

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



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: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 2

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

Note: This template contains text in blue and black ink. The black text cannot be edited by SSC-CPAs, and is common to all SSC-CPAs. Only the blue text shall be edited by implementer(s). Furthermore, only the blue text needs to be checked at the time of a new SSC-CPA inclusion.

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

>>

Title: Cogeneration and/or trigeneration at commercial sites, number (insert CPA number), (insert region)

Version: (insert version number)

Date: (insert date in the form DD/MM/YYYY)

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

>>

(i) Purpose of the CPA

The purpose of the CPA is to reduce the greenhouse gas emissions at (insert name of commercial site), through the installation of an on-site (cogeneration and/or trigeneration facility). This plant will see the simultaneous production of electricity (and cooling and heating) from a single fuel source - methane-rich natural gas. The outputs from the (cogeneration and/or trigeneration plant) will be used to meet (all/part) of the energy requirements of the commercial site.

The CPA will be developed under the registered PoA: 'Cogeneration and/or trigeneration at commercial sites in South Africa'.

(ii) Measures undertaken to reduce greenhouse gas emissions

The installation of the (cogeneration and/or trigeneration systems) at (insert name of commercial building) will see a reduction in electricity consumption from South Africa's national grid. This grid is predominantly coal-fired (coal accounts for more than 92% of the fuel used in South Africa's electricity generation³) and therefore, heavily carbon-intensive. The reduction in electricity consumption from the grid will result in a reduction of greenhouse gas emissions, as well as all of the negative impacts of coal mining.

The historically low cost of electricity also means that carbon intensive electricity is cheaper than any other source of power. This has made it difficult for energy efficiency projects to compete with coal based power⁴. The CPA provides (insert CPA implementer(s) name) with a framework on which to overcome this barrier.

³ Department of Water and Environmental Affairs. (2010). *National Climate Change Response Draft Green Paper*, pg 13, para..3. Retrieved from South Africa Government Online: <http://www.environment.gov.za>

⁴ Department of Water and Environmental Affairs. (2010). *National Climate Change Response Draft Green Paper*, pg 13, para. 5. Retrieved from South Africa Government Online: <http://www.environment.gov.za>

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 3

(iii) Contribution of the CPA to sustainable development

The CPA makes a positive contribution to sustainable development. The South African Designated National Authority (DNA) evaluates sustainability in three categories: economic, environmental, and social. The contribution of the programme towards sustainable development is discussed below in terms of these three categories:

Environmental

This programme supports South Africa's emission mitigation actions. According to a letter sent to the United Nations Framework Convention on Climate Change (UNFCCC) on 29/01/2010, South Africa committed to "taking nationally appropriate mitigation actions to enable a 34% deviation below the 'Business as Usual' emissions growth trajectory by 2020 and a 42% deviation below the 'Business as Usual' emissions growth trajectory by 2025.

The CPA will reduce electricity consumption from a predominantly coal-fired grid, which will result in a reduction in all of the negative impacts associated with coal mining. These impacts include: the impact of coal mining, the utilisation of scarce water resources, SO₂ emissions and the impacts associated with the disposal of coal ash.

Economic

South Africa's national electricity provider, Eskom, carried out planned electricity supply interruptions at the beginning of 2008. These interruptions were caused by the demand for electricity exceeding the supply of electricity. During the interruptions, grid electricity was not accessible. Developing a (cogeneration and/or trigeneration) project at (insert name of commercial site) will reduce the pressure on energy infrastructure, thereby making important contributions the country's economic sustainability.

There will also be a transfer of knowledge from the countries supplying the technology to South Africa.

Social

The programme will create jobs in the construction and operations phases of the programme.

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

>>

The entity or individual responsible for the small-scale CPA, hence forth referred to as the CPA implementer(s), will be provided here. Promethium Carbon (Pty) Ltd is the managing entity of the programme, as indicated in the PoA.

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

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

>>

Cogeneration and/or trigeneration at commercial sites, number (insert CPA number), (insert region)

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 4

A.4.1.1. Host Party:

>>

Republic of South Africa

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

>>

The CPA implementer(s) shall complete the following table, to allow for the unique identification of the small-scale CPA.

Name and contact details of the CPA implementer(s)	
Responsible person	
Region	
Street address	
GPS coordinates	

The CPA implementer(s) shall also include map showing the location of the small-scale CPA. (Note: the CPA must fall within the geographical boundary of South Africa.)

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

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

>>

According to the Glossary of CDM terms, Version 05, *the starting date of a CDM programme activity is the earliest date at which either the implementation or constructing or real action of a programme activity begins. The starting date of the CPA cannot be prior to the commencement of validation of the programme of activities.*

The starting date of the small scale CPA is (DD/MM/YYYY). This is the date that (name activity) took place.

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

>>

The expected operational lifetime of the CPA is a minimum of 10 years and 0 months. *The managing entity shall confirm this through maintenance agreements and/or similar supporting documents.*

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

Fixed Crediting period

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



A.4.3.1. Starting date of the crediting period:

>>

The starting date of the crediting period is (DD/MM/YYYY). This is the date that CPA (insert number) was included in the registered PoA, or the date that the cogeneration and/trigeneration plant became operational, whichever occurs later.

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

>>

10 years 0 months

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:

>>

The CPA implementer(s) shall estimate the amount of emission reductions over the chosen crediting period.

Years	Estimation of annual emission reductions in tonnes of CO₂e
(Insert year)	
(Insert year)	
(Insert year)	
(Insert year)	
(Insert year)	
(Insert year)	
(Insert year)	
(Insert year)	
(Insert year)	
(Insert year)	
Total estimated reductions (tonnes of CO₂e)	
Total number of crediting years	10
Annual average of the estimated reductions over the crediting period (tCO₂e)	

A.4.5. Public funding of the CPA:

>>

No public funding will be used in the development or in the implementation of this project.

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 6

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

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The managing entity of the PoA will also ensure that the project boundaries of adjacent CPAs (with the same activity implementer) are not within 1 km of each other at the closest point.

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

>>

Currently, there are no registered CDM project activities or PoAs relating to cogeneration and/or trigeneration at commercial buildings. The managing entity has developed methodology AMS II.K. specifically for this programme.

Prior to the registration of this CPA under the PoA, the managing entity will check the UNFCCC website to ensure that ([insert CPA number](#)) is not part of another PoA, nor has been registered as an individual CDM project activity.

Since the CPA implementer signs an agreement with managing entity to transfer the emission reduction rights, it can be also be assured that the project has not been previously registered under the CDM.

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:

>>

Cogeneration and/or trigeneration at commercial sites in South Africa under reference number ([insert reference number](#))

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

>>

The small scale CPA is eligible to be included in the registered PoA, as it meets all of the criteria set out in section A.4.2.2 of the PoA. This is justified below:

Item	Eligibility criteria	Justification
1	Each CPA shall conform to the technical description in section A.4.2.1 of the PoA. Due to the nature of the project (i.e. it is not a technology specific PoA), the precise technology employed by each CPA may vary.	
2	Each CPA will be uniquely identified by the description of the site on which it is implemented. This will include a plot plan and/or plot/erf number and/or GPS coordinates. The site may not overlap with another site that has a project applicable under AMS II.K.	
3	Each CPA shall fall within the geographical boundary of South Africa, as stipulated in section A.4.1.2.	

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 7

4	Each CPA shall meet with the applicability criteria in version 01 of the baseline and monitoring methodology AMS II.K. <i>Installation of co-generation or tri-generation systems supplying energy to commercial buildings.</i>	
5	Each CPA to be included in this PoA shall meet with the debundling rules relevant to PoAs.	
6	Each CPA shall not be registered, or be in the process of registration, as an individual CDM project activity.	
7	Each CPA shall not be included in another registered PoA.	
8	Each CPA shall sign an agreement with the managing entity to (a) participate in the programme, and (b) transfer the emission reduction rights to the managing entity.	
9	Each CPA must be approved by the managing entity and DOE prior to its incorporation into the PoA.	
10	The starting date of each CPA will not be before the Global Stakeholder Process of the PoA	
11	The monitoring plan of each CPA will be in line with the monitoring requirements of the PoA	
12	Each CPA shall demonstrate additionality in accordance with section A.4.3 of the PoA.	

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

>>

If the CPA is a microscale project⁵, then the CPA implementer(s) shall demonstrate additionality by proving that the programme achieves annual energy savings of less than 20 GWh. One of the conditions below shall also be satisfied:

- (a) The geographic location of the project activity is in LDCs/SIDs or special underdeveloped zones of the host country identified by the Government before 28 May 2010;
- (b) The project activity is an energy efficiency activity with both conditions (i) and (ii) satisfied (see below);
 - (i) Each of the independent subsystems/measures in the project activity achieves an estimated annual energy savings of equal to or smaller than 600 megawatt hours; and
 - (ii) End users of the subsystems or measures are households/communities/SMEs.

If the CPA is not a microscale project, the CPA implementer(s) shall demonstrate additionality for the CPA using either Approach 1 or Approach 2 applicable for the specific project activity, as per section E.5.2 of the PoA.

⁵ Where each of the independent subsystems/measures in the CPA achieves an estimated energy saving equal to or smaller than 600 MWh, as per EB 60 Annex 25.

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 8

Approach 1- Investment Analysis

Financial additionality of the Projects would be demonstrated based on investment comparison analysis by using Unit Cost (UC) of cogeneration and/or trigeneration as a financial indicator (in accordance with CDM guidance in financial analysis).

It shall be demonstrated by providing financial calculations having the condition that the UC of a typical SSC-CPA project activity operating a cogeneration and/or trigeneration is less than the baseline alternative then project is not eligible. Only if the UC of the Project activity is more than the grid price (The unit cost of electricity generated or displaced by the cogeneration and/or trigeneration system will be compared) baseline alternative, the SSC-CPA is considered as additional and eligible. It is clear that only by considering the CDM revenues the project activity would be viable for the SSC-CPA operator.

Approach 2 – Barrier Analysis

The CPA implementer(s) shall follow Attachment A to Appendix B of the ‘Simplified modalities and procedures for small-scale CDM project activities’, and demonstrate that the project activity would otherwise not be implemented due to the existence of one or more of the following barriers.

- (a) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions;

The investment barrier shall be demonstrated based on the investment analysis as per sub-step 2 b, option II-Investment Comparison Analysis of ‘Tool for the demonstration and assessment of additionality’. The main criteria and data necessary to be provided by each CPA to fulfil the eligibility criteria are mentioned in section A.4.2.2 of the PoA-DD.

- (b) Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions;
- (c) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions;
- (d) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.

It is standard practice in South Africa for commercial sites to use grid electricity for base load supply. There are no policies or schemes which supports cogeneration and/or trigeneration at commercial sites in South Africa

This CPA enables (insert name of CPA implementer(s)) to opt for an onsite (cogeneration and/or trigeneration system(s)). In the absence of the CDM, the proposed voluntary measure would not have been implemented.

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



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.

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According to methodology AMS II.K. version 01, the project boundary encompasses the physical site of the facility where the cogeneration or trigeneration system is being implemented and the facility(ies) consuming the energy generated by the project activity.

The GHG reduced through this CPA is CO₂. The reduction takes place through the avoidance of fossil fuels (predominantly coal) used in the production of electricity. The gases and sources relevant to the CPA are listed below, based on methodology AMS II.K. version 01.

	Source	Gas	Included?	Justification/Explanation
Baseline	Electricity generation, grid or captive source	CO ₂	Included	The main source of emissions in the baseline.
		CH ₄	Excluded	Excluded for simplification. This is conservative.
		N ₂ O	Excluded	Excluded for simplification. This is conservative.
	Fossil fuel consumption due to steam generation	CO ₂	Included	Only in case where steam generating systems are used in the baseline.
		CH ₄	Excluded	Excluded for simplification. This is conservative.
		N ₂ O	Excluded	Excluded for simplification. This is conservative.
Project Activity	Fossil fuel consumption due to the CPA project activity	CO ₂	Included	The main source of emissions in the project activity.
		CH ₄	Excluded	Excluded for simplification.
		N ₂ O	Excluded	Excluded for simplification.
	Supplemental electricity consumption	CO ₂	Included	The main source of emissions in the project activity.
		CH ₄	Excluded	Excluded for simplification.
		N ₂ O	Excluded	Excluded for simplification.

B.5. Emission reductions:

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

The CPA implementer shall delete the tables that are not applicable to the CPA.

Data / Parameter:	<i>EF_{grid,y}</i>
Data unit:	tCO ₂ e/MWh
Description:	Amount of electricity displaced by the project in year y.
Source of data used:	'Tool to calculate the emission factor for an electricity system' (Version 02.1).
Value applied:	<i>To be calculated by the CPA implementer(s).</i>
Justification of the	As per applied tool, this value will be calculated ex-ante. The calculations for

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 10

choice of data or description of measurement methods and procedures actually applied :	this tool are provided in Annex 3.
Any comment:	

Data / Parameter:	$EF_{ELEC,i}$
Data unit:	tCO ₂ e/MWh
Description:	Emission factor of the grid
Source of data used:	This parameter is calculated in accordance with the ‘Tool to calculate the emission factor for an electricity system’, Version 02.1.
Value applied:	To be calculated by the CPA implementer(s).
Justification of the choice of data or description of measurement methods and procedures actually applied :	As per applied tool, this value will be calculated ex-ante. The calculations for this tool are provided in Annex 3.
Any comment:	

Data / Parameter:	$COP_{c,i}$
Data unit:	MWh _{th} /MWh _e (MWh thermal output/MWh electrical input
Description:	The Coefficient of Performance of the baseline scenario chiller(s) <i>i</i> .
Source of data used:	Manufacturer specifications.
Value applied:	To be completed by the CPA implementer(s).
Justification of the choice of data or description of measurement methods and procedures actually applied :	To be conservative, the Coefficient of Performance of the entire cooling system must be used.
Any comment:	

Data / Parameter:	EF_i
Data unit:	tCO ₂ /TJ
Description:	Emission factor of fossil fuel <i>i</i>
Source of data used:	IPCC guidelines or other relevant national standard.
Value applied:	To be completed by the CPA implementer(s).
Justification of the choice of data or description of measurement methods and procedures actually applied :	
Any comment:	

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 11

Data / Parameter:	η_{es}
Data unit:	Fraction
Description:	Efficiency of the displaced steam generation system(s) in year y
Source of data used:	Existing steam generator performance data for the prior three years (if the baseline scenario is an existing steam generator or generators) or determined by the ‘Tool to determine the baseline efficiency of thermal or electric energy generation systems’ (Version 01), (if the baseline scenario is a steam generator that would have been built).
Value applied:	To be completed by the CPA implementer(s).
Justification of the choice of data or description of measurement methods and procedures actually applied :	As per methodology AMS II.K. (Version 01).
Any comment:	

Data / Parameter:	EF_{grid,CO_2}
Data unit:	tCO ₂ /MWh
Description:	Combined margin CO ₂ emission factor for the project electricity system in year y
Source of data used:	This parameter is calculated in accordance with the ‘Tool to calculate the emission factor for an electricity system’, Version 02.1
Value applied:	To be calculated by the CPA implementer(s).
Justification of the choice of data or description of measurement methods and procedures actually applied :	As per applied tool, this value will be calculated ex-ante. The calculations for this tool are provided in Annex 3.
Any comment:	

Data / Parameter:	$TDL_{j,y}$
Data unit:	-
Description:	Average technical transmission and distribution losses for providing electricity to source j in year y
Source of data used:	To be calculated by the CPA implementer(s).
Value applied:	To be completed by the CPA implementer(s).
Justification of the choice of data or description of measurement methods and procedures actually applied :	
Any comment:	

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



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

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The CPA implementer(s) shall provide a transparent ex-ante calculation of project emissions, baseline emissions (or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations from AMS II.K. Version 01.

The CPA implementer(s) shall document how each equation is applied, in a manner that enables the reader to reproduce the calculation. Where relevant, the CPA implementer(s) shall provide additional background information and or data in Annex 3, including relevant electronic files (i.e. spreadsheets).

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)
(Insert year)				
(Insert year)				
(Insert year)				
(Insert year)				
(Insert year)				
(Insert year)				
(Insert year)				
(Insert year)				
(Insert year)				
(Insert year)				
Total (tonnes of CO ₂ e)				

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

B.6.1. Description of the monitoring plan:

>>

The monitoring plan will ensure that the project emission reductions for each CPA are accurately monitored, recorded and reported. The CPA implementer(s) shall follow the monitoring plan provided in section E.7.2. of the PoA. The CPA implementer(s) shall also complete the following tables (where applicable), and may also add additional information to the table where necessary. The CPA implementer(s) shall delete the tables not applicable to the CPA.

Data / Parameter:	<i>E_{grid,y}</i>
Data unit:	MWh/year
Description:	Amount of grid electricity displaced by the project in year y.
Source of data to be used:	Measured at project site.
Value of data applied	To be completed by the CPA implementer(s).

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 13

for the purpose of calculating expected emission reductions in section B.5	
Description of measurement methods and procedures to be applied:	The amount of grid electricity displaced will be continuously monitored and measured hourly. This data will be recorded monthly for the purpose of calculating emission reductions.
QA/QC procedures to be applied:	The data will be kept for a minimum of two years after the end of crediting period or the last issuance of CERs, whichever occurs later. The data will be maintained in both soft copy and hard copy format
Any comment:	

Data / Parameter:	C_{PL}
Data unit:	MWh _{th} /year
Description:	Cooling output of baseline scenario chillers in year <i>y</i>
Source of data to be used:	Measured at project site
Value of data	To be completed by the CPA implementer(s).
Description of measurement methods and procedures to be applied:	The cooling output of the baseline scenario chillers will be continuously monitored and measured hourly. This data will be recorded monthly for the purpose of calculating emission reductions.
QA/QC procedures to be applied:	The data will be kept for a minimum of two years after the end of crediting period or the last issuance of CERs, whichever occurs later. The data will be maintained in both soft copy and hard copy format
Any comment:	

Data / Parameter:	m_{CWR}
Data unit:	tonnes/hour
Description:	The chilled water mass flow rate for chiller(s) <i>i</i> produced by the project in hour <i>h</i> of year <i>y</i> .
Source of data to be used:	Measured at project site.
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be completed by the CPA implementer(s).
Description of measurement methods and procedures to be applied:	The chilled water mass flow rate will be monitored continuously and measured hourly. The data will be recorded monthly for the purpose of emission reduction calculations.
QA/QC procedures to be applied:	The data will be kept for a minimum of two years after the end of crediting period or the last issuance of CERs, whichever occurs later. The data will be maintained in both soft copy and hard copy format

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 14

Any comment:	
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Data / Parameter:	ΔT_{CWA}
Data unit:	°C
Description:	Differential temperature of inlet and outlet chilled water for chiller(s) <i>i</i> in hour <i>h</i> of year <i>y</i> of incoming and outgoing water from project
Source of data to be used:	Measured at project site..
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be completed by the CPA implementer(s).
Description of measurement methods and procedures to be applied:	The differential temperature of inlet and outlet chilled water will be monitored continuously and measured hourly. The data will be recorded monthly for the purpose of emission reduction calculations.
QA/QC procedures to be applied:	The data will be kept for a minimum of two years after the end of crediting period or the last issuance of CERs, whichever occurs later. The data will be maintained in both soft copy and hard copy format
Any comment:	

Data / Parameter:	m_H
Data unit:	tonnes/hour
Description:	The water mass flow rate from heater(s) during hour <i>h</i> in year <i>y</i> .
Source of data to be used:	Measured at project site.
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be completed by the CPA implementer(s).
Description of measurement methods and procedures to be applied:	The water mass flow rate from the heater(s) will be monitored continuously and measured hourly. The data will be recorded monthly for the purpose of emission reduction calculations.
QA/QC procedures to be applied:	The data will be kept for a minimum of two years after the end of crediting period or the last issuance of CERs, whichever occurs later. The data will be maintained in both soft copy and hard copy format
Any comment:	

Data / Parameter:	ΔT_H
Data unit:	°C
Description:	Differential temperature of inlet and outlet hot water from heater(s) during hour <i>h</i>
Source of data to be used:	Measured at project site.

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 15

Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be completed by the CPA implementer(s).
Description of measurement methods and procedures to be applied:	The differential temperature of inlet and outlet hot water will be monitored continuously and measured hourly. The data will be recorded monthly for the purpose of emission reduction calculations.
QA/QC procedures to be applied:	The data will be kept for a minimum of two years after the end of crediting period or the last issuance of CERs, whichever occurs later. The data will be maintained in both soft copy and hard copy format
Any comment:	

Data / Parameter:	$FC_{y,t}$
Data unit:	m^3/yr
Description:	Quantity of fuel consumed by the project activity in year y
Source of data to be used:	Measured at project site
Value of data	To be completed by the CPA implementer(s).
Description of measurement methods and procedures to be applied:	The quantity of fuel consumed by the project activity will be monitored continuously using thermal mass flow meters. The readings from these meters will be aggregated monthly for use in the emission reduction report.
QA/QC procedures to be applied:	
Any comment:	The data will be kept for a minimum of two years after the end of crediting period or the last issuance of CERs, whichever occurs later. The data will be maintained in both soft copy and hard copy format

Data / Parameter:	$NCV_{NG,y,t}$
Data unit:	MJ/m^3
Description:	Net calorific value of natural gas in year y
Source of data to be used:	Manufacturer specifications
Value of data	To be completed by the CPA implementer(s).
Description of measurement methods and procedures to be applied:	The energy content of the natural gas used in the project activity, as specified by natural gas supplier.
QA/QC procedures to be applied:	
Any comment:	The data will be kept for a minimum of two years after the end of crediting period or the last issuance of CERs, whichever occurs later. The data will be maintained in both soft copy and hard copy format

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 16

Data / Parameter:	$EF_{CO_2,NG,y}$
Data unit:	tCO ₂ e/GJ
Description:	Emission factor of natural gas in year y
Source of data to be used:	IPCC guidelines
Value of data	To be completed by the CPA implementer(s).
Description of measurement methods and procedures to be applied:	The IPCC default value for the emission factor of natural gas, according to the latest IPCC guidelines.
QA/QC procedures to be applied:	
Any comment:	

Data / Parameter:	$EC_{P,j,y}$
Data unit:	MWh/yr
Description:	Quantity of electricity consumed by the project electricity consumption source j in year y
Source of data to be used:	Measured at project site
Value of data	To be completed by the CPA implementer(s).
Description of measurement methods and procedures to be applied:	The quantity of electricity consumed by the project electricity consumption source will be monitored continuously using power meters. The readings from these meters will be aggregated monthly for use in the emission reduction report.
QA/QC procedures to be applied:	
Any comment:	The data will be kept for a minimum of two years after the end of crediting period or the last issuance of CERs, whichever occurs later. The data will be maintained in both soft copy and hard copy format

C.1. Please indicate the level at which environmental analysis as per requirements of the CDM modalities and procedures is undertaken. Justify the choice of level at which the environmental analysis is undertaken:

X Please tick if this information is provided at the PoA level. In this case sections C.2. and C.3. need not be completed in this form.

This information is provided in the PoA. The environmental analysis is done at a PoA level, as each CPA will have similar environmental impacts.

C.2. Documentation on the analysis of the environmental impacts, including transboundary impacts:

>>

Not applicable. This section is intentionally left blank.

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 17

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:

>>

Not applicable. This section is intentionally left blank.

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 18

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 sections D.2. to D.4. need not be completed in this form.

The local stakeholders will vary for every CPA included in the PoA. Hence, it is proposed to undertake local stakeholder consultation at a CPA level.

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

>>

To be completed by the CPA implementer(s).

D.3. Summary of the comments received:

>>

To be completed by the CPA implementer(s).

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

>>

To be completed by the CPA implementer(s).

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



Annex 1

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

Organization:	To be completed by the CPA implementer(s)
Street/P.O.Box:	
Building:	
City:	
State/Region:	
Postfix/ZIP:	
Country:	
Telephone:	
FAX:	
E-Mail:	
URL:	
Represented by:	
Title:	
Salutation:	
Last Name:	
Middle Name:	
First Name:	
Department:	
Mobile:	
Direct FAX:	
Direct tel:	
Personal E-Mail:	

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 20

Annex 2

INFORMATION REGARDING PUBLIC FUNDING

To be completed by the CPA implementer(s).

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



Annex 3

BASELINE INFORMATION

To be completed by the CPA implementer(s) if additional baseline information is required.

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



NAME /TITLE OF THE PoA: Cogeneration and/or trigeneration at commercial sites



CDM – Executive Board

page 22

Annex 4

MONITORING INFORMATION

To be completed by the CPA implementer(s) if additional monitoring information is required.