CLEAN DEVELOPMENT MECHANISM
SMALL-SCALE PROGRAMME OF ACTIVITIES DESIGN DOCUMENT FORM
(CDM-SSC-PoA-DD) Version 01

CONTENTS

Annexes

NOTE:

(i) This form is for the submission of a CDM PoA whose CPAs apply a small scale approved methodology.

(ii) At the time of requesting registration this form must be accompanied by a CDM-SSC-CPA-DD form that has been specified for the proposed PoA, as well as by one completed CDM-SSC-CPA-DD (using a real case).

SECTION A. General description of small-scale programme of activities (PoA)

A.1 Title of the small-scale programme of activities (PoA):

>>
Title: Cogeneration and/or trigeneration at commercial sites.
Version: 01
Date: 08/07/2011

A.2. Description of the small-scale programme of activities (PoA):

>>

1. General operating and implementing framework of PoA

This programme of activities (PoA) aims to develop a series of cogeneration and/or trigeneration projects at commercial facilities across South Africa. These projects will see the simultaneous production of electricity and cooling and/or heating, from a single fuel source – methane-rich natural gas. Each small-scale CDM programme activity (CPA) will cover a single commercial site, and will result in energy savings up to 60 GWh per year.

Promethium Carbon (Pty) Ltd (hence forth referred to as Promethium Carbon) will be responsible for the project documentation of the PoA and CPA, and will act as the managing entity of the PoA. The installation of the cogeneration and/or trigeneration systems will typically be managed by the owner(s) of each commercial site, hence forth referred to as the CPA implementer(s).

This programme is being developed as a small scale CDM project in order to generate revenue from the certified emission reductions (CERs). These CERs will provide the necessary finance for the expansion of the project, thereby ensuring sustainability thereof.

The PoA involves any project in the cogeneration/trigeneration sphere. As there are a number of technology suppliers in the cogeneration/trigeneration sphere, the PoA is written in a way so as to not limit the choice of technology provider on condition that the technology is in accordance with section A.4.2.1 of this PoA.

2. Policy/measure or stated goal of the PoA

The goal of this PoA is to improve the energy efficiency of commercial sites across South Africa and in other developing countries. The PoA is written for South Africa, but is envisaged that other countries may be added to the Program in terms of the provisions of EB 60 Annex 26 Paragraph 6.

The installation of cogeneration and/or trigeneration systems will see a reduction in electricity consumption from the country's national grid. Coal accounts for more than 92% of the fuel used in South Africa's electricity generation[1] 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

[1] 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

power[2]. This PoA will provide commercial entities with a framework on which to overcome these barriers.

The PoA 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 the emission mitigation actions of South Africa. 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 programme 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, SO_2 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 series of cogeneration and/or trigeneration projects at commercial facilities in South Africa 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 cogeneration and/or trigeneration systems to South Africa.

Social

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

3. Confirmation that the proposed PoA is a voluntary action by the coordinating/managing entity

South Africa has no mandatory requirements to implement cogeneration and/or trigeneration systems at commercial sites. The CPA implementer(s) will voluntarily install the new technology.

A.3. Coordinating/managing entity and participants of SSC-POA:

>>

Promethium Carbon is the managing entity of the PoA. The contact details of Promethium Carbon are provided in Annex 1.

[2] 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

The project participants being registered in relation to the PoA are provided in the table below:

Name of Party involved (*) ((host) indicates a host Party)	Private and/or public entity(ies) project participants (*) (as applicable)	Kindly indicate if the Party involved wishes to be considered as project participant (Yes/No)
Republic of South Africa (host)	Promethium Carbon	No
Republic of South Africa (host)	Mobile Telephone Networks	No

A.4. Technical description of the small-scale programme of activities:

A.4.1. Location of the programme of activities:

A.4.1.1. Host Party(ies):

>>
Republic of South Africa

A.4.1.2. Physical/ Geographical boundary:

>>
All CPAs associated with this PoA will be implemented within the geographical boundary of South Africa.

Figure 1: Geographical boundary of the PoA – South Africa[3]

[3] Retrieved from http://maps.google.co.za/maps

It is envisaged that other countries may be added to the Program in terms of the provisions of EB 60 Annex 26 Paragraph 6.

A.4.2. Description of a typical small-scale CDM programme activity (CPA):

A.4.2.1. Technology or measures to be employed by the SSC-CPA:

>>

Each CPA will cover a single commercial site in South Africa. The site may comprise one or a number of individual buildings. The CPA will involve the implementation of a new onsite cogeneration and/or trigeneration project. The system will replace or supplement either: the operation of (a) existing systems that supply and cooling and/or heating systems, or (b) electricity and cooling and/or heating systems that would have been built and utilized.

Cogeneration/trigeneration

Cogeneration is the simultaneous production of power and heat from a single fuel source. Trigeneration is the extension of cogeneration to include cooling. 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. The technology employed by each CPA is described in further detail below.

Power generation

- Electricity may be generated using internal combustion engines that will convert fuel to electricity. The internal combustion engines are spark ignition engines operating on the same principle as normal petrol engines.
- Electricity may also be generated using fuel cell technology. In this case fuel may be used in an electrochemical cell to convert chemical energy to electric energy, heating and cooling.

Fuel

- The fuel that will be utilised will be natural gas.

Heating

- Heat exchangers may be installed to utilise the waste heat from the internal combustion engines or fuel cells. These heat exchangers may produce hot water or steam, which may be used to meet all or part of the heating requirement on the commercial site.

Cooling (in the case of trigeneration)

- In the case of trigeneration, absorption chillers may also be installed.
    - These chillers operate on thermal energy from the power generator(s) - heat that would otherwise have been lost to the atmosphere.
    - The absorption chillers produce chilled water, which will be used to meet all or part of the cooling demand in the commercial site.
    - The absorption chillers may contain refrigerants, but only if such refrigerants:
        - Have no global warming potential (GWP);
        - Have no ozone depleting potential (ODP) and

- Are not mandated by the host country's laws or regulations (as stipulated by version 01 of methodology AMS II.K.).

Baseline

- The baseline would be utilising power from the national grid.

A.4.2.2. Eligibility criteria for inclusion of a SSC-CPA in the PoA:

>>

The eligibility criteria for including each CPA in this PoA are given below:

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.
4. Each CPA shall meet with the applicability criteria in version 01 of the baseline and monitoring methodology AMS II.K. *Installation of co-generation or tri-generation systems supplying energy to commercial buildings*.
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.

A.4.3. Description of how the anthropogenic emissions of GHG by sources are reduced by a SSC-CPA below those that would have occurred in the absence of the registered PoA (assessment and demonstration of additionality):

>>

(i) The proposed PoA is a voluntary coordinated action

The proposed PoA is a voluntary coordinated action. There are no mandatory policies/regulations in South Africa that enforce the installation of trigeneration systems at commercial sites. The managing entity of the PoA and the CPA implementer(s) are voluntary project participants.

(ii) Assessment and demonstration of additionality:

Additionality will be proven on a CPA level as per section E.5.2 of this PoA-DD.

(iii) Notice of prior consideration

As per EB 60 Annex 26, the Executive Board agreed that the "Guidelines for the demonstration and assessment of prior consideration of the CDM" do not apply to PoAs, as it is expected that no component of the programme will commence prior to the start date of validation. However, a notice of prior consideration was submitted to the Executive Board on 11/11/2010, before the recent PoA clarifications were published.

The milestones in the programme's development are shown in the table below.

Date	Milestone
17/07/2009	Application for a revision of methodology AMS II.D.
23/12/2009	Submission of application for a new small scale methodology.
28/05/2010	Approval of methodology AMS II.K.
11/11/2010	Notice of prior consideration submitted to the Executive Board.
24/05/2011	Request quotes for validation.
13/06/2011	Carbon Check selected as project validators.
08/07/2011	PoA completed by Promethium Carbon (Pty) Ltd.

A.4.4. Operational, management and monitoring plan for the programme of activities (PoA):

A.4.4.1. Operational and management plan:

>>

Promethium Carbon is the managing entity of the PoA, and is responsible for the documentation of the PoA and the CPA. The CPA implementer(s) will manage the installation of the cogeneration and/or trigeneration systems at each commercial site.

(i) Record keeping system for each CPA under the PoA

A database will be set up by the managing entity of the PoA. It will include the following information for each CPA:

1) The name of the CPA implementer(s);
2) The name of the commercial site where the cogeneration and/or trigeneration technology is implemented;
3) The CPA site details, including street address and geographical location (latitude and longitude) of the commercial site (the location of the CPA);
4) The commissioning date of the cogeneration and/or trigeneration facility;
5) The monitoring period for each CPA;
6) The signed agreement with the managing entity to (a) participate in the programme, and (b) transfer the emission reduction rights to the managing entity.

The database capturing points 1 to 6 above will be setup in a way that allows the user to easily extract information for the purposes of emission reduction monitoring and reporting. Data will be archived for a minimum of two years after the 28 year crediting period has lapsed. Relevant data capture, verification and storage procedures will be followed in maintaining the data to ensure its accuracy, validity and completeness.

(ii) Procedure to avoid double counting

The database ensures that each CPA is uniquely defined and is included in one PoA only, thereby avoiding double counting of emissions reductions generated by the CPA. However, prior to the registration of each CPA under the PoA, the managing entity will confirm that the proposed CPA is not registered, or in the process of being registered, as a CDM project activity. Each CPA will also not overlap the geographical boundary of another CPA registered under the same PoA.

(iii) Confirmation that the CPA included in the PoA is not a de-bundled component of another CPA or CDM project activity

To ensure that each CPA is not a debundled component of another CPA or CDM project activity, the managing entity will follow EB 54 Annex 13 ‘Guidelines on assessment of debundling for SSC project activities’. The managing entity will 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.

(iv) Provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA

The managing entity is responsible for identifying, registering, and managing all CPAs that will be registered under the proposed PoA. The managing entity will ensure that those operating the CPA are aware of, and have agreed that their activity is being subscribed to the PoA (through a signed agreement, as stipulated in section A.4.2.2.).

A.4.4.2. Monitoring plan:

The monitoring plan will ensure that each CPA's emission reductions are accurately monitored, recorded and reported.

(i) Overall PoA management

Promethium Carbon is the PoA managing entity and is responsible for the project documentation of the PoA and CPA. The installation of the cogeneration and/or trigeneration systems will typically be managed by the owner(s) of each commercial site (the CPA implementer(s)). Promethium Carbon has opted to verify each CPA individually.

(ii) Data monitoring and collection during the crediting period

An online database will be developed by the managing entity, which will record the start and end dates of each monitoring period, as well as the emission reductions for each CPA during the monitoring period. This database will also contain each CPA's details, as specified in section A.4.4.1. This will ensure that the online database is transparent, that no double counting occurs, and that the status of verification can be determined anytime for each CPA.

(iii) Data verification

Each CPA will produce a monitoring report at the end of its monitoring period. This report will contain all of the data relating to the CPA's emission reductions during the monitoring period. This report will then be submitted to the DOE for verification. The records and documents pertaining to the monitoring and verification of each CPA will be maintained by the managing entity.

A.4.5. Public funding of the programme of activities (PoA):

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

SECTION B. Duration of the programme of activities (PoA)

B.1. Starting date of the programme of activities (PoA):

>>
The date of Global Stakeholder Participation (GSP): 11 July 2011

B.2. Length of the programme of activities (PoA):

>>
28 years

SECTION C. Environmental Analysis

>>

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:

1. Environmental Analysis is done at PoA level ☐
2. Environmental Analysis is done at SSC-CPA level X

The environmental analysis will be 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:

>>

The programme mainly has a positive impact on the environment. It will reduce the electricity consumption from the South African national grid. The reduction in electricity consumption from the national grid will result in a reduction of coal-based electricity and all the negative impacts associated with coal mining such as: the impact of the actual (coal) mining process, the utilisation of scarce water resources, SO_2 emissions and the impacts associated with the disposal of coal ash. Hence the project will reduce GHG emissions.

Furthermore, the combustion of natural gas (used in the generation of electricity), emits lower levels of NO_x, CO_2, and particulate emissions, than coal. The combustion of natural gas also emits negligible amounts of SO_2 and mercury[4].

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

>>

The environmental impacts of the programme will be considered on a CPA level in terms of a CPA not involving any activity that is listed in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998 [Current regulations 386 & 387 and/or any other regulation that may be applicable at the time]) and, as such, does not require an environmental impact assessment or a basic assessment.

SECTION D. Stakeholders' comments

>>

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

1. Local stakeholder consultation is done at PoA level ☐
2. Local stakeholder consultation is done at SSC-CPA level X

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.

[4] NaturalGas.org. (2010). *Natural Gas and the Environment.* Retrieved from http://www.naturalgas.org/environment/naturalgas.asp

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

>>

Not applicable. This section has been intentionally left blank.

D.3. Summary of the comments received:

>>

Not applicable. This section has been intentionally left blank.

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

>>

Not applicable. This section has been intentionally left blank.

SECTION E. Application of a baseline and monitoring methodology

E.1. Title and reference of the approved SSC baseline and monitoring methodology applied to a SSC-CPA included in the PoA:

>>

The approved baseline and monitoring methodology is AMS II.K.: 'Installation of co-generation or tri-generation systems supplying energy to commercial buildings', Version 01, Sectoral Scope: 03, EB 54. This methodology was developed specifically for this programme.

A combination of the following methodological tools may be used in a CPA (depending on the type of technology that the cogeneration and/or trigeneration facility is either supplementing or replacing):

- 'Tool for the assessment and demonstration of additionality' (Version 05.2).
- 'Tool to determine the remaining lifetime of equipment' (Version 01).
- 'Tool to calculate the emission factor for an electricity system' (Version 02.1).
- 'Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion' (Version 02).
- 'Tool to determine the baseline efficiency of thermal or electric energy generation systems' (Version 01).
- 'Tool to calculate baseline, project and/or leakage emissions from electricity consumption' (Version 01).

E.2. Justification of the choice of the methodology and why it is applicable to a SSC-CPA:

>>

Each CPA complies with the applicability criteria as set out in the selected methodology (AMS II.K. *Installation of co-generation or tri-generation systems supplying energy to commercial buildings*, Version 01, Sectoral Scope: 03, EB 54). This is justified below.

Item	AMS II.K.	CPA
1	*This methodology applies to the installation of fossil fuel based co-generation or tri-generation facilities that simultaneously produce electricity and cooling (e.g., chilled water) and/or heating (e.g., steam or hot water) for supplying such energy to commercial, non-industrial, buildings.*	Each CPA involves the installation of a new fossil fuel based cogeneration or trigeneration system at a commercial site.

2	*The methodology is applicable to installation of new co-generation or tri-generation systems that replace or supplement either: the operation of (a) existing systems that supply electricity (grid or on-site generation) and cooling (e.g., chillers) and/or heating systems (e.g., boilers) or (b) electricity and cooling and/or heating systems that would have been built and utilized.*	Each CPA involves the installation of a new cogeneration or trigeneration system. The system will replace or supplement either: the operation of (a) existing systems that supply and cooling and/or heating systems, or (b) electricity and cooling and/or heating systems that would have been built and utilized.
3	*The methodology does not apply to the replacement of existing co-generation or tri-generation systems.*	Each CPA involves the installation of a new cogeneration or trigeneration system, and not the replacement of an existing cogeneration or trigeneration system.
4	*If it is identified that the baseline situation is the continued use of existing system then the existing system must have been in operation for at least the immediately prior three years, to the start date of the project activity, in order to ensure that adequate baseline performance data are available.*	If it is identified that the baseline situation is the continued use of the existing system then each CPA is implemented at a commercial site with a cooling and/or heating system. The existing system will in this case, have been in operation for at least three years prior to the start date of the programme activity. In the case of a new installation, this criterion is not applicable.
5	*This methodology only applies to commercial, non-industrial applications. Projects that comprise energy efficiency measures implemented through integration of a number of utility provisions (for example, integrating power, steam/heat, and cooling systems) of an industrial facility cannot apply this methodology.*	Each CPA will be implemented at a non-industrial facility whose operation affects commerce (where commerce is transactions (sales and purchases), having the objective of supplying commodities (goods and services)). Hence, each CPA will be implemented at a commercial, non-industrial building. Each CPA will not involve the integration of a number of utility provisions.

6	*For the purpose of this methodology, natural gas is defined as a gas which consists primarily of methane and which is generated from (i) natural gas fields (non-associated gas), (ii) associated gas found in oil fields. It may be blended up to 1% on a volume basis with gas from other sources, such as, inter alia, biogas generated in biodigesters, gas from coal mines, gas which is gasified from solid fossil fuels, etc.*	The natural gas fed to the internal combustion engine(s) in each CPA will consist primarily of methane.
7	*Any chilled water/cooling, steam/hot water/heat and electricity produced by the co-generation or tri-generation system must be used on-site (within the project boundary) to meet all or part of the energy demand. Existing chillers, boilers, electrical heaters, electricity generating units, etc. may remain in operation after the implementation of the project activity to either (a) supply the balance of the demand not met by the co-generation or tri-generation systems if the cogeneration or tri-generation system has insufficient capacity to supply the total energy demand and/or (b) provide backup to the co-generation or tri-generation facilities. However, emission reductions can only be claimed for the cooling, heat and electricity produced by the new co-generation or tri-generation system.*	The chilled water/cooling; steam/hot water/heat; and electricity produced by the cogeneration and/or trigeneration system will be used on-site to meet all or part of the building's energy demand.
8	*The energy savings caused by a single project activity may not exceed the equivalent of 60 GWh per year. A maximum saving of 60 GWh is equivalent to maximum savings of 60 GWh_e of electricity consumption or maximum savings of 180 GWh_{th} of fuel consumption, i.e., for calculation of maximum savings allowable per year, 1 GWh_e equals 3 GWh_{th}.*	Each CPA will result in energy savings of less than 60 GWh per year.
9	*This project activity can include installation of cooling equipment which use refrigerants only if such refrigerants have no global warming potential (GWP) and no ozone depleting potential (ODP) and if such installation is not mandated by laws or regulations.*	If the CPA makes use of equipment which use refrigerants, these refrigerants will have no global warming potential (GWP) or ozone depleting potential (ODP).
10	*In case the produced electricity, cooling and/or heat are delivered to a facility that is not owned or under the control of the project owner, a contract between the project owner and consumer of the energy must be in force, during the crediting period, specifying that only the facility generating the energy can claim CERs from the emissions displaced by the subject project.*	The electricity, cooling and/or heating in each CPA will be used on-site at each commercial site.

E.3. Description of the sources and gases included in the SSC-CPA boundary

>>

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 the CPAs under this PoA is CO_2. 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_2O	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_2O	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_2O	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_2O	Excluded	Excluded for simplification.

E.4. Description of how the baseline scenario is identified and description of the identified baseline scenario:

>>

Methodology AMS II.K Version 01 requires that the project participant choose between two baseline options. Option 13 (a) is appropriate as each CPA involves the supplementing of an existing system (each CPA consists of a new cogeneration and/or trigeneration system that supplements grid electricity, and existing heating and/or cooling systems).

The project participant is then required to select the appropriate baseline scenario from further two options. Option 13 (a) (i) is applicable to this programme as the total annual consumption of energy (electricity, cooling, and heating) at each commercial site will not increase by more than the 20% (during the crediting period) from the established baseline values. This will be shown during validation.

For this reason, the baseline scenario is the continuation of the operation of the existing systems:

- Electricity is sourced from the national grid;
- Heating is sourced from conventional electric heaters; and
- Cooling is sourced from conventional electric vapour compression chillers (in the case of trigeneration).

Therefore, the baseline emissions are established from existing systems (using data from the three years prior to the project start date).

E.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the SSC-CPA being included as registered PoA (assessment and demonstration of additionality of SSC-CPA):

E.5.1. Assessment and demonstration of additionality for a typical SSC-CPA:

>>

If the CPA is a microscale project[5], then the CPA implementer(s) shall demonstrate additionality by following the guidance provided in EB 60, Annex 25 'Guidelines for demonstrating additionality of microscale project activities'.

If the CPA is not a microscale project, the CPA implementer(s) can demonstrate the additionality using either Approach 1 or Approach 2 given in the Section E.5.2 below.

Additionality of the small scale CDM project can be demonstrated by showing that the project would not occurred anyway due to an investment analysis as Approach 1 or existence of the barrier as per Approach 2.

A description of the barrier at PoA level is provided in section A.4.3. The arguments presented therein are also prevalent in the CPA project area. Hence, the CPA need not re-write the arguments presented therein to support CPA additionality, except present an analysis to support the key barrier to the project CPA operator.

E.5.2. Key criteria and data for assessing additionality of a SSC-CPA:

>>

If the CPA is a microscale project, 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 additionality of the SSC-CPA is demonstrated by either Approach 1 or Approach 2 applicable for the project activity.

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).

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

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;

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.

(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.

Conclusion:

1. The programme activity is a voluntary initiative.
2. The PoA is not implementing any mandatory policy/regulation requirements in South Africa which enforces the use of a cogeneration and/or trigeneration system.

Hence, this PoA will enable a number of users to opt for cogeneration and/or trigeneration systems. In the absence of the CDM, the proposed voluntary measures would not have been implemented.

E.6. Estimation of emission reductions of a CPA:

E.6.1. Explanation of methodological choices, provided in the approved baseline and monitoring methodology applied, selected for a typical SSC-CPA:

>>

AMS II.K. is selected for a typical CPA. *This methodology applies to the installation of fossil fuel based co-generation or tri-generation facilities that simultaneously produce chilled water and/or heating for supplying such energy to commercial, non-industrial buildings*.

Each CPA would constitute a new cogeneration and/or trigeneration system that replaces or supplements the operation of existing systems that supply electricity (grid or on-site generation) and cooling (e.g. chillers) and/or heating systems (e.g. boilers).

Emission reductions are determined by methodology AMS II.K (Version 01). The equations used for calculating the emission reductions are found in section E.6.2.

E.6.2. Equations, including fixed parametric values, to be used for calculation of emission reductions of a SSC-CPA:

>>

The emission reductions of a CPA are calculated in accordance with methodology AMS II.K. *Installation of co-generation or tri-generation systems supplying energy to commercial buildings*, Version 01, Sectoral Scope 03, EB 54.

(i) Baseline emissions

The baseline emissions (BE_y) are calculated using equation (1) of the applied methodology:

$$BE_y = BE_{grid,y} + BE_{capt,y} + BE_{BC,y} + BE_{BH,y} \quad \text{(AMS II.K. equation 1)}$$

Where:

BE_y	Baseline emissions in year *y* (tCO_2e/year)
$BE_{grid,y}$	Baseline emissions associated with grid electricity displaced by the project in year *y* (tCO_2e/year)
$BE_{capt,y}$	Baseline emissions associated with the electricity produced by a captive power plant in year *y* (tCO_2e/year)
$BE_{BC,y}$	Baseline emissions associated with the cooling (e.g., chilled water) produced in year *y* (tCO_2e/year)
$BE_{BH,y}$	Baseline emissions associated with the heat (e.g., steam or hot water) produced in year *y* (tCO_2e/year)

Baseline electricity related emissions

If the CPA displaces electricity that was previously obtained from the grid or would have been obtained from the grid, the baseline emissions include the CO_2 emissions of the power plants connected to the grid. The baseline emissions ($BE_{grid,y}$) are calculated based on the amount of grid electricity displaced by the project activity times the emission factor of the grid calculated, as indicated in equation (2), in accordance with methodology AMS-I.D.

$$BE_{grid,y} = E_{grid,y} \times EF_{grid,y}$$ (AMS II.K. equation 2)

Where:

$BE_{grid,y}$	Baseline emissions for the grid electricity displaced by the project in year *y* (tCO_2e/year)
$E_{grid,y}$	Amount of grid electricity displaced by the project in year *y* (MWh)
$EF_{grid,y}$	Emission factor of the grid (calculated in accordance with methodology AMS I.D.) (tCO_2e/ MWh)

Baseline emissions associated with the electricity consumed to produce chilled water (in the case of trigeneration)

In the case of trigeneration, baseline emissions associated with the electricity consumed to produce chilled water within the project boundary are calculated using equation (5) of the applied methodology:

$$BE_{BC,y} = EF_{ELEC,y} \times \sum_i \frac{C_{P,i,j}}{COP_{c,i}}$$ (AMS II.K. equation 5)

Where:

$BE_{BC,y}$	Baseline emissions for chilled water produced in the project activity in year *y* (tCO_2e/year)
$EF_{ELEC,y}$	Electricity emission factor of the grid, calculated in accordance with methodology AMS-I-D (tCO_2e/MWh)
$COP_{c,i}$	The Coefficient of Performance of the baseline scenario chiller(s) *i* (MWh_{th}/MW_{he}), as determined by point 20 (a) of methodology AMS II.K., version 01
$C_{P,i,j}$	Cooling output of baseline scenario chiller(s) *i* in year *y* (MWh_{th}/year), as determined by equation (6) of AMS II.K., version 01

Baseline emissions associated with the production of heat

For CPAs with water heating systems that use electricity, the baseline emissions are determined using the electricity emission factor and hourly measurements of the total water mass flow-rate and differential temperature of incoming and outgoing water, per equation (7) of the applied methodology. This equation is based on the assumption that the efficiency of electric water heating systems is 100%.

$$BE_{BH,y} = EF_{ELEC,y} \times \sum_{h=1}^{8.760} \frac{m_h \times C_{pw} \times \Delta T_h}{3600}$$ (AMS II.K. equation 7)

Where:

$BE_{BH,y}$	Baseline emissions for hot water produced in the project activity in year *y* (tCO_2e/year)
$EF_{ELEC,y}$	Electricity emission factor of the grid (calculated in accordance with methodology AMS I.D) (tCO_2e/MWh)
m_h	The water mass flow rate from heater(s) during hour *h* in year *y* (tonnes/hour)
C_{pw}	The specific heat capacity of water (MJ/tonnes °C) (4.2 MJ/t °C)
ΔT_h	Differential temperature of inlet and outlet hot water for heater(s) during hour *h* (°C)

For CPAs replacing baseline scenario steam generating systems (e.g., boiler), that use fossil fuel the baseline emissions are based on the equivalent amount of fuel that would have been used in the absence of the project activity as indicated in equation (8) of the applied methodology:

$$BE_{BH,y} = \sum_i EF_i \times \frac{S_{p,i,y}}{\eta_{cs}}$$ (AMS II.K. equation 8)

Where:

$BE_{BH,y}$	Baseline emissions for steam produced in the project activity in year *y*
EF_i	Emission factor of fossil fuel *i*
η_{cs}	Efficiency of the displaced steam generation system(s) in year *y*, as determined by point 22(a) of methodology AMS II.K. version 01
$S_{p,i,y}$	Thermal energy delivered by the project activity (TJ) in year *y* measured on an hourly basis using mass flow rate and enthalpy data

(ii) Project emissions

Project emissions in each CPA are equal to the emissions associated with consumption of fossil fuel and electricity within the project boundary by the co-generation or tri-generation system, auxiliary equipment, and systems (such as boilers, chillers and hot water heaters, captive electricity generation plants) used to generate any backup or supplemental electricity, heating or cooling.

Project emissions are determined as follows:

- Fuel consumption of programme including any fuel used to run auxiliary equipment. Emissions are calculated using the 'Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion' (Version 02).
- Electricity consumption of project including any electricity used to run auxiliary equipment. Emissions are calculated using the 'Tool to calculate baseline, project and/or leakage emissions from electricity consumption' (Version 01).

(iii) Leakage

As per methodology AMS II.K., leakage emission resulting from fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of fossil fuels outside of the project boundary shall be considered in each CPA, as per the guidance provided in the leakage section of ACM0009. In case leakage emissions in the baseline situation are higher than leakage emissions in the project situation, leakage emissions will be set to zero.

(iv) Emission reductions

The emission reductions in each CPA are calculated as the difference between the baseline emissions and the project and leakage emissions, as represented below:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y	Emission reductions in year *y* (tCO_2e/year)
BE_y	Baseline emissions in year *y* (tCO_2e/year)
PE_y	Project emissions in year *y* (tCO_2e/year)
LE_y	Leakage emissions in year *y* (tCO_2e/year)

E.6.3. Data and parameters that are to be reported in CDM-SSC-CPA-DD form:

Data / Parameter:	$EF_{grid,y}$
Data unit:	tCO_2e/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:	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.
Any comment:	

Data / Parameter:	$EF_{ELEC,y}$
Data unit:	tCO_2e/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.
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*.
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*
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:	

Data / Parameter:	η_{cs}
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:	$EF_{grid,CM,y}$
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.
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:	

E.7. Application of the monitoring methodology and description of the monitoring plan:

E.7.1. Data and parameters to be monitored by each SSC-CPA:

Data / Parameter:	$E_{grid,y}$
Data unit:	MWh/year
Description:	Amount of grid electricity displaced by the project in year *y*.
Source of data to be used:	The amount of grid electricity displaced will be monitored using a calibrated energy meter.
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 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:	$C_{p,i,j}$
Data unit:	MWh_{th}/year
Description:	Cooling output of baseline scenario chillers in year *y (ex-ante)*
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:	$m_{C,i,h}$
Data unit:	tonnes/hour
Description:	The chilled water mass flow rate for chiller(s) i produced by the project in hour *h* of year *y*.
Source of data to be	Calibrated flow meter.

used:	
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
Any comment:	

Data / Parameter:	$\Delta T_{C,i,h}$
Data unit:	°C
Description:	Differential temperature of inlet and outlet chilled water for chiller(s) *i* in hour *h* of year *y* of incoming and outgoing water from project
Source of data to be used:	Calibrated meter.
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 *h* in year *y*.
Source of data to be used:	Calibrated flow meter.
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 *h*
Source of data to be used:	Calibrated meter.
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:	$FC_{j,y}$
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:	$NCV_{NG,y}$
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	The energy content of the natural gas used in the project activity, as specified by natural gas supplier.

and procedures to be applied:	
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:	$EF_{CO_2,NG,y}$
Data unit:	tCO_2e/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:	$EC_{PJ,j,y}$
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

E.7.2. Description of the monitoring plan for a SSC-CPA:

>>

The monitoring plan will ensure that the project emission reductions are accurately monitored, recorded and reported.

The following parameters will be monitored onsite during the crediting period:

1. The amount of grid electricity displaced by the project will be monitored using energy meters.
2. The quantity of natural gas consumed by the project activity will be monitored by thermal mass flow meters, which measures the gas flow rate of the main supply line.

3. The quantity of additional electricity consumed by the project activity will be monitored using power meters.

The CPA implementer(s) shall also monitor a combination of the following parameters depending on the type of technology being implemented, as well as the type of technology being replaced:

1. The chilled water mass flow rate (for the chillers, in the case of trigeneration) will be monitored using thermal energy meters.
2. The temperatures of inlet and outlet chilled water (for the chillers, in the case of trigeneration) will be monitored using immersion temperature sensors.
3. The water mass flow rate from the heat exchanger will be monitored using thermal energy meters.
4. The temperatures of the inlet and outlet hot water (for the heat exchanger) will be monitored using immersion temperature sensors.

The process of data collection and storage is as follows:

1. The data will be fed to the plant control system.
2. Data is collected from the plant control system and is logged directly into a database in the onsite Building Management System (BMS). The data in the BMS is available for a period of five years.
3. The data is also logged into the two onsite Management Information System (MIS) servers. The MIS integrates directly into the control system backbone, and will keep a database for at least five years.
4. All data will also be stored in a database in the historian. The data in the historian will be stored for a minimum period of two years after the end of the crediting period or the last issuance of CER's, whichever occurs later.

E.8 Date of completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/entity(ies)

>>

Date of completion of application: 08/07/2011

Contact information for the entity responsible for the application of the baseline and monitoring information:
Promethium Carbon (Pty) Ltd
Coral House
20 Peter Place
Bryanston 2021
Johannesburg
Telephone: +27 11 706 8185

This entity is a project participant.

Annex 1

CONTACT INFORMATION ON COORDINATING/MANAGING ENTITY and PARTICIPANTS IN THE PROGRAMME of ACTIVITIES

Organization:	Promethium Carbon (Pty) Ltd
Street/P.O.Box:	20 Peter Place
Building:	Coral House
City:	Johannesburg
State/Region:	Gauteng
Postfix/ZIP:	2021
Country:	South Africa
Telephone:	+27 11 706 8185
FAX:	+27 86 589 3466
E-Mail:	
URL:	http://www.promethium.co.za
Represented by:	
Title:	Mr
Salutation:	
Last Name:	Louw
Middle Name:	
First Name:	Robbie
Department:	
Mobile:	+27 82 557 8646
Direct FAX:	
Direct tel:	
Personal E-Mail:	robbie@promethium.co.za

Organization:	Mobile Telephone Networks
Street/P.O.Box:	216 14th Ave, Fairland
Building:	Phase 1 Innovation centre
City:	Johannesburg
State/Region:	Gauteng
Postfix/ZIP:	2118
Country:	South Africa
Telephone:	+27 11 912 3000
FAX:	+27 83 705 7171
E-Mail:	lombar_p@mtn.co.za
URL:	http://www.mtn.co.za
Represented by:	
Title:	Mr
Salutation:	
Last Name:	Lombard
Middle Name:	
First Name:	Pierre
Department:	Network Group
Mobile:	+27 83 212 5612
Direct FAX:	

Direct tel.:	
Personal E-Mail:	plombard@mweb.co.za

Annex 2

INFORMATION REGARDING PUBLIC FUNDING

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

Annex 3

BASELINE INFORMATION

Annex 4

MONITORING INFORMATION

- - - - -