a later valid version of the PoA-DD form version 09.0 for the updated PoA-DD than the version of the form of the registered PoA-DD. The information transferred to the revised POA-DD is materially the same as that in the registered POA-DD.

D.1.2. Programme of activities period

Means of validation	The purpose of a validation related to the duration or day of renewal of PoA period is an assessment according to the VVS PoA version 02.0 and includes an assessment of an updated PoA-DD in accordance with the relevant sections of the PS for PoA related to the duration of renewal of PoA period and in particular to the next PoA period of the registered CDM PoA. The PoA has been registered on
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	06/08/2013 and the first PoA period has been started on 06/08/2013 same day and end date is 05/08/2020. It is also been verified that the next PoA period of the registered PoA commences on the day immediately after the expiration of the current PoA period.
Findings	There are no CARs/CLs raised in this section.
Conclusion	The validation team confirmed that the start date and the length of the PoA period are in compliance with the VVS PoA version 02.0

D.1.3. Coordinating/managing entity and the project participants

Means of validation	The validation team checked business licenses of the PPs and CME, MOU, revised LoA and other relevant documentation to validate the corporate identity of all project participants, the CME and focal points included in the Modalities of Communication (MoC) statement.						
Findings	There are 1 CAR and 1 CL raised in this section.						
Conclusion	<table border="1"> <thead> <tr> <th>Parties involved</th><th>Project participants</th></tr> </thead> <tbody> <tr> <td>Sri Lanka (Host party)</td><td> <ul style="list-style-type: none"> Public entity : Sri Lanka Climate Fund (Private) Limited (CME) (Private-Public partnership company) Private entity : Koho Trading & Consultancy (Private) Limited (Project participant) </td></tr> <tr> <td>Republic of Korea</td><td> <ul style="list-style-type: none"> Public entity : Korea Environment Corporation (Project participant) </td></tr> </tbody> </table> <p>However, the CAR 01 & CL 01 have been raised and closed successfully. The validation team crosschecked the identities with business licenses of the PPs and CME, and the LoA re-issued by DNA of Sri Lanka dated 30/04/2019, and the MOC signed by CME and PPs signed on 04/09/2019, revised PoA-DD version 5.0 and the onsite interviews, and confirmed the information was consistent. And the validation team is able to conclude the name and/or address for corporate CME and/or PP are accurate and correct.</p>	Parties involved	Project participants	Sri Lanka (Host party)	<ul style="list-style-type: none"> Public entity : Sri Lanka Climate Fund (Private) Limited (CME) (Private-Public partnership company) Private entity : Koho Trading & Consultancy (Private) Limited (Project participant) 	Republic of Korea	<ul style="list-style-type: none"> Public entity : Korea Environment Corporation (Project participant)
Parties involved	Project participants						
Sri Lanka (Host party)	<ul style="list-style-type: none"> Public entity : Sri Lanka Climate Fund (Private) Limited (CME) (Private-Public partnership company) Private entity : Koho Trading & Consultancy (Private) Limited (Project participant) 						
Republic of Korea	<ul style="list-style-type: none"> Public entity : Korea Environment Corporation (Project participant) 						

D.1.4. Post-registration changes

Type of post-registration changes (PRCs)	Confirmation (Y/N)	Validation report for PRCs	
		Version	Completion date
Corrections	Y	2.0	08/11/2019
Inclusion of monitoring plan	N	-	-
Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents	N	-	-
Changes to the programme design	N	-	-
Addition of CPA inclusion template	N	-	-
Changes specific to afforestation and reforestation activities	N	-	-
Change of coordinating/managing entity	N	-	-

D.2. Generic component project activities

D.2.1. Application and selection of methodologies and standardized baselines

Means of validation	DOE has verified whether the CME uses the valid version of the methodology applied in the registered PoA-DD as per para. 284/ PS for PoA version 02.0. The CME has applied the latest methodology version AMS-I.D. version 18 in the updated PoA-DD, that is, the latest version at the time of the submission of the request for renewal of PoA period.
Findings	There are no CARs/CLs raised in this section

Conclusion	The validation team confirms that the chosen baseline and monitoring methodology is applicable to the generic component project activities by reviewing the AMS-I.D. version 18, and the section I.2/ PoA-DD version 05.0.
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D.2.2. Validity of original baseline or its update

Means of validation	DOE has assessed the validity of the baseline of the PoA as per below. Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the PoA period is performed according to 288-201/ PS for PoA version 02.0
Findings	There are 1 CL and 2 CARs raised in this section
Conclusion	<p>As per 288-291/ PS for PoA version 02.0, the stepwise procedure to assess the validity of the original baseline or to update it for each of the corresponding CPAs are as follows:</p> <p>Step 1: Assess the modalities to calculate GHG emission reductions or net anthropogenic GHG removals that would have resulted from that scenario to demonstrate the validity of the original baseline or its update.</p> <p>The current baseline scenario is still valid as per the methodology AMS I-D version 18.0. The identified baseline scenario of the PoA is as follows: The electricity delivered to the grid by the PoA would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.</p> <p>The annual emission reduction for renewal of PoA period is calculated as same with the 1st PoA period. The baseline emission is demonstrated as follows:</p> $BE_y = EG_{PJ,y} * EF_{grid,y}$ <p>Where; BE_y : Baseline Emission in year y (tCO₂) $EG_{PJ,y}$: Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh) $EF_{grid,y}$: Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO₂/MWh)</p> <p>However, the CL02 has been raised and closed successfully. CME has updated the emission factor in accordance with TOOL07 version 07.0". Further information for the updated parameter to calculate GHG emission reductions can be seen in the PoA-DD.</p> <p>Step 2: Assess and incorporate the impact of national and/or sectoral policies and circumstances existing at the time of requesting renewal of the PoA period on the modalities to estimate baseline GHG emissions for the subsequent crediting period of each corresponding CPA.</p> <p>As per requirement of the this step, it has been assessed that there is no impact of circumstances existing at the time of requesting renewal of the PoA period on the current baseline GHG emissions. It has been assessed that there is no relevant mandatory national and/or sectoral policies that should be considered to define the baseline scenario for this renewal of PoA period of the PoA. In accordance with the "Ceylon Electricity Board, Long Term Generation Expansion plan 2018-2037", the consumption of fossil fuels in the power sector gradually increases with growing demand for coal. Since coal is identified as an economically attractive fuel operation for electricity generation in Sri Lanka.</p> <p>In accordance with the National Energy Policy & Strategies of Sri Lanka, Gazette No. 1553/10 of 10/06/2008 which is still latest policy, NRE(Non-conventional Renewable Energy) Resources (including small-scale hydropower) are the leading sustainable, non-conventional form of renewable energy promoted in Sri Lanka for</p>

electricity generation into the grid. These policies do not affect the current baseline of the PoA. Therefore, there are no relevant mandatory national and/or sectoral policies and the current baseline of the PoA complies with existing policies. As per the Sri Lanka Energy Balance 2017, although diffusion of the new and renewable energy has been encouraged, the new and renewable resource accounts for only 8.9% of total grid generation in 2017 compared to 11.1% of total grid generation in 2015. Hence in the absence of the PoA, electricity would still have been generated in the existing fossil fuel power plants or by the addition of new fossil fuel power plants connected to the CEB grid.

Step 3: Assess whether the requirements contained in Step 2 above are applicable to a registered CDM PoA applying the valid version of an applicable approved standardized baseline that standardizes baseline scenario

In the absence of the PoA, the amount of electricity would have been generated in the existing fossil fuel power plants and connected to the CEB grid. In addition, the standardized baseline is not applied in this PoA. Thus, this step is not applicable to renewal of the PoA period.

Step 4 : Assess updating the data and parameters used for determining the original baseline not monitored during the PoA period in accordance with the “Methodological tool: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period”.

Step 4.1: Assessment of the validity of the data and parameters

Some parameters fixed ex-ante, which were determined at the start of the 1st PoA period, are not valid anymore. Therefore, the current baseline has been updated for the renewal of PoA period according to the TOOL07 version 07.0. This update includes CO₂ emission factor of fossil fuel and all values used in its calculation (including OM and BM). In case of NCVs of fossil fuel, the value for the 1st PoA period was derived from IPCC default value as provided in the 2006 IPCC Guidelines but current value for renewal of PoA period is derived from data of Sri Lanka Energy Balance 2017 according to TOOL07 version 07.0. In case of CO₂ emission factors of each fossil fuel, the value for the 1st PoA period was derived from IPCC default value as provided in the 2006 IPCC Guidelines and still applied them for renewal of the PoA period. Thus, The current baseline & data and parameters need to be updated and Step 4.2 is applied.

Step 4.2: Update the current baseline and the data and parameters

Step 4.2.1: Update the current baseline

As per the Step 1 above, the current baseline scenario is still valid as per the methodology AMS I-D version 18.0. The identified baseline scenario of the PoA is as follows:

The electricity delivered to the grid by the PoA would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.

Thus, this step is not applicable and step 4.2.1 is applied.

Step 4.2.1 : Update the data and parameters

As stated in Step 4.1 above, all parameters regarding the grid emission factor calculation have been updated for the renewal of PoA period.

TOOL07/ step 1.- Identify the relevant electric power systems.

Ceylon Electricity Board (CEB) electric power system is selected as the electric power system of PoA as it's only electricity transmission and distribution system in Sri Lanka owned and operated by the national utility CEB. The validation team confirmed that the identified electric power systems are appropriate and consistent

with the evidence in “Sri Lanka Energy Balance 2017” published by Sri Lanka Sustainable Energy Authority and the interview with the officer of Sri Lanka Sustainable Energy Authority (SLSEA).

TOOL07/ step 2.- Choose whether to include off-grid power plants in the project electricity system (optional)
Option I “Only grid power plants are included in the calculation” was chosen.

TOOL07/ step 3.- Select a method to determine the operating margin (OM)
The simple OM emission factor calculation method was chosen because low cost/ must-run projects constituted less than 50% of the total grid generation during the previous 5 years. Only grid power plants are included in the calculation.
However, the CAR 02 has been raised and closed successfully.
The validation team has checked the calculation for low cost/must-run constitution of the total grid generation and confirmed the calculation is correct. Therefore, simple OM emission factor calculation method is selected reasonable. And ex-ante option has been selected to calculate the simple OM, using the data vintages for years y, as the full generation-weighted average for the most recent 3 years for which data are available at the time of CPA-DD submission.
The calculation of grid emission factor will be made using the most historical years for which data is available at the time of submission of the CPA-DD to the DOE for validation.

TOOL07/ step 4.- Calculate the operating margin emission factor according to the above selected method.
Option A is used to calculate the simple OM emission factor based on the net electricity generation of each power unit and an emission factor for each power unit. Option A1 will be selected to determine $EF_{EL,m,y}$. The Operating margin emission factor is calculated as the full generation weighted average for the most recent 3 years for which data are available at the time of CPA-DD submission.
The validation team confirms that the data sourced are deemed reasonable and the calculation complied with the TOOL07 version 07.0

TOOL07/ Step 5.- Calculate the build margin emission factor.
Option 1 has been chosen for the calculation of Build Margin (BM) in this CPA.
In the generic CPA, none of the power units in SET_{sample} started to supply electricity to the grid more than 10 years ago. Thus, SET_{sample} is used to calculate the build margin as per Step (a) ~ (c), the Step(d)~(f) in the Tool is not required.

The validation team hereby confirms that the data sources are deemed reliable and calculation is appropriate.

TOOL07/ Step 6.- Calculate the combined margin (CM) emissions factor.
According to TOOL 07, the default weights: $w_{OM} = 0.5$ and $w_{BM} = 0.5$ for the first crediting period, and $w_{OM} = 0.25$ and $w_{BM} = 0.75$ for the second and third crediting period were adopted.

Therefore, the combined baseline emission factor is determined ex-ante.
The $EF_{grid,y}$ calculated at the time of submission of PoA-DD to the DOE for validation for renewal of PoA period as follows:

- $EF_{grid,y}$ for the 1st crediting period : 0.8108 tCO₂/MWh.
- $EF_{grid,y}$ for the 2nd and 3rd crediting period : 0.8666 tCO₂/MWh.

However, the CAR 03 has been raised and closed successfully.
This steps of EF determination will be applied to each CPA of the PoA with the latest data at the time of CPA-DD submission for inclusion.

The validation team confirmed that the validity of the original baseline or its update for renewal of the PoA period is appropriately assessed and demonstrated as per para. 288-291/ CDM PS for PoA version 02.0 and also “Tool to assess the validity of the original / current baseline and to update the baseline at the renewal of a crediting period” version.3.0.1.

D.2.3. Estimated emission reductions or net anthropogenic removals

Means of validation	DOE has assessed the calculation of GHG emission of the generic CPA complies with the applied methodology and requirement of the CDM PS for PoA version 02.0.
Findings	There are no CARs/CLs raised in this section.
Conclusion	<p>As per D.2.2. of this report, The current baseline scenario is still valid as per the methodology AMS I-D version 18.0.</p> <p>The annual emission reduction for renewal of the PoA period is calculated as same with the 1st PoA period.</p> <p>The baseline emission is demonstrated as follows:</p> $BE_y = EG_{PJ,y} * EF_{grid,y}$ <p>Where;</p> <p>BE_y : Baseline Emission in year y (tCO₂)</p> <p>$EG_{PJ,y}$: Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)</p> <p>$EF_{grid,y}$: Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO₂/MWh)</p> <p>The project emission is demonstrated as follows:</p> <p>The generic CPA involves small-scale hydropower generation project activity, and does not involves reservoirs, and does not consumes the fossil fuels due to the project activity, and will not have backup generator driven by fossil fuels. Therefore, the Project Emissions are zero.</p> <p>If CPA involves reservoirs and consumes the fossil fuels, the project emission will be calculated as per AMS I.D. version 18.0 and Section I.6/ PoA-DD.</p> <p>As per category AMS-I.D (Ver.18), leakage is to be considered only for biomass project activities. this generic CPA is not biomass projects, Leakage Emissions are zero. $LE_y = 0$ tCO₂/y.</p> <p>Emission Reductions (ER_y) is calculated as follows:</p> $ER_y = BE_y - PE_y - LE_y$ <p>The validation team confirmed that the algorithms and formulae used to determine emission reductions in the PoA-DD were referred in accordance with applied methodology, AMS I.D. (Version 18), and TOOL 07 of "tool to calculate the emission factor for an electricity system (Version 07.0).</p>

D.2.4. Validity of monitoring plan

Means of validation	<p>The PoA applies the approved monitoring methodology within AMS I-D. version 18. The original monitoring plan following the requirements of the CDM methodology was updated based on requirements of the applied methodology. The monitoring plan presented in the generic CPA complies with the requirements of the applicable methodology. The assessment team has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found. CME has appropriately mentioned the maintenance and calibration frequency of monitoring equipment and monitoring frequency against each monitoring parameter. The Document of the Operational and Management System prepared by CME&PPs on 27/09/2019 has been reviewed by the assessment team through document review and interviews with the relevant personnel. The information provided has allowed the validation team to confirm that the monitoring plan is feasible. The relevant points of monitoring plan have been discussed with the CME&PPs. Specifically; these points include the procedures of CPA inclusions, the location of meters, the data management, and the quality assurance and quality control procedures to be implemented in the context of the PoA.</p>
Findings	There are no CARs/CLs raised in this section

Conclusion	The validation team confirms that the CME&PPs are able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.
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D.2.5. Eligibility criteria for inclusion of CPAs

Means of validation	The coordinating/managing entity shall define the eligibility criteria for inclusion of CPAs in the proposed CDM PoA, setting out required conditions for a proposed CPA to be included in the PoA, and shall demonstrate the usability of the eligibility criteria for assessing the inclusion of CPAs in the PoA in accordance with para 123/ PS for PoA version 02.0																												
Findings	There are 1 CL and 1 CAR raised in this section.																												
Conclusion	The validation team checked the eligibility criteria for inclusion of CPAs as follows:																												
	<table border="1"> <thead> <tr> <th>N o.</th><th>Eligibility criterion - Category/ Required Condition</th><th>Mean of validation</th><th>Findings</th><th>Conclusion</th></tr> </thead> <tbody> <tr> <td>1</td><td>Voluntary action</td><td>The CPA is a voluntary activity, which is not enforced by any mandatory national/local regulation in Sri Lanka.</td><td>No findings raised in this eligibility criteria</td><td>This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA</td></tr> <tr> <td>2</td><td>Geographic al boundary</td><td>This criterion will ensure that all CPAs are within the geographical boundary (Sri Lanka) set by the proposed PoA. Geographic reference shows the physical and geographical location of the CPA. Therefore, it is verifiable whether the CPA is located in the boundary of the proposed PoA.</td><td>- No findings raised in this eligibility criteria</td><td>The eligibility criterion is defined in accordance with para.124(a)/ PS for PoA version 02.0 and same with the Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA</td></tr> <tr> <td>3</td><td>Agreement between CPA & CME and Acknowledgment by the CPA</td><td>Affirmation of issued by the implementer & Agreement between CPA & CME will be checked by the validation team.</td><td>No findings raised in this eligibility criteria</td><td>The eligibility criterion is same with the Section K of PoA-DD.. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA</td></tr> <tr> <td>4</td><td>De-bundling check</td><td>Affirmation of de-bundling check by the CPA Implementer will be checked by the validation team.</td><td>No findings raised in this eligibility criteria</td><td>The eligibility criterion is defined in accordance with para.124(n) /PS for PoA version 02.0 and same with the Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into</td></tr> </tbody> </table>	N o.	Eligibility criterion - Category/ Required Condition	Mean of validation	Findings	Conclusion	1	Voluntary action	The CPA is a voluntary activity, which is not enforced by any mandatory national/local regulation in Sri Lanka.	No findings raised in this eligibility criteria	This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA	2	Geographic al boundary	This criterion will ensure that all CPAs are within the geographical boundary (Sri Lanka) set by the proposed PoA. Geographic reference shows the physical and geographical location of the CPA. Therefore, it is verifiable whether the CPA is located in the boundary of the proposed PoA.	- No findings raised in this eligibility criteria	The eligibility criterion is defined in accordance with para.124(a)/ PS for PoA version 02.0 and same with the Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA	3	Agreement between CPA & CME and Acknowledgment by the CPA	Affirmation of issued by the implementer & Agreement between CPA & CME will be checked by the validation team.	No findings raised in this eligibility criteria	The eligibility criterion is same with the Section K of PoA-DD.. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA	4	De-bundling check	Affirmation of de-bundling check by the CPA Implementer will be checked by the validation team.	No findings raised in this eligibility criteria	The eligibility criterion is defined in accordance with para.124(n) /PS for PoA version 02.0 and same with the Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into			
N o.	Eligibility criterion - Category/ Required Condition	Mean of validation	Findings	Conclusion																									
1	Voluntary action	The CPA is a voluntary activity, which is not enforced by any mandatory national/local regulation in Sri Lanka.	No findings raised in this eligibility criteria	This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA																									
2	Geographic al boundary	This criterion will ensure that all CPAs are within the geographical boundary (Sri Lanka) set by the proposed PoA. Geographic reference shows the physical and geographical location of the CPA. Therefore, it is verifiable whether the CPA is located in the boundary of the proposed PoA.	- No findings raised in this eligibility criteria	The eligibility criterion is defined in accordance with para.124(a)/ PS for PoA version 02.0 and same with the Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA																									
3	Agreement between CPA & CME and Acknowledgment by the CPA	Affirmation of issued by the implementer & Agreement between CPA & CME will be checked by the validation team.	No findings raised in this eligibility criteria	The eligibility criterion is same with the Section K of PoA-DD.. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA																									
4	De-bundling check	Affirmation of de-bundling check by the CPA Implementer will be checked by the validation team.	No findings raised in this eligibility criteria	The eligibility criterion is defined in accordance with para.124(n) /PS for PoA version 02.0 and same with the Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into																									

					the PoA
	5	Double counting check	Certificate of double counting check issued by the implementer will be checked by the validation team.	No findings raised in this eligibility criteria	The eligibility criterion is defined in accordance with para.124(b)&(c) /PS for PoA version 02.0 and same with the Section B & Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA
	6	Technology & Specification	Technical Specifications issued by manufactures will be checked by the validation team to confirm the specification of the technology /measure employed in the CPA.	No findings raised in this eligibility criteria	The eligibility criterion is defined in accordance with para.124(d)/PS for PoA version 02.0 and same with Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA
	7	Methodology Applicability (AMS-I.D Ver.18)	The eligibility criterion will check the compliance of the applicability conditions of AMS-I.D. Ver.18, which is objective and comprehensive to allow assessment and inclusion of the CPA into the proposed PoA.	No findings raised in this eligibility criteria	The eligibility criterion is defined in accordance with para.124(f), (h)/PS for PoA version 02.0 and same with the Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA
	8	No Public Funding from Parties in Annex I	Affidavit on No Public Funding from Annex 1 party will be provided to the DOE. By the desk review and interview with CME/PPs and implementers, the DOE can objectively justify the status of funding if any.	No findings raised in this eligibility criteria	The eligibility criterion is defined in accordance with para.124(j)/PS for PoA version 02.0 and same with the Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA
	9	Additionality	If the CPA employs renewable energy technology up to 5MW installed capacity and satisfies conditions in the TOOL19 version 09.0, it can use the tool to demonstrate the microscale additionality and demonstrate the	CL 03 has been raised and closed successfully	The eligibility criterion is defined in accordance with para.124(g)/PS for PoA version 02.0 and same with the Section C and Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA

			<p>additionality automatically.</p> <p>Otherwise, the validation team confirms that the investment barrier contained in Tool-21 version 12.0 will be demonstrated for the proposed CPA.</p>		
	10	CPA start date	<p>The validation team confirms that the CPA is not started prior to the start date of the PoA, i.e. 5 February 2013 (the date of publication of the POA-DD for GSC) by reviewing the signed 1st commercial contract document accordance with the Glossary: CDM Terms Ver.09.1.</p>	No findings raised in this eligibility criteria	<p>The eligibility criterion is defined in accordance with para.124(e)/PS for PoA version 02.0 and same with the Section C and Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA</p>
	11	Local stakeholder consultation	<p>Evidence of Minutes of consultation meeting will be provided to the DOE for validation.</p> <p>Complying with the VVS requirements, in validation team's opinion, combining with/without the onsite inspection and interview with local stakeholders the evidence listed for the Eligibility criterion will be sufficient.</p>	No findings raised in this eligibility criteria	<p>The eligibility criterion is defined in accordance with para.124(i)/PS for PoA version 02.0 and same with Section K of PoA DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA</p>
	12	Environmental impact analysis	<p>IEE/EIA report & approval letter by authority will be provided to the DOE for validation.</p>	No findings raised in this eligibility criteria	<p>The eligibility criterion is defined in accordance with para.124(i)/ PS for PoA version 02.0 and same with Section K of PoA DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA</p>
	13	Project type & Capacity	<p>Manufacturer's Technical Specifications & Feasibility Study Report will be provided to the DOE for validation</p>	No findings raised in this eligibility criteria	<p>The eligibility criterion is defined in accordance with para.124(m)/ PS for PoA version 02.0 and same with Section K of PoA-DD This criterion is objective and comprehensive to</p>

				allow assessment and inclusion of CPA into the PoA
14	Target Group	For checking the CPA is to generate the electricity and connect the national grid only, manufacturer's technical specifications & feasibility study report will be provided to the DOE for validation	The CAR04 has been raised and closed successfully.	The eligibility criterion is defined in accordance with para.124(k)/ PS for PoA version 02.0 and same with the Section K of PoA-DD. This criterion is objective and comprehensive to allow assessment and inclusion of CPA into the PoA

Investment analysis in the proposed CPA

If the CPA employs renewable energy technology up to 5MW installed capacity and satisfies conditions in the TOOL19 version 09.0, it can use the tool to demonstrate the microscale additionality and demonstrate the additionality automatically.

Otherwise, the investment barrier will be applied as per TOOL21, then benchmark analysis of the investment analysis will be applied as per TOOL01.

In the investment analysis, project Internal Rate of Return (IRR) is selected as the most suitable financial indicator, and the main input values have been listed and validated as follows:

Benchmark: As per clause 15/ TOOL27 version 09.0, Local commercial lending rates of one-year average of Average Weighted Lending Rate (AWLR) issued by Central Bank of Sri Lanka as the benchmark will be applied at the time of investment decision for each CPA.

The validation team confirmed by reviewing the official website of Central Bank of Sri Lanka that all the monthly AWLR data is available and publicly acceptable.

The validation team concluded that the applied benchmark is suitable for the investment analysis for the CPAs.

Electricity Tariff: It will source from the SPPA as the generic CPA-DD. The validation team has checked ANNEX F: SRI LANKA ELECTRICITY TARIFF STRUCTURES/ Assessment of Sri Lanka's Power Sector published by UNDP, and found that there are two options to determine NCRE tariff: Three-tier tariff and Flat tariff. However, the tariff will be confirmed in the SPPA. Therefore, SPPA is the credible actual value source for the tariff of the CPAs.

Total investment, and O&M cost will source from the FSR for the proposed CPA.

Technical lifetime will source from the Manufactures specifications and/or FSR.

Annual estimated electricity generation will source from the Technical specification and/or FSR, conservative value will be applied.

The validation team confirmed all the input values in the investment analysis will be obtained from the actual values as per Para.124(g)(iv)a/PS for PoA version 02.0.

As per clause 27/ TOOL27 version 09, three parameters constituting more than 20% of either total project costs or total project revenues and having material impact will be taken in the sensitivity analysis.

Thus, as per clause 28/tool 27 version 9, the sensitivity analysis will at least cover a range of +10 per cent and -10 per cent of above three parameters such as total investment, annual electricity generation and electricity tariff as described in the generic CPA.

The validation team can conclude that the additionality can be demonstrated by the steps contained in the generic CPA.

SECTION E. Internal quality control

Internal quality control within the team is assured by means of a technical review process that takes place after the on-site assessment and after closure of findings. The internal quality control in the verification process is given by the final decision made by the Certification Body.

SECTION F. Validation opinion

KTR has performed a validation for renewal of the PoA period of the aforementioned existing Programme of Activities. Standard auditing techniques have been used for the validation process. The validation has been performed following the requirements of the latest version of the CDM VVS for PoA version 2.0. The review of the PoA-DD including the generic CPA-DD, subsequent follow-up interviews, and further verification and validation of references have provided validation team with sufficient evidence to determine the validity of the original baseline and the update of data & parameters.

The findings raised during this validation have been closed satisfactorily.


In our opinion, the PoA meets all relevant UNFCCC requirements and hence the validation team recommends the renewal of the PoA period of this PoA.

Appendix 1. Abbreviations

Abbreviations	Full texts
AMS	Approved small scale methodologies
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDP	Committee for Development Policy
CEA	Central Environmental Authority
CEB	Ceylon Electricity Board
CER	Certified Emission Reductions
CL	Clarification Request
CM	Combined margin
CME	coordinating/managing entity
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
CPA	component project activity
DD	Design Document
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EF	Emission factor
EIA	Environmental Impact Assessment
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	Green House Gas(es)
GNI	Gross National Income
HAI	Human Assets Index
IEE	Initial Environmental Examination
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
KP	Kyoto Protocol
KTR	Korea Testing & Research Institute
LoA	Letter of approval
MoC	Modalities of Communication MoU Memorandum of Understanding
NRE/NCRE	Nonconventional Renewable Energy
O&M	Operation & Maintenance
ODA	Official Development Assistance
OM	Operating Margin
PCP-PoA	CDM Project Cycle Procedure for Programme of Activities
PLF	Plant Load Factor
PoA	Programme of Activities
PP	Project Participant
PS for PoA	Project Standard for Programme of Activities
SLSEA	Sri Lanka Sustainable Energy Authority
SPPA	Standardized Power Purchase Agreement
SSC WG	small scale working group
SUZ	Special Underdeveloped Zone
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
VVS for PoA	Validation and Verification Standard for Programme of Activities
WHO	World Health Organization

Appendix 2. Competence of team members and technical reviewers

Certificate for Achievement



한국화학융합시험연구원

K O R E A T E S T I N G & R E S E A R C H I N S T I T U T E

Certificate of Authorization

Name : JUNG, Kyuhong

Date of Birth : February 1st, 1977

Certificate Number : 2019CDM - 001


We, hereby certify that above mentioned person is qualified for the technical areas specified below in compliance with Appendix 2 of CDM Accreditation Standard Ver 7.0 and CDM quality procedure (CDM-QP-07).

Scope of Authorization :

CODE	TECHNICAL AREA	STATUS
1.1	Thermal energy generation	Lead Validator/Verifier
1.2	Renewables	Lead Validator/Verifier
4.1	Cement and lime production	Lead Validator/Verifier
13.1	Solid waste and waste water	Lead Validator/Verifier


Valid until : July 5th, 2022

July 5th, 2019



한국화학융합시험연구원장

Korea Testing and Research Institute



KTR

한국화학융합시험연구원

K O R E A T E S T I N G & R E S E A R C H I N S T I T U T E

Certificate of Authorization

Name : LEE, Jeongil
Date of Birth : February 14th, 1972
Certificate Number : 2019CDM - 003

We, hereby certify that above mentioned person is qualified for the technical areas specified below in compliance with Appendix 2 of CDM Accreditation Standard Ver 7.0 and CDM quality procedure (CDM-QP-07).

Scope of Authorization :

CODE	TECHNICAL AREA	STATUS
1.2	Renewables	Full-time Validator/Verifier
13.1	Solid waste and waste water	Full-time Validator/Verifier
13.2	Manure	Full-time Validator/Verifier

Valid until : July 5th, 2022

July 5th, 2019



한국화학융합시험연구원장
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K O R E A T E S T I N G & R E S E A R C H I N S T I T U T E

Certificate of Authorization

Name : LEE, Bongjae
 Date of Birth : August 6th, 1978
 Certificate Number : 2019CDM - 002

We, hereby certify that above mentioned person is qualified for the technical areas specified below in compliance with Appendix 2 of CDM Accreditation Standard Ver 7.0 and CDM quality procedure (CDM-QP-07).

Scope of Authorization :

CODE	TECHNICAL AREA	STATUS
1.1	Thermal energy generation	Lead Validator/Verifier
1.2	Renewables	Lead Validator/Verifier
3.1	Energy demand	Lead Validator/Verifier
4.1	Cement and lime production	Lead Validator/Verifier
13.1	Solid waste and waste water	Lead Validator/Verifier

Valid until : July 5th, 2022July 5th, 2019

한국화학융합시험연구원장
 Korea Testing and Research Institute



Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	UNFCCC	Methodology AMS-I.D. "Grid connected renewable electricity generation	EB 81, Annex 24 Version 18.0	UNFCCC
2	UNFCCC	TOOL07: Tool to calculate the emissions factor for an electricity system ver.07.0.0	EB 100, Annex 4	UNFCCC
3	UNFCCC	Programme of activities design document form	Version 09.0 31/05/ 2019	UNFCCC
4	Sri Lanka Climate Fund (Pvt.) Ltd.	Initially updated POA-DD version 04.0 Revised POA-DD version 05.0	- -	CME
5	Sri Lanka Climate Fund (Pvt.) Ltd.	EF Calculation sheet version 04.0 EF Calculation sheet version 05.0	- -	CME
6	UNFCCC	CDM project standard for programmes of activities	CDM-EB93-A08-STAN Version 02.0	UNFCCC
7	UNFCCC	CDM validation and verification standard for project activities	CDM-EB93-A05-STAN Version 02.0	UNFCCC
8	Sri Lanka Climate Fund (Pvt.) Ltd.	MOU (Memorandum of Understanding)	13/09/2012	CME
9	Sri Lanka Climate Fund (Pvt.) Ltd.	Signed Modalities of Communication Statement(MOC)	04/09/2019	CME
10	Sri Lanka Climate Fund (Pvt.) Ltd.	Certificate of incorporation for CME	PV 63781	CME
11	Sri Lanka Climate Fund (Pvt.) Ltd.	Notice of company's change of registered office address for CME	PV 63781	CME
12	Koho trading and consultancy (private) Limited	Notice of company's change of registered office address for PP,	PV 10632	PP
13	Ministry of Mahaweli Development and Environment	Revised LoA	30/04/2019	CME
14	UNFCCC	Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period	EB 66 annex 47 Version 03.0.1	UNFCCC
15	Ministry of Power & Energy	National energy policy & Strategies of Sri Lanka	Gaette No. 1553/10 10/06/2008	Other
16	Transmission and Generation Planning Branch Transmission Division CEYLON ELECTRICITY BOARD	Long Term Generation Expansion Plan 2018-2037	06/2018	Other
17	Sri Lanka Sustainable Energy Authority	Sri Lanka Energy Balance 2017	2018	Other
18	Sri Lanka Climate Fund (Pvt.) Ltd	Document of the Operational and Management System	27/09/2019	CME
19	UNFCCC	TOOL01 : Tool for the demonstration and assessment of additionality	EB 70 annex 08	UNFCCC
20	UNFCCC	TOOL19 : Demonstration of	EB 101 annex 15	UNFCCC

		additionality of microscale project activities		
21	UNFCCC	TOOL21 : Demonstration of additionality of small-scale project activities	EB 99 annex 3	UNFCCC
22	UNFCCC	TOOL27 : Investment analysis	EB 101 annex 11	UNFCCC
23	UNDP	Assessment of Sri Lanka's Power Sector	-	Other
24	Central Bank of Sri Lanka	Website of Central Bank of Sri Lanka	https://www.cbsl.lk/eResearch/Modules/RD/SearchPages/CMB_LendingAndDeposit.aspx	Other
25	UNFCCC	"Special Underdeveloped Zone" (SUZ) under the "Guidelines for the demonstration of additionality of microscale project activities"	SSC WG 35 meeting report Annex 19	UNFCCC
26	UN CDP(Committee for Development Policy)	List of least developed countries	-	Other
27	CEB	Statistical Digest Report 2013 Statistical Digest Report 2014 Statistical Digest Report 2015 Statistical Digest Report 2016 Statistical Digest Report 2017	-	Other
28	WHO/UNICEF	Joint Monitoring Programme for Water Supply, Sanitation and Hygiene	06/2019	Other

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CL from this validation

CL ID	01	Section no.	D.1.3	Date: 05/09/2019
Description of CL				
The Modalities of the communication (MoC) statement shall be provide for validation, and the necessary supporting documents should also be provided				
Project participant response				Date: 30/10/2019
The MoC statement is signed by the CME and PPs on 04/09/2019. And the written confirmation from the CME that all corporate and personal details, including specimen signatures are valid and accurate, has been sent to the validation team directly by CME.				
Documentation provided by project participant				
- Signed MoC				
DOE assessment				Date: 02/11/2019
The validation team reviewed the signed MoC and the written confirmation from the CME, and confirmed the MoC has been correctly completed with the latest version of the form, and signed by PPs' authorized signatories, and it has been confirmed that all corporate and personal details including specimen signatures are valid and accurate as per the written confirmation letter from the CME. In conclusion, the corporate and personal details, employment status and specimen signatures included in the MoC statement are valid and accurate. Thus, the CL01 has been closed.				

CL ID	CL02	Section no.	D.2.2	Date: 05/09/2019
Description of CL				
The CME choose The $EF_{CO2,grid,y}$ issued by the SEA of Sri Lanka which is more reliable and accurate compared to calculation of $EF_{CO2,grid,y}$ by CME. However, it was prepared under the version 5.0 of "Tool to calculate the EF for an electricity system which is out of version at the time of submission of the generic CPA-DD to the DOE for validation. Therefore, The CME is requested to clarify the deviation between the version 05.0 and version 07.0.				
Project participant response				Date: 30/10/2019
The CME explained that there are no revision to affect the calculation EF. Because there is only one electricity transmission system which is owned and operated by the national utility known as Ceylon Electricity Board (CEB) in Sri Lanka.				
Documentation provided by project participant				
-				
DOE assessment				Date: 02/11/2019

DOE compared the revision details from Version 5.0 of "Tool to calculate the EF for an electricity system" to Version 7.0 and find out that there was no revision to affect the calculation EF for grid connection.

Version change	Key revision	Validation opinion
From 05.0 – 06.0 :	Inclusion of simplified approaches on small isolated grids in SIDS and LDC.	No impact There is no revision or update for EF calculation regarding grid-connected electricity generation.
	Enhancement of the clarity of the requirements related to determine transmission constraints	No impact In Sri Lanka, there is only one electricity transmission system which is owned and operated by the national utility known as Ceylon Electricity Board (CEB). Therefore Option 1 is used and each CPA under the PoA will be connected to this network. Therefore, there is no impact of EF calculation for updated tools
From 06.0 – 07.0	Revision to include monitoring requirements for parameters used to determine the emission factor of the isolated grid.	No impact there is only one electricity transmission system which is owned and operated by the national utility known as Ceylon Electricity Board (CEB).

In Sri Lanka, there is only one electricity transmission system which is owned and operated by the national utility known as Ceylon Electricity Board (CEB). Therefore Option 1 is used and each CPA under the PoA will be connected to this network.

In conclusion, the $EF_{CO_2,grid,y}$ issued by the SEA of Sri Lanka is valid and acceptable.

Therefore, the CL02 has been closed.

CL ID	CL 03	Section no.	D.2.5	Date: 05/09/2019
Description of CL				
<p>As per TOOL 19, if the CPA employs renewable energy technology up to 5MW installed capacity, the CPA choose the option (a) to demonstrate the additionality automatically in the PoA-DD version 3.0 for 1st PoA period.</p> <p>However, the CME did not choose the option(a) in the PoA-DD for renewal PoA period.</p> <p>Alternatively, the CME will demonstrate the addintionality by using the TOOL 19 and TOOL 21 in case of micro scale CPA.</p> <p>CME is requested to clarify the change of additionality demonstration for the micro-scale CPA</p>				
Project participant response				Date: 30/10/2019
The CME presented the list of least developed countries prepared by UN CDP(Committee for Development Policy) and relevant evidence documents				
Documentation provided by project participant				
<ul style="list-style-type: none"> - List of least developed countries prepared by UN CDP - Web-Site Link (https://www.un.org/development/desa/dpad/least-developed-country-category/ldc-data-retrieval.html) - Joint Monitoring Programme for Water Supply, Sanitation and Hygiene_06/2019 issued by WHO/UNICEF 				
DOE assessment				Date: 02/11/2019
<p>As per the Definition of "Special Underdeveloped Zone" (SUZ) under the "Guidelines for the demonstration of additionality of microscale project activities", SSC WG 35 meeting report Annex 19, the SSC WG recommends that at least two of the below conditions are satisfied for a SUZ:</p> <p>(a) The average GNI per capita of the most recent 3 years in the zone should be lower than or equal to \$905 as per the World Bank Atlas method. The GNI per capita shall be reported in USD;</p> <p>(b) Human Assets Index (HAI) of the zone is less than the value in the reference group as indicated by CDP of UNESC;</p> <p>(c) Economic Vulnerability Index (EVI) of the zone is less than the value in the reference group, as indicated by CDP of UNESC;</p> <p>(d) The proportion of population with income less than USD 1 per day in the zone is greater than 50%;</p> <p>(e) The proportion of population with no access to improved drinking water supply as per WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation is greater than 50%</p> <p>The validation team reviewed the references above and checked the list of least developed countries prepared by UN CDP(Committee for Development Policy), found that all criteria were not met. Therefore, it was confirmed that Sri Lanka is is no longer consider it as the SUZ of host country</p> <p>If the CPA employs renewable energy technology up to 5MW installed capacity, the CPA will assess the conditions defined in the TOOL 19 and TOOL 21. the validation team confirmd that it is correct and reasonable.</p> <p>Thus, the CL03 has been closed</p>				

Table 2. CAR from this validation

CAR ID	CAR 01	Section no.	D.1.3.	Date: 05/09/2019
Description of CAR				
<p>During the desk review and interview with the representative of CME & PPs, Appendix 7 of the PoA-DD does not depict the corrections as follows:</p> <ol style="list-style-type: none"> 1. Both name and address of CME have been changed. 2. Address of the PP, Koho Trading and Consultancy (Private) Limited has been changed. 				
Project participant response				Date: 30/10/2019
The CME has included the information of change in the revised PoA-DD.				
Documentation provided by project participant				
<ul style="list-style-type: none"> - Certificate of incorporation for CME - Notice of company's name/address change of registered office for CME - Notice of company's address change of registered office for PP, Koho trading and consultancy (private) Limited. - Revised LoA - Signed MOC - Revised PoA-DD version 05.0 				

DOE assessment	Date: 02/11/2019
<p>1. For CME name/address changes, The validation team checked the certificate of incorporation(No. of company: PV 63781) issued by Democratic Socialist Republic of Sri Lanka and found that Sri Lanka Carbon Fund (Private) Limited has changed its name to Sri Lanka Climate Fund (Private) Limited in accordance with the provisions of the section 8 of the Companies Act, No. 7 of 2007 dated on 29/01/2016. The validation team has also checked the notice of company's change of registered office address issued on 03/10/2017 and found that it is true to change the address to NO 82. "Sampathpaya" Rajamalwaththa Road, Battaramulla, Sri Lanka.</p> <p>2. For Koho trading and consultancy (Private) Limited (project participant) address change, the validation team has checked the notice of company's change of registered office address issued on 03/10/2017 and found that it is true to change the address to No. 416/2-1, Thimbrigasyaya Road, Colombo 5, Sri Lanka.</p> <p>The validation team crosschecked the identities with business licenses of the PPs and CME, the LoA re-issued by DNA of Sri Lanka dated 30/04/2019, the MOC signed by CME and PPs signed on 04/09/2019 , revised PoA-DD version 5.0, the on-site interviews, and confirmed the information was consistent. For CME, the legal status and organization structure still remains because the business license number is same with the previous certificate of incorporation for CME.</p> <p>The validation team is able to conclude the changes of name and/or address for corporate CME and/or PP are accurate and correct.</p> <p>Thus, the CAR 01 was closed.</p>	

CAR ID	CAR 02	Section no.	D.2.2.	Date: 05/09/2019
Description of CAR				
<p>To calculate the EF, the simple OM emission factor calculation method was chosen because low cost/ must-run projects constituted less than 50% of the total grid generation during the previous 5 years. However, the Data of Low-cost/must run (LCMR) in the Emission Factor calculation section of generic CPA-DD is not identical with the Statistical Digest 2012-2016 and the data is not updated to Statistical Digest to 2013-2017.</p>				
Project participant response				Date: 30/10/2019
The Data of Low-cost/must-run for emission factor calculation has been corrected and update to 2013-2017.				
Documentation provided by project participant				
<p>Revised the CPA-DD version 5.0</p> <p>Revised EF calculation sheet version 5.0</p>				
DOE assessment				Date: 02/11/2019
<p>The EF calculation contained in the PoA-DD has been cross-checked with the Grid Emission Factor calculation issued by SLSEA, "Statistical Digest Report" issued by CEB, 2013-2017 and found them correct.. The validation team also interviewed the official in SLSEA about the EF calculation procedures, and can confirm that the emission factor calculation is in accordance with data Statistical Digest Report from 2013 to 2017,</p> <p>The CPA-DD & EF calculation sheet has also been revised in accordance with the above data and confirmed them to be accurate and correct.</p> <p>Therefore, the CAR02 has been closed.</p>				

CAR ID	CAR 03	Section no.	D.2.2.	Date: 05/09/2019
Description of CAR				
<p>.According to section 6.8 of the tool, the steps to determine the parameter shall be applied to each component project activity (CPA) of the PoA for determining the CO₂ emission factor for an electricity system. However, the all the generic CPA-DDs have determined the EF_{grid,y} as 0.8108 tCO₂/MWh for 1st crediting period, 0.8666 tCO₂/MWh for 2nd and 3rd crediting period to be applied by all CPAs.</p>				
Project participant response				Date: 30/10/2019
The CME has revised the generic PPA-DD reflecting this issue.				
Documentation provided by project participant				
Revised PoA-DD version 5.0				

DOE assessment	Date: 02/11/2019
<p>In the generic CPA-DD, the CME described the EF determination steps as per the TOOL07 version 07.0. The CME has included the description for the steps to determine the parameter will be applied to each component project activity (CPA) of the PoA for determining the CO₂ emission factor for an electricity system, with the latest data by the time of CPA-DD submission for inclusion.</p> <p>In order to unify the modality and procedure for each specific CPA-DD, equations with specific years and Appendix 4 were kept as the example in the PoA-DD.</p> <p>The validation team reviewed the revised PoA-DD and found it correct.</p> <p>Therefore, the CAR 03 has been closed.</p>	

CAR ID	CAR 04	Section no.	D.2.5.	Date: 05/09/2019
Description of CAR				
<p>The CME developed the eligibility criteria for inclusion of a CPA in the PoA in the PoA-DD. However, the validation team found that the eligibility criteria for inclusion of CPA in the PoA is not fully covered required with para. 124/ PS for PoA version 2.0</p>				
Project participant response				Date: 30/10/2019
<p>The CME included the target group as a requirement of eligibility criteria in the Section K/ revised PoA-DD version 5.0</p>				
Documentation provided by project participant				
<p>Revised the PoA-DD version 5.0</p>				
DOE assessment				Date: 02/11/2019
<p>The target group as a requirement of eligibility criteria is included in the Section K/ revised PoA-DD version 5.0.</p> <p>The CPA is to generate the electricity and connect the national grid only, manufacturer's technical specifications & feasibility study report will be provided to the DOE for validation.</p> <p>The validation team assessed the revised eligibility criteria for inclusion of a CPA under the PoA, and confirmed that the eligibility criteria are properly revised in accordance with para. 124/ PS for PoA version 2.0</p>				

Table 3. FAR from this validation

FAR ID	-	Section no.	-	Date: -
Description of FAR				
N/A				
Project participant response				Date: -
N/A				
Documentation provided by project participant				
N/A				
DOE assessment				Date: -
N/A				