

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**



CDM – Executive Board

page 1

CLEAN DEVELOPMENT MECHANISM SMALL-SCALE PROGRAM ACTIVITY DESIGN DOCUMENT FORM (CDM-SSC-CPA-DD) Version 01
--

CONTENTS

- A. General description of CDM programme activity (CPA)
- B. Eligibility of CPA and Estimation of Emission Reductions
- C. Environmental Analysis
- D. Stakeholder comments

Annexes

Annex 1: Contact information on entity/individual responsible for the CPA

Annex 2: Information regarding public funding

Annex 3: Baseline information

Annex 4: Monitoring plan

NOTE:

- (i) This form is for submission of CPAs that apply a small scale approved methodology using the provision of the proposed small scale CDM PoA.
- (ii) The coordinating/managing entity shall prepare a CDM Small Scale Programme Activity Design Document (CDM-SSC-CPA-DD)^{1,2} that is specified to the proposed PoA by using the provisions stated in the SSC PoA DD. At the time of requesting registration the SSC PoA DD must be accompanied by a CDM-SSC CPA-DD form that has been specified for the proposed SSC PoA, as well as by one completed CDM-SSC CPA-DD (using a real case). After the first CPA, every CPA that is added over time to the SSC PoA must submit a completed CDM-SSC CPA-DD.

¹ The latest version of the template form CDM-CPA-DD is available on the UNFCCC CDM web site in the reference/document section.

² At the time of requesting validation/registration, the coordinating managing entity is required to submit a completed CDM-POA-DD, the PoA specific CDM-CPA-DD, as well as one of such CDM-CPA-DD completed (using a real case).

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO



CDM – Executive Board

page 2

SECTION A. General description of small scale CDM programme activity (CPA)

Note: the text in the black shall not be altered by the CPA implementers. Only text in orange shall be altered and/or modified.

A.1. Title of the small-scale CPA:

>>

XXX Brick Project

Version: **XXX**

Date: **DD/MM/YYYY**

A.2. Description of the small-scale CPA:

>>

The proposed small scale CDM Programme activity “**XXX Brick Project**” (hereafter referred to as the “**The CPA**”) is developed by the **XXX** (hereafter referred to as the “**The CPA implementer**”). The CPA is a new unburnt brick production facility located in **ADDRESS, CITY, PROVINCE**, Viet Nam. The CPA is to produce **XXX million standardized³ unburnt bricks (concrete bricks) OR m³ (AAC) annually**.

The proposed SSC CPA is under the PoA “**Green Brick Development Programme of Activities Managed by INTRACO**”. The PoA promotes an eco-friendly technology for production of alternative building materials. Technology employed by the CPA in this PoA does not involve any firing/sintering (using fossil fuels) stage, which is applied in normal fired clay brick production and therefore the CPA of the PoA will contribute to conservation of energy and fossil fuel (coal). The coordinating/management entity (CME) of this PoA is Investment and Trade Consultancy Company Limited (referred later on as **INTRACO** or the **CME**). The CME **will work closely with the developers** of the unburnt brick plant and other organizations active in the construction material sector in Viet Nam to facilitate the development of the new unburnt brick plant and its inclusion in this PoA.

The CPA complies with the following technological scenario as described in the SSC-PoA-DD:

Scenario	Description of scenario
<input type="checkbox"/> 1	Concrete Bricks
<input type="checkbox"/> 2	Autoclaved Aerated Concrete Blocks

Table A.2.1 – Technological scenario

Description of the technology involved in the CPA:

CPA implementer shall detail at CPA level the details of the technology involved.

A.3. Entity/individual responsible for the small-scale CPA:

>>

XXX is the CPA Implementer.

³ Standard bricks are considered of 220 mm x 105 mm x 60 mm (=1.386 dm³) size. The CPAs may produce bricks of varying sizes depending on the market demand.

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO



CDM – Executive Board

page 3

A.4. Technical description of the small-scale CPA:

A.4.1. Identification of the small-scale CPA:

>>

The operational and management arrangements established by the CME for the implementation of the PoA are described below:

CPA Number	XXX
CPA Title	XXX Brick Project
CPA Implementer	XXX
Technology Scenario	XXX
GPS coordinates of the CPA site	XXX E and XXX N
Address of CPA site	ADDRESS, CITY
Province	XXX Province
Starting date of the CPA	DD/MM/YYYY (INDICATE SUPPORTIVE EVIDENCE DOCUMENT)
Expected commissioning/operation start date of the CPA	DD/MM/YYYY (INDICATE SUPPORTIVE EVIDENCE DOCUMENT)

Table A.4.1 – CPA identification.

The unique information provided above will avoid double counting of the emission reduction.

A.4.1.1. Host Party:

>>

Viet Nam

A.4.1.2. Geographic reference or other means of identification allowing the unique identification of the small-scale CPA (maximum one page):

>>

The XXX Brick Project located in ADDRESS, CITY, PROVINCE, Viet Nam

The geographical coordinates of the CPA:

Latitude: XXX N and Longitude: XXX E.

The site of the CPA is shown in the figure below:

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO

CDM – Executive Board

page 4

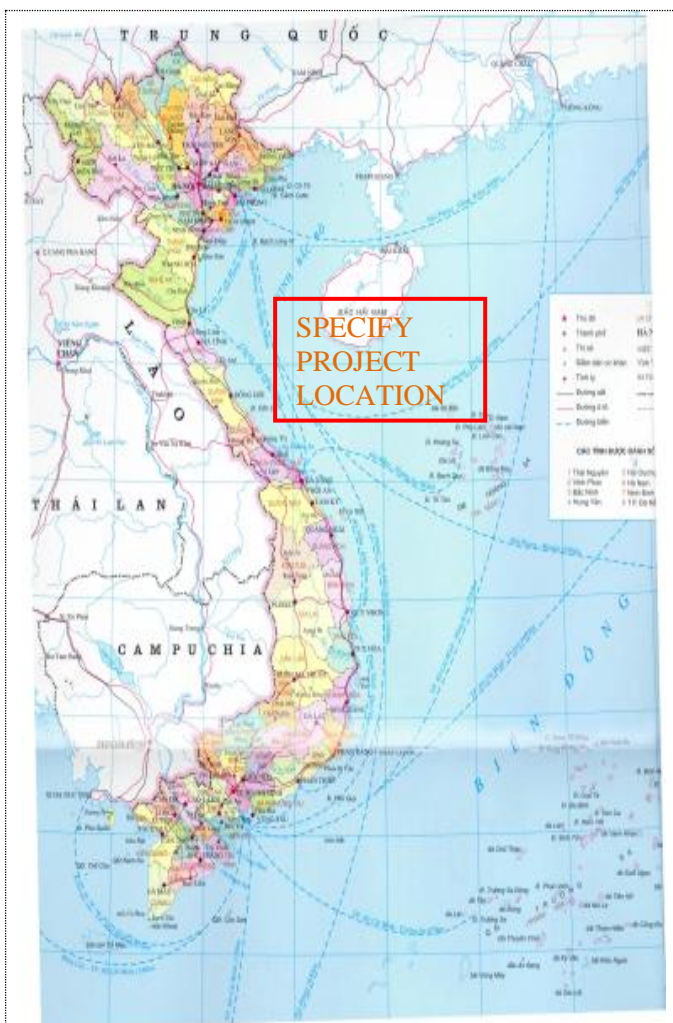


Fig A.4.1.2.1. Map of Vietnam

[INSERT MAP OF PROVINCE]



Fig A.4.1.2.1. Map of XXX Province

A.4.2. Duration of the small-scale CPA:

A.4.2.1. Starting date of the small-scale CPA:

>>

DD/MM/YYYY (PLEASE SPECIFY EVENT)

The starting date shall not be before the date of commencement of validation of the PoA (10/12/2010).

A.4.2.2. Expected operational lifetime of the small-scale CPA:

>>

XX years XX month(s) (Please provide the evidence documentation reference)

A.4.3 Choice of the crediting period and related information:

>>

Fixed Crediting Period



A.4.3.1. Starting date of the crediting period:

>>

DD/MM/YYYY

The starting date of the crediting period of the CPA shall be the date of its inclusion in the registered PoA, or any date thereafter which-ever is later. The duration of the crediting period shall not exceed the end date of the PoA.

A.4.3.2. Length of the crediting period, first crediting period if the choice is renewable CP:

>>

10 years.

Note: Please note that the duration of crediting period of any CPA shall be limited to the end date of the PoA regardless of when the CPA was added.

A.4.4. Estimated amount of emission reductions over the chosen crediting period:

>>

Table A.4.1 Estimated amount of emission reductions over the chosen crediting period

Years	Estimation of annual emission reductions in tonnes of CO ₂ e
Year 1	XXX
Year 2	XXX
Year 3	XXX
Year 4	XXX
Year 5	XXX
Year 6	XXX
Year 7	XXX
Year 8	XXX
Year 9	XXX
Year 10	XXX
Total estimated reductions (tonnes of CO₂e)	XXX
Total number of crediting years	10
Annual average of the estimated reductions over the crediting period (tCO₂ e)	XXX

A.4.5. Public funding of the CPA:

>>

The CPA will/has not receive(d) any public funding from Parties included in Annex I of the UNFCCC.

OR:

The CPA will/has receive(d) public funding from Parties included in Annex I of the UNFCCC. It is confirmed that this will not lead to diversion of ODA funding.



A.4.6. Information to confirm that the proposed small-scale CPA is not a de-bundled component

>>

The CPA included in the PoA is not a debundled component of another CDM Programme Activity or CDM Project activity:

It has been demonstrated that this CPA included in the PoA is not a debundled component of another CDM Programme of Activities or another CDM Project activity. The following approach has been applied as per the guidance for determining the occurrence of de bundling under a Programme of Activities (EB 54, Annex 13):

Paragraphs 8, 9 and 10 of EB 54, Annex 13 states:

Para 8. For the purposes of registration of a Programme of Activities (PoA)⁴ a proposed small-scale CPA of a PoA shall be deemed to be a de-bundled component of a large scale activity if there is already an activity⁵, which satisfies both conditions (a) and (b) below:

(a) Has the same activity implementer as the proposed small scale CPA or has a Coordinating or Managing entity, which also manages a large scale PoA of the same technology/measure, and;

Substantiation:(proper justification to be provided)

(b) The boundary is within 1 km of the boundary of the proposed small-scale CPA, at the closest point.

Substantiation:(proper justification to be provided and list all projects within 1 km)

Para 9. If a proposed small-scale CPA of a PoA is deemed to be a debundled component in accordance with paragraph 2 above, but the total size of such a CPA combined with a registered small-scale CPA of a PoA or a registered CDM Project activity does not exceed the limits for small-scale CDM and smallscale A/R Project activities as set out in Annex II of the decision 4/CMP.1⁶ and 5/CMP.1 respectively, the CPA of a PoA can qualify to use simplified modalities and procedures for small-scale CDM and smallscale A/R CDM Project activities.

Substantiation:(proper justification to be provided)

Para 10. If each of the independent subsystems/measures (e.g. biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small scale thresholds defined by the

⁴ Only those POAs need to be considered in determining de-bundling that are: (i) in the same geographical area; and (ii) use the same methodology; as the POA to which proposed CPA is being added

⁵ Which may be a (i) registered small-scale CPA of a PoA, (ii) an application to register another small-scale CPA of a PoA or (iii) another registered CDM Project activity

⁶ Limits have been revised as set in paragraph 28 of decision 1/CMP.2

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO

CDM – Executive Board

page 7

methodology applied⁷, than that CPA of PoA is exempted from performing de-bundling check i.e. considered as being not a de-bundled component of a large scale activity.

Substantiation:(proper justification to be provided)

Based on the above description, the proposed small scale CPA under PoA is not deemed to be de-bundled component of a large-scale activity, therefore is eligible to use the simplified modalities and procedures for small-scale project activities. The CPA implementer name XXX has given a declaration to CME that the Project activity is not a debundled component of large scale Project.

The CME confirms that the CPA is not a de-bundled component of large scale Project activity.

A.4.7. Confirmation that small-scale CPA is neither registered as an individual CDM project activity or is part of another Registered PoA:

>>

The CPA implementer XXX and the CME confirm that the present small-scale CPA is not registered as an individual CDM project and is also not a part of another PoA.

SECTION B. Eligibility of small-scale CPA and Estimation of emissions reductions

B.1. Title and reference of the Registered PoA to which small-scale CPA is added:

>>

Green Brick Development Programme of Activities Managed by INTRACO

Version: 04

Date: 21/05/2012

B.2. Justification of the why the small-scale CPA is eligible to be included in the Registered PoA:

>>

[The area below is left blank intentionally due to changes in orientation of the pages in this section.]

⁷ i.e. 450 kW thermal installed capacity

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO

CDM – Executive Board

page 8

Each of the CPA to be included in the proposed PoA shall meet the following applicable eligibility criteria (considering the para 13, annex 3 of EB 63):

S. No.	Eligibility criteria description	Information/document requirement (kindly tick the box if information requested is available).	Eligibility check outcome (to be confirmed at CPA level by the CME)	Justification
a.	The CPA shall be located in Viet Nam, but not in the following provinces: Can Tho, An Giang, Bạc Liêu, Ben Tre, Ca Mau, Dong Thap, Hau Giang, Kien Giang, Long An, Soc Trang, Tien Giang, Tra Vinh and Vĩnh Long.	All of the following documents shall be provided: <input type="checkbox"/> Business license of the CPA Implementer issued by Vietnamese local authorities. <input type="checkbox"/> Declaration from the CPA implementer confirming that the boundary of the implemented CPA is within the geographical territory of Viet Nam, but not within the aforementioned provinces and including information regarding geographic reference (latitude and longitude), name and address of the SSC-CPA.	<input type="checkbox"/> Yes <input type="checkbox"/> NO	[justification/clarification]
b	The CPA implementer has signed a valid contractual agreement with the CME which permits its participation and inclusion in the PoA and specifies the duties and responsibilities of a CPA implementer and the acceptance of the terms and conditions of the PoA. This contract is one of the measures to avoid double counting as it would contain the name and full details of CPA implementer at the same time, it	The following document shall be provided: <input type="checkbox"/> Contractual agreement between CME and CPA implementer.	<input type="checkbox"/> Yes <input type="checkbox"/> NO	[justification/clarification]

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO

CDM – Executive Board

page 9

	would contain an agreement /undertaking by the CPA implementer stating that the CPA is only a part of this PoA and shall not be subscribed as a stand-alone project or part of any other PoA.			
c.	The SSC-CPA shall confirm to one of technological scenarios used for the production of unburnt brick as described in section A.4.2 of the SSC-PoA-DD	<p>The following document shall be provided:</p> <p><input type="checkbox"/> Confirmation by the CME regarding the applicable technological scenario for the CPA.</p> <p>Any of the following documents shall be provided:</p> <p><input type="checkbox"/> Purchase order of equipment</p> <p><input type="checkbox"/> Feasibility Study / Project Proposal of the project that describes the project technology.</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> NO</p>	[justification/clarification]
d.	The start date of the SSC-CPA shall not be before the commencement of validation of the PoA (10/12/2010, the date the PoA was published on the website of the UNFCCC for Global Stakeholders Consultation).	<p>One of the following documents shall be provided:</p> <p><input type="checkbox"/> In case available, the earliest signed equipment or (sub) contractor agreement with a total contract value that is significant to the project activity (the date of signing the purchase order by SSC-CPA Implementer shall constitute the starting date of the SSC-CPA).</p> <p><input type="checkbox"/> Declaration from the CPA Implementer that no contracts have been signed till the CPA inclusion date.</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> NO</p>	[justification/clarification]
e	The CPA shall meet the applicability and other	As described in section E.2 of the PoA DD, the CPA shall meet relevant requirement of the meth and the	<input type="checkbox"/> Yes	[justification/clarification]

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO

CDM – Executive Board

page 10

	requirements of the methodology AMS.III.Z Version 03. ⁸	required document shall be supplied to the DOE at the time of inclusion.	<input type="checkbox"/> NO	
f	Demonstration of additionality as described in the section E.5.1 of the PoA DD in line with §6 and §8 of annex 2, EB 63.	The CPA provides related documents to substantiate the argument of barrier analysis put forth in section E.5.1 of the PoA DD.	<input type="checkbox"/> Yes <input type="checkbox"/> NO	[justification/clarification]
g	The SSC-CPA shall conduct local stakeholder's consultation and Environmental Analysis at CPA level. This shall be carried out prior to inclusion.	The following documents shall be provided: <input type="checkbox"/> Meeting minutes and other related documents of the local stakeholder consultation. <input type="checkbox"/> Copy of Environmental Analysis report.	<input type="checkbox"/> Yes <input type="checkbox"/> NO	[justification/clarification]
h	CPA of the PoA shall be within the threshold (i.e. emission reduction of less than or equal to 60 kilotons of CO ₂ equivalent annually) as per the §7 (c) of applied Baseline and Monitoring Methodology AMS III.Z/version 03.	The CPA implementer and CME shall consider this condition in the CPA DD and Emission reduction spread sheet.	<input type="checkbox"/> Yes <input type="checkbox"/> NO	[justification/clarification]

⁸ Including the level of service level compliance as per relevant national standard, refer section A.4.2.1 of the PoA-DD.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 11

i	Confirmation that the CPA is not a de-bundled component of another large-scale CPA or CDM project activity as per latest guidance given by the CDM Executive Board	<p>The following document shall be provided:</p> <p><input type="checkbox"/> Declaration from the CPA Implementer confirming that the CPA is not a de-bundled component of another large-scale CPA or CDM project activity as per latest guidance given by the CDM Executive Board.</p> <p>And:</p> <p><input type="checkbox"/> Confirmation that the SSC-CPA is not a de-bundled component of another large-scale SSC-CPA or CDM project activity as per latest guidance given by the CDM Executive Board shall be provided in the SSC-CPA-DD.</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> NO</p>	[justification/clarification]
j	Confirmation on involvement of public funding or ODA from Annex I Parties in SSC-CPA	<p>The following document shall be provided:</p> <p>Option 1:</p> <p><input type="checkbox"/> Declaration (document) from the CPA Implementer regarding the no involvement of public funding or ODA from Annex I Parties.</p> <p>And:</p> <p><input type="checkbox"/> Confirmation in the SSC-CPA-DD regarding no involvement of public funding or ODA from Annex I Parties.</p> <p>OR</p> <p>Option 2:</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> NO</p>	[justification/clarification]

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO

CDM – Executive Board

page 12

		<input type="checkbox"/> In case of public funding, an affirmation/confirmation / declaration that such public funding does not result in diversion of ODA. And: <input type="checkbox"/> Confirmation in the SSC-CPA-DD regarding no diversion of ODA from Annex I Parties.		
k	The CPA implementer shall be duly registered by the Vietnamese authorities prior to inclusion	The following document shall be provided: <input type="checkbox"/> Business license of the CPA Implementer issued by Vietnamese local authorities.	<input type="checkbox"/> Yes <input type="checkbox"/> NO	[justification/clarification]
l	The SSC-CPA shall be in compliance with statutory requirements of Viet Nam.	The following document shall be provided: <input type="checkbox"/> Approval document from the Vietnamese local authorities, to approve the Environmental Impact Assessment Report.	<input type="checkbox"/> Yes <input type="checkbox"/> NO	[justification/clarification]
m	Confirmation on the crediting period of the SSC-CPA which shall not exceed the length of the PoA (28 years) regardless of the time of inclusion of CPA in the PoA	Confirmation described in the SSC-CPA-DD states that the crediting period of the SSC-CPA shall not exceed the length of the PoA.	<input type="checkbox"/> Yes <input type="checkbox"/> NO	[justification/clarification]



B.3. Assessment and demonstration of additionality of the small-scale CPA , as per eligibility criteria listed in the Registered PoA:

>>

The criteria for assessing the additionality of the CPA is done as per the below requirement (refer section E.5.1 and section A.4.2.2 of PoA-DD):

CME has delineated the addtionality argument in the PoA-DD. Subsequently CPA of the PoA (at the time of inclusion) only requires to confirm that this additionality argument (as mentioned in section E.5.1 of PoA-DD) is valid for this CPA by means of eligibility criteria confirmation.

Hence, subsequent CPA of the PoA is additional as it is able to demonstrate the eligibility compliance.

B.4. Description of the sources and gases included in the project boundary and proof that the small-scale CPA is located within the geographical boundary of the registered PoA.

>>

In line with the definition in methodology for type AMS.III-Z, version 03, the boundary for the purpose of the proposed CPA is defined as the physical and geographical site where the brick production takes place during both the baseline and crediting period. Accordingly project boundary of the CPA is delineated below:

[OUT OF THE TWO TECHNOLOGY SCENARIOS THE ONE APPLICABLE FOR THE CPA WILL REMAIN IN THE CPA-DD.]

Figure E.3.1 Flow diagram of the CPA boundary for technological scenario 1 (Concrete Bricks)

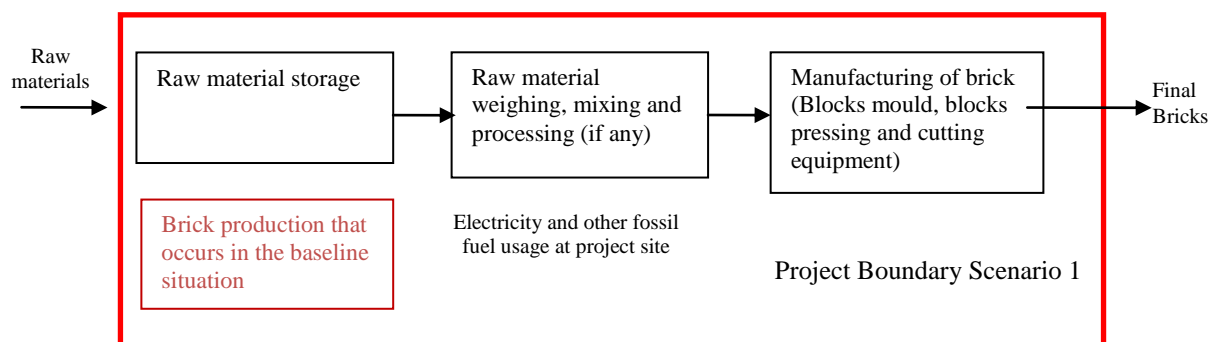


Figure E.3.2 Flow diagram of the project boundary for technological scenario 2 (Autoclaved Aerated Concrete):

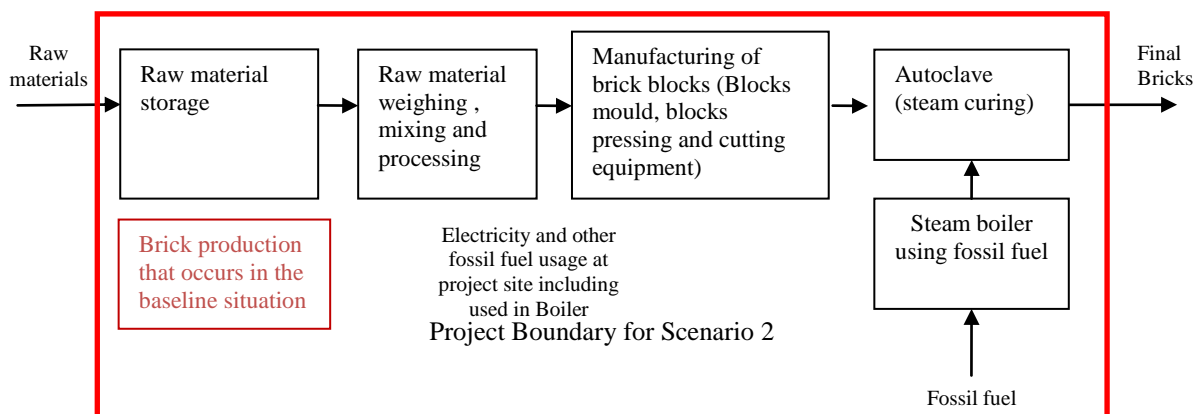
**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 14



Scenario 2 requires autoclave (steam curing). Steam is generated in boilers that will be fired with fossil fuels.

Table E.3.3: Emission sources included/excluded from the CPA boundary

	Source	Gas		Justification/Explanation
Baseline	Fossil fuel consumption for the firing/sintering	CO ₂	Included	This is the main emission source in the baseline. In the baseline thermal energy is generated with coal to fire/sinter clay bricks.
		CH ₄	Excluded	Excluded for simplification. This is conservative.
		N ₂ O	Excluded	Excluded for simplification. This is conservative.
Project emissions	On-site electricity consumption	CO ₂	Included	Electricity (grid) will be consumed to operate equipment used in the CPAs. This shall be accounted for the project emissions.
		CH ₄	Excluded	Excluded for simplification. This emission source is assumed to be very small.
		N ₂ O	Excluded	Excluded for simplification. This emission source is assumed to be very small.
	On-site fossil Fuel consumption	CO ₂	Included	For Scenario 2 (Autoclaved Aerated Concrete blocks) will consume fossil fuel(s) to generate thermal energy for the autoclave (steam curing) stage of block production. In addition, fossil fuels may be consumed by onsite electricity generators (DG sets), etc.
		CH ₄	Excluded	Excluded for simplification. This emission source is assumed to be very small
		N ₂ O	Excluded	Excluded for simplification. This emission source is assumed to be very small

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**



CDM – Executive Board

page 15

The table above describes the emission sources that are accounted for direct GHG emissions by the CPA i.e. project emissions, while indirect emissions (due to the production/processing and transportation of raw materials) are accounted as leakage emission and detailed in section B.5.2 of the CPA DD.

The CPA is approved for development in **XXX** Province in Viet Nam, therefore, the CPA is located within the geographical boundary of the registered PoA.

B.5. Emission reductions:

B.5.1. Data and parameters that are available at validation:

>>

Data / Parameter:	TDL_y
Data unit:	%
Description:	Average technical transmission and distribution losses for providing electricity to source in year y
Source of data used:	“Tool to calculate baseline, project and/or leakage emissions from electricity consumption” Version 01, (EB39, Annex 7)
Value applied:	20
Justification of the choice of data or description of measurement methods and procedures actually applied :	The CPA would consume electricity from the grid. Thus, the applicable scenario is Scenario A. The default value of 20% is therefore used, as defined in the Tool for project or leakage electricity consumption for scenario A.
Any comment:	

Data / Parameter:	EF_{BL}
Data unit:	in tCO_2/m^3 of produced brick;
Description:	Baseline emission factor
Source of data used:	Official reliable data source published by independent third party, for example VABM.
Value applied:	Shall be determined by each CPA
Justification of the choice of data or description of measurement methods and procedures actually applied :	Justification shall be provided at CPA level.
Any comment:	Value shall be fixed for the entire crediting period for the CPA.

Data / Parameter:	$EF_{EL,i,y}$
Data unit:	tCO_2/MWh
Description:	Emission factor for grid electricity consumed in the project activity in year y
Source of data used:	Calculated in accordance with the latest approved version of the “Tool to calculate the emission factor for an electricity system”.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 16

Value applied:	This value shall be calculated by each CPA during CPA inclusion.
Justification of the choice of data or description of measurement methods and procedures actually applied :	The latest grid emission factor approved by the DNA of Viet Nam, available when during CPA inclusion shall be used. CPAs of the PoA shall calculate the combined margin emission factor at the time of inclusion and that emission factor shall be fixed ex-ante for the CPA.
Any comment:	The grid emission factor fixed ex-ante at the time of CPA inclusion shall be fixed for the entire crediting period.

Data / Parameter:	COEF_m
Data unit:	tCO ₂ /ton of raw material type “ <i>m</i> ”
Description:	Emission factor for the production / processing of raw material type “ <i>m</i> ”
Source of data used:	Third party published literature or website.
Value applied:	Shall be determined by each CPA
Justification of the choice of data or description of measurement methods and procedures actually applied :	Each type of raw material for which leakage needs to be accounted for a particular CPA shall be mentioned in the CPA-DD separately. The data of emission factor for the production/processing of raw material type <i>m</i> shall be based on official literature or website.
Any comment:	Value shall be fixed for the entire crediting period or updated in case of any change.

Data / Parameter:	EF_{CO₂,TRANS}
Data unit:	g CO ₂ /t km
Description:	Default CO ₂ emission factor for freight transportation activity
Source of data used:	Methodological Tool “Project and leakage emissions from road transportation of freight” (Version 01.0.0)
Value applied:	245
Justification of the choice of data or description of measurement methods and procedures actually applied :	As per Methodological Tool “Project and leakage emissions from road transportation of freight” (Version 01.0.0)
Any comment:	This shall be used for the calculation of leakage emission associated with transportation of raw materials. As a simplified and conservative approach, emission factor of the light vehicles shall be considered at the CPA level.

B.5.2. Ex-ante calculation of emission reductions:

>>

Baseline emissions



As per paragraph 10 of the AMS-III.Z Version 03, “*The baseline emissions are the fossil fuel consumption related emissions (fossil fuel consumed multiplied by an emissions factor) associated with the system(s), which were or would have otherwise been used, in the brick production facility(ies) in the absence of the project activity.*”

Further paragraph 10(b) states:

“For projects involving installation of systems in a new facility, the average annual historical baseline fossil fuel consumption value and the baseline brick production rate shall be determined as that which would have been consumed and produced, respectively, under an appropriate baseline scenario. If the baseline scenario identified includes different technologies with different levels of energy consumption, a weighted average energy use of these technologies can be considered for determining the baseline emissions of the facility or facilities.”

As per Section E.4 of the PoA-DD the baseline scenario of the CPA has been established at the PoA level. The corresponding baseline emission factor **shall be** determined/calculated taking into account the different technologies with different levels of energy consumption associated with the baseline brick production in Viet Nam at the time of CPA inclusion. The same **shall be** determined in Annex 3 of the CPA-DD.

The baseline emissions for **a typical** CPA are calculated as below:

$$BE_y = EF_{BL} * P_{PJ,y} \quad (\text{AMS.III.Z: eq: 1})$$

Where:

BE_y	The annual baseline emissions from fossil fuels displaced by the project activity in t CO ₂ e in year y (of the crediting period)
EF_{BL}	The annual production specific emission factor for year y, in t CO ₂ / m ³
$P_{PJ,y}$	The annual net production of the facility in year y, m ³

The annual production specific emission factor (EF_y) can be calculated *ex ante* as follows:

$$EF_{BL} = \sum_{j,i} (FC_{BL,i,j} \times NCV_j \times EF_{CO_2,j}) / P_{Hy} \quad (\text{AMS.III.Z: eq 2})$$

Where:

$FC_{BL,i,j}$	Average annual baseline fossil fuel consumption value for fuel type <i>j</i> combusted in the process <i>i</i> , using volume or weight units
NCV_j	Average net calorific value of fuel type <i>j</i> combusted, TJ per unit volume or mass unit
$EF_{CO_2,j}$	CO ₂ emission factor of fuel type <i>j</i> combusted in the in the process <i>i</i> in t CO ₂ / TJ
P_{Hy}	Average annual historical baseline brick production rate in units of volume, m ³

Project emissions



As per paragraph 13 of approved methodology AMS.III-Z Version 03 “*Project activity emissions (PE_y) consist of those emissions associated with the use of electricity or fossil fuel or both and are calculated in accordance with the “Tool to calculate baseline, project and /or leakage emissions from electricity consumption” and/or “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion” (tCO_{2e})*”.

The typical CPAs of the PoA shall consume electricity from the grid. However, in a few cases, diesel based generators are standby and/or main source of electricity.. In addition, boilers may be installed to generate thermal energy for autoclaving (steam curing) in technology scenario 2. These boilers use fossil fuels.

Project emissions from electricity consumption

A typical CPA of the PoA will consume electricity at the project site to run various equipments. The emission on the account of electricity (PE_{EC,y})consumption has been designed to calculate in accordance with the “Tool to calculate baseline, project and/or leakage emission from electricity consumption” (version 01).

The tool is applicable if one out of the following three scenarios applies to the sources of electricity consumption:

- Scenario A: Electricity consumption from the grid
- Scenario B: Electricity consumption from (an) off grid fossil fuel fired captive power plant
- Scenario C: Electricity consumption from the grid and fossil fuel fired captive power plant.

The CPA would consume electricity from the grid. Thus, the applicable scenario is Scenario A.

$$PE_{EC,y} = \sum_j EC_{PJ,j,y} \times EF_{EL,j,y} \times (1 + TDL_{j,y}) \quad (\text{eq. 1 of the tool})^9$$

Where:

Parameter	Description	Unit
PE _{EC,y}	Project emissions from electricity consumption in year y	tCO _{2e} /yr
EC _{PJ,j,y}	Quantity of electricity consumed by the project electricity consumption source j in year y	(MWh/yr)
EF _{EL,j,y}	Emission factor for electricity generation for source j in year y	(tCO ₂ /MWh)

⁹ Equation numbering maintained as shown in “Tool to calculate baseline, project and/or leakage emission from electricity consumption” (version 01)



$TDL_{j,y}$	Average technical transmission and distribution losses for providing electricity to source j in year y	-
-------------	--	---

Under scenario A of the tool, option A1 is being used to calculate the CO₂ emission factor of grid electricity. As per scenario A1, the emission factor is the combined margin emission factor of the grid, calculated as per the guidelines provided under the latest version of “Tool to calculate emission factor for an electricity emission”. For ex-ante calculation purposes (for the real case CPA the latest approved grid emission factor is applied, of which the detailed calculation is publicly available¹⁰). Subsequent CPAs of the PoA shall calculate the combined margin emission factor at the time of inclusion and that emission factor **shall be** fixed ex-ante for the CPA.

For the Average technical transmission and distribution losses for providing electricity to source j in year y ($TDL_{j,y}$), CPAs of the PoA shall consider the default value as mentioned in the tool, as a conservative and simplified approach.

Project emissions from fossil fuel consumption

Since fossil fuel (diesel, coal or FO) may be consumed for the operation of diesel generators in case of grid power failure or main electricity source and/or operation of a steam boiler, etc., CO₂ emission from fossil fuel combustion ($PE_{FC,y}$) should be calculated using the latest approved version of the “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion” Version 02 (EB 41, Annex 11). According to this Tool, CO₂ emissions from fossil fuel combustion in process j are calculated based on the quantity of fuels combusted and the CO₂ emission coefficient of those fuels, as follows:

$$PE_{FC,j,y} = \sum_i FC_{i,j,y} \times COEF_{i,y} \quad (1)^{11}$$

Where

Parameter	Description	Unit
$PE_{FC,j,y}$	Are the CO ₂ emissions from fossil fuel combustion in process j during year y	(t CO ₂ e/yr)
$FC_{i,j,y}$	Is the quantity of fuel type i combusted in process j during year y	(mass or volume unit/year)
$COEF_{i,y}$	Is the CO ₂ coefficient of fuel type i in year j	(t CO ₂ /mass or volume unit)
i	Are the fuel types combusted in process j during the year y	

As the data on the chemical composition of the fossil fuel type i used by the project activity is not available. Thus, the option B of the Tool is adopted for calculation of the CO₂ emission coefficient

¹⁰ Approved Grid Emission Factor from the official website of the DNA of Vietnam

¹¹ Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**



CDM – Executive Board

page 20

$COEF_{i,y}$. The $COEF_{i,y}$ is calculated based on net calorific value and CO_2 emission factor of the fuel type i , as follows:

$$COEF_{i,y} = NCV_{i,y} \times EF_{CO_2,i,y} \quad (4)^{12}$$

Where:

Parameter	Description	Unit
$COEF_{i,y}$	Is the CO_2 coefficient of fuel type i in year j	(t CO_2 /mass or volume unit)
$NCV_{i,y}$	Is the weighted average net calorific value of the fuel type i in year j	(GJ/mass or volume unit)
$EF_{CO_2,i,y}$	Is the weighted average CO_2 emission factor of fuel type i in year y	(t CO_2 /GJ)
i	Are the fuel types combusted in process j during the year y	

For ex ante estimation purpose, the fossil fuels consumption will be based on parameters available in the feasibility study report or a declaration from the technology supplier of each CPA. Actual fossil fuel consumption will be part of the monitoring plan of each CPA.

Leakage

As per paragraphs 11 and 12 of AMS.III.Z the applicable small scale methodology, there are two possibilities in which leakages have to be accounted:

11. Leakage emissions on account of diversion of biomass from other uses (competing uses) shall be calculated as per “General guidance on leakage in biomass project activities”.

The CPAs of the PoA shall not consume any kind of biomass. Hence this is not applicable for the CPAs of this PoA.

12. In the case of project activities involving change in production process or a change in type or quantity of raw and/or additive materials as compared to the baseline, the incremental emissions associated with the production/consumption and transport of those raw and/or additive materials consumed as compared to baseline, shall be calculated as leakage.

Leakage shall be considered for the CPA based on the specific quantities of additive materials used and the incremental emissions associated with the production/processing and transportation of these materials.

¹² Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 21

Raw Material¹³	Transportation	Production and/or processing	Justification
Cement	Yes	Yes	Leakage on the account of both production and transportation of cement shall be accounted at the CPA level.
Lime	Yes	Optional	Leakage shall be accounted for transportation at CPA level. Leakage on the account of production/processing if required (in case of waste not required to be considered) shall be done at CPA level.
Stone dust	Yes	Optional	Leakage shall be accounted for transportation at CPA level. Leakage on the account of production/processing if required (in case of waste not required to be considered) shall be done at CPA level.
Sand	Yes	No	Leakage shall be accounted for transportation at CPA level. No processing is required in case of sand.
Gypsum	Yes	Optional	Leakage shall be accounted for transportation at CPA level. Leakage on the account of production/processing if required (in case of waste not required to be considered) shall be done at CPA level.
Fly ash	Yes	No	Leakage shall be accounted for transportation at CPA level. Waste material of thermal power plants needs to be demonstrated at CPA level as well. Since it is waste hence emission on the account of production/processing is not required
Aluminium powder	Yes	Optional	Leakage shall be accounted for

¹³ The raw materials indicated in table may or may not be utilized in the CPAs. This is just for indicative purposes. As part of requirement of applied monitoring methodology the quantity of each raw material shall be monitored at individual CPA level. At individual CPA level any other raw material which is not listed in the table may be used provided it complies with requirement of applied methodology i.e. monitoring of individual raw materials and addressing emission on the account of production/processing/transportation.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 22

			transportation at CPA level. Leakage on the account of production/processing if required (in case of waste not required to be considered) shall be done at CPA level.
Iron and steel slag	Yes	No	Leakage shall be accounted for transportation at CPA level. Waste material of iron and steel industry needs to be demonstrated at CPA level as well. Since it is waste hence emission on the account of production/processing is not required

The surplus availability of each raw material/additive (demonstrated as “waste”) shall be demonstrated in accordance with paragraph 6 of AMS.III.Z at individual CPA level.

The applicable equations for leakage are:

$$LE_y = LE_{rm,prod,y} + LE_{TR,y}$$

Where:

Parameter	Unit	Description
LE_y	tCO ₂ e	Leakage emission from raw material production/processing and transportation in the year y
$LE_{rm,prod,y}$	tCO ₂ e	Leakage emission from the raw material production/ processing in the year y
$LE_{TR,y}$	tCO ₂ e	Leakage emission from raw material transportation in the year y

Leakage emissions due to raw material production/processing:

$$LE_{rm,prod,y} = \sum_m RMC_{m,y} * COEF_{m,y}$$

Where:

Parameter	Unit	Description
$LE_{rm,prod,y}$	tCO ₂ e	Leakage emission from raw material production/processing in the year y
$RMC_{m,y}$	Ton	Quantity of raw material type <i>m</i> purchased for producing bricks in the year y
$COEF_{m,y}$	tCO ₂ e/ton	CO ₂ emission factor for production/processing of raw material type <i>m</i> in year y
<i>m</i>		Type of raw material utilized in CPA

Leakage emission due to (each) raw material transportation:



Leakage emissions due to raw material transportation are accounted for based on the Option B described in the methodological tool “Project and leakage emissions from road transportation of freight” (Version 01.0.0) (EB 63, Annex 10). Option B relies on conservative default emission factors to estimate project or leakage emissions from road transportation of freight.

$$LE_{TR,y} = \sum_n D_{n,y} \cdot FR_{n,y} \cdot EF_{CO_2,TRANS} \cdot 10^{-6} \quad (1)^{14}$$

Where:

Parameter	Unit	Description
$LE_{TR,y}$	tCO ₂ e	Leakage emissions from road transportation of freight during the year y
$D_{n,y}$	km	Return trip road distance between the origin and destination of freight transportation activity for the raw material type “n” during the year y
$FR_{n,y}$	t	Total mass of the raw material / additive type “n” transported in the year y
$EF_{CO_2,TRANS}$	g CO ₂ e/t km	Default CO ₂ emission factor for freight transportation activity (As a simplified and conservative approach, emission factor of the light vehicles shall be considered at the CPA level).
n		Type of raw material “n” transported

Emission reductions

Emission reductions (ER_y) achieved by the CPA will be calculated as the difference between the baseline emissions and the sum of project emissions and leakage as follows:

$$ER_y = BE_y - PE_y - Leakage \quad (AMS.III.Z: eq. 3)$$

Where:

ER_y	Emission reductions in year y (t CO ₂ e/yr)
BE_y	Baseline emissions in year y (t CO ₂ e/yr)
PE_y	Project emissions in year y (t CO ₂ /yr)
LE_y	Leakage emissions in year y (t CO ₂ /yr)

¹⁴ Equation of the tool “Project and leakage emissions from road transportation of freight” Version 01.0.0 has been modified to have clear identification for the emissions related to transportation of the raw materials / additives in the CPAs of the PoA.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 24

B.5.3. Summary of the ex-ante estimation of emission reductions:

>>

Year	Estimation of project activity emissions (tonnes of CO ₂ e)	Estimation of baseline emissions (tonnes of CO ₂ e)	Estimation of leakage (tonnes of CO ₂ e)	Estimation of overall emission reductions (tonnes of CO ₂ e)
Year 1	XXX	XXX	XXX	XXX
Year 2	XXX	XXX	XXX	XXX
Year 3	XXX	XXX	XXX	XXX
Year 4	XXX	XXX	XXX	XXX
Year 5	XXX	XXX	XXX	XXX
Year 6	XXX	XXX	XXX	XXX
Year 7	XXX	XXX	XXX	XXX
Year 8	XXX	XXX	XXX	XXX
Year 9	XXX	XXX	XXX	XXX
Year 10	XXX	XXX	XXX	XXX
Total (tonnes of CO₂ e)	XXX	XXX	XXX	XXX

B.6. Application of the monitoring methodology and description of the monitoring plan:

>>

Data / Parameter:	P_{PJy}
Data unit:	m ³
Description:	Net production of the bricks in the facility in year y;
Source of data to be used:	Onsite measurements
Value of data applied for the purpose of calculating expected emission reductions in section B.5	Value to be used for ex ante CER estimation for the CPA shall be based on the data available at the time of CPA inclusion.
Description of measurement methods and procedures to be applied:	To be reported at the time of CPA inclusion.
QA/QC procedures to be applied:	The amount of bricks manufactured at the end of each crediting period will be cross checked with the invoices for the sale of bricks and the stock in the plant.
Any comment:	The data will be archived electronically and kept for minimum of two years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later.

Data / Parameter:	$RMC_{m,y}$ (=FR _{m,y} – in case of calculation of leakage on the account of transportation of raw materials / additives)
Data unit:	ton
Description:	Quantity of principal raw material and additive material type “m” purchased /

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 25

	transported on monthly basis.
Source of data to be used:	On site measurement / Invoices / transportation receipt.
Value of data applied for the purpose of calculating expected emission reductions of the CPA	Value to be used for ex ante CER estimation for the CPA shall be based on the data available at the time of CPA inclusion.
Description of measurement methods and procedures to be applied:	To be reported at the time of CPA inclusion.
QA/QC procedures to be applied:	To be reported at the time of CPA inclusion for the respective raw materials / additives.
Any comment:	At the time of the CPA inclusion, for each of the relevant raw material / additives, separate tables shall be provided. The data will be archived electronically and kept for minimum of two years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later.

Data / Parameter:	<i>Compressive Strength</i>
Data unit:	N/mm ² ;
Description:	Performance of project brick/block in terms of Compressive Strength
Source of data to be used:	External laboratory testing results
Value of data applied for the purpose of calculating expected emission reductions of the CPA	To be determined with respect to each CPA during monitoring period.
Description of measurement methods and procedures to be applied:	Tests will be done according to the applicable Vietnamese Standards for compressive strength at least every six months. The brick/ block will be tested in a Compressive strength Testing Machine (CTM) in any of the laboratories of polytechnics, engineering colleges, building centers, national laboratories etc., and the test certificates are provided by the laboratory.
QA/QC procedures to be applied:	-
Any comment:	The data will be archived electronically and kept for minimum of two years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later.

Data / Parameter:	<i>Density</i>
Data unit:	kg/m ³
Description:	Average density of the bricks produced
Source of data to be	External laboratory testing results

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 26

used:	
Value of data applied for the purpose of calculating expected emission reductions of the CPA	To be determined with respect to each CPA
Description of measurement methods and procedures to be applied:	Tests will be done at least every six months. The brick/ block will be tested in any of the laboratories of polytechnics, engineering colleges, building centres, national laboratories etc., and the test certificates are provided by the laboratory.
QA/QC procedures to be applied:	-
Any comment:	Separate records for hollow and solid bricks will be maintained. The data will be archived electronically and kept for minimum of two years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later.

Data / Parameter:	$FC_{DIESEL,i,y}$; $FC_{FO,i,y}$; $FC_{COAL,i,y}$
Data unit:	ton/year
Description:	Quantity of fossil fuel combusted in process j during year y
Source of data to be used:	On site measurement
Value of data applied for the purpose of calculating expected emission reductions in section B.5	Value to be used for ex ante CER estimation for the CPA shall be based on the data available at the time of CPA inclusion.
Description of measurement methods and procedures to be applied:	Description of the actual measurement method using any of the three alternatives provide in the “Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion” shall be provided at individual CPA level.
QA/QC procedures to be applied:	Perform an annual energy/mass balance that is based on purchased quantities and stock.
Any comment:	At the time of the CPA inclusion, for each of the relevant fossil fuel separate tables shall be provided. The data will be archived electronically and kept for minimum of two years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later.

Data / Parameter:	$NCV_{DIESEL,y}$; $NCV_{FO,y}$; $NCV_{COAL,y}$
Data unit:	GJ / ton
Description:	Weighted average net calorific value of the fossil fuel consumed in year y
Source of data to be used:	Any of the four data source in preferential order as mentioned in the Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion”.
Value of data applied	To be determined with respect to each CPA at time of inclusion

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 27

for the purpose of calculating expected emission reductions in section B.5	
Description of measurement methods and procedures to be applied:	Any of the four data source in preferential order as mentioned in the Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion”. For option a) and b): Measurements should be undertaken in line with national or international fuel standards.
QA/QC procedures to be applied:	Verify if the values under a), b) and c) are within the uncertainty range of the IPCC default values as provided in Table 1.2, Vol. 2 of the 2006 IPCC Guidelines. If the values fall below this range collect additional information from the testing laboratory to justify the outcome or conduct additional measurements. The laboratories in a), b) or c) should have ISO17025 accreditation or justify that they can comply with similar quality standards.
Any comment:	At the time of the CPA inclusion, for each of the relevant fossil fuel separate tables shall be provided. The data will be archived electronically and kept for minimum of two years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later.

Data / Parameter:	$EF_{CO_2,DIESEL,y}$; $EF_{CO_2,FO,y}$; $EF_{CO_2,COAL,y}$
Data unit:	tCO ₂ /GJ
Description:	CO ₂ emission factor of the fossil fuel used in year y in the CPA
Source of data to be used:	Any of the four data source in preferential order as mentioned in the Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion”.
Value of data applied for the purpose of calculating expected emission reductions of the CPA	Value to be determined by each CPA at time of inclusion.
Description of measurement methods and procedures to be applied:	Any of the four data source in preferential order as mentioned in the Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion”. For option a) and b): Measurements should be undertaken in line with national or international fuel standards.
QA/QC procedures to be applied:	-
Any comment:	At the time of the CPA inclusion, for each of the relevant fossil fuel separate tables shall be provided. The data will be archived electronically and kept for minimum of two years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later.

Data / Parameter:	$EC_{PJ,y}$
Data unit:	MWh
Description:	Amount of electricity consumed in the year y at the project site for the CPA
Source of data to be	Measurements records at the plant site.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 28

used:	
Value of data applied for the purpose of calculating expected emission reductions in section B.5	Value to be used for ex ante CER estimation for the CPA shall be based on the data available at the time of CPA inclusion.
Description of measurement methods and procedures to be applied:	<p>Measurement Procedure and frequency: The quantity of electricity will be continuously measured and recorded monthly.</p> <p>Measuring equipment: Measured using calibrated energy meter of accuracy class 0.5s.</p> <p>Calibration process: Calibration shall be as per the relevant paragraphs of the “General guidelines to SSC CDM methodologies” and be conducted by independent accredited third party.</p> <p>Calibration frequency: As per local/national standard or as per manufacturer’s specifications. If the local/national standards and manufacturer’s specifications is not available, it will be as per international standard, but at least one in 3 years.</p>
QA/QC procedures to be applied:	The measurement results shall be cross-checked with records for purchased energy (e.g. invoices/receipts).
Any comment:	The data will be archived electronically and kept for minimum of two years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later

Data / Parameter:	$D_{n,y}$
Data unit:	km
Description:	Return trip road distance between the origin and destination of freight for raw materials / additives type “m” for the transportation activity during the year y.
Source of data to be used:	Records of vehicle operator or records by project participants
Value of data applied for the purpose of calculating expected emission reductions of the CPA	Value to be determined with respect to each CPA.
Description of measurement methods and procedures to be applied:	<p>Determined once for each freight transportation activity f for a reference trip, using the vehicle odometer or any other appropriate sources (e.g. on-line sources). To be updated whenever the road distance changes.</p> <p>As per Methodological Tool “Project and leakage emissions from road transportation of freight” (Version 01.0.0).</p>
QA/QC procedures to be applied:	As per Methodological Tool “Project and leakage emissions from road transportation of freight” (Version 01.0.0)
Any comment:	The data will be archived electronically and kept for minimum of two years after the end of the crediting period or the last issuance of CERs for the project activity, whichever occurs later.



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 29

B.6.1. Description of the monitoring plan:

>>

In order to ensure all CPAs are monitored and verified as per the applied monitoring methodology, the CME has prepared a comprehensive monitoring plan for all the CPAs to be included in the PoA. Furthermore, the CME will conduct periodical inspection of units randomly at any given time in a year. For this purpose the CME will deploy trained monitoring personnel who will visit the CPAs sites, review their records and take corrective actions if required. The monitoring personnel would duly attest the records as a mark of satisfactory inspection. The CME would randomly check the visits of monitoring personnel in order to ensure due compliance of registered monitoring plan.

Templates (as a part of monitoring manual) are made to record the data to be monitored. The monitoring personnel of the CME would be provided with such templates. In-house training shall be imparted to plant personnel (at the CPA site) for the efficient monitoring/recording of the data and to translate the same into the computation of emission reductions.

Based on the monitoring requirements of AMS III-Z, Version 03 as described under Table of E.7.1, following records would be verified by the CME's inspectors:

Raw materials inwards:

Criteria	Documents checked for annual consumption	Cross checked validity with
Each type of raw material/additive to be utilised in the CPA	Purchase invoices / Inventory records	Transportation records
Add ROWS IF REQUIRED		

Table B.6.1.1 – Raw material monitoring

Production Output:

Stock register showing daily production and sales (Cross checked with the sales invoices or bills)

Fossil fuels and/or Power Consumption and calorific value data

The consumption of fuel for boiler/genset and/or power has to be recorded on monthly basis. In the case of fuel, the purchase bills would be verified. In the case of power, the meter reading on power payment would be taken as record. As an additional and alternate source, the CPAs are asked to provide monthly statement of electricity consumption for every three months to the CME. The CPAs are asked to maintain records in either of the case.

S. No.	Parameter	Documents checked for annual consumption	Cross checked validity with
1.	Coal	Purchase invoices Inventory records	Transportation records

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**

CDM – Executive Board

page 30

2.	Fuel Oil	Purchase invoices Inventory records	Transportation records
3.	Diesel	Purchase invoices Inventory records	Transportation records
4.	Electricity	Purchase invoices Electricity meter	Production records

Table B.6.1.2 – fuel and power consumption monitoring

The other relevant data will be recorded by the CPA owners and would be provided on quarterly basis to the CME. The data received will be archived electronically for computations of emission reductions on annual basis. Such archived data will be kept until two years after the end of the crediting period or the issuance of CERs whichever is later. Each small scale CPA shall follow all the provision of the PoA including that related to monitoring. Only those CPA implementers who confirm to sign an agreement in this context shall be included in the PoA, as this is a part of eligibility criteria.

The NCV of the fuel used will be based on default values of the IPCC or the information provided by the fuel supplier, based on availability of the specific information. In case the information is used by fuel supplier, this will be crosschecked with the values from appropriate national standards and the IPCC.

Transportation of materials

To determine leakage emissions due to the transportation of raw materials, option B of the Methodological Tool “Project and leakage emissions from road transportation of freight” (Version 01.0.0) shall be used. As such the quantity of raw materials/additives and the round trip distance between origin and destination shall be monitored.

Performance criteria by testing Compressive Strength

The methodology requires making available the test certificates on the strength performance of bricks tested at a minimum of six-months interval. In the context of testing of bricks, the SSC WG, at its 22nd meeting clarified that the testing can be undertaken based on the national/regional standards or guidelines applicable to the type of project activity bricks. Testing can also be undertaken as per the procedures provided by the technology provider as long as the testing methods can be substantiated with reference to peer reviewed literature i.e. relevant international journal publications, publications of national/international building research centres etc. As long as the testing procedures in the guidelines/standards are met, the testing itself can be undertaken in polytechnics, engineering colleges, building centers, national laboratories etc. The bricks tested by the CPA owners through third party laboratories shall be done at least every six month and would be provided to the CME.

Each CPA and the CME shall retain all monitored data required for verification and issuance for two years after the end of the crediting period or the last issuance of CERs, for this programme, whichever occurs later.

Procedures for emergency preparedness for cases where emergencies cause unintended emissions:

No events are expected that can lead to unintended emissions.

This template shall not be altered. It shall be completed without modifying/adding headings or logo, format or font.

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO



CDM – Executive Board

page 32

[ADD ROWS IF REQUIRED]

C.3. Please state whether an environmental impact assessment is required for a typical CPA, included in the programme of activities (PoA), in accordance with the host Party laws/regulations:

>>

[KINDLY REVIEW AND REVISE THE TEXT BELOW]

According to the regulations of the Law on Environmental protection of Vietnam (the Law on According to the Decision No. 80/2006/ND-CP dated 09/08/2006, the guidance on Environmental Protection Law of Vietnam 2005 and Circular No. 08/2006/TT-BTC dated 08/09/2006, the CPA has to analyse the environmental impacts before project construction. The CPA owner therefore commissioned a third party to conduct the required environmental impact assessment (EIA) on DD/MM/YYYY and the EIA report was reviewed and approved by the local authority on DD/MM/YYYY. Where impacts of the project were identified, mitigation measures were suggested and defined.

SECTION D. Stakeholders' comments

>>

D.1. Please indicate the level at which local stakeholder comments are invited. Justify the choice:

☐ Please tick if this information is provided at the PoA level. In this case section D.2. to D.4. need not be completed in this form.

Local stakeholder consultation has been done at PoA level and the same shall also be done at CPA level.

D.2. Brief description how comments by local stakeholders have been invited and compiled:

>>

The stakeholder consultation for the CPA took place on DD/MM/YYYY at the LOCATION, ADDRESS, CITY. DESCRIPTION OF METHOD OF INVITATION, HOW THE INVITEES WERE SELECTED, AND DESCRIPTION OF INVITEES:

- INVITEES
- INVITEES

The CPA owner invited the participants in the meeting to express their comments and concerns about the project and CDM introduction, all documents related to the Project were answered and serious considered.

D.3. Summary of the comments received:

>>

The issue and concerns raised by the stake holders and the clarifications provided by the CPA implementer/CME are summarized below:

Queries raised by stakeholders	Clarifications by the CPA implementer/CME

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO

CDM – Executive Board

page 33

The stakeholders present were satisfied with these responses and were appreciative of the efforts by the CPA implementer in undertaking the said project.

D.4. Report on how due account was taken of any comments received:

>>

XXX

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**



CDM – Executive Board

page 34

Annex 1

CONTACT INFORMATION ON ENTITY/INDIVIDUAL RESPONSIBLE FOR THE SMALL-SCALE CPA

Organization:	[XXX]
Street/P.O.Box:	[XXX]
Building:	[XXX]
City:	[XXX]
State/Region:	[XXX]
Postfix/ZIP:	[XXX]
Country:	[XXX]
Telephone:	[XXX]
FAX:	[XXX]
E-Mail:	[XXX]
URL:	[XXX]
Represented by:	[XXX]
Title:	[XXX]
Salutation:	[XXX]
Last Name:	[XXX]
Middle Name:	[XXX]
First Name:	[XXX]
Department:	[XXX]
Mobile:	[XXX]
Direct FAX:	[XXX]
Direct tel:	[XXX]
Personal E-Mail:	[XXX]

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**



CDM – Executive Board

page 35

Annex 2

INFORMATION REGARDING PUBLIC FUNDING

The CPA will not receive any public funding from Parties included in Annex I of the UNFCCC.

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01



NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO

CDM – Executive Board

page 36

Annex 3

BASELINE INFORMATION

The baseline scenario for the CPAs of the PoA would be the burnt clay brick (most common and prevailing practice in Viet Nam), as determined in section E.4 of the PoA-DD. As per the requirement of PoA-DD the baseline emission factor in line with paragraph 10(b) of the methodology AMS.III.Z Version 03 is summarized below.

Baseline emission factor calculation (include the relevant text below)

Refer to the relevant requirement of paragraph 10(b) of applied methodology. Provide the relevant calculation below.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM
(CDM-SSC-CPA-DD) - Version 01**



**NAME/TITLE OF THE PoA:
Green Brick Development Programme of Activities Managed by INTRACO**



CDM – Executive Board

page 37

Annex 4

MONITORING INFORMATION

Please refer to section B.6.1 of this CPA DD

- - - - -