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

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NOTE:

This form is for the submission of a CDM PoA whose CPAs apply a large scale approved methodology.

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

SECTION A. General description of programme of activities (PoA)

A.1 Title of the programme of activities:

>>
Southern African Renewable Energy (SARE) Programme
Version Number of the Document: 01.5
Date: 04/09/2012

A.2. Description of the programme of activities:

>> Here the following information will be included

1. General operating and implementing framework of PoA

This programme of activities (hereafter referred to as the "PoA") is a programme for the development of renewable energy projects that will supply energy to the national grid within the country of concern. The programme is geographically located in 6 Southern African countries. These are: Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland (hereafter referred to as "the Countries"). The Coordinating and Managing Entity is K2011/117952/07 (Pty) Ltd (South Africa) trading as African Sustainability Initiative (hereafter referred to as African Sustainability Initiative (ASI)).

2. Policy/measure or stated goal of the PoA

The stated objective of this programme is to incentivise broad scale investment in renewable energy technology and reduce dependence on fossil fuels electricity. This will help to reduce the associated CO_2 emissions in Southern Africa by displacing electricity produced by coal or other carbon-intensive fossil fuels through the use of renewable energy (solar, wind, hydro, geothermal, wave and tidal power).

In addition the PoA will contribute to activities aimed at growing and strengthening the renewable energy industry in the Countries. Whilst the countries involved in this PoA are well known to have little or no oil or natural gas reserves, they do have well developed coal reserves and considerably undeveloped, but promising renewable energy resources. Programmes such as this one are necessary to move away from the current dependence on the most prevalent fossil fuel resources and encourage the uptake of the prevalent/abundant renewable resources.

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

The PoA is a voluntary action, not required by law, undertaken by African Sustainability Initiative (ASI) who is the coordinating/managing entity for the PoA.

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

>> Here the following information shall be included

1. Coordinating or managing entity of PoA as the entity which communicates with the Board

African Sustainability Initiative (ASI) will be the coordinating and managing entity (CME) of the PoA and will be responsible for ensuring that all renewable energy CPA project activities are installed under

the correct CDM specifications as detailed by the programme; as well as implementing and effectively executing the monitoring plan.

2. **Project participants being registered in relation to the PoA. Project participants may or may not be involved in one of the CPAs related to the PoA.**

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)
South Africa	CME: K2011/117952/07 (Pty) Ltd (South Africa) trading as African Sustainability Initiative	No
Botswana	CME: K2011/117952/07 (Pty) Ltd (South Africa) trading as African Sustainability Initiative	No
Lesotho	CME: K2011/117952/07 (Pty) Ltd (South Africa) trading as African Sustainability Initiative	No
Mozambique	CME: K2011/117952/07 (Pty) Ltd (South Africa) trading as African Sustainability Initiative	No
Namibia	CME: K2011/117952/07 (Pty) Ltd (South Africa) trading as African Sustainability Initiative	No
Swaziland	CME: K2011/117952/07 (Pty) Ltd (South Africa) trading as African Sustainability Initiative	No

A.4. Technical description of the programme of activities:

A.4.1. Location of the programme of activities:

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The PoA is located within the following Southern African countries: Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland.

A.4.1.1. Host Party(ies):

>>

Botswana
Lesotho*
Mozambique*
Namibia
South Africa
Swaziland
.

* indicates that the Host Country is a Least Developed Country (LDC)

A.4.1.2. Physical/ Geographical boundary:

>> Definition of the boundary for the PoA in terms of a geographical area (e.g., municipality, region within a country, country or several countries) within which all CDM programme activities (CPAs) included in the PoA will be implemented, taking into consideration the requirement that all applicable national and/or sectoral policies and regulations of each host country within that chosen boundary;

The boundary of the PoA is defined as the geographical area within which all the implemented CDM programme activities (CPAs) included in the PoA will be physically installed. All installations of renewable energy projects which are enrolled in the CPAs under this PoA will be within the borders of the Host Parties listed in A.4.1.1 (the Countries listed above).

Each CPA will define the geographical boundary within which it operates. Multiple CPAs can operate within the same geographic location as the monitoring plan will ensure that there is no double counting of installed systems.

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

>>

A typical CPA will consist of a grid-connected renewable power generation project that is eligible under ACM0002 "*Consolidated baseline methodology for grid-connected electricity generation from renewable sources*" version 13.0.0. Typical CPAs will include power generation by solar, hydro, wind, geothermal, wave, or tidal power technology which will supply power to the grid.

A typical CPA project activity is one of:

a) installation of a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant);
b) involves a capacity addition;
c) involves a retrofit of (an) existing plant(s); or
d) involves a replacement of (an) existing plant(s).

The grid-connected renewable power generation CPA project activity will be developed within the borders of the Countries.

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

>>

As stated above, a typical CPA will consist of a grid-connected renewable power generation project that is eligible under ACM0002. The methodology is applicable for project activities that

a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant);
b) involve a capacity addition;
c) involve a retrofit of (an) existing plant(s); or
d) involve a replacement of (an) existing plant(s).

A grid-connected renewable power generation CPA may be one technology of either a:

- hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir),
- wind power plant/unit,
- geothermal power plant/unit,
- solar power plant/unit (either photovoltaic or concentrated solar thermal),
- wave power plant/unit; or
- tidal power plant/unit.

A CPA under this PoA may be a single plant or a cluster of such plants employing the same technology undertaken by the same project developer.

The Programme will initially involve the following technologies:

- Different types of photovoltaic 'solar' panels that generate electrical power by converting solar radiation into electricity via a panel composed of a number of cells containing a photovoltaic material. The panels are placed in direct sunlight and may be complemented with a battery pack to store electricity for use after dark;
- Solar thermal plants, i.e. concentrated solar thermal, that use solar energy to produce high temperatures in a working fluid which is used to produce electricity usually through a steam turbine;
- Hydro power plants which use the potential energy stored in water reservoirs or the natural course of rivers, to produce electricity;
- Wind turbine farms which use wind energy converted via a large wind turbine into electrical energy which is supplied to the grid;
- Geothermal energy plants which use the heat available in subterranean locations to heat a working fluid which is then used to produce electricity usually by way of a steam turbine.

As per ACM0002, in addition to the requirements set out in the latest approved version of the standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, the PoA-DD must describe for each distinct type of CPA separately, the eligibility criteria for CPA inclusion. Section A.4.2.2 below describes the eligibility criteria for inclusion of a CPA into the PoA.

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

>> Here only a description of criteria for enrolling the CPA shall be described, the criteria for demonstrating additionality of CPA shall be described in section E.5

The eligibility criteria are developed in line with the Standard for demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities.

According to the ACM0002, the PoA-DD must describe for each distinct type of CPA separately, the eligibility criteria for CPA inclusion. A CPA shall not be regarded to be of the same type if one of the following is different:

1 The type of technology
- Hydro-power plant/unit - Run-of-river reservoir;
- Hydro-power plant/unit - Accumulation reservoir;
- Geothermal power plant/unit;
- Wind power plant/unit;
- Solar power plant/unit - Photovoltaic;
- Solar power plant/unit - Heat concentration (concentrated solar thermal (CSP));
- Wave power plant/unit;
- Tidal power plant/unit;
- Combination of any of the above.

And:

2 Whether the project activity is one of the following:
- Greenfield;
- Capacity addition;
- Retrofit of existing plants;
- Replacement of existing plant.

Further, an important aspect for eligibility criteria is the legal and regulatory framework including:
- Legal regulations;
- Promotional policies.

Also, when defining eligibility criteria for CPA inclusion for a distinct type of CPA, relevant technical and economic parameters must be considered, such as:
- Technical and economic parameters that are technology specific (e.g., load factors, wind speed);
- Parameters reflecting the investment climate (e.g. subsidies, tariffs, depreciation);
- Ranges of costs and revenues.

CPA project types are based on the technology use and the type of project activity as listed under bullet points 1 and 2 above. Eligibility criteria developed for this PoA cover all these aspects above.

This means the following CPA types are envisaged under this PoA:

1. Hydro-power plant/unit - Run-of-river reservoir - Greenfield
2. - Capacity addition
3. - Retrofit of existing plants
4. - Replacement of existing plant

5. Hydro-power plant/unit with accumulation reservoir - Greenfield
6. - Capacity addition
7. - Retrofit of existing plants

8. - Replacement of existing plant

9. Geothermal power plant/unit - Greenfield
10. - Capacity addition
11. - Retrofit of existing plants
12. - Replacement of existing plant

13. Wind power plant/unit - Greenfield
14. - Capacity addition
15. - Retrofit of existing plants
16. - Replacement of existing plant

17. Solar power plant/unit - Photovoltaic - Greenfield
18. - Capacity addition
19. - Retrofit of existing plants
20. - Replacement of existing plant

21. Solar power plant/unit - concentrated heat (concentrated solar thermal) - Greenfield
22. - Capacity addition
23. - Retrofit of existing plants
24. - Replacement of existing plant

25. Wave power plant/unit - Greenfield
26. - Capacity addition
27. - Retrofit of existing plants
28. - Replacement of existing plant

29. Tidal power plant/unit - Greenfield
30. - Capacity addition
31. - Retrofit of existing plants
32. - Replacement of existing plant

A CPA using a combination of the above project types will be classified as a new CPA project type.

Eligibility Criteria:

The eligibility criteria for the inclusion of each distinct type of CPA into the PoA are found in tables in Annex 5. Project types have been grouped in tables by each technology (e.g. hydro, solar, tidal etc.). If an eligibility criterion in a table is relevant for a numbered project type (as per the list above) then it is represented with a "✓" symbol. If it is not relevant to that project type then it is represented with "NA".

Each CPA must determine which project type from the above list their CPA fits into, and then use the appropriate table found in Annex 5 which provides the eligibility criteria for that particular project type.

A CPA using a combination of the above project types:

It cannot be determined at a PoA level which combination of the above described project types might be used in combination with each other within the development of a CPA, if at all. However, if a CPA is developed using a combination of the above described project types then that CPA must show how it meets each of the eligibility criteria associated with each of the distinct project types listed within the combination.

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

>> Here the following shall be demonstrated:

(i) The proposed PoA is a voluntary coordinated action;
(ii) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA;
(iii) If the PoA is implementing a mandatory policy/regulation, this would/is not enforced;
(iv) If mandatory a policy/regulation are enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation.

The information presented here shall constitute the demonstration of additionality of the PoA as a whole.

(i) The proposed PoA is a voluntary, coordinated action

The PoA is a voluntary action, coordinated and implemented by the CME in order to support the objective of incentivising broad scale investment in renewable energy technology and reducing dependence on fossil fuels electricity. This will hence help to reduce the associated CO_2 emissions in Southern Africa by displacing electricity produced by coal or other carbon-intensive fossil fuels (the current scenario) through the use of renewable energy (solar, wind, hydro, geothermal, wave and tidal power).

There is no mandatory requirement for the development of such technologies. The grid connected renewable power generation CPA project activity implemented in a typical CPA under the PoA are developed by those who voluntarily apply to be included in the PoA.

The current scenario in Southern Africa is the generation of electricity by coal or other carbon-intensive fossil fuels and the baseline scenario (to be determined within each CPA) is most likely the continuation of the current situation. Whilst the countries involved in this PoA are well known to have little or no oil or natural gas reserves, they do have well developed coal reserves and considerably undeveloped, but promising renewable energy resources. The broad scale investment in renewable energy technology has not taken place as is evident by the limited number of commercial renewable energy projects in Southern Africa, and hence the limited amount of electricity that is produced using renewable energy. Investment in the renewable energy sectors of the host countries will allow for the growth and strengthening of these renewable energy industries. This will include the transfer of renewable energy technologies and

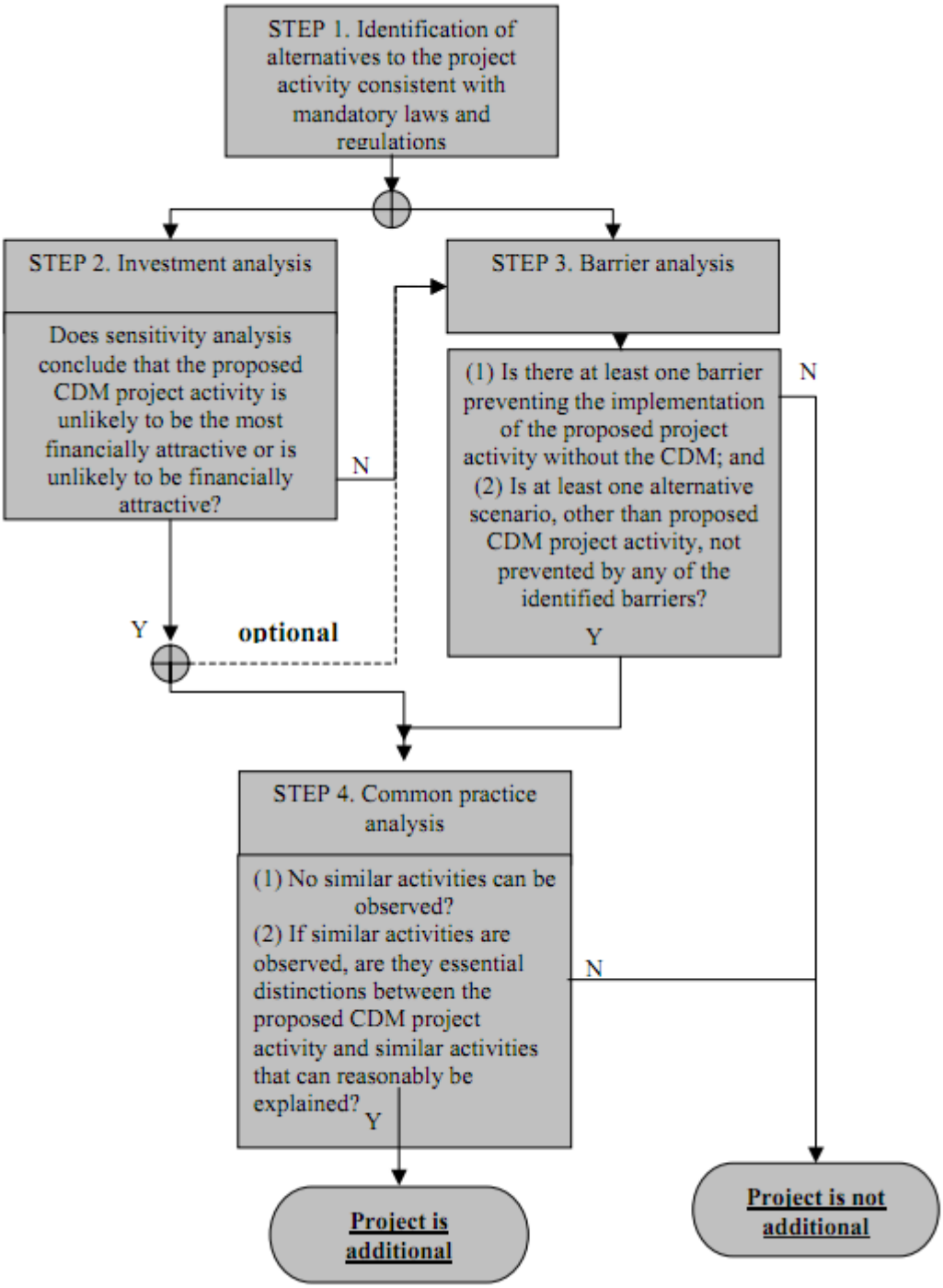
associated knowledge and experience (which the lack of commercial projects in place suggests has not taken place). This transfer of knowledge will include training on renewable energy technologies further enhancing growth and strengthening of these industries. Programmes such as this one are necessary to move away from the current dependence on the most prevalent fossil fuel resources and encourage the uptake of the prevalent/abundant renewable resources.

(ii) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA

Additionality is demonstrated in line with the Standard for demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities.

The methodology ACM0002 stipulates the use of the "*Tool for the demonstration and assessment of additionality*". The tool follows a stepwise approach (outlined in the figure below) consisting of:

1. Identification of alternatives to the project activity;
2. Investment analysis;
3. Barrier analysis; and
4. Common practice analysis.



Each CPA will demonstrate additionality within a CPA-DD following this stepwise approach.

Step 1: Identification of alternatives to the project activity consistent with current laws and regulations

Sub-step 1a: Define alternatives to the project activity:
Identify realistic and credible alternative(s) available to the project developer, for example,

a) The project is undertaken without registration as a CDM project; or
b) No project activity is undertaken.

Sub-step 1b: Consistency with mandatory laws and regulations:

The alternative(s) shall be in compliance with all mandatory applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g. to mitigate local air pollution. (This Sub-step does not consider national and local policies that do not have legally-binding status.)

If an alternative does not comply with all mandatory applicable legislation and regulations, then show that, based on an examination of current practice in the country or region in which the law or regulation applies, those applicable legal or regulatory requirements are systematically not enforced and that noncompliance with those requirements is widespread in the country. If this cannot be shown, then eliminate the alternative from further consideration.

If the proposed project activity is the only alternative amongst the ones considered by the project participants that is in compliance with mandatory regulations with which there is general compliance, then the proposed CDM project activity is not additional.

Outcome of Step 1b: Identified realistic and credible alternative scenario(s) to the CPA project activity that are in compliance with mandatory legislation and regulations taking into account the enforcement in the region or country and EB decisions on national and/or sectoral policies and regulations.

The implementing entity is then to proceed to Step 2 (Investment analysis).

Step 2: Investment Analysis

Sub-step 2a: Determine the appropriate investment analysis method

Determine whether to apply simple cost analysis, investment comparison analysis or benchmark analysis (Sub-step 2b). If the CDM project activity and the alternatives identified in Step 1 generate no financial or economic benefits other than CDM related income, then apply the simple cost analysis (Option I). Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis (Option III).

Since it is envisioned that in the majority these CPAs will produce revenue through the sale of renewable energy, and one alternative will include not investing in the project, a benchmark investment comparison analysis is expected to be the be most appropriate choice for most CPAs.

Sub-step 2b: Option III. Apply a benchmark analysis

The tool states that discount rates and benchmarks shall be derived from:

a) Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial expert or documented by official publicly available financial data;
b) Estimates of the cost of financing and required return on capital (e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned), based on bankers views and private equity investors/funds required return on comparable projects;
c) A company internal benchmark (weighted average capital cost of the company). The project developers shall demonstrate that this benchmark has been consistently used in the past;
d) Government/official approved benchmark where such benchmarks are used for investment decisions;
e) Any other indicators, if the project participants can demonstrate that the above mentioned options are not applicable and their indicator is appropriately justified.

As part of the analysis an appropriate benchmark may be calculated e.g. Weighted Cost of Capital (WACC) or any other benchmark considered appropriate for CDM purposes

Furthermore, "Guidelines on the assessment of investment analysis", EB62, Annex 5, provides default values for the expected rate of return on equity (calculated after taxes) for different countries. These default values may be used if calculating the cost of equity is based on data sources which the DOE will be unable to clearly validate and justify or as a simple default option. For the purpose of determining the adjustment factor to reflect the risk of projects in different sectoral scopes, three different project categories are distinguished according to the sectoral scopes under CDM. Group 1 includes:

- Energy industries (sectoral scope 1)
- Energy Distribution (sectoral scope 2)
- Energy Demand (sectoral scope 3)
- Waste handling and disposal (sectoral scope 13)

Sub-step 2c: Calculation and comparison of financial indicators

Calculate the suitable financial indicator for the proposed CPA project activity. Include all relevant costs (including, for example, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but possibly including inter alia subsidies/fiscal incentives, ODA etc. where applicable), and as appropriate, non-market cost and benefits in the case of public investors if this is standard practice for the selection of public investments in the host country.

Present the investment analysis in a transparent manner and provide all the relevant assumptions, preferably in the CPA-DD, or in separate annexes to the CPA-DD. Refer to all critical techno-economic parameters and assumptions (such as capital costs, fuel prices, lifetimes, and discount rate or cost of capital). Justify and/or cite assumptions in a manner that can be validated by the DOE. In calculating the financial/economic indicator, the project's risks can be included through the cash flow pattern, subject to project-specific expectations and assumptions (e.g. insurance premiums can be used in the calculation to reflect specific risk equivalents).

Assumptions and input data for the investment analysis shall not differ across the CPA project activity and its alternatives, unless differences can be well substantiated.

Present, in the CPA-DD, a clear comparison of the financial indicator for the proposed CPA project activity and the financial benchmark (from option III - benchmark analysis), as well as, if necessary, the "EB62 Annex 5 Guidelines on the assessment on investment analysis" country specific benchmark. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CPA project activity cannot be considered as financially attractive and can thus be concluded to be additional.

Further for projects in either of the countries in which there is a renewable energy feed in tariff or independent power producer program or similar policy development the following is pertinent. South Africa is used as an example in this PoA-DD but each CPA-DD must provide specific details where required.

In South Africa there is an opportunity for the project to be awarded a Renewable Energy Independent Power Producer (IPP) Procurement Programme[1] tariff. This procurement programme is a competitive bidding process. The South African government originally put in place a REFIT (Renewable Energy Feed in Tariff) programme whose objective was to reduce the emissions of GHGs associated with electricity production by promoting the development of renewable energy sources. The REFIT policy was abandoned by the South African government and replaced by the Renewable Energy IPP Procurement Program.

The South African Renewable Energy IPP Procurement programme is the process whereby bidders are required to bid on a competitive tariff and satisfy the identified socio-economic development objectives of the Department of Energy (DoE). The REFIT (Renewable Energy Feed In Tariff) tariffs (July 2011) are essentially the maximum tariff that a bidder may bid – the request for proposal (July 2011) outlines the absolute maximum tariffs that can be submitted in the bid process.

The Renewable Energy IPP tariff should be ignored for the purpose of this analysis as it awarded to projects that reduce emissions in South Africa only. Including the tariff here would induce a counter incentive contrary to the nature of the CDM and this was confirmed by the CDM Executive Board[2].

Nonetheless, for CPAs in South Africa, for the purposes of being conservative, one should use the Medium Term Power Purchase Program tariff of ZAR/kWh 0.65 as this is the only program to date that has resulted in electricity from an Independent Power Producer being purchased and supplied onto the grid[3]. This rate is significantly higher than the tariff at which electricity is sold, known as the megaflex rate, electricity in low demand season costs ZAR/kWh 0.28 and in high demand season ZAR/kWh 0.32, and therefore by using the Medium Term Power Purchase Program tariff, a conservative approach is maintained with respect to the power tariff.

The table below provides details of tariffs used in CDM projects that are currently registered or in validation in SA.

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[1] The South African Renewable Energy IPP Procurement programme is tasked with promoting the renewable energy sector in order to reduce emissions in SA. The REFIT (Renewable Energy Feed In Tariff) tariffs (Nersa - July 2011) are essentially the maximum tariff that a bidder may bid (www.ipp-renewables.co.za).

[2] "As a general principle, national and/or sectoral policies and circumstances are to be taken into account on the establishment of a baseline scenario, without creating perverse incentives that may impact host Parties' contributions to the ultimate objective of the Convention" (EB 22, Annex 3, paragraph 5).

[3] Engineering Weekly (Source: http://www.engineeringnews.co.za/article/eskom-concludes-two-power-purchase-contracts-four-more-close-2010-05-19, accessed 24/05/11)

Project:	Tariff	Further details
Durban landfill gas to electricity – Marianhill and La Mercy landfills (registered 15/12/2006)	US $0.0422	Total generation cost
Kanhym farm manure to energy project (Registered 18/07/2008)	R246/MWh (increasing by 10% annually)	No further information in PDD
Durban landfill gas – Bisasar Road (Registered (26/03/2009)	US $0.0422/kWh	Total generation cost
Alton landfill gas to energy project (Registered 24/08/2009)	R320/MWh	Electricity base tariff + renewable energy tariff
Ekhurleni landfill gas recovery project – South Africa (Registered 26/10/2010)	R121.7/MWh	Megaflex weighted average cost
Cookhouse Windfarm in South Africa (validation 2011)	R0.66/kWh	NERSA revenue application decision (Feb 2010)
Grid connected wind power plant in Klawer , South Africa (validation 2011)	R52.30/MWh	"Price of electricity from the national grid"
Grid connected wind power plant in Witberg, South Africa (validation 2011)	R52.30/MWh	"Price of electricity from the national grid"
De Aar grid connected 100.5 wind farm, South Africa (validation 2011)	R0.6585/kWh	"NERSA's decision on Eskom's required revenue application - multi-year price determination 2010/11 to 2012/13 (MYPD 2) 24 February 2010, page 2, paragraph 1".
Prieska grid connected 20MW solar park (validation 2011)	R0.6585/kWh	"NERSA's decision on Eskom's required revenue application - multi-year price determination 2010/11 to 2012/13 (MYPD 2) 24 February 2010, page 2, paragraph 1".
Springbok grid connected 55.5MW wind farm, South Africa (validation 2011)	R0.6585/kWh	"NERSA's decision on Eskom's required revenue application - multi-year price determination 2010/11 to 2012/13 (MYPD 2) 24 February 2010, page 2, paragraph 1".

Sub-step 2d: Sensitivity Analysis (applicable to options II and III)

Include a sensitivity analysis that shows whether the conclusion regarding the financial/economic attractiveness is robust to reasonable variations in the critical assumptions. The investment analysis provides a valid argument in favour of additionality only if it consistently supports (for a realistic range of assumptions) the conclusion that the project activity is unlikely to be the most financially/economically attractive (as per Step 2c para 11a) or is unlikely to be financially/economically attractive (as per Step 2c para 11b).

Outcome of Step 2: If after the sensitivity analysis it is concluded that: (1) the proposed CDM project activity is unlikely to be the most financially/economically attractive (as per Step 2c para 11a) or is unlikely to be financially/economically attractive (as per Step 2c para 11b), then proceed to Step 4 (Common practice analysis). Step 3 is an optional step and will only be conducted if the IRR is greater than or equal to the benchmark value.

Step 4: Common practice analysis

Identify and discuss the existing common practice through the following Sub-steps:

Sub-step 4a: Analyse other activities similar to the proposed project activity:

Provide an analysis of any other activities that are operational and that are similar to the proposed project activity. Projects are considered similar if they are in the same country/region and/or rely on a broadly similar technology, are of a similar scale, and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing, etc. Other CDM project activities (registered project activities and project activities which have been published on the UNFCCC website for global stakeholder consultation as part of the validation process) are not to be included in this analysis. Provide documented evidence and, where relevant, quantitative information. On the basis of that analysis, describe whether and to which extent similar activities have already diffused in the relevant region.

Sub-step 4b: Discuss any similar Options that are occurring:

If similar activities are widely observed and commonly carried out, it calls into question the claim that the proposed project activity is financially unattractive (as contended in Step 2). Therefore, if similar activities are identified above, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially/economically unattractive or subject to barriers. This can be done by comparing the proposed CPA project activity to the other similar activities, and pointing out and explaining essential distinctions between them that explain why the similar activities enjoyed certain benefits that rendered it financially/economically attractive (e.g., subsidies or other financial flows) and which the proposed CPA project activity cannot use If necessary data/information of some similar projects are not accessible for project developers to conduct this analysis, such projects can be excluded from this analysis. In case similar projects are not accessible, the CPA-DD should include justification about non-accessibility of data/information.

Outcome of Step 4: If Sub-steps 4a and 4b are satisfied, i.e.(i) similar activities cannot be observed or (ii) similar activities are observed, but essential distinctions between the project activity and similar activities can reasonably be explained, then the proposed project activity will be seen to be additional.

Further, for measures listed, the following calculation must be performed:

Step 1: Calculate applicable output range as +/-50% of the design output or capacity of the proposed project activity.

Step 2: In the applicable geographical area, identify all plants that deliver the same output or capacity, within the applicable output range calculated in Step 1, as the proposed project activity and have started

commercial operation before the start date of the project. Note their number N_{all}. Registered CDM project activities and projects activities undergoing validation shall not be included in this step;

Step 3: Within plants identified in Step 2, identify those that apply technologies different than the technology applied in the proposed project activity. Note their number N_{diff}.

Step 4: Calculate factor $F=1-N_{diff}/N_{all}$ representing the share of plants using technology similar to the technology used in the proposed project activity in all plants that deliver the same output or capacity as the proposed project activity. The proposed project activity is a .common practice within a sector in the applicable geographical area if both the following conditions are fulfilled:

(a) the factor F is greater than 0.2, and

(b) $N_{all}-N_{diff}$ is greater than 3.

Prior Consideration:

Use the Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities and additional Guidelines where necessary to demonstrate prior consideration of the CDM for each CPA under this PoA.

(iii) If the PoA is implementing a mandatory policy/regulation, this would/is not enforced;

There is no mandatory requirement for the development of grid connected renewable power generation plants/units.

(iv) If mandatory a policy/regulation is enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation.

There is no mandatory requirement for the development of grid connected renewable power generation plants/units.

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

A.4.4.1. Operational and management plan:

>> Description of the operational and management arrangements established by the coordinating/managing entity for the implementation of the PoA, including:

(i) a record keeping system for each CPA under the PoA,
(ii) a system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been already registered either as CDM project activity or as a CPA of another PoA,
(iii) the provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA;

(i) A record keeping system for each CPA under the PoA,

The CME will establish and maintain an extensive database for each and every CPA wherein the following data will be recorded:

- Name of the CPA;
- Name of the implementing entity of the CPA;
- Contact details of the implementing entity including contact person, address, telephone and email address;
- Type of renewable energy (solar, wind, hydro etc.);
- Installed capacity and other relevant technical specifications of each CPA;
- Location of the CPA (GPS coordinates of the power house for example);
- Verification status and monitoring reports of each CPA.

All the above parameters will be provided by each CPA implementing entity at the time of registration. The CPA will record the data in its data collection system which is made available to the CME.

The CME will be responsible for the management of records and data associated with each CPA and all records will be stored for a period of two years after the end of the relevant crediting period. A CME procedures document contains further details related to the CME according to EB65 Annex 3. Relevant data capture, verification and storage procedures will be followed in maintaining the data to ensure its accuracy, validity and completeness.

(ii) A system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been already registered either as a CDM project activity or as a CPA of another PoA,

Each CPA shall be uniquely identified within the database described in (i) above. The addition of any new CPAs will be cross-checked by the CME against the database to ensure that there is no double accounting for any CPAs already enrolled and therefore that there will be no new CPA's included in the programme that have already been registered under the PoA.

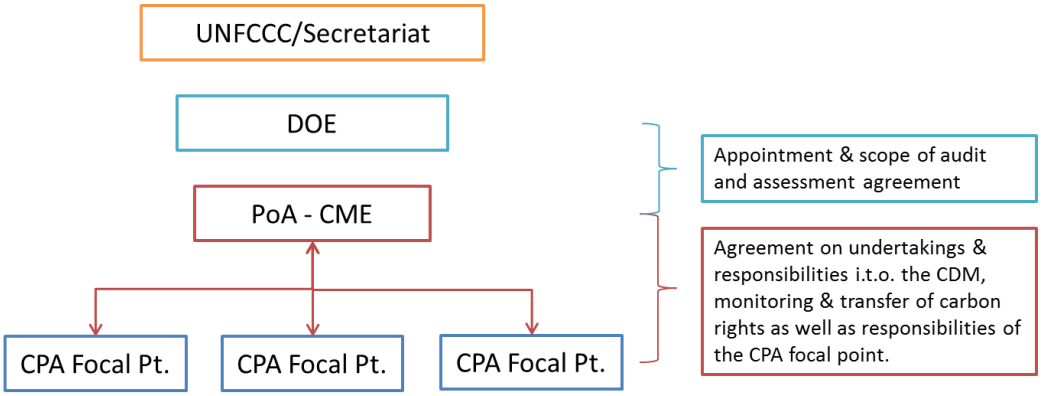
The geographical boundary for the PoA is limited by the borders of the Countries. The database will contain the physical location of each CPA.

Prior to registering a new CPA within the proposed PoA, the CME will check the CDM project database to establish whether a CDM project activity or CPA of another PoA for grid-connected renewable power generation has already been registered within the borders of the Countries. This search will cover registered project activities, project activities requesting registration, project activities under review and project activities for which either a review or corrections have been requested.

Further, the technical review of the CPA for inclusion in the PoA will be met by the evidence provided in order to meet the eligibility criteria.

In an instance where a CPA of another PoA or CDM project activity is already registered in a Country, the coordinating entity will ensure through cross-checking the database of the other CPA or CDM project that there is no double counting of the individual CPA for this PoA.

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



Contractual relations will be established throughout the supply chain to ensure that all parties are aware of the Programme and how they are affected by its CDM registration. The agreements will include a **CPA CDM Undertaking Agreement**: CPA participants (CPA Focal Point) agree to adhere to the requirements of the Programme – this will include a contract of undertaking wherein the role and responsibility of the project developer in the PoA/CPA is prescribed especially in respect to additionality criteria and monitoring requirements.

A.4.4.2. Monitoring plan:

>> Here the following information will be provided:

(i) Description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the amount of reductions of anthropogenic emissions by sources or removals by sinks of greenhouse gases achieved by CPAs under the PoA.

The CME opts for a verification method that does not use statistical sampling. All CPAs will be verified.

(ii) In case the coordinating/managing entity opts for a verification method that does not use sampling but verifies each CPA (whether in groups or not, with different or identical verification periods) a transparent system is to be defined and described that ensures that no double accounting occurs and that the status of verification can be determined anytime for each CPA;

The CME will implement a monitoring protocol that allows the Designated Operational Entity (DOE) to verify all CPAs in the PoA. As described previously a database will be established that contains all the CPA specific data required to identify and locate each CPA. Each CPA will comprise a single project activity, and hence the data will be monitored directly.

Monitoring will be carried out by each CPA. For each CPA, all parameters included in E.7.1 will be monitored by the implementing entity of the CPA according to the procedures established in E.7.2. The main measure for the PoA is the measure of net electricity supplied to the grid and assuring the correct operation and maintenance of the measuring equipment. This will be done by respecting the calibration

frequency as per the manufacturer's requirements. The CME will store all the data in an electronic database. Primary data will be stored by the implementing entities.

Verification will occur either separately for each CPA or in groups. The CME will in responsible for the preparation of the Monitoring Reports and communication with the DOE during verification activities. The Monitoring Report will collate all required monitoring information in order to allow the DOE to verify the emission reductions for each monitoring period of each CPA. The Monitoring Report will unambiguously set out the data on emission reductions generation by each CPA during the monitoring period consistent with the requirements of this PoA-DD and the corresponding CPA-DD. The monitoring report will also contain records of arrangements for training and capacity development where applicable. The use of the database of CPA information and QA/QC procedures will ensure that double counting is not possible.

The start and end dates of each monitoring period for each individual CPA, together with the emission reductions attributable to that monitoring period will be recorded in the database. Record keeping procedures undertaken by the CME will ensure that the data attributed to a monitoring period can be clearly attributed to an individual CPA and will furthermore prevent double counting of emission reduction data.

The monitoring plan for parameters included in section E.7.1 will be implemented for each CPA with assistance from the CME as follows:

- CPA implementing entities will implement each CPA individually and monitor and record all parameters included in section E.7.1.
- The CME will provide guidance to the CPA implementing entity on how the monitoring should be conducted and data should be collected with regards to emission reduction calculations.
- The CPA owners will provide data on monitored parameters included in section E.7.1 to the CME.
- The CME will document and store all data related to parameters included in section E.7.1 provided by CPA implementing entities in an electronic database, while primary data will be stored by each CPA implementing entity. The data will be kept for at least two years after the end of the last crediting period.
- The CME will review relevant monitoring documents, prepare the Monitoring Report, and provide the Monitoring Report to the DOE.

A.4.5. Public funding of the programme of activities:

>>
The proposed PoA will not receive any public funds resulting from official development assistance from Parties included in Annex I to the Convention.

SECTION B. Duration of the programme of activities

B.1. Starting date of the programme of activities:

>>

16/09/2011

This is the start date of Global Stakeholder Consultation (GSC) for this PoA.

B.2. Length of the programme of activities:

>>
28 Years

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 CPA level X

The PoA allows for large scale project activities for various renewable energy types and hence it is inappropriate to conduct an environmental analysis at the PoA level. The type of CPA activity and location will determine whether or not a full scale EIA process will be needed.

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

>>
The environmental impacts analysis or environmental analysis as required by the host country will be done at a CPA level.

The positive environmental benefits of the implemented CPAs at a PoA level may include:

- Decreased air pollution linked to the use of the fossil fuels;
- Displacement of fossil fuels and GHG emission reductions; and
- Decreased dependency on fossil fuels.

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 degree of complexity and detail required for each individual CPA may vary depending on the installed capacity and other technical specifications, as well as local regulations. The CME will evaluate if a CPA wishing to be included in the PoA complies with local regulations related to EIAs.

It is anticipated that on most occasions some form of EIA will be required. For example, in South Africa a Basic Assessment may be required instead of the full Scoping and Environmental Impact Report.

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 CPA level X

Each CPA operates within a geographically defined region and within any one of the Host Countries. For this reason local stakeholder consultation is done on a CPA level to ensure that the stakeholders within the region that are actually affected by the project activity are adequately informed and consulted.

Note: If local stakeholder comments are invited at the PoA level, include information on how comments by local stakeholders were invited, a summary of the comments received and how due account was taken of any comments received, as applicable.

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

>>
Local Stakeholder consultation is performed at CPA level.

D.3. Summary of the comments received:

>>
N/A

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

>>
N/A

SECTION E. Application of a baseline and monitoring methodology

This section shall demonstrate the application of the baseline and monitoring methodology to a typical - CPA. The information defines the PoA specific elements that shall be included in preparing the PoA specific form used to define and include a CPA in this PoA (PoA specific CDM-CPA-DD).

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

>>
The approved consolidated baseline and monitoring methodology ACM0002 *Consolidated baseline methodology for grid-connected electricity generation from renewable sources* version 13.0.0, EB67 is applied to each CPA included in the PoA.

In addition to the methodology the following tools and guidelines are referred to in this PoA:

- Tool for the demonstration and assessment of additionality v06.0.0, EB65, Annex21;
- Tool to calculate the emission factor for an electricity system v2.2.1, EB63, Annex 19;
- Tool to calculate project or leakage CO^2emissions from fossil fuel combustion, v02, EB41, Annex 11.
- Combined tool to identify the baseline scenario and demonstrate additionality v.04.0.0, EB66, Annex48;
- Guidelines on the assessment of investment analysis v05, EB62 Annex 5

Furthermore, the following Procedure is referred to in this document:

- Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities v04.1, EB55 Annex 38.

Furthermore, the following Standard is referred to in this document:

- Standard for demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities v01.0, EB65 Annex 03.

Each CPA implementing entity should substantiate the applicability of each tool/guideline used within their CPA.

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

>>

The applicability criteria of ACM0002:	**Methodology ACM0002 is applicable to a CPA under the proposed PoA:**
The methodology is applicable for project activities that (a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).	A CPA will consist of a renewable energy power generation project that is grid-connected and falls under one of options (a) – (d).
The project activity is the installation, capacity addition, retrofit or replacement of a power plant/unit of one of the following types: • hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir), • wind power plant/unit, • geothermal power plant/unit, • solar power plant/unit, • wave power plant/unit; or • tidal power plant/unit.	A CPA will consist of a renewable energy power generation project that is grid-connected. The CPA will be of one of the types listed here.
In the case of capacity additions, retrofits or replacements (except for capacity addition projects for which the electricity generation of the existing power plant(s) or unit(s) is not affected): • the existing plant started commercial operation prior to the start of a minimum historical reference period of five years (used for the calculation of baseline emissions and defined in the baseline emission section); and	In the case of capacity additions, retrofits or replacements (except for capacity addition projects for which the electricity generation of the existing power plant(s) or unit(s) is not affected) it will be seen to that the: • existing plant that started commercial operation prior to the start of a minimum historical reference period of five years; and • no capacity expansion or retrofit of the plant

• no capacity addition or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	will have been undertaken between the start of this minimum historical reference period and the implementation of the project activity.
In the case of hydro power plants, one of the following conditions must apply: • the project activity is implemented in an existing reservoir, with no change in the volume of reservoir; or • the project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the Project Emissions section, is greater than 4 W/m2; or • the project activity results in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, is greater than 4 W/m^2.	If a CPA is a grid-connected hydropower plant: • the project activity will be implemented in an existing reservoir, with no change in the volume of reservoir; or • the project activity will be implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the Project Emissions section, will be greater than 4 W/m2; or • the project activity will result in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, will be greater than 4 W/m^2.
In case of hydro power plants using multiple reservoirs where the power density of any of the reservoirs is lower than 4 W/m^2 after the implementation of the project activity all of the following conditions must apply: • The power density calculated for the entire project activity using equation 5 is greater than 4W/m^2; • All reservoirs and hydro power plants are located at the same river and were designed together to function as an integrated project that collectively constitutes the generation capacity of the combined power plant; • The water flow between the multiple reservoirs is not used by any other hydropower unit which is not a part of the project activity; • The total installed capacity of the power units, which are driven using water from the reservoirs with a power density lower than 4 W/m^2, is lower than 15 MW; • The total installed capacity of the power units, which are driven using water from reservoirs with a power density lower than 4 W/m^2, is less than 10% of the total installed capacity of the project activity from multiple reservoirs.	If a CPA is a grid-connected hydro power plant using multiple reservoirs where the power density of any of the reservoirs is lower than 4 W/m^2 after the implementation of the project activity then all of the following conditions will apply: • The power density calculated for the entire project activity using equation 5 is greater than 4W/m^2; • All reservoirs and hydro power plants are located at the same river and were designed together to function as an integrated project that collectively constitutes the generation capacity of the combined power plant; • The water flow between the multiple reservoirs is not used by any other hydropower unit which is not a part of the project activity; • The total installed capacity of the power units, which are driven using water from the reservoirs with a power density lower than 4 W/m^2, is lower than 15 MW; • The total installed capacity of the power units, which are driven using water from reservoirs with a power density lower than 4 W/m^2, is less than 10% of the total installed capacity of the project activity from multiple reservoirs.
The project methodology is not applicable to the	The PoA will not include any CPAs consisting of:

following: • project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; • biomass fired power plants; and • hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the power plant is less than 4 W/m^2.	• a project activity that involves switching from fossil fuels to renewable energy sources at the site of the project activity; • biomass fired power plants; and • hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the power plant is less than 4 W/m^2.
In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if: • the most plausible baseline scenario, as a result of the identification of baseline scenario, is the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	If a CPA is a project activity that consists of a retrofit, replacement or capacity addition then it will be seen to that: • the most plausible baseline scenario, as a result of the identification of baseline scenario, is the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.

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

>>

Source		Gas	Included?	Justification / Explanation
Baseline	CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity	CO_2	Yes	According to ACM0002, baseline emissions include only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity.
		CH_4	No	Minor source of emissions
		N_2O	No	Minor source of emissions
Project activity	For geothermal power plants, fugitive emissions of CH4 and CO2 from	CO_2	Yes	Significant emission source
		CH_4	Yes	Significant emission source

	noncondensable gases contained in geothermal steam	N_2O	No	Minor source of emissions
	CO2 emissions from combustion of fossil fuels for electricity generation in solar thermal power plants and geothermal power plant	CO_2	Yes	Significant emission source
		CH_4	No	Minor source of emissions
		N_2O	No	Minor source of emissions
	For hydro power plants, emissions of CH4 from the reservoir	CO_2	No	Minor source of emissions
		CH_4	Yes	Significant emission source
		N_2O	No	Minor source of emissions

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

>>

Due to the differing nature of the renewable power generation projects potentially applicable under ACM0002, within each CPA a description of how the baseline scenario for that CPA is identified and a description of that identified baseline scenario will be provided.

If the CPA project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is then the electricity delivered to the grid by the CPA project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system".

If the CPA project activity is a capacity addition to existing grid-connected renewable power plant/unit, the baseline scenario is then that in the absence of the CDM project activity, the existing facility would continue to supply electricity to the grid at historical levels, until the time at which the generation facility would likely be replaced or retrofitted ($DATE_{BaselineRetrofit}$). From that point of time onwards, the baseline scenario is assumed to correspond to the CPA project activity, and no emission reductions are assumed to occur.

If the CPA project activity is the retrofit or replacement of existing grid-connected renewable power plant/unit(s) at the project site, the following step-wise procedure to identify the baseline scenario shall be applied by the implementing entity within the CPA-DD:

Step 1: Identify realistic and credible alternative baseline scenarios for power generation

Apply Step 1 of the "Combined tool to identify the baseline scenario and demonstrate additionality". The options considered should include:

P1: The project activity not implemented as a CDM project;

P2: The continuation of the current situation, i.e. to use all power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance. The additional power generated under the project would be generated in existing and new grid-connected power plants in the electricity system; and

P3: All other plausible and credible alternatives to the project activity that provide an increase in the power generated at the site, which are technically feasible to implement. This includes, inter alia, different levels of replacement and/or retrofit at the power plant/unit(s). Only alternatives available to project participants should be taken into account.

Step 2: Barrier analysis

Apply Step 2 of the "Combined tool to identify the baseline scenario and demonstrate additionality".

Step 3: Investment analysis

If this option is used, apply the following:

- Apply an investment comparison analysis, as per Step 3 of the "Combined tool to identify the baseline scenario and demonstrate additionality", if more than one alternative is remaining after Step 2 and if the remaining alternatives include scenarios P1 and P3;
- Apply a benchmark analysis, as per Step 2b of the "Tool for the demonstration and assessment of additionality", if more than one alternative is remaining after Step 2 and if the remaining alternatives include scenarios P1 and P2.

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 CPA being included as registered PoA (assessment and demonstration of additionality of CPA): >>

>>

As per ACM0002, each CPA will be a grid connected renewable power generation project activity. The likely scenario is that the CPA project activity is the installation of a new grid-connected renewable power plant/unit. The baseline scenario in the absence of that CPA project activity is power generated by the operation of grid-connected power plant and by the addition of new generation sources using carbon-intensive fossil fuels, hence the anthropogenic emissions are reduced below those that would have occurred in the absence of the CPA. This baseline is in line with all laws and regulations of the Countries. The demonstration of additionality takes place at CPA level.

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

>> Here the PPs shall demonstrate, using the procedure provided in the baseline and monitoring methodology applied, additionality of a typical CPA.

Additionality is demonstrated in line with the Standard for demonstration of additionality, development of eligibility criteria, and application of multiple methodologies for programme of activities.

The methodology ACM0002 stipulates the use of the Tool for the demonstration of additionality. The tool follows a stepwise approach consisting of:

1. Identification of alternatives to the project activity;
2. Investment analysis;
3. Barrier analysis; and
4. Common practice analysis.

Step 1: Identification of alternatives to the project activity consistent with current laws and regulations

Sub-step 1a: Define alternatives to the project activity:
The following are realistic alternatives available to the project developer

a) The project is undertaken without registration as a CDM project; or
b) A fossil fuel fired power plant project is undertaken; or
c) No project activity is undertaken.

Sub-step 1b: Consistency with mandatory laws and regulations:

Alternative a: This alternative, and likewise the project activity, should be shown to be in compliance with the national legislation of the host country. If in contravention then this alternative should be eliminated.

Alternative b: This alternative, should be shown to be in compliance with the national legislation of the host country or if in contravention then this alternative should be eliminated.

Alternative c: There should be no requirement imposed on the project developers to build a renewable energy plant, and therefore not undertaking the project activity would not be in contravention of any host country laws or regulations. If in contravention then this alternative should be eliminated.

The CPA should list the alternatives that remain after ensuring consistency with mandatory laws and regulations and removing those alternatives that do not comply.

Step 2: Investment Analysis

Sub-step 2a: Determine the appropriate investment analysis method

Since the project will produce revenue through the sale of renewable energy, and one alternative includes not investing in the project, a benchmark investment comparison analysis is most appropriate.

Sub-step 2b: Option III. Apply a benchmark analysis

The tool states that discount rates and benchmarks shall be derived from:

a) Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial expert or documented by official publicly available financial data;
b) Estimates of the cost of financing and required return on capital (e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned), based on bankers views and private equity investors/funds required return on comparable projects;
c) A company internal benchmark (weighted average capital cost of the company). The project developers shall demonstrate that this benchmark has been consistently used in the past;
d) Government/official approved benchmark where such benchmarks are used for investment decisions;
e) Any other indicators, if the project participants can demonstrate that the above mentioned options are not applicable and their indicator is appropriately justified.

As part of the analysis an appropriate benchmark may calculated e.g. Weighted Cost of Capital (WACC) or any other benchmark considered appropriate for CDM purposes

Furthermore, "Guidelines on the assessment of investment analysis", EB62, Annex 5, provides default values for the expected rate of return on equity (calculated after taxes) for different countries. These default values may be used if calculating the cost of equity is based on data sources which the DOE will be unable to clearly validate and justify or as a simple default option where appropriate. For the purpose of determining the adjustment factor to reflect the risk of projects in different sectoral scopes, three different project categories are distinguished according to the sectoral scopes under CDM. Group 1 includes:

- Energy industries (sectoral scope 1)
- Energy Distribution (sectoral scope 2)
- Energy Demand (sectoral scope 3)
- Waste handling and disposal (sectoral scope 13)

Sub-step 2c: Calculation and comparison of financial indicators

The CPA shall calculate the equity IRR/project IRR and compare this to the benchmarks derived above.

Sensitivity Analysis

A sensitivity analysis will be conducted over the main external parameters that drive the financial model. Each parameter listed in the table below should be increased by 10% and decreased by 10% and the effect on the equity IRR/project IRR noted.

Parameter
Energy yield
Tariff
Total construction cost
Average O&M cost

Step 4: Common Practice Analysis

Unless the proposed project type has demonstrated to be first-of-its kind (according to Sub-step 3a), and for measures different from those listed in paragraph 6 of the tool the above generic additionality tests shall be complemented with an analysis of the extent to which the proposed project type (e.g. technology or practice) has already diffused in the relevant sector and region.

Sub-step 4a: Analyse other activities similar to the proposed project activity

Provide an analysis of any other activities that are operational and that are similar to the proposed project activity. Projects are considered similar if they are in the same country/region and/or rely on a broadly similar technology, are of a similar scale, and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing, etc. Other CDM project activities (registered project activities and project activities which have been published on the UNFCCC website for global stakeholder consultation as part of the validation process) are not to be included in this analysis.

Sub-step 4b: Discuss similar options that are occurring

If similar activities are widely observed and commonly carried out, it calls into question the claim that the proposed project activity is financially unattractive (as contended in Step 2) or faces barriers (as contended in Step 3). Therefore, if similar activities are identified above, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially/economically unattractive or subject to barriers. This can be done by comparing the proposed project activity to the other similar activities, and pointing out and explaining essential distinctions between them that explain why the similar activities enjoyed certain benefits that rendered it financially/economically attractive (e.g., subsidies or other financial flows) and which the proposed project activity cannot use or did not face the barriers to which the proposed project activity is subject.

Outcome of step 4 from above:

If sub-steps 4a and 4b are are not satisfied, i.e. similar activities can be observed and essential distinctions between the project activity and similar activities cannot reasonably be explained, the proposed CDM project activity is not additional.

Further, for measures listed, these further steps apply:

Step 1: Calculate applicable output range as +/-50% of the design output or capacity of the proposed project activity.

Step 2: In the applicable geographical area, identify all plants that deliver the same output or capacity, within the applicable output range calculated in Step 1, as the proposed project activity and have started commercial operation before the start date of the project. Note their number N_{all}.

Registered CDM project activities and projects activities undergoing validation shall not be included in this step;

Step 3: Within plants identified in Step 2, identify those that apply technologies different than the technology applied in the proposed project activity. Note their number N_{diff}.

Step 4: Calculate factor $F=1-N_{diff}/N_{all}$ representing the share of plants using technology similar to the technology used in the proposed project activity in all plants that deliver the same output or capacity as the proposed project activity.

The proposed project activity is a .common practice within a sector in the applicable geographical area if both the following conditions are fulfilled:

(a) the factor F is greater than 0.2, and

(b) $N_{all}-N_{diff}$ is greater than 3.

Prior Consideration:

The Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities state that there must be confirmation that the start date of any CPA is not, or will not be, prior to the commencement of validation of the programme of activities, i.e. the date on which the CDM-POA-DD is first published for global stakeholder consultation.

The CPA must state here the start date of the CPA and describe how the CPA satisfies 'prior consideration' criteria.

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

>> Here the PPs shall provide the key criteria for assessing additionality of a CPA when proposed to be included in the registered PoA. The criteria shall be based on additionality assessment undertaken in E.5.1 above. The project participants shall justify the choice of criteria based on analysis in above section.
It shall be demonstrated how these criteria would be applied to the additionality of a typical CPA at the time of inclusion.

NOTE: Information provided here shall be incorporated into the CDM-CPA-DD that has been specified for this PoA and shall be included in documentation submitted by project participants at registration of PoA.

Each CPA is expected to assess and demonstrate additionality using an investment analysis approach (following the approach described in the "*Tool for the demonstration and assessment of additionality*" described in A.4.3 and E.5.1.). The financial viability of the CPA project activity will be compared with a scenario where the CPA implementation entity does not undertake the project and uses the financial resources that would have been used to finance the construction of the project for alternative investments. To this end the equity IRR (without CDM revenues) will be compared with a benchmark rate for investment returns available to a local investor in the host country (see sub-step 2b in E.5.1) or the country specific benchmark from "Guidelines on the assessment on investment analysis". These benchmarks represent the minimum equity IRR that is required for the project to be financially viable relative to the "do-nothing" scenario.

Furthermore, a sensitivity analysis showing whether the conclusion regarding the financial/economic attractiveness is robust to reasonable variations in the critical assumptions, and a common practice analysis will be performed.

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 CPA:

>>

Each CPA under this PoA will use ACM0002 "*Consolidated baseline methodology for grid-connected electricity generation from renewable sources*" version 13.0.0., EB67 A grid-connected renewable power generation CPA may be one of either a:

- hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir),
- wind power plant/unit,
- geothermal power plant/unit,
- solar power plant/unit,
- wave power plant/unit; or
- tidal power plant/unit.

The methodology is applicable for CPAs that (a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).

Every CPA, which will use one of the renewable energy types listed above to generate power, will have to determine its condition as one of (a)-(d) described above, along with the further eligibility criteria for each source of grid connected renewable power generation.

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

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According to the methodology, the PoA-DD must describe for each type of CPA, the emission reduction calculations. The different types of CPAs are categorised in section A.4.2.2. With regard to the emission reduction calculations it is only the technology employed that affects the choice of emission reduction calculations used. That is:

- Hydro-power plant/unit - Run-of-river reservoir;
- Hydro-power plant/unit - Accumulation reservoir;
- Geothermal power plant/unit;
- Wind power plant/unit;
- Solar power plant/unit - Photovoltaic;
- Solar power plant/unit - Heat concentration (concentrated solar thermal (CSP));
- Wave power plant/unit;
- Tidal power plant/unit;
- Combination of any of the above.

And on whether the project activity is one of the following:

- Greenfield;
- Capacity addition;
- Retrofit of existing plants;
- Replacement of existing plant.

Under this PoA it is assumed that there will be no legal regulations or promotional policies that will result in the need for further distinct types of CPAs. Also, technical and economic parameters will not result in the need for further distinct types of CPAs. Essentially types of CPAs will be based on the technology use and the type of project activity as listed under bullet points 1 and 2 above.

For each CPA, all relevant parameters included in E.7.1 will be monitored by the implementing entity of the CPA and recorded electronically. The CPA owners will provide data on monitored parameters included in section E.7.1 to the CME. The CME will document and store all data related to parameters included in section E.7.1 provided by CPA implementing entities in an electronic database, while primary data will be stored by each CPA implementing entity.

Project emissions

For most of the renewable power generation CPA project activities, $PE_y = 0$. However, some CPA project activities may involve project emissions that could be significant. For any CPA that makes use of fossil fuels (e.g. as part of the electricity generation process particularly in geothermal and in solar concentrated solar thermal technologies), these shall be accounted for using equation 1.
Geothermal power plants/units must also make use of equation 1 to calculate project emissions from the operation of the power plant due to the release of non-condensable gases.
Hydro-power plants/units with accumulation reservoirs must also make use of equation 1 to calculate emissions from reservors.

Equation 1 is as follows:

$$\mathbf{PE_y = PE_{ff,y} + PE_{GP,y} + PE_{HP,y}} \qquad \textbf{(1)}$$

Where:

$\mathbf{PE_y}$	=	Project emissions in year *y* (tCO_2e)
$\mathbf{PE_{ff,y}}$	=	Project emissions from fossil fuel consumption in year *y* (tCO_2)
$\mathbf{PE_{GP,y}}$	=	Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year *y* (tCO_2e)
$\mathbf{PE_{HP,y}}$	=	Project emissions from reservoirs of hydro power plants in year *y* (tCO_2e)

The procedure to calculate the project emissions from each of these sources described above is presented here:

Fossil fuel combustion ($PE_{FF,y}$)

For geothermal and solar thermal CPA projects, which also use fossil fuels for electricity generation, CO_2 emissions from the combustion of fossil fuels shall be accounted for as project emissions ($PE_{FF,y}$).

The use of fossil fuels for the back up or emergency purposes (e.g. diesel generators) can be neglected.

$PE_{FF,y}$ shall be calculated as per the "Tool to calculate project or leakage CO_2emissions from fossil fuel combustion".

Equations from the "Tool to calculate project or leakage CO_2emissions from fossil fuel combustion".

CO_2 emissions from fossil fuel combustion in process *j* are calculated based on the quantity of fuels combusted and the CO_2 emission coefficient of those fuels, as follows:

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

Where:

$PE_{FC,j,y}$	=	Are the CO_2 emissions from fossil fuel combustion in process *j* during the year *y* (tCO_2/yr)
$FC_{i,j,y}$	=	Is the quantity of fuel type *i* combusted in process *j* during the year *y* (mass of volume unit/yr)
$COEF_{i,y}$	=	Is the CO_2 emission coefficient of fuel type *i* in year *y* (tCO_2/mass or volume unit)
i		Are the fuel types combusted in process *j* during the year *y*

The CO_2 emission coefficient $COEF_{jy}$ can be calculated using one of the following two options, depending on the availability of data on the fossil fuel type *i*, as follows:

Option A:
The CO_2 emission coefficient $COEF_{i,y}$ is calculated based on the chemical composition of the fossil fuel type *i*, using the following approach:

If $FC_{i,j,y}$ is measured in a mass unit: $$COEF_{i,y} = w_{c,i,y} * 44/12 \quad (2)$$

If $FC_{i,j,y}$ is measured in a volume unit: $$COEF_{i,y} = w_{c,i,y} * \rho_{i,y} * 44/12 \quad (3)$$

Where:

$COEF_{i,y}$	=	Is the CO_2 emission coefficient of fuel type *i* (tCO_2/mass or volume unit)
$w_{c,i,y}$	=	Is the weighted average mass fraction of carbon in fuel type *i* in year *y*
$\rho_{i,y}$	=	Is the weighted average density of fuel type *i* in year *y* (mass unit/volume unit of the fuel).

i	=	Are the fuel types combusted in process *j* during the year *y*

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

$$\mathbf{COEF_{i,y} = NCV_{i,y} * EF_{CO2,I,y}} \qquad \textbf{(4)}$$

Where:

$\mathbf{COEF_{i,y}}$	=	Is the CO_2 emission coefficient of fuel type *i* in year *y* (tCO_2/mass or volume unit)
$\mathbf{NCV_{i,y}}$	=	Is the weighted average net calorific value of the fuel type *i* in year *y* (GJ/mass or volume unit)
$\mathbf{EF_{CO2,I,y}}$	=	Is the weighted average CO_2 emission factor of fuel type *i* in year *y* (tCO_2/GJ)
i	=	Are the fuel types combusted in process *j* during the year *y*

Option A should be the preferred approach, if the necessary data is available.

Each CPA will document which option has been applied if calculation of emissions due to the use of fossil fuels is necessary.

<u>Emissions of non-condensable gases from the operation of geothermal power plants ($PEGP_{,y}$)</u>

For geothermal CPA project activities, project developers shall account fugitive emissions of carbon dioxide and methane due to release of non-condensable gases from produced steam. Non-condensable gases in geothermal reservoirs usually consist mainly of CO_2 and H_2S. They also contain a small quantity of hydrocarbons, including predominantly CH_4. In geothermal power projects, non-condensable gases flow with the steam into the power plant. A small proportion of the CO_2 is converted to carbonate/bicarbonate in the cooling water circuit. In addition, parts of the non-condensable gases are re-injected into the geothermal reservoir. However, as a conservative approach, this methodology assumes that all non-condensable gases entering the power plant are discharged to atmosphere via the cooling tower. Fugitive carbon dioxide and methane emissions due to well testing and well bleeding are not considered, as they are negligible.

$PE_{GP,y}$ is calculated as follows:

$$\mathbf{PE_{GP,y} = (w_{steam,CO2,y} + w_{steam,CH4,y} * GWP_{CH4}) * M_{steam,y}} \qquad \textbf{(2)}$$

Where:

$\mathbf{PE_{GP,y}}$	=	Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year *y* (tCO_2e)
$\mathbf{w_{steam,CO2,y}}$	=	Average mass fraction of carbon dioxide in the produced steam

		in year *y* (tCO_2/t steam)
$w_{steam,CH4,y}$	=	Average mass fraction of methane in the produced steam in year *y* (tCH_4/t steam)
GWP_{CH4}	=	Global warming potential of methane valid for the relevant commitment period (tCO_2e/tCH_4)
$M_{steam,y}$	=	Quantity of steam produced in year *y* (t steam)

Emissions from water reservoirs of hydro power plants ($PE_{HP,y}$)

For hydro power CPA project activities that result in new reservoirs and hydro power CPA project activities that result in the increase of existing reservoirs, project developers shall account for CH_4 and CO_2 emissions from the reservoir, estimated using either option (a) or (b) described below:

(a) If the power density of the CPA project activity (PD) is greater than 4 W/m^2 and less than or equal to 10 W/m^2:

$$PE_{HP,y} = \frac{EF_{Res} \cdot TEG_y}{1000} \quad \textbf{(3)}$$

Where:

$PE_{HP,y}$	=	Project emissions from reservoirs of hydro power plants in year *y* (tCO_2e)
EF_{Res}	=	Default emission factor for emissions from reservoirs of hydro power plants ($kgCO_2e$/MWh)
TEG_y	=	Total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year *y* (MWh)

(b) If the power density of the CPA project activity (PD) is greater than 10 W/m^2:

$$PE_{HP,y} = 0 \quad \textbf{(4)}$$

The power density of the CPA project activity (PD) is calculated as follows:

$$PD = \frac{Cap_{PJ} - Cap_{BL}}{A_{PJ} - A_{BL}} \quad \textbf{(5)}$$

Where:

PD	=	Power density of the CPA project activity (W/m^2)
Cap_{PJ}	=	Installed capacity of the hydro power plant after the implementation of the CPA project activity (W)

$\mathbf{Cap_{BL}}$	=	Installed capacity of the hydro power plant before the implementation of the project activity (W). For new hydro power plants, this value is zero.
$\mathbf{A_{PJ}}$	=	Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (m^2)
$\mathbf{A_{BL}}$	=	Area of the reservoir measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m^2). For new reservoirs, this value is zero.

Each CPA will document which option has been applied in the case of a hydro-power plant.

Baseline emissions

Baseline emissions include only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants.

The baseline emissions will be calculated as follows:

$$\mathbf{BE_y = EG_{PJ,y} * EF_{grid,CM,y}} \qquad \textbf{(6)}$$

Where:

$\mathbf{BE_y}$	=	Baseline emissions in year *y* (tCO_2)
$\mathbf{EG_{PJ,y}}$	=	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh)
$\mathbf{EF_{grid,CM,y}}$	=	Combined margin CO_2 emission factor for grid connected power generation in year *y* calculated using the "Tool to calculate the emission factor for an electricity system" (tCO_2/MWh)

<u>Calculation of $EG_{PJ,y}$</u>

Independent of technology type, the calculation of $EG_{PJ,y}$ is different for (a) greenfield plants, (b) retrofits and replacements, and (c) capacity additions.

<u>(a) Greenfield renewable energy power plants</u>

If the CPA project activity is the installation of a new grid-connected renewable power plant/unit at a site where no renewable power plant was operated prior to the implementation of the project activity, then:

$$\mathbf{EG_{PJ,y} = EG_{facility,y}} \quad \mathbf{(7)}$$

Where:

$\mathbf{EG_{PJ,y}}$	=	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh)
$\mathbf{EG_{facility,y}}$	=	Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y* (MWh)

(b) Retrofit of an existing renewable energy power plant

If the CPA project activity is the retrofit or replacement of an existing grid-connected renewable power plant, the baseline scenario is the continuation of the operation of the existing plant.

For **hydro power plants**, if the replacement involves the installation of a hydro power plant in a new reservoir then the applicability conditions on multiple reservoirs must be satisfied by the project activity.

The methodology uses historical electricity generation data to determine the electricity generation by the existing plant in the baseline scenario, assuming that the historical situation observed prior to the implementation of the project activity would continue.

The power generation of renewable energy projects can vary significantly from year to year, due to natural variations in the availability of the renewable source (e.g. varying rainfall, wind speed or solar radiation). The use of few historical years to establish the baseline electricity generation can therefore involve a significant uncertainty. The methodology addresses this uncertainty by adjusting the historical electricity generation by its standard deviation. This ensures that the baseline electricity generation is established in a conservative manner and that the calculated emission reductions are attributable to the project activity. Without this adjustment, the calculated emission reductions could mainly depend on the natural variability observed during the historical period rather than the effects of the project activity.

$EG_{PJ,y}$ is calculated as follows:

$$\mathbf{EG_{PJ,y} = EG_{facility,y} - (EG_{historical} + \sigma_{historical}); \text{ until } DATE_{BaselineRetrofit}} \quad \mathbf{(8)}$$

and

$$\mathbf{EG_{PJ,y} = 0; \text{ on/after } DATE_{BaselineRetrofit}} \quad \mathbf{(9)}$$

Where:

$\mathbf{EG_{PJ,y}}$	=	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh)
$\mathbf{EG_{facility,y}}$	=	Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y* (MWh)
$\mathbf{EG_{historical}}$	=	Annual average historical net electricity generation delivered to the grid by the existing renewable energy plant that was

		operated at the project site prior to the implementation of the project activity (MWh)
$\sigma_{historical}$	=	Standard deviation of the annual average historical net electricity generation delivered to the grid by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity (MWh)
$DATE_{BaselineRetrofit}$	=	Point in time when the existing equipment would need to be replaced in the absence of the project activity (date)

$EG_{facility,y}$ is the quantity of net electricity generation supplied by the project plant/unit to the grid. It shall be determined as a difference between (i) quantity of electricity supplied by the project plant/unit to the grid and (ii) quantity of electricity delivered to the project plant/unit from the grid.

$EG_{historical}$ is the annual average of historical net electricity generation, delivered to the grid by the existing renewable energy plant that was operated at the project site prior to the implementation of the CPA project activity. To determine $EG_{historical}$, project developers may choose between two historical periods. This allows some flexibility: the use of the longer time period may result in a lower standard deviation and the use of the shorter period may allow a better reflection of the (technical) circumstances observed during the more recent years.

One of the following two time spans of historical data will be chosen to determine $EG_{historical}$:

(a) The five last calendar years prior to the implementation of the CPA project activity; or
(b) The time period from the calendar year following $DATE_{hist}$, up to the last calendar year prior to the implementation of the project, as long as this time span includes at least five calendar years, where $DATE_{hist}$ is latest point in time between:
    I. The commercial commissioning of the plant/unit;
    II. If applicable: the last capacity addition to the plant/unit; or
    III. If applicable: the last retrofit of the plant/unit.

<u>(c) Capacity addition to an existing renewable energy power plant</u>

The addition of a new power plant or unit may in some cases affect the electricity generated by the existing plant(s) or unit(s). This applies for example, in the following situation:

- a new **hydro** turbine installed at an existing hydro dam may affect the power generation by the existing turbines.
- A new **geothermal** power unit installed next to an existing geothermal energy based power plant may affect the power generation by the existing plant.

In other situations the power plant of the existing plant(s) or unit(s) may not be affected. This is assumed to be the case for:

- A new **wind, solar, wave or tidal** power plant installed next to an existing power plant of the same technology may not affect the radiation received by the existing power plant and would therefore not affect the power generation of the existing power plant;

If the project activity is a capacity addition, project participants may use one of the following two options to calculate $EG_{PJ,y}$.

Option 1: In the case where the addition of new capacity could affect the electricity generated by existing plant(s) or unit(s) the project participants shall use the approach applied to retrofits and replacements as set out in section (b) above. $EG_{facility,y}$ corresponds to the total electricity generation of the existing plant(s) or unit(s) and the added plant(s) or unit(s). A separate metering of electricity fed into the grid by the added plant(s) or unit (s) is not necessary under this option.

Option 2: For wind, solar, wave or tidal power plants, where the addition of new capacity does not affect the electricity generated by existing plant(s) or unit(s) the following approach can be used provided that the electricity fed into the grid by the added power plant(s) or unit(s) addition is separately metered:

$$\mathbf{EG_{PJ,y} = EG_{PJ_Add,y}} \qquad \textbf{(10)}$$

Where:

$\mathbf{EG_{PJ,y}}$	=	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh)
$\mathbf{EG_{PJ_Add,y}}$	=	Quantity of net electricity generation supplied to the grid in year *y* by the project plant/unit that has been added under the project activity (MWh)

Each CPA will document which approach has been applied.

Equations from the "Tool to calculate the emission factor for an electricity-system"

Each CPA will calculate the Grid Emission Factor ($\mathbf{EF_{grid,CM,y}}$) as per the "*Tool to calculate the Emission Factor for an electricity system*." The combined margin (CM) is calculated to determine the CO_2 emission factor for grid connected power generation The CM is the result of a weighted average of two emission factors pertaining to the electricity system: the "operating margin" (OM) and the "build margin" (BM). The OM is the emission factor that refers to the group of existing power plants whose current electricity generation would be affected by the proposed CPA project activity. The BM is the emission factor that refers to the group of prospective power plants whose construction and future operation would be affected by the proposed CPA project activity.

The tool prescribes a step-based approach to calculate the CM:

Step 1: Identify the relevant electricity systems
A project electricity system is defined by the spatial extent of the power plants that are physically connected through transmission and distribution lines to the CPA project activity e.g. the renewable power plant location.

None of the project electricity systems for any of the Host Countries are located in an Annex-I country. The geographical extent of the CPA electricity system will be documented transparently and all grid power plants/units connected to the system will be identified.

Electricity transfers from connected electricity systems to the CPA project electricity system are defined as electricity imports and electricity transfers to connected electricity systems are defined as electricity exports. Where electricity imports and/or exports exist, these will be identified and electricity exports will not be subtracted from electricity generation data used for calculating and monitoring the electricity emission factors.

Step 2: Choose whether to include off-grid power plants in the project electricity system (optional)
This programme selects option I to calculate the operating margin and build margin emission factor whereby only grid power plants are included in the calculation.

Step 3: Select a method to determine the operating margin (OM)
The calculation of the operating margin emission factor ($EF_{grid,OM,y}$) is based on one of the following methods:

(a) Simple OM; or
(b) Simple adjusted OM; or
(c) Dispatch data analysis OM; or
(d) Average OM.

The below criteria will be considered by each CPA in determining the selection of the method to calculate OM. Each CPA will outline their choice and justification for the method employed in line with the below restrictions.

The simple OM method (Option a) can only be used if low-cost/must-run resources constitute less than 50% of total grid generation in:
1) average of the five most recent years, or
2) based on long-term averages for hydroelectricity production.

The dispatch data analysis (Option c) cannot be used if off-grid power plants are included in the project electricity system as per Step 2 above; however, this will not be a constraint as off-grid power generation is specifically excluded as per Step 2 above. Dispatch data analysis requires annual monitoring of grid power units that are actually dispatched at the margin during each hour *h*. This is not the approach taken by the programme which applies an ex-ante value for the $\mathbf{EF_{grid,OM,y}}$ and the data required to perform dispatch analysis is not available. Therefore Option (c) is excluded and will not be selected by a CPA.

The simple adjusted OM method (Option b) could be used, but detailed data is needed for this method and is not available for all of the Host Countries. Therefore this method is excluded and will not be selected by a CPA.

The average OM (Option d) method should only be used if the data for simple OM is <u>not</u> available. This method should therefore be used in the case where the Host country does not have the data available to use the simple OM method.

For the simple OM, the simple adjusted OM and the average OM, the emissions factor can be calculated using either *ex ante* or *ex post* data vintages. An ex-ante approach will be adopted for all CPAs included in the PoA. The emission factor is determined once at the validation stage and thus no monitoring and recalculation of the emissions factor during the crediting period will be required.
For grid power plants a 3-year generation-weighted average, based on the most recent data available at the time of inclusion of the CPA will be used.

Step 4: Calculate the operating margin emission factor according to the selected method
Only the simple OM or average OM method may be used by a CPA. The two methods are outlined below:

(a) Simple OM

The simple OM emission factor is calculated as the generation-weighted average CO_2 emissions per unit net electricity generation (tCO_2/MWh) of all generating power plants serving the system, not including low-cost/must-run power plants/units. The simple OM may be calculated:

Option A: Based on the net electricity generation and a CO_2 emission factor of each power unit[4] or
Option B: Based on the total net electricity generation of all power plants serving the system and the fuel types and total fuel consumption of the project electricity system.

Option B can only be used if:
a) The necessary data for Option A is not available; and
b) Only nuclear and renewable power generation are considered as low-cost/must-run power sources and the quantity of electricity supplied to the grid by these sources is known; and
c) Off-grid power plants are not included in the calculation

Option A - Calculation based on average efficiency and electricity generation of each plant

Under this option, the simple OM emission factor is calculated based on the net electricity generation of each power unit and an emission factor for each power unit, as follows:

$$EF_{grid,OMsimple,y} = \frac{\sum_m EG_{m,y} \cdot EF_{EL,m,y}}{\sum_m EG_{m,y}} \quad \textbf{(1)}$$

Where:
$\mathbf{EF_{grid,OMsimple,y}}$ = Simple operating margin CO_2 emission factor in year *y* (tCO_2/MWh)

[4] Power units should be considered if some of the power units at the site of the power plant are low-cost/must-run units and some are not. Power plants can be considered if all power units at the site of the power plant belong to the group of low-cost/must-run units or if all power units at the site of the power plant do not belong to the group of low-cost/must-run units.

$EG_{m,y}$	=	Net quantity of electricity generated and delivered to the grid by power unit *m* in year *y* (MWh)
$EF_{EL,m,y}$	=	CO_2 emission factor of power unit m in year y (tCO_2/MWh)
M	=	All power units serving the grid in year y except low-cost / must-run power units
Y	=	The relevant year as per the data vintage chosen in Step 3

Determination of **$EF_{EL,m,y}$**

The emission factor of each power unit m should be determined as follows:

• Option A1. If for a power unit m data on fuel consumption and electricity generation is available, the emission factor ($EF_{EL,m,y}$) should be determined as follows:

$$EF_{EL,m,y} = \frac{\sum_i FC_{i,m,y} \cdot NCV_{i,y} \cdot EF_{CO2,i,y}}{EG_{m,y}} \qquad \textbf{(2)}$$

Where:

$EF_{EL,m,y}$	=	CO_2 emission factor of power unit m in year y (tCO_2/MWh)
$FC_{i,m,y}$	=	Amount of fossil fuel type *i* consumed by power unit *m* in year *y* (Mass or volume unit)
$NCV_{i,y}$	=	Net calorific value (energy content) of fossil fuel type *i* in year *y* (GJ/mass or volume unit)
$EF_{CO2,i,y}$	=	CO_2 emission factor of fossil fuel type *i* in year *y* (tCO_2/GJ)
$EG_{m,y}$	=	Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)
m	=	All power units serving the grid in year *y* except low-cost/must-run power units
i	=	All fossil fuel types combusted in power unit m in year *y*
y	=	The relevant year as per the data vintage chosen in Step 3

• Option A2. If for a power unit m only data on electricity generation and the fuel types used is available, the emission factor should be determined based on the CO2 emission factor of the fuel type used and the efficiency of the power unit, as follows:

$$EF_{EL,m,y} = \frac{EF_{CO2,m,i,y} \cdot 3.6}{\eta_{m,y}} \qquad \textbf{(3)}$$

Where:

$\mathbf{EF_{EL,m,y}}$	=	CO2 emission factor of power unit *m* in year *y* (tCO2/MWh)
$\mathbf{EF_{CO2,m,i,y}}$	=	Average CO2 emission factor of fuel type *i* used in power unit *m* in year *y* (tCO_2/GJ)
$\boldsymbol{\eta_{m,y}}$	=	Average net energy conversion efficiency of power unit m in year *y* (ratio)
m	=	All power units serving the grid in year *y* except low-cost/must-run power units
y	=	The relevant year as per the data vintage chosen in Step 3

Where several fuel types are used in the power unit, use the fuel type with the lowest CO_2 emission factor for $EF_{CO2,m,i,y}$.

• Option A3. If for a power unit *m* only data on electricity generation is available, an emission factor of 0 tCO_2/MWh can be assumed as a simple and conservative approach.

Determination of $\mathbf{EG_{m,y}}$

For grid power plants, $EG_{m,y}$ should be determined as per the provisions in the monitoring tables.

Option B - Calculation based on total fuel consumption and electricity generation of the system.

Under this option, the simple OM emission factor is calculated based on the net electricity supplied to the grid by all power plants serving the system, not including low-cost/must-run power plants/units, and based on the fuel type(s) and total fuel consumption of the project electricity system, as follows:

$$EF_{grid,OMsimple,y} = \frac{\sum_i \left(FC_{i,y} \times NCV_{i,y} \times EF_{CO2,i,y}\right)}{EG_y} \qquad \textbf{(7)}$$

Where:

$\mathbf{EF_{grid,OMsimple,y}}$	=	Simple operating margin CO_2 emission factor in year *y* (tCO_2/MWh)
$\mathbf{F_{Ci,y}}$	=	Amount of fossil fuel type *i* consumed in the project electricity system in year *y* (mass or volume unit)
$\mathbf{NCV_{i,y}}$	=	Net calorific value (energy content) of fossil fuel type *i* in year *y* (GJ/mass or volume unit)
$\mathbf{EF_{CO2,i,y}}$	=	CO2 emission factor of fossil fuel type i in year y (tCO2/GJ)
$\mathbf{EF_{CO2,i,y}}$	=	Net electricity generated and delivered to the grid by all power sources serving the system, not including low-cost/must-run power plants/units, in year *y* (MWh)
i	=	All fossil fuel types combusted in power sources in the project electricity system in year *y*
y	=	The relevant year as per the data vintage chosen in Step 3

For this approach (simple OM) to calculate the operating margin, the subscript m refers to the power plants/units delivering electricity to the grid, not including low-cost/must-run power plants/units, and including electricity imports to the grid. Electricity imports should be treated as one power plant m.

(d) Average OM

The average OM emission factor ($EF_{grid,OM-ave,y}$) is calculated as the average emission rate of all power plants serving the grid, using the methodological guidance as described under (a) above for the simple OM, but including in all equations also low-cost/must-run power plants.

Option B should only be used if the necessary data for Option A is not available.

Step 5: Calculate the build margin emission factor

The vintage of data used by the CPAs will be that as classified under **Option 1** where:

- For the first crediting period, the build margin emission factor is calculated *ex ante* based on the most recent information available on units already built for sample group *m*. Most recent refers to the time at which the CPA is submitted for inclusion under the PoA. For the second crediting period, the build margin emission factor will be updated based on the most recent information available on units already built at the time of submission of the request for renewal of the crediting period to the DOE. For the third crediting period, the build margin emission factor calculated for the second crediting period should be used. This option does not require monitoring the emission factor during the crediting period.

The sample group of power units *m* used to calculate the build margin should be determined as below:

a) Identify the set of five power units that have started to supply electricity to the grid most recently (excluding power units registered as CDM project activities) and determine their annual electricity generation ($AEG_{SET-5-units}$ in MWh);
b) Determine the annual electricity generation of the CPA electricity system (excluding power units registered as CDM project activities). Identify the set of power units that stared to supply electricity to the grid most recently and that comprise 20% of the AEG_{total} and determine their annual electricity generation ($AEG_{SET>20\%}$ in MWh).
c) From the $SET_{5-units}$ and $SET_{>20\%}$ select the set of power units that comprises the larger annual electricity generation (SET_{sample}).

CPAs should then identify the date when the power units in the SET_{sample} started to supply electricity to the grid. If none of the power units in SETsample started to supply electricity to the grid more than 10 years ago, then use SET sample to calculate the BM.
Otherwise:

d) Exclude from the SETsample the power units which started to supply electricity to the gird more than 10 years ago. Include that set the power units registered as CDM project activity (if any) starting with power units that started to supply electricity to the grid most recently, until the electricity generation set comprises 20% of the annual electricity generation of the project electricity system. Determine for the resulting set ($SET_{sample-CDM}$) the annual electricity generation ($AEG_{SET-sample-CDM}$ in MWh).

If the annual electricity generation of that set comprises at least 20% of the annual electricity generation of the project electricity system i.e. $AEG_{SET-sample-CDM} > 0.2 \times AEG_{total}$, then the CPA should use the sample group $SET_{sample-CDM}$ to calculate the BM;
Otherwise:

e) Include in the sample group $SET_{sample-CDM}$ the power units that started to supply electricity to the grid more than 10 years ago until the electricity generation of the project electricity system.
f) The sample group of power units *m* used to calculate the BM is the resulting set. ($SET_{sample-CDM>10yrs}$)

Capacity additions from retrofits of power plants should not be included in the calculation of the build margin emission factor.

The build margin emissions factor is the generation-weighted average emission factor (tCO_2/MWh) of all power units *m* during the most recent year *y* for which power generation data is available, calculated as follows:

$$EF_{grid,BM,y} = \frac{\sum_m EG_{m,y} \times EF_{EL,m,y}}{\sum_m EG_{m,y}} \quad \textbf{(12)}$$

Where:

$\mathbf{EF_{grid,BM,y}}$	=	Build margin CO_2 emission factor in year *y* (tCO_2/MWh)
$\mathbf{EG_{m,y}}$	=	Net quantity of electricity generated and delivered to the grid by power unit *m* in year *y* (MWh)
$\mathbf{EF_{EL,m,y}}$	=	CO_2 emission factor of power unit m in year *y* (tCO_2/MWh)
M	=	Power units included in the build margin
Y	=	Most recent historical year for which power generation data is available

The CO_2 emission factor of each power unit *m* ($EF_{EL,m,y}$) should be determined as per the guidance in Step 4 (a) for the simple OM, using options A1, A2 or A3, using for *y* the most recent historical year for which power generation data is available, and using for *m* the power units included in the build margin.

Step 6: Calculate the combined margin (CM) emissions factor
The combined margin emissions factor is calculated as follows:

$$EF_{grid,CM,y} = EF_{grid,OM,y} \times w_{OM} + EF_{grid,BM,y} \times w_{BM} \quad \textbf{(13)}$$

Where:

$\mathbf{EF_{grid,BM,y}}$	=	Build margin CO_2 emission factor in year *y* (tCO_2/MWh)
$\mathbf{EF_{grid,OM,y}}$	=	Operating margin CO_2 emission factor in year *y* (tCO_2/MWh)
$\mathbf{w_{OM}}$	=	Weighting of operating margin emissions factor (%)
$\mathbf{w_{BM}}$	=	Weighting of build margin emissions factor (%)

The following default values should be used for w_{OM} and w_{BM}:

- Wind and solar power generation project activities: $w_{OM} = 0.75$ and $w_{BM} = 0.25$ (owing to their intermittent and non-dispatchable nature) for the first crediting period and for subsequent crediting periods;

Calculation of $DATE_{BaselineRetrofit}$

In order to estimate the point in time when the existing equipment would need to be replaced/retrofitted in the absence of the project activity ($DATE_{BaselineRetrofit}$), the CPA may take the following approaches into account:

(a) The typical average technical lifetime of the type equipment may be determined and documented, taking into account common practices in the sector and country, e.g. based on industry surveys, statistics, technical literature, etc.;
(b) The common practices of the responsible company regarding replacement/retrofitting schedules may be evaluated and documented, e.g. based on historical replacement/retrofitting records for similar equipment.

The point in time when the existing equipment would need to be replaced/retrofitted in the absence of the CPA project activity should be chosen in a conservative manner, i.e. if a range is identified, the earliest date should be chosen.

Leakage

No leakage emissions are considered. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport). These emissions sources are neglected.

Emission reductions

Emission reductions are calculated as follows:

$$\mathbf{ER_y = BE_y - PE_y} \qquad \textbf{(11)}$$

Where:

$\mathbf{ER_y}$	=	Emission reductions in year *y* (t CO_2e)
$\mathbf{BE_y}$	=	Baseline emissions in year *y* (t CO_2)
$\mathbf{PE_y}$	=	Project emissions in year *y* (t CO_2e)

Estimation of emissions reductions prior to validation

Project developers should prepare as part of the CPA-DD an estimate of likely emission reductions for the proposed crediting period. This estimate should, in principle, employ the same methodology as selected above. Where the grid emission factor ($EF_{CM,grid,y}$) is determined ex post during monitoring, project participants may use models or other tools to estimate the emission reductions prior to validation.

Changes required for methodology implementation in 2nd and 3rd crediting periods

At the start of the second and third crediting period project developers have to address two issues:

- Assess the continued validity of the baseline; and

- Update the baseline.

In assessing the continued validity of the baseline, a change in the relevant national and/or sectoral regulations between two crediting periods has to be examined at the start of the new crediting period. If at the start of the project activity, the project activity was not mandated by regulations, but at the start of the second or third crediting period regulations are in place that enforce the practice or norms or technologies that are used by the project activity, the new regulation (formulated after the registration of the project activity) has to be examined to determine if it applies to existing plants or not. If the new regulation applies to existing CDM project activities, the baseline has to be reviewed and, if the regulation is binding, the baseline for the project activity should take this into account. This assessment will be undertaken by the verifying DOE.

For updating the baseline at the start of the second and third crediting period, new data available will be used to revise the baseline scenario and emissions. Project participants shall assess and incorporate the impact of new regulations on baseline emissions.

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

Project emissions:

For most of the renewable power generation CPA project activities, $PE_y = 0$. However, some CPA project activities may involve project emissions that could be significant.

For **project emissions** a CPA does not need to report any parameters in the CPA-DD, unless the CPA is a:

- Geothermal power plant (Greenfield, Capacity addition, Retrofit of existing plants, or Replacement of existing plant);
- Hydro-power plant with accumulation reservoir (Greenfield, Capacity addition, Retrofit of existing plants, or Replacement of existing plant);

For ***Geothermal power plants,*** under project emissions, the following parameters must be reported in the CPA-DD:

Emissions of non-condensable gases from the operation of Geothermal power plants ($PE_{GP,y}$):

Data / Parameter:	**$GWPCH_4$**
Data unit:	tCO2e/tCH_4
Description:	Global warming potential of methane valid for the relevant commitment period
Source of data used:	IPCC
Value applied:	For the first commitment period: 21 tCO_2e/tCH_4
Justification of the choice of data or description of measurement methods and procedures	2006 IPCC Guidelines for National Greenhouse Gas Inventories

actually applied :	
Any comment:	-

For ***Hydro-power plants,*** project emissions the following parameters must be reported in the CPA-DD:

Emissions from water reservoirs of hydro power plants if the power density of the project activity is greater than 4W/m^2 and less than or equal to 10M/m^2.

Data / Parameter:	**EF_{Res}**
Data unit:	$kgCO_2e/MWh$
Description:	Default emission factor for emissions from reservoirs of hydro power plants
Source of data used:	Decision at EB23
Value applied:	90 $kgCO_2e/MWh$
Justification of the choice of data or description of measurement methods and procedures actually applied :	EB 23 Annex 5: Hydroelectric power plants with power densities greater than 4 W/m^2 but less than or equal to 10 W/m^2 can use the currently approved methodologies, with an emission factor of 90 gCO_2eq/kWh for project reservoir emissions.
Any comment:	-

OR

Emissions from water reservoirs of hydro power plants, if the power density of the project activity is greater than 10W/m^2:

Data / Parameter:	**Cap_{BL}**
Data unit:	W
Description:	Installed capacity of the hydro power plant before the implementation of the project activity. For new hydro power plants, this value is zero.
Source of data used:	Project developer records at the project site
Value applied:	To be determined using project developer records
Justification of the choice of data or description of measurement methods and procedures actually applied :	Determine the installed capacity based on recognized standards.
Any comment:	-

Data / Parameter:	**A_{BL}**
Data unit:	m^2
Description:	Area of the reservoir measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m^2). For new

	reservoirs, this value is zero.
Source of data used:	Project developer records at the project site
Value applied:	To be determined using project developer records
Justification of the choice of data or description of measurement methods and procedures actually applied :	Measured from topographical surveys, maps, or satellite pictures, etc.
Any comment:	-

Baseline emissions:

For **baseline emissions,** ***all projects*** must report the following parameter in the CPA-DD:

- $EF_{grid,CM,y}$ (combined margin CO_2 emission factor for grid connected power generation in year y).

(Copy this table for each data and parameter)	
Data / Parameter:	**$EF_{grid,CM,y}$**
Data unit:	tCO_2/MWh
Description:	Combined margin CO_2 emission factor for grid connected power generation in year y calculated using the "Tool to calculate the emission factor for an electricity system".
Source of data to be used:	Calculated.
Value of data applied for the purpose of calculating expected emission reductions in section B.5	As per the data vintage stipulated in the "Tool to calculate the emission factor for an electricity system"
Description of measurement methods and procedures to be applied:	Calculated.
QA/QC procedures to be applied:	
Any comment:	-

Additionally, if a project is a ***Retrofit or replacement of an existing renewable energy power plant*** the following parameters must be reported in the CPA-DD under baseline emissions:

Data / Parameter:	**$EG_{historical}$**
Data unit:	MWh
Description:	Annual average historical net electricity generation delivered to the grid by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity
Source of data used:	Project developer records at the project site
Value applied:	To be determined using developer records
Justification of the choice of data or description of measurement methods and procedures actually applied :	One of the following two time spans of historical data will be chosen to determine $EG_{historical}$: (a) The five last calendar years prior to the implementation of the CPA project activity; or (b) The time period from the calendar year following $DATE_{hist}$, up to the last calendar year prior to the implementation of the project, as long as this time span includes at least five calendar years, where $DATE_{hist}$ is latest point in time between: i. The commercial commissioning of the plant/unit; ii. If applicable: the last capacity addition to the plant/unit; or iii. If applicable: the last retrofit of the plant/unit.
Any comment:	-

Data / Parameter:	**$\sigma_{historical}$**
Data unit:	MWh
Description:	Standard deviation of the annual average historical net electricity generation delivered to the grid by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity
Source of data used:	Calculated from data used to establish $EG_{historica}$
Value applied:	Calculated
Justification of the choice of data or description of measurement methods and procedures actually applied :	Parameter to be calculated as the standard deviation of the annual generation data used to calculate $EG_{historical}$ for retrofit or replacement CPA project activities.
Any comment:	-

Data / Parameter:	**$DATE_{BaselineRetrofit}$**
Data unit:	Date
Description:	Point in time when the existing equipment would need to be replaced in the absence of the CPA project activity.

Source of data used:	Project developer records at the project site
Value applied:	To be determined using project developer records
Justification of the choice of data or description of measurement methods and procedures actually applied :	In order to estimate the point in time when the existing equipment would need to be replaced/retrofitted in the absence of the project activity ($DATE_{BaselineRetrofit}$), the CPA may take the following approaches into account: (a) The typical average technical lifetime of the type equipment may be determined and documented, taking into account common practices in the sector and country, e.g. based on industry surveys, statistics, technical literature, etc.; (b) The common practices of the responsible company regarding replacement/retrofitting schedules may be evaluated and documented, e.g. based on historical replacement/retrofitting records for similar equipment.
Any comment:	

Data / Parameter:	**$DATE_{hist}$**
Data unit:	Date
Description:	Point in time from which the time span of historical data for retrofit or replacement project activities may start
Source of data used:	Project developer records at the project site
Value applied:	To be determined using project developer records
Justification of the choice of data or description of measurement methods and procedures actually applied :	$DATE_{hist}$ is the latest point in time between: (i) The commercial commissioning of the plant/unit; (ii) If applicable: the last capacity addition to the plant/unit; or (iii) If applicable: the last retrofit of the plant
Any comment:	-

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

D.7.1. Data and parameters to be monitored by each CPA:

Project emissions:

For most of the renewable power generation CPA project activities, $PE_y = 0$ and therefore no parameters need to be monitored for project emissions. However, some CPA project activities may involve project emissions that could be significant. See section E.6.2 to determine if emissions from the use of fossil fuels will be one of these significant sources of emissions for the CPA.

Details of which types of projects must calculate project emissions and the associated parameters to be monitored follows:

For Geothermal power plants the following parameters must be monitored:
(Greenfield, Capacity addition, Retrofit of existing plants, or Replacement of existing plant)

Emissions of non-condensable gases from the operation of geothermal power plants ($PE_{GP,y}$):

(Copy this table for each data and parameter)

Data / Parameter:	$w_{steam,CO2,y}$
Data unit:	tCO_2/t steam
Description:	Average mass fraction of carbon dioxide in the produced steam in year *y*
Source of data to be used:	Physical sample measurements of the non-condensable gases collected at the CPA project site and analysed
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	Non-condensable gases sampling should be carried out in production wells and at the steam field-power plant interface using ASTM Standard Practice E1675 for Sampling 2-Phase Geothermal Fluid for Purposes of Chemical Analysis (as applicable to sampling single phase steam only). The CO_2 and CH_4 sampling and analysis procedure consists of collecting non-condensable gases samples from the main steam line with glass flasks, filled with sodium hydroxide solution and additional chemicals to prevent oxidation. Hydrogen sulphide (H_2S) and carbon dioxide (CO_2) dissolve in the solvent while the residual compounds remain in their gaseous phase. The gas portion is then analysed using gas chromatography to determine the content of the residuals including CH_4. All alkanes concentrations are reported in terms of methane. Monitoring to take place at least every 3 months and more frequently, if necessary.
QA/QC procedures to be applied:	Sampling carried out according to ASTM Standard Practice E1675
Any comment:	Applicable to geothermal power projects

(Copy this table for each data and parameter)

Data / Parameter:	$w_{steam,CH4,y}$
Data unit:	tCH_4/t steam
Description:	Average mass fraction of methane in the produced steam in year *y*
Source of data to be used:	Physical sample measurements of the non-condensable gases collected at the CPA project site and analysed
Value of data applied	To be stipulated by the CPA

for the purpose of calculating expected emission reductions in section B.5	
Description of measurement methods and procedures to be applied:	Non-condensable gases sampling should be carried out in production wells and at the steam field-power plant interface using ASTM Standard Practice E1675 for Sampling 2-Phase Geothermal Fluid for Purposes of Chemical Analysis (as applicable to sampling single phase steam only). The CO_2 and CH_4 sampling and analysis procedure consists of collecting non-condensable gases samples from the main steam line with glass flasks, filled with sodium hydroxide solution and additional chemicals to prevent oxidation. Hydrogen sulphide (H_2S) and carbon dioxide (CO_2) dissolve in the solvent while the residual compounds remain in their gaseous phase. The gas portion is then analysed using gas chromatography to determine the content of the residuals including CH_4. All alkanes concentrations are reported in terms of methane. Monitoring to take place at least every 3 months and more frequently, if necessary.
QA/QC procedures to be applied:	Sampling carried out according to ASTM Standard Practice E1675
Any comment:	Applicable to geothermal power project

(Copy this table for each data and parameter)	
Data / Parameter:	$\mathbf{M_{steam,y}}$
Data unit:	t steam
Description:	Quantity of steam produced in year *y*
Source of data to be used:	Direct, physical measurements as recorded by metering equipment at CPA project site.
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	The steam quantity discharged from the geothermal wells should be measured with a venture flow meter (or other equipment with at least the same accuracy). Measurement of temperature and pressure upstream of the venture meter is required to define steam properties. The calculation of steam quantities should be conducted on a continuous basis and should be based on international standards. The measurement results should be summarized transparently in regular production reports. Monitoring to take place daily.
QA/QC procedures to be applied:	Calibration certificates in line with manufacturers requirements will be available for on site verification.
Any comment:	Applicable to geothermal power projects

*And where necessary, Fossil fuel combustion ($PE_{FF,y}$) (see parameters listed under '**Other Tools to be used', below):***

(Copy this table for each data and parameter)	
Data / Parameter:	**$PE_{FF,y}$**
Data unit:	tCO2
Description:	Project emissions from fossil fuel consumption in year *y*
Source of data to be used:	As per the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion"
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	Calculated
QA/QC procedures to be applied:	-
Any comment:	Mostly applicable to geothermal and solar thermal projects, which also use fossil fuels for electricity generation

For Hydro-power plants, the following parameters must be monitored:

For hydro power CPA project activities that result in new reservoirs and hydro power CPA project activities that result in the increase of existing reservoirs, project developers shall account for CH_4 and CO_2 emissions from the reservoir

Emissions from water reservoirs of hydro power plants, if the power density of the project activity is greater than 4W/m^2 and less than or equal to 10M/m^2.

(Copy this table for each data and parameter)	
Data / Parameter:	**TEG_y**
Data unit:	MWh
Description:	Total electricity produced by the project activity, including the electricity

	supplied to the grid and the electricity supplied to internal loads, in year *y*
Source of data to be used:	Direct, physical measurements as recorded by metering equipment (electricity meter) at CPA project site.
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	Direct, physical measurements as recorded by metering equipment (electricity meter). Continuous measurement and at least monthly recording.
QA/QC procedures to be applied:	Cross check measurement results with records for sold electricity
Any comment:	Applicable to hydro power CPA project activities with a power density of the project activity (PD) greater than 4 W/m^2 and less than or equal to 10 $W/m^{2.}$

*And where necessary, Fossil fuel combustion ($PE_{FF,y}$) (see parameters listed under '**Other Tools to be used', below):***

(Copy this table for each data and parameter)	
Data / Parameter:	**$PE_{FF,y}$**
Data unit:	tCO2
Description:	Project emissions from fossil fuel consumption in year *y*
Source of data to be used:	As per the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion"
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	Calculated
QA/QC procedures to be applied:	-
Any comment:	Mostly applicable to geothermal and solar thermal projects, which also use fossil fuels for electricity generation

OR

Emissions from water reservoirs of hydro power plants if the power density of the project activity is greater than 10W/m^2:

(Copy this table for each data and parameter)	
Data / Parameter:	**Cap_{PJ}**
Data unit:	W
Description:	Installed capacity of the hydro power plant after the implementation of the CPA project activity
Source of data to be used:	Project developer records at the project site
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	Determine the installed capacity based on recognized standards, using project developers standards. Monitoring to take place yearly.
QA/QC procedures to be applied:	Determine the installed capacity based on recognized standards.
Any comment:	-

(Copy this table for each data and parameter)	
Data / Parameter:	**A_{PJ}**
Data unit:	m^2
Description:	Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full
Source of data to be used:	Project developer records at the project site
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	Measured from topographical surveys, maps, or satellite pictures, etc. Monitoring to take place yearly.
QA/QC procedures to be applied:	-
Any comment:	-

*And where necessary, Fossil fuel combustion ($PE_{FF,y}$) (see parameters listed under '**Other Tools to be used', below):***

(Copy this table for each data and parameter)	
Data / Parameter:	**$PE_{FF,y}$**
Data unit:	tCO2
Description:	Project emissions from fossil fuel consumption in year *y*
Source of data to be used:	As per the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion"
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	Calculated
QA/QC procedures to be applied:	-
Any comment:	Mostly applicable to geothermal and solar thermal projects, which also use fossil fuels for electricity generation

Baseline emissions:

Baseline emissions include only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants.

The baseline emissions are calculated using:

- $EG_{PJ,y}$ (Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh)), and
- $EF_{grid,CM,y}$ (Combined margin CO_2 emission factor for grid connected power generation in year *y* calculated using the "Tool to calculate the emission factor for an electricity system" (tCO_2/MWh)).

$EF_{grid,CM,y}$ is a parameter that is to be reported in the CPA-DD as per E.6.3.

Calculation of $EG_{PJ,y}$

Independent of technology type, the calculation of $EG_{PJ,y}$ is different for (a) greenfield plants, (b) retrofits and replacements, and (c) capacity additions.

For Greenfield renewable energy power plants, the following parameters must be monitored:

(Copy this table for each data and parameter)	
Data / Parameter:	**$EG_{facility,y}$**
Data unit:	MWh
Description:	Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y*
Source of data to be used:	Direct, physical measurements as recorded by metering equipment (electricity meter) at CPA project site.
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA. The following parameters shall be measured: (i) the quantity of electricity supplied by the project plant/unit to the grid; and (ii) The quantity of electricity delivered to the project plant/unit from the grid
Description of measurement methods and procedures to be applied:	Direct, physical measurements as recorded by metering equipment (electricity meter). Continuous measurement and at least monthly recording.
QA/QC procedures to be applied:	Cross check measurement results with records for sold electricity
Any comment:	-

For Capacity addition to an existing renewable energy power plant, the following parameters must be monitored:

(Copy this table for each data and parameter)	
Data / Parameter:	**$EG_{PJ_Add,y}$**
Data unit:	MWh
Description:	Quantity of net electricity generation supplied to the grid in year *y* by the project plant/unit that has been added under the project activity.
Source of data to be used:	Direct, physical measurements as recorded by metering equipment (electricity meter) at CPA project site..
Value of data applied	To be stipulated by the CPA

for the purpose of calculating expected emission reductions in section B.5	
Description of measurement methods and procedures to be applied:	Direct, physical measurements as recorded by metering equipment (electricity meter). Continuous measurement and at least monthly recording.
QA/QC procedures to be applied:	Cross check measurement results with records for sold electricity
Any comment:	Applicable to wind, solar, wave or tidal power plant(s) or unit(s), provided that option 2 in the baseline methodology is applied.

For Retrofits and replacement plants:
The applicable parameters required to calculate baseline emissions are listed under E.6.3 (parameters to be listed in the CPA-DD).

Other Tools to be used:

Where necessary, Fossil fuel combustion ($PE_{FF,y}$)may be calculated. This is to be done by monitoring the following parameters from the "Tool to calculate project or leakage CO_2emissions from fossil fuel combustion"

(Copy this table for each data and parameter)	
Data / Parameter:	**$FC_{i,j,y}$**
Data unit:	Mass or volume unit per year (e.g. ton/yr or m^3/yr)
Description:	Quantity of fuel type *i* combusted in process *j* during the year *y*
Source of data to be used:	Direct, physical measurements as recorded by metering equipment at CPA project site.
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	• Use either mass or volume meters. In cases where fuel is supplied from small daily tanks, rulers can be used to determine mass or volume of the fuel consumed, with the following conditions: The ruler gauge must be part of the daily tank and calibrated at least once a year and have a book of

	control for recording the measurements (on a daily basis or per shift); • Accessories such as transducers, sonar and piezoelectronic devices are accepted if they are properly calibrated with the ruler gauge and receiving a reasonable maintenance; • In case of daily tanks with pre-heaters for heavy oil, the calibration will be made with the system at typical operational conditions. Monitoring frequency is as continuous as possible.
QA/QC procedures to be applied:	The consistency of metered fuel consumption quantities should be cross checked by an annual energy balance that is based on purchased quantities and stock changes. Where the purchased fuel invoices can be identified specifically for the CDM project, the metered fuel consumption quantities should also be cross-checked with available purchase invoices from the financial records.
Any comment:	-

(Copy this table for each data and parameter)	
Data / Parameter:	$w_{C,i,y}$
Data unit:	tC/mass unit of the fuel
Description:	Weighted average mass fraction of carbon in fuel type *i* in year *y*
Source of data to be used:	The following data sources may be used if the relevant conditions apply: **Data source** / **Conditions for using the data source** a) Values provided by the fuel supplier in invoices / This is the preferred source b) Measurements by the implementing entity / If a) is not available
Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	Measurements should be undertaken in line with national or international fuel Standard. Monitoring frequency: The mass fraction of carbon should be obtained for each fuel delivery, from which weighted average annual values should be calculated.
QA/QC procedures to be applied:	Verify if the values under a) and b) are within the uncertainty range of the IPCC default values as provided in Table 1.2, Vol. 2 of the 2006 IPCC Guidelines. If the values fall below this range collect additional information from the testing laboratory to justify the outcome or conduct additional measurements. The laboratories in b) should have ISO17025 accreditation or

	justify that they can comply with similar quality standards.
Any comment:	Applicable where Option A in the tool is used

(Copy this table for each data and parameter)	
Data / Parameter:	$\rho_{i,y}$
Data unit:	Mass unit/volume unit
Description:	Weighted average density of fuel type *i* in year *y*
Source of data to be used:	The following data sources may be used if the relevant conditions apply:

Data source	**Data source Conditions for us n he data source**
a) Values provided by the fuel supplier in invoice	This is the preferred source
b) Measurements by the implementing entity	If a) is not available
c) Regional or national default value	If a) is not available These sources can only be used for liquid fuels and should be based on well-documented, reliable sources (such as national energy balances).

Value of data applied for the purpose of calculating expected emission reductions in section B.5	To be stipulated by the CPA
Description of measurement methods and procedures to be applied:	Measurements should be undertaken in line with national or international fuel Standards. Monitoring frequency: The density of the fuel should be obtained for each fuel delivery, from which weighted average annual values should be calculated.
QA/QC procedures to be applied:	-
Any comment:	Applicable where Option A in the tool is used and where $FC_{i.j.y}$ is measured in a volume unit. Preferably the same data source should be used for $w_{C,i,y}$ and $\rho_{i,y}$.

(Copy this table for each data and parameter)	
Data / Parameter:	$NCV_{i,y}$
Data unit:	GJ per mass or volume unit (e.g. GJ/m³, GJ/ton)
Description:	Weighted average net calorific value of fuel type *i* in year *y*
Source of data to be	The following data sources may be used if the relevant conditions apply:

<table>
<tr><td>used:</td><td>
<table>
<tr><th>Data source</th><th>Conditions for using the data source</th></tr>
<tr><td>a) Values provided by the fuel supplier in invoice</td><td>This is the preferred source if the carbon fraction of the fuel is not provided (Option A)</td></tr>
<tr><td>b) Measurements by the implementing entity</td><td>If a) is not available</td></tr>
<tr><td>c) Regional or national default value</td><td>If a) is not available
These sources can only be used for liquid fuels and should be based on well documented, reliable sources (such as national energy balances).</td></tr>
<tr><td>d) IPCC default values at the upper limit of the uncertainty at a 95% confidence interval as provided in Table 1.2 of Chapter 1 of Vol. 2 (Energy) of the 2006 IPCC Guidelines on National GHG Inventories</td><td>If a) is not available</td></tr>
</table>
</td></tr>
<tr><td>Value of data applied for the purpose of calculating expected emission reductions in section B.5</td><td>To be stipulated by the CPA</td></tr>
<tr><td>Description of measurement methods and procedures to be applied:</td><td>For a) and b): Measurements should be undertaken in line with national or international fuel standards.

Monitoring frequency:
For a) and b): The NCV should be obtained for each fuel delivery, from which weighted average annual values should be calculated
For c): Review appropriateness of the values annually
For d): Any future revision of the IPCC Guidelines should be taken into account.</td></tr>
<tr><td>QA/QC procedures to be applied:</td><td>Verify if the values under a), b) and c) are within the uncertainty range of the IPCC default values as provided in Table 1.2, Vol. 2 of the 2006 IPCC Guidelines. If the values fall below this range collect additional information from the testing laboratory to justify the outcome or conduct additional measurements. The laboratories in a), b) or c) should have ISO17025 accreditation or justify that they can comply with similar quality standards</td></tr>
<tr><td>Any comment:</td><td>Applicable where Option A or B in the tool is used</td></tr>
</table>

(Copy this table for each data and parameter)	
Data / Parameter:	$EF_{CO2,i,y}$

Data unit:	tCO_2/GJ
Description:	Weighted average CO_2 emission factor of fuel type *i* in year *y*
Source of data to be used:	The following data sources may be used if the relevant conditions apply:

Data source	**Conditions for using the data source**
a) Values provided by the fuel supplier in invoices	This is the preferred source if the carbon fraction of the fuel is not provided (Option A)
b) Measurements by the implementing entity	If a) is not available
c) Regional or national default value	If a) is not available These sources can only be used for liquid fuels and should be based on well documented, reliable sources (such as national energy balances).
d) IPCC default values at the upper limit of the uncertainty at a 95% confidence interval as provided in Table 1.2 of Chapter 1 of Vol. 2 (Energy) of the 2006 IPCC Guidelines on National GHG Inventories	If a) is not available

Value of data applied for the purpose of calculating expected emission reductions in section B.5	
Description of measurement methods and procedures to be applied:	To be stipulated by the CPA
QA/QC procedures to be applied:	Verify if the values under a), b) and c) are within the uncertainty range of the IPCC default values as provided in Table 1.2, Vol. 2 of the 2006 IPCC Guidelines. If the values fall below this range collect additional information from the testing laboratory to justify the outcome or conduct additional measurements. The laboratories in a), b) or c) should have ISO17025 accreditation or justify that they can comply with similar quality standards
Any comment:	Applicable where option B in the tool is used. For a): If the fuel supplier does provide the NCV value and the CO_2 emission factor on the invoice and these two values are based on measurements for this specific fuel, this CO_2 factor should be used. If another source for the CO_2 emission factor is used or no CO_2 emission factor is provided, Options b), c) or d) should be used.

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

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The purpose of the monitoring plan will be to measure and record the net electricity delivered to the electrical grid. Details of the CPA monitoring plan will be described within each CPA, considering the following elements:

1. Management structure and responsibilities

The CME will implement a monitoring protocol that allows the Designated Operational Entity (DOE) to verify all CPAs in the PoA. Monitoring will be carried out be each CPA. For each CPA, all parameters included in E.7.1 will be monitored by the implementing entity of the CPA. The main measure for the PoA is the measure of net electricity supplied to the grid and assuring the correct operation and maintenance of the measuring equipment.

Data collection:
The CME will establish and maintain an extensive database for each and every CPA wherein the following data will be recorded:

- Name of the CPA;
- Name of the implementing entity of the CPA;
- Contact details of the implementing entity including contact person, address, telephone and email address;
- Type of renewable energy technology (solar, wind, hydro etc.);
- Installed capacity and other relevant technical specifications of each CPA;
- Location of the CPA (GPS coordinates of the power house for example);
- Verification status and monitoring reports of each CPA.

Each CPA will comprise a single project activity, and hence the data will be monitored directly at that CPA project site. Monitoring will be carried out be each CPA. The CME will provide guidance to the CPA implementing entity on how the monitoring should be conducted and data should be collected with regards to emission reduction calculations The start and end dates of each monitoring period for each individual CPA, together with the emission reductions attributable to that monitoring period will be recorded in the database.

Data recording:
For each CPA, all parameters included in E.7.1 will be monitored by the implementing entity of the CPA and recorded electronically. The CPA owners will provide data on monitored parameters included in section E.7.1 to the CME. The CME will document and store all data related to parameters included in section E.7.1 provided by CPA implementing entities in an electronic database, while primary data will be stored by each CPA implementing entity.

Data calibration:
This will be done by respecting the calibration frequency as per the manufacturer’s requirements. The CME will store all the data in an electronic database. Primary data will be stored by the implementing entities.

Data reporting:

The CME will in responsible for the preparation of the Monitoring Reports and communication with the DOE during verification activities. The Monitoring Report will compile all required monitoring information in order to allow the DOE to verify the emission reductions for each monitoring period of each individual CPA. The Monitoring Report will unambiguously set out the data on emission reductions generation by each CPA during the monitoring period consistent with the requirements of this PoA-DD and the corresponding CPA-DD. Record keeping procedures undertaken by the CME will ensure that the data attributed to a monitoring period can be clearly attributed to an individual CPA and will furthermore prevent double counting of emission reduction data.

Data archiving:
The CME will be responsible for the management of records and data associated with each CPA and all records (electronic and hard copy) will be stored for a period of two years after the end of the relevant crediting period. Archiving will be redundant and include off-site copies of all documents.

2. Data quality control
The data and reports provided by each CPA implementing entity to the CME will be checked internally to ensure the accuracy and completeness of data. In case of mistakes, corrective action will be applied to avoid future similar mistakes. There will be no assurance of data prior to verification.

3. Training and monitoring personnel
The CME will ensure that all persons that participate in the monitoring process will be suitably qualified and trained in the operation and maintenance of the CPA project activity. These persons will also receive training on the application of the monitoring plan.

Leakage
No leakage emissions are considered. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport). These emissions sources are neglected.

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)

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The baseline study and monitoring methodology were completed on 09 September 2011 by:

Graham Paul
EcoMetrix Africa (Pty) Ltd
Graham.Paul@ecometrix.co.za

Annex 1

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

Organization:	K2011/117952/07 (Pty) Ltd (South Africa) trading as African Sustainability Initiative
Street/P.O.Box:	355 Oak Avenue
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URL:	http://www.sustain-africa.com/
Represented by:	
Title:	
Salutation:	Mr
Last Name:	Buchanan
Middle Name:	
First Name:	Sean
Department:	
Mobile:	
Direct FAX:	
Direct tel:	0114631009
Personal E-Mail:	

Annex 2

INFORMATION REGARDING PUBLIC FUNDING

Refer to section A.4.5.

Annex 3

BASELINE INFORMATION

Refer to section E.4.

Annex 4

MONITORING INFORMATION

Refer to section E.7.

Annex 5

ELIGIBILITY CRITERIA

The eligibility criteria for the inclusion of each distinct type of CPA into the PoA are found in tables in Annex 5. Project types have been grouped in tables by each technology (e.g. hydro, solar, tidal etc.). If an eligibility criterion in a table is relevant for a numbered project type (as per the list above) then it is represented with a "✓" symbol. If it is not relevant to that project type then it is represented with "NA".

Each CPA must determine which project type from the above list their CPA fits into, and then use the appropriate table found in Annex 5 which provides the eligibility criteria for that particular project type.

The table below provides eligibility criteria for the following project types related to **Hydro-power plant/unit - Run-of-river reservoir**:
1. Greenfield
2. Capacity addition
3. Retrofit of existing plants
4. Replacement of existing plant

Eligibility Criteria Grouping	**Eligibility Criteria**	**Procedure and Data Source**	**Hydro-power plant/unit - Run-of-river reservoir:**			
			1.	**2.**	**3.**	**4.**
Technical	1. The project methodology is not applicable to the following: a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity,	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
	since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass fired power plants; c) Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the reservoir is less than 4 W/m^2.	□ Environmental Impact Assessment (EIA) proceedings; AND/OR □ Project feasibility study. The CME shall examine such evidence and determine whether the project is not either of a) or b) or c) above. If this is found to be the case then this criterion is satisfied. If not the case then the CPA is ineligible.				
Technical	2. The CPA is a hydro power plant/unit with a run-of-river reservoir.	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a hydro power plant/unit with a run-of-river reservoir.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
		The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a hydro power plant/unit with a run-of-river reservoir then this criterion is satisfied.				
Technical	3. The CPA is a project activity that installs a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant).	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a greenfield plant. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a greenfield plant, then this criterion is satisfied.	✓	**NA**	**NA**	**NA**
Technical	4. In the case of capacity addition/retrofit of existing	The CPA shall provide verifiable information to show that the existing plant started commercial operation prior to the start of	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
	plants/replacement of existing plant, the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	a minimum historical reference period of five years. This might include: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; Furthermore, The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
		The CME shall examine such evidence and where necessary conduct a site visit to verify these two points. If the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity then this criterion is satisfied.				
	5. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	The CPA shall provide details within the CPA-DD of the identification of the baseline scenario, as described in the PoA-DD. If the most plausible baseline scenario identified is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance, then this criterion is met and this methodology is applicable.	**NA**	✓	✓	✓
Technical	6. The CPA must provide the following technical details and	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
	these must be acceptable under ACM0002: a) The planned generation capacity (in kW or MW); b) The planned energy generation (kWh or MWh per year); c) Potential water flow (m^3/s); d) Potential hydrostatic head: The distance a volume of water has to fall in order to generate power (m).	□ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Project feasibility study. The CME shall examine such evidence and whether it is acceptable under ACM0002. If this is found to be the case then this criterion is satisfied. If found not to be acceptable under ACM0002 then the CPA is ineligible.				
Technical	7. Each CPA must provide, monitor and collect data as specified by the parameters as listed in sections E.6.3 and E.7.1.specific to the appropriate technology type of CPA.	The CPA shall : □ Provide data where necessary and implement a monitoring plan to monitor and collect data as per E.6.3 and E.7.1. in the CPA-DD upon inclusion of the CPA. The CPA implementing entity will provide a Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
Technical	8. Each CPA is developed at a location within the borders of the Countries and is connected to the national or regional electricity grid of that particular country.	The CME shall verify that the CPA is at a location within the Countries by examining one of the following: □ Geographic coordinates of the project activity; OR □ Plant map/diagram with geographic references; OR □ Operating license or permit indicating location of project equipment; OR □ Other appropriate document. If the location is verified to be within the boundary of the Countries this criterion is satisfied, otherwise the CPA is ineligible.	✓	✓	✓	✓
Investment Climate	9. Parameters reflecting the investment climate affecting the CPA must be clearly defined and stated upfront. These must include, but are not limited to: a) Subsidies or other financial flows: Each CPA must provide affirmation that it will not receive any public funds resulting from official development assistance (ODA) from Parties included in Annex I to the Convention that would result in the diversion of	a) The CPA shall provide the CME with one of the following: □ An official letter from the CPA implementing entity confirming that funding for the project did not originate from an Annex 1 Party that resulted in diversion of ODA; OR □ A letter on the official letterhead of the Annex 1 Party funding agency confirming that funding for the project does not result in the diversion of ODA ; OR □ Any official document which indicates that funds for the project will be supplied from internal sources (e.g. capital vote application/board meeting minutes). Based on the evidence provided the CME shall verify that either no Annex 1 Party funding was used, or if Annex 1 Party funding was used, it did not result in the diversion of	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
	ODA. b) Tariffs: Each CPA must provide details of typical tariffs that might be received within the host country, presented alongside the analysis to indicate typical costs of electricity in that host country. c) Depreciation: When conducting investment analysis to demonstrate additionality, each CPA must account for depreciation of equipment within financial models appropriately in line with UNFCCC guidelines and local practices. d) Power purchase agreements: Each CPA must have a power purchase agreement in place prior to the selling of any electricity. This	ODA in which case this criterion is satisfied. b) The CPA implementing entity shall provide, within the financial model used to demonstrate additionality, details of typical tariffs that would be received, taking into consideration the UNFCCC guidance on host party laws and policies designed to reduce emissions. Verifiable references for such rates will be provided. As per paragraph 44 and 45 of the CDM Project Standard v0.1.0 EB65 Annex 5, if national or sectoral policy exists, providing a comparative advantage to less emission intensive technologies or fuels, that were promulgated after 7 December 1997, such policies shall not be taken into account in identifying the baseline scenario. A hypothetical scenario without the policy shall be referred do. The CME shall examine the financial model and references to determine whether the tariffs are appropriate and thus meets this criterion. c) The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of depreciation and how it is appropriately dealt with in line with UNFCCC guidelines (Guidance on the assessment of investment analysis: depreciation (and other non-cash items) which were deducted for the estimation of				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
	agreement should state the agreed tariffs.	gross profits and the tax thereon, should be added back to the net profits before calculating the appropriate financial indicator) and local practices, including official references of guidelines and local practices used. The CME shall examine the financial model and references to determine whether depreciation is taken into account and whether it is appropriately so done. If this is the case then this criterion is met. d) The CPA shall provide the CME with a copy of a power purchase agreement for the project prior to the selling of any electricity. A power purchase agreement may not be available at validation. If this is the case then the CPA should provide, at validation, a description of the programme under which electricity might be bought, for example, by a national utility, municipality, transmission and distribution company etc. Examples of these programmes include: □ A Renewable Energy Independent Power Producer Procurement Programme (REIPPP) as in South Africa; □ A feed in tariff structure etc. If this evidence is provided to the CME then this criterion is met.				
Range of	10. Section A.4.3 of the PoA-DD	The CPA implementing entity shall provide within the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
costs and revenues parameter	describes the process for proving additionality – the investment analysis method will be used for all CPAs. The CPA must consider and document within the financial model used to demonstrate additionality, all relevant factors affecting the costs and revenues associated with its implementation and operation. This must be done in line with UNFCCC guidelines (Guidance on the assessment of investment analysis) and local practices. The financial model should at least include the following items: a) Capital investment; b) Operating and maintenance costs; c) Income from electricity sales; d) Subsidies; e) Fiscal incentives (if any); f) Depreciation.	financial model used to demonstrate additionality, details of each of these above mentioned items. The CPA will include verifiable references for each item as per the Guidance on the assessment of investment analysis. The CME shall examine the financial model and the associated references. If these ranges of costs and revenues are referenced appropriately then this criterion is met.				
Legal and	11. Each CPA must carry out local	The details on stakeholder consultation shall be included in the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
regulatory parameter	stakeholder consultation and analysis of environmental impacts at CPA level and provide details in the CPA-DD.	CPA-DD. In addition the CPA shall provide the following: □ Local stakeholder workshop invitation &/or advertisement; AND □ Local stakeholder consultation summary, report and/ or minutes; OR □ The comments from stakeholders; AND □ The responses to the comments. The CME shall review these documents and verify that stakeholder concerns were heard and addressed in which case this criterion is satisfied. However if in the opinion of the CME the stakeholders concerns were not adequately addressed the CPA is ineligible. The CPA shall demonstrate that it analysed all environmental impacts including complying with all local environmental regulations. In order to verify compliance with this requirement, the CME shall assess one or more of the following: □An environmental impact assessment Record of Decision issued by the Environmental Regulator (if required by local regulations); AND/OR □A valid environmental permit issued by the Environmental Regulator; AND/OR □An opinion/assessment by a professional versed in local environmental regulations demonstrating the project's compliance with local environmental regulations i.e. in the case that the project activity is not required to obtain				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
		environmental regulatory approval. If the CME has verified using these documents that the CPA is in compliance with the local environmental regulations this criterion is satisfied, otherwise the CPA is ineligible.				
Legal and regulatory parameter	12. The CPA implementer shall declare that to the best of their knowledge, all mandatory legal and regulatory requirements have been complied with.	A CPA should provide a Project Developer CDM Undertaking Agreement which can be used as evidence in this regard. If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	13. The CPA must use ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 13.0.0., including implementing the baseline and monitoring methodology therein.	The CPA-DD must makes use of methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" v13.0.0 including implementing the baseline and monitoring methodology. The CME shall examine the CPA-DD to ensure that ACM0002 v13.0.0 is used. If this is the case then this criterion is met.	✓	✓	✓	✓
Other	14. Each CPA must demonstrate the start date of the CPA through documentary evidence and demonstrate the additionality of	Start date: As per the Glossary of terms the start date is defined as "the earliest date at which either the implementation or construction or real action of a CDM project activity or PoA	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
	the CPA according to section A.4.3 of this document.	begins". The CPA shall provide the CME with evidence that allows the actual start date to be verified itself and that it is not prior to 16/09/2011 (the start date of the PoA). The following (or equivalent) are examples of evidence that would allow the CME to verify the start date: □ Proof of first expenditure on the development of a new greenfield plant e.g. purchase of land (applicable for project type 1) OR □ Proof of replacement of equipment or retrofit or capacity addition e.g. purchase order for the project equipment or civils (applicable for project types 2, 3 or 4); OR □ A project implementation plan or similar document (in the case of an early stage project where the CDM start date has not been reached). If the date of first action is verified to be prior to 16/09/2011 then the CPA is ineligible. If the date of first action is verified to be subsequent to 16/09/2011 then the CPA is eligible and this criterion is satisfied. If first action is verified to have not have occurred yet then the CPA is eligible and this criterion is satisfied. Additionality: The CME shall examine the financial analysis (investment analysis) provided by the CPA that demonstrates additionality of the project activity in line with section A.4.3 of the PoA-DD. The CME will confirm that the analysis contains a clear				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
		comparison of the financial indicator and the financial benchmark. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CPA project activity cannot be considered as financially attractive and can thus be concluded to be additional.				
Other	15. Each CPA must implement the operational and management plan as detailed in section A.4.4.1.	The CPA shall provide: □ A Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	16. The coordinating entity will ensure that all CPAs under its PoA are neither registered as an individual CDM project activity nor included in another registered PoA.	All of the following shall be provided to the CME: □ Name, address and geographical coordinates of the CPA installation(s); □ List of all projects (reflecting the geographical location) using ACM0002 in the host country; □ List of registered PoAs promoting grid connected renewable energy technologies in the host country; □ List of other CDM project activities in which the implementers of the CPA are listed as project participants. The CME shall verify that the CPA is not registered elsewhere	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
		as a CPA in another PoA or as a standalone CDM project. If the CPA is registered elsewhere it is ineligible under this PoA.				
Other	17. Each CPA shall be uniquely identified within a database of all CPAs maintained by the CME. Therefore the following data must be provided to the CME prior to inclusion in the PoA: i. Name of the CPA; ii. Name of the implementing entity of the CPA; iii. Contact details of the implementing entity including contact person, address, telephone and email address; iv. Type of renewable energy (solar, wind, hydro etc.); v. Installed capacity and other relevant technical specifications of each	All of the items listed above shall be provided to the CME by the CPA implementing entity. The CME shall crosscheck the CME database to ensure that the CPA is not already captured on the CME database. If the CPA is not already captured on the CME database then the CPA satisfies this eligibility criterion, as a CPA cannot be included more than once in a PoA.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit - Run-of-river reservoir:			
			1.	2.	3.	4.
	CPA; vi. Location of the CPA (GPS coordinates of the power house for example); vii. Verification status and monitoring reports of each CPA.					

The table below provides eligibility criteria for the following project types related to **Hydro-power plant/unit with accumulation reservoir**:
5. Greenfield
6. Capacity addition
7. Retrofit of existing plants
8. Replacement of existing plant

Eligibility Criteria Grouping	**Eligibility Criteria**	**Procedure and Data Source**	**Hydro-power plant/unit – Accumulation reseervoir:**			
			5.	**6.**	**7.**	**8.**
Technical	1. The project methodology is not applicable to the following: a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass fired power plants; c) Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the reservoir is less than 4 W/m^2.	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; AND/OR □ Project feasibility study. The CME shall examine such evidence and determine whether the project is not either of a) or b) or c) above. If this is found to be the case then this criterion is satisfied. If not the case then the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
Technical	2. The CPA is a hydro power plant/unit with accumulation reservoir.	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a hydro power plant/unit with accumulation reservoir. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a hydro power plant/unit with accumulation reservoir then this criterion is satisfied.	✓	✓	✓	✓
Technical	3. The CPA is a project activity that installs a new power plant at a site where no renewable power plant was operated prior to the implementation of the project	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams;	✓	**NA**	**NA**	**NA**

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
	activity (greenfield plant).	AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a greenfield plant. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a greenfield plant, then this criterion is satisfied.				
Technical	4. In the case of capacity addition/retrofit of existing plants/replacement of existing plant, the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum	The CPA shall provide verifiable information to show that the existing plant started commercial operation prior to the start of a minimum historical reference period of five years. This might include: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings;	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
	historical reference period and the implementation of the project activity	Furthermore, The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. The CME shall examine such evidence and where necessary conduct a site visit to verify these two points. If the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity then this criterion is satisfied.				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
Technical	5. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	The CPA shall provide details within the CPA-DD of the identification of the baseline scenario, as described in the PoA-DD. If the most plausible baseline scenario identified is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance, then this criterion is met and this methodology is applicable.	**NA**	✓	✓	✓
Technical	6. In the case of hydro power plants, at least one of the following conditions must apply: i. the project activity is implemented in an existing reservoir, with no change in the volume of the reservoirs; or ii. the project activity is implemented in an existing reservoir, where the volume of reservoir is increased and	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that at least one of these listed conditions	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
	the power density of the project activity, as per definitions given in the Project Emissions section, is greater than 4 W/m^2 after the implementation of the project activity; or iii. the project activity results in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, is greater than 4 W/m^2 after the implementation of the project activity.	apply. The CME shall examine such evidence and where necessary conduct a site visit to verify these conditions. If it is verified that at least one of these conditions applies, then this criterion is satisfied.				
Technical	7. In case of hydro power plants using multiple reservoirs where the power density of any of the reservoirs is lower than 4 W/m^2 after the implementation of the project activity all of the following conditions must apply: i. The power density calculated for the entire	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
	project activity using equation 5 is greater than 4W/m2; ii. All reservoirs and hydro power plants are located at the same river and were designed together to function as an integrated project that collectively constitutes the generation capacity of the combined power plant; iii. The water flow between the multiple reservoirs is not used by any other hydropower unit which is not a part of the project activity; iv. The total installed capacity of the power units, which are driven using water from the reservoirs with a power density lower than 4 W/m2, is lower than 15 MW; v. The total installed capacity of the power units, which	□ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that all these conditions apply if the hydro power plant uses multiple reservoirs where the power density of any of the reservoirs is lower than 4 W/m^2 after the implementation of the project activity . The CME shall examine such evidence and where necessary conduct a site visit to verify these conditions. If the hydro power plant uses multiple reservoirs where the power density of any of the reservoirs is lower than 4 W/m^2 after the implementation of the project activity and all these conditions apply then this criterion is satisfied.				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
	are driven using water from reservoirs with a power density lower than 4 W/m2, is less than 10% of the total installed capacity of the project activity from multiple reservoirs.					
Technical	8. In the case of capacity addition/retrofit of existing plants/replacement of existing plant, the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	The CPA shall provide verifiable information to show that the existing plant started commercial operation prior to the start of a minimum historical reference period of five years. This might include: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; Furthermore, The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
		□ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. The CME shall examine such evidence and where necessary conduct a site visit to verify these two points. If the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity then this criterion is satisfied.				
	9. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the	The CPA shall provide details within the CPA-DD of the identification of the baseline scenario, as described in the PoA-DD. If the most plausible baseline scenario identified is .the	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
	identification of baseline scenario, is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance, then this criterion is met and this methodology is applicable.				
Technical	10. The CPA must provide the following technical details and these must be acceptable under ACM0002: a) The planned generation capacity (in kW or MW); b) The planned energy generation (kWh or MWh per year); c) Potential water flow (m^3/s); d) Potential hydrostatic head: The distance a volume of water has to fall in order to generate power (m). e) Power density of reservoir/s (W/m^2).	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Project feasibility study. The CME shall examine such evidence and whether it is acceptable under ACM0002. If this is found to be the case then this criterion is satisfied. If found not to be acceptable under ACM0002 then the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
Technical	11. Each CPA must provide, monitor and collect data as specified by the parameters as listed in sections E.6.3 and E.7.1.specific to the appropriate technology type of CPA.	The CPA shall : □ Provide data where necessary and implement a monitoring plan to monitor and collect data as per E.6.3 and E.7.1. in the CPA-DD upon inclusion of the CPA. The CPA implementing entity will provide a Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Technical	12. Each CPA is developed at a location within the borders of the Countries and is connected to the national or regional electricity grid of that particular country.	The CME shall verify that the CPA is at a location within the Countries by examining one of the following: □ Geographic coordinates of the project activity; OR □ Plant map/diagram with geographic references; OR □ Operating license or permit indicating location of project equipment; OR □ Other appropriate document. If the location is verified to be within the boundary of the Countries this criterion is satisfied, otherwise the CPA is ineligible.	✓	✓	✓	✓
Investment	13. Parameters reflecting the	a) The CPA shall provide the CME with one of the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
Climate	investment climate affecting the CPA must be clearly defined and stated upfront. These must include, but are not limited to: a) Subsidies or other financial flows: Each CPA must provide affirmation that it will not receive any public funds resulting from official development assistance (ODA) from Parties included in Annex I to the Convention that would result in the diversion of ODA. b) Tariffs: Each CPA must provide details of typical tariffs that might be received within the host country, presented alongside the analysis to indicate typical costs of electricity in that host country. c) Depreciation:	following: □ An official letter from the CPA implementing entity confirming that funding for the project did not originate from an Annex 1 Party that resulted in diversion of ODA; OR □ A letter on the official letterhead of the Annex 1 Party funding agency confirming that funding for the project does not result in the diversion of ODA ; OR □ Any official document which indicates that funds for the project will be supplied from internal sources (e.g. capital vote application/board meeting minutes). Based on the evidence provided the CME shall verify that either no Annex 1 Party funding was used, or if Annex 1 Party funding was used, it did not result in the diversion of ODA in which case this criterion is satisfied. b) The CPA implementing entity shall provide, within the financial model used to demonstrate additionality, details of typical tariffs that would be received, taking into consideration the UNFCCC guidance on host party laws and policies designed to reduce emissions. Verifiable references for such rates will be provided. As per paragraph 44 and 45 of the CDM Project Standard v0.1.0 EB65 Annex 5, if national or sectoral policy exists, providing a comparative advantage to less emission				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
	When conducting investment analysis to demonstrate additionality, each CPA must account for depreciation of equipment within financial models appropriately in line with UNFCCC guidelines and local practices. d) Power purchase agreements: Each CPA must have a power purchase agreement in place prior to the selling of any electricity. This agreement should state the agreed tariffs.	intensive technologies or fuels, that were promulgated after 7 December 1997, such policies shall not be taken into account in identifying the baseline scenario. A hypothetical scenario without the policy shall be referred do. The CME shall examine the financial model and references to determine whether the tariffs are appropriate and thus meets this criterion. c) The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of depreciation and how it is appropriately dealt with in line with UNFCCC guidelines (Guidance on the assessment of investment analysis: depreciation (and other non-cash items) which were deducted for the estimation of gross profits and the tax thereon, should be added back to the net profits before calculating the appropriate financial indicator) and local practices, including official references of guidelines and local practices used. The CME shall examine the financial model and references to determine whether depreciation is taken into account and whether it is appropriately so done. If this is the case then this criterion is met.				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
		d) The CPA shall provide the CME with a copy of a power purchase agreement for the project prior to the selling of any electricity. A power purchase agreement may not be available at validation. If this is the case then the CPA should provide, at validation, a description of the programme under which electricity might be bought, for example, by a national utility, municipality, transmission and distribution company etc. Examples of these programmes include: □ A Renewable Energy Independent Power Producer Procurement Programme (REIPPP) as in South Africa; □ A feed in tariff structure etc. If this evidence is provided to the CME then this criterion is met.				
Range of costs and revenues parameter	14. Section A.4.3 of the PoA-DD describes the process for proving additionality – the investment analysis method will be used for all CPAs. The CPA must consider and document within the financial model used to demonstrate additionality, all relevant factors affecting the costs and revenues associated with its implementation	The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of each of these above mentioned items. The CPA will include verifiable references for each item as per the Guidance on the assessment of investment analysis. The CME shall examine the financial model and the associated references. If these ranges of costs and revenues are referenced appropriately then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
	and operation. This must be done in line with UNFCCC guidelines (Guidance on the assessment of investment analysis) and local practices. The financial model should at least include the following items: a) Capital investment; b) Operating and maintenance costs; c) Income from electricity sales; d) Subsidies; e) Fiscal incentives (if any); f) Depreciation.					
Legal and regulatory parameter	15. Each CPA must carry out local stakeholder consultation and analysis of environmental impacts at CPA level and provide details in the CPA-DD.	The details on stakeholder consultation shall be included in the CPA-DD. In addition the CPA shall provide the following: □ Local stakeholder workshop invitation &/or advertisement; AND □ Local stakeholder consultation summary, report and/ or minutes; OR □ The comments from stakeholders; AND □ The responses to the comments. The CME shall review these documents and verify that	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
		stakeholder concerns were heard and addressed in which case this criterion is satisfied. However if in the opinion of the CME the stakeholders concerns were not adequately addressed the CPA is ineligible. The CPA shall demonstrate that it analysed all environmental impacts including complying with all local environmental regulations. In order to verify compliance with this requirement, the CME shall assess one or more of the following: □An environmental impact assessment Record of Decision issued by the Environmental Regulator (if required by local regulations); AND/OR □A valid environmental permit issued by the Environmental Regulator; AND/OR □An opinion/assessment by a professional versed in local environmental regulations demonstrating the project's compliance with local environmental regulations i.e. in the case that the project activity is not required to obtain environmental regulatory approval. If the CME has verified using these documents that the CPA is in compliance with the local environmental regulations this criterion is satisfied, otherwise the CPA is ineligible.				
Legal and	16. The CPA implementer shall	A CPA should provide a Project Developer CDM Undertaking	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
regulatory parameter	declare that to the best of their knowledge, all mandatory legal and regulatory requirements have been complied with.	Agreement which can be used as evidence in this regard. If this evidence is provided to the CME then this criterion is satisfied.				
Other	17. The CPA must use ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 13.0.0., including implementing the baseline and monitoring methodology therein.	The CPA-DD must makes use of methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" v13.0.0 including implementing the baseline and monitoring methodology. The CME shall examine the CPA-DD to ensure that ACM0002 v13.0.0 is used. If this is the case then this criterion is met.	✓	✓	✓	✓
Other	18. Each CPA must demonstrate the start date of the CPA through documentary evidence and demonstrate the additionality of the CPA according to section A.4.3 of this document.	Start date: As per the Glossary of terms the start date is defined as "the earliest date at which either the implementation or construction or real action of a CDM project activity or PoA begins". The CPA shall provide the CME with evidence that allows the actual start date to be verified itself and that it is not prior to 16/09/2011 (the start date of the PoA). The following (or equivalent) are examples of evidence that would allow the CME to verify the start date:	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
		□ Proof of first expenditure on the development of a new greenfield plant e.g. purchase of land (applicable for project type 1) OR □ Proof of replacement of equipment or retrofit or capacity addition e.g. purchase order for the project equipment or civils (applicable for project types 2, 3 or 4); OR □ A project implementation plan or similar document (in the case of an early stage project where the CDM start date has not been reached). If the date of first action is verified to be prior to 16/09/2011 then the CPA is ineligible. If the date of first action is verified to be subsequent to 16/09/2011 then the CPA is eligible and this criterion is satisfied. If first action is verified to have not have occurred yet then the CPA is eligible and this criterion is satisfied. Additionality: The CME shall examine the financial analysis (investment analysis) provided by the CPA that demonstrates additionality of the project activity in line with section A.4.3 of the PoA-DD. The CME will confirm that the analysis contains a clear comparison of the financial indicator and the financial benchmark. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CPA project activity cannot be considered as financially attractive				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
		and can thus be concluded to be additional.				
Other	19. Each CPA must implement the operational and management plan as detailed in section A.4.4.1.	The CPA shall provide: □ A Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	20. The coordinating entity will ensure that all CPAs under its PoA are neither registered as an individual CDM project activity nor included in another registered PoA.	All of the following shall be provided to the CME: □ Name, address and geographical coordinates of the CPA installation(s); □ List of all projects (reflecting the geographical location) using ACM0002 in the host country; □ List of registered PoAs promoting grid connected renewable energy technologies in the host country; □ List of other CDM project activities in which the implementers of the CPA are listed as project participants. The CME shall verify that the CPA is not registered elsewhere as a CPA in another PoA or as a standalone CDM project. If the CPA is registered elsewhere it is ineligible under this PoA.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
Other	21. Each CPA shall be uniquely identified within a database of all CPAs maintained by the CME. Therefore the following data must be provided to the CME prior to inclusion in the PoA: i. Name of the CPA; ii. Name of the implementing entity of the CPA; iii. Contact details of the implementing entity including contact person, address, telephone and email address; iv. Type of renewable energy (solar, wind, hydro etc.); v. Installed capacity and other relevant technical specifications of each CPA; vi. Location of the CPA (GPS coordinates of the power house for example); vii. Verification status and monitoring reports of each	All of the items listed above shall be provided to the CME by the CPA implementing entity. The CME shall crosscheck the CME database to ensure that the CPA is not already captured on the CME database. If the CPA is not already captured on the CME database then the CPA satisfies this eligibility criterion, as a CPA cannot be included more than once in a PoA.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Hydro-power plant/unit – Accumulation reseervoir:			
			5.	6.	7.	8.
	CPA.					

The table below provides eligibility criteria for the following project types related to **Geothermal power plant/unit:**
9. Greenfield
10. Capacity addition
11. Retrofit of existing plants
12. Replacement of existing plant

Eligibility Criteria Grouping	**Eligibility Criteria**	**Procedure and Data Source**	**Geothermal power plant/unit:**			
			9.	**10.**	**11.**	**12.**
Technical	1. The project methodology is not applicable to the following: a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass fired power plants; c) Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the reservoir is less than 4 W/m^2.	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; AND/OR □ Project feasibility study. The CME shall examine such evidence and determine whether the project is not either of a) or b) or c) above. If this is found to be the case then this criterion is satisfied. If not the case then the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
Technical	2. The CPA is a geothermal plant/unit.	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a geothermal power plant/unit. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a geothermal power plant/unit then this criterion is satisfied.	✓	✓	✓	✓
	3. The CPA is a project activity that installs a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant).	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR	✓	**NA**	**NA**	**NA**

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
		□ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a greenfield plant. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a greenfield plant, then this criterion is satisfied.				
Technical	4. In the case of capacity addition/retrofit of existing plants/replacement of existing plant, the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	The CPA shall provide verifiable information to show that the existing plant started commercial operation prior to the start of a minimum historical reference period of five years. This might include: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; Furthermore, The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams;	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
		AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. The CME shall examine such evidence and where necessary conduct a site visit to verify these two points. If the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity then this criterion is satisfied.				
Technical	5. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is .the continuation of the current situation, i.e. to use the power	The CPA shall provide details within the CPA-DD of the identification of the baseline scenario, as described in the PoA-DD. If the most plausible baseline scenario identified is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
	generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	business as usual maintenance, then this criterion is met and this methodology is applicable.				
Technical	6. The CPA must provide the following technical details and these must be acceptable under ACM0002: a) The planned generation capacity (in kW or MW); b) The planned energy generation (kWh or MWh per year); c) The average geothermal gradient (degrees Celsius/m).	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Project feasibility study. The CME shall examine such evidence and whether it is acceptable under ACM0002. If this is found to be the case then this criterion is satisfied. If found not to be acceptable under ACM0002 then the CPA is ineligible.	✓	✓	✓	✓
Technical	7. Each CPA must provide, monitor and collect data as specified by the parameters as listed in sections E.6.3 and E.7.1.specific to the appropriate technology type of CPA.	The CPA shall : □ Provide data where necessary and implement a monitoring plan to monitor and collect data as per E.6.3 and E.7.1. in the CPA-DD upon inclusion of the CPA. The CPA implementing entity will provide a Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
		respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.				
Technical	8. Each CPA is developed at a location within the borders of the Countries and is connected to the national or regional electricity grid of that particular country.	The CME shall verify that the CPA is at a location within the Countries by examining one of the following: □ Geographic coordinates of the project activity; OR □ Plant map/diagram with geographic references; OR □ Operating license or permit indicating location of project equipment; OR □ Other appropriate document. If the location is verified to be within the boundary of the Countries this criterion is satisfied, otherwise the CPA is ineligible.	✓	✓	✓	✓
Investment Climate	9. Parameters reflecting the investment climate affecting the CPA must be clearly defined and stated upfront. These must include, but are not limited to: a) Subsidies or other financial flows: Each CPA must provide affirmation that it will not receive any public funds resulting from official	a) The CPA shall provide the CME with one of the following: □ An official letter from the CPA implementing entity confirming that funding for the project did not originate from an Annex 1 Party that resulted in diversion of ODA; OR □ A letter on the official letterhead of the Annex 1 Party funding agency confirming that funding for the project does not result in the diversion of ODA ; OR □ Any official document which indicates that funds for the project will be supplied from internal sources (e.g. capital	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
	development assistance (ODA) from Parties included in Annex I to the Convention that would result in the diversion of ODA. b) Tariffs: Each CPA must provide details of typical tariffs that might be received within the host country, presented alongside the analysis to indicate typical costs of electricity in that host country. c) Depreciation: When conducting investment analysis to demonstrate additionality, each CPA must account for depreciation of equipment within financial models appropriately in line with UNFCCC guidelines and local practices. d) Power purchase agreements:	vote application/board meeting minutes). Based on the evidence provided the CME shall verify that either no Annex 1 Party funding was used, or if Annex 1 Party funding was used, it did not result in the diversion of ODA in which case this criterion is satisfied. b) The CPA implementing entity shall provide, within the financial model used to demonstrate additionality, details of typical tariffs that would be received, taking into consideration the UNFCCC guidance on host party laws and policies designed to reduce emissions. Verifiable references for such rates will be provided. As per paragraph 44 and 45 of the CDM Project Standard v0.1.0 EB65 Annex 5, if national or sectoral policy exists, providing a comparative advantage to less emission intensive technologies or fuels, that were promulgated after 7 December 1997, such policies shall not be taken into account in identifying the baseline scenario. A hypothetical scenario without the policy shall be referred do. The CME shall examine the financial model and references to determine whether the tariffs are appropriate and thus meets this criterion. c) The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
	Each CPA must have a power purchase agreement in place prior to the selling of any electricity. This agreement should state the agreed tariffs.	of depreciation and how it is appropriately dealt with in line with UNFCCC guidelines (Guidance on the assessment of investment analysis: depreciation (and other non-cash items) which were deducted for the estimation of gross profits and the tax thereon, should be added back to the net profits before calculating the appropriate financial indicator) and local practices, including official references of guidelines and local practices used. The CME shall examine the financial model and references to determine whether depreciation is taken into account and whether it is appropriately so done. If this is the case then this criterion is met. d) The CPA shall provide the CME with a copy of a power purchase agreement for the project prior to the selling of any electricity. A power purchase agreement may not be available at validation. If this is the case then the CPA should provide, at validation, a description of the programme under which electricity might be bought, for example, by a national utility, municipality, transmission and distribution company etc. Examples of these programmes include: □ A Renewable Energy Independent Power Producer Procurement Programme (REIPPP) as in South Africa; □ A feed in tariff structure etc. If this evidence is provided to the CME then this criterion				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
		is met.				
Range of costs and revenues parameter	10. Section A.4.3 of the PoA-DD describes the process for proving additionality – the investment analysis method will be used for all CPAs. The CPA must consider and document within the financial model used to demonstrate additionality, all relevant factors affecting the costs and revenues associated with its implementation and operation. This must be done in line with UNFCCC guidelines (Guidance on the assessment of investment analysis) and local practices. The financial model should at least include the following items: a) Capital investment; b) Operating and maintenance costs; c) Income from electricity sales; d) Subsidies; e) Fiscal incentives (if any); f) Depreciation.	The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of each of these above mentioned items. The CPA will include verifiable references for each item as per the Guidance on the assessment of investment analysis. The CME shall examine the financial model and the associated references. If these ranges of costs and revenues are referenced appropriately then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
Legal and regulatory parameter	11. Each CPA must carry out local stakeholder consultation and analysis of environmental impacts at CPA level and provide details in the CPA-DD.	The details on stakeholder consultation shall be included in the CPA-DD. In addition the CPA shall provide the following: □ Local stakeholder workshop invitation &/or advertisement; AND □ Local stakeholder consultation summary, report and/ or minutes; OR □ The comments from stakeholders; AND □ The responses to the comments. The CME shall review these documents and verify that stakeholder concerns were heard and addressed in which case this criterion is satisfied. However if in the opinion of the CME the stakeholders concerns were not adequately addressed the CPA is ineligible. The CPA shall demonstrate that it analysed all environmental impacts including complying with all local environmental regulations. In order to verify compliance with this requirement, the CME shall assess one or more of the following: □An environmental impact assessment Record of Decision issued by the Environmental Regulator (if required by local regulations); AND/OR □A valid environmental permit issued by the Environmental Regulator; AND/OR □An opinion/assessment by a professional versed in local environmental regulations demonstrating the project's compliance with local environmental regulations i.e. in the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
		case that the project activity is not required to obtain environmental regulatory approval. If the CME has verified using these documents that the CPA is in compliance with the local environmental regulations this criterion is satisfied, otherwise the CPA is ineligible.				
Legal and regulatory parameter	12. The CPA implementer shall declare that to the best of their knowledge, all mandatory legal and regulatory requirements have been complied with.	A CPA should provide a Project Developer CDM Undertaking Agreement which can be used as evidence in this regard. If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	13. The CPA must use ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 13.0.0., including implementing the baseline and monitoring methodology therein.	The CPA-DD must makes use of methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" v13.0.0 including implementing the baseline and monitoring methodology. The CME shall examine the CPA-DD to ensure that ACM0002 v13.0.0 is used. If this is the case then this criterion is met.	✓	✓	✓	✓
Other	14. Each CPA must demonstrate the start date of the CPA through documentary evidence and	Start date: As per the Glossary of terms the start date is defined as "the earliest date at which either the implementation or	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
	demonstrate the additionality of the CPA according to section A.4.3 of this document.	construction or real action of a CDM project activity or PoA begins". The CPA shall provide the CME with evidence that allows the actual start date to be verified itself and that it is not prior to 16/09/2011 (the start date of the PoA). The following (or equivalent) are examples of evidence that would allow the CME to verify the start date: □ Proof of first expenditure on the development of a new greenfield plant e.g. purchase of land (applicable for project type 1) OR □ Proof of replacement of equipment or retrofit or capacity addition e.g. purchase order for the project equipment or civils (applicable for project types 2, 3 or 4); OR □ A project implementation plan or similar document (in the case of an early stage project where the CDM start date has not been reached). If the date of first action is verified to be prior to 16/09/2011 then the CPA is ineligible. If the date of first action is verified to be subsequent to 16/09/2011 then the CPA is eligible and this criterion is satisfied. If first action is verified to have not have occurred yet then the CPA is eligible and this criterion is satisfied. Additionality: The CME shall examine the financial analysis (investment analysis) provided by the CPA that demonstrates additionality of the project activity in line with section A.4.3 of the PoA-DD. The CME will confirm that the analysis contains a clear				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
		comparison of the financial indicator and the financial benchmark. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CPA project activity cannot be considered as financially attractive and can thus be concluded to be additional.				
Other	15. Each CPA must implement the operational and management plan as detailed in section A.4.4.1.	The CPA shall provide: □ A Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	16. The coordinating entity will ensure that all CPAs under its PoA are neither registered as an individual CDM project activity nor included in another registered PoA.	All of the following shall be provided to the CME: □ Name, address and geographical coordinates of the CPA installation(s); □ List of all projects (reflecting the geographical location) using ACM0002 in the host country; □ List of registered PoAs promoting grid connected renewable energy technologies in the host country; □ List of other CDM project activities in which the implementers of the CPA are listed as project participants. The CME shall verify that the CPA is not registered elsewhere as a CPA in another PoA or as a standalone CDM project. If	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
		the CPA is registered elsewhere it is ineligible under this PoA.				
Other	17. Each CPA shall be uniquely identified within a database of all CPAs maintained by the CME. Therefore the following data must be provided to the CME prior to inclusion in the PoA: i. Name of the CPA; ii. Name of the implementing entity of the CPA; iii. Contact details of the implementing entity including contact person, address, telephone and email address; iv. Type of renewable energy (solar, wind, hydro etc.); v. Installed capacity and other relevant technical specifications of each CPA; vi. Location of the CPA (GPS coordinates of the power house for example); vii. Verification status and monitoring reports of each	All of the items listed above shall be provided to the CME by the CPA implementing entity. The CME shall crosscheck the CME database to ensure that the CPA is not already captured on the CME database. If the CPA is not already captured on the CME database then the CPA satisfies this eligibility criterion, as a CPA cannot be included more than once in a PoA.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Geothermal power plant/unit:			
			9.	10.	11.	12.
	CPA.					

The table below provides eligibility criteria for the following project types related to **Wind power plant/unit**:
13. Greenfield
14. Capacity addition
15. Retrofit of existing plants
16. Replacement of existing plant

Eligibility Criteria Grouping	**Eligibility Criteria**	**Procedure and Data Source**	**Wind power plant/unit:**			
			13.	**14.**	**15.**	**16.**
Technical	1. The project methodology is not applicable to the following: a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass fired power plants; c) Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the reservoir is less than 4 W/m^2.	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; AND/OR □ Project feasibility study. The CME shall examine such evidence and determine whether the project is not either of a) or b) or c) above. If this is found to be the case then this criterion is satisfied. If not the case then the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
Technical	2. The CPA is a wind power plant/unit.	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a wind power plant/unit. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a wind power plant/unit then this criterion is satisfied.	✓	✓	✓	✓
	3. The CPA is a project activity that installs a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant).	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR	✓	**NA**	**NA**	**NA**

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
		□ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a greenfield plant. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a greenfield plant, then this criterion is satisfied.				
Technical	4. In the case of capacity addition/retrofit of existing plants/replacement of existing plant (except for wind power capacity addition projects which use Option 2: on page 10 of the methodology to calculate the parameter $EG_{PJ,y}$), the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. The CPA-DD should	The CPA shall provide verifiable information to show that the existing plant started commercial operation prior to the start of a minimum historical reference period of five years. This might include: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; Furthermore, The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
	document whether option 2 on page 10 of the methodology will be used.	□ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. If applicable, the CPA must state if option 2 is chosen if the project activity is a capacity addition. The CME shall examine such evidence and where necessary conduct a site visit to verify these two points. If the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity then this criterion is satisfied. If the project activity is a capacity addition then if option 2 is stated as chosen, this criterion is satisfied.				
Technical	5. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible	The CPA shall provide details within the CPA-DD of the identification of the baseline scenario, as described in the PoA-DD.	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
	baseline scenario, as a result of the identification of baseline scenario, is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	If the most plausible baseline scenario identified is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance, then this criterion is met and this methodology is applicable.				
Technical	6. The CPA must provide the following technical details and these must be acceptable under ACM0002: a) The planned generation capacity (in kW or MW); b) The planned energy generation (kWh or MWh per year); c) Wind speed at the planned project site (m^2/s).	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Project feasibility study. The CME shall examine such evidence and whether it is acceptable under ACM0002. If this is found to be the case then this criterion is satisfied. If found not to be acceptable under ACM0002 then the CPA is ineligible.	✓	✓	✓	✓
Technical	7. Each CPA must provide, monitor and collect data as specified by the parameters as listed in sections	The CPA shall : □ Provide data where necessary and implement a monitoring plan to monitor and collect data as per E.6.3 and E.7.1. in the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
	E.6.3 and E.7.1.specific to the appropriate technology type of CPA.	CPA-DD upon inclusion of the CPA. The CPA implementing entity will provide a Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.				
Technical	8. Each CPA is developed at a location within the borders of the Countries and is connected to the national or regional electricity grid of that particular country.	The CME shall verify that the CPA is at a location within the Countries by examining one of the following: □ Geographic coordinates of the project activity; OR □ Plant map/diagram with geographic references; OR □ Operating license or permit indicating location of project equipment; OR □ Other appropriate document. If the location is verified to be within the boundary of the Countries this criterion is satisfied, otherwise the CPA is ineligible.	✓	✓	✓	✓
Investment Climate	9. Parameters reflecting the investment climate affecting the CPA must be clearly defined and stated upfront. These must include, but are not limited to: a) Subsidies or other financial flows:	a) The CPA shall provide the CME with one of the following: □ An official letter from the CPA implementing entity confirming that funding for the project did not originate from an Annex 1 Party that resulted in diversion of ODA; OR □ A letter on the official letterhead of the Annex 1 Party	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
	Each CPA must provide affirmation that it will not receive any public funds resulting from official development assistance (ODA) from Parties included in Annex I to the Convention that would result in the diversion of ODA. b) Tariffs: Each CPA must provide details of typical tariffs that might be received within the host country, presented alongside the analysis to indicate typical costs of electricity in that host country. c) Depreciation: When conducting investment analysis to demonstrate additionality, each CPA must account for depreciation of equipment within financial models appropriately in line with UNFCCC	funding agency confirming that funding for the project does not result in the diversion of ODA ; OR □ Any official document which indicates that funds for the project will be supplied from internal sources (e.g. capital vote application/board meeting minutes). Based on the evidence provided the CME shall verify that either no Annex 1 Party funding was used, or if Annex 1 Party funding was used, it did not result in the diversion of ODA in which case this criterion is satisfied. b) The CPA implementing entity shall provide, within the financial model used to demonstrate additionality, details of typical tariffs that would be received, taking into consideration the UNFCCC guidance on host party laws and policies designed to reduce emissions. Verifiable references for such rates will be provided. As per paragraph 44 and 45 of the CDM Project Standard v0.1.0 EB65 Annex 5, if national or sectoral policy exists, providing a comparative advantage to less emission intensive technologies or fuels, that were promulgated after 7 December 1997, such policies shall not be taken into account in identifying the baseline scenario. A hypothetical scenario without the policy shall be referred do. The CME shall examine the financial model and references to determine whether the tariffs are appropriate				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
	guidelines and local practices. d) Power purchase agreements: Each CPA must have a power purchase agreement in place prior to the selling of any electricity. This agreement should state the agreed tariffs.	and thus meets this criterion. c) The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of depreciation and how it is appropriately dealt with in line with UNFCCC guidelines (Guidance on the assessment of investment analysis: depreciation (and other non-cash items) which were deducted for the estimation of gross profits and the tax thereon, should be added back to the net profits before calculating the appropriate financial indicator) and local practices, including official references of guidelines and local practices used. The CME shall examine the financial model and references to determine whether depreciation is taken into account and whether it is appropriately so done. If this is the case then this criterion is met. d) The CPA shall provide the CME with a copy of a power purchase agreement for the project prior to the selling of any electricity. A power purchase agreement may not be available at validation. If this is the case then the CPA should provide, at validation, a description of the programme under which electricity might be bought, for example, by a national utility, municipality, transmission and distribution company etc. Examples of these programmes include: □ A Renewable Energy Independent Power Producer				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
		Procurement Programme (REIPPP) as in South Africa; □ A feed in tariff structure etc. If this evidence is provided to the CME then this criterion is met.				
Range of costs and revenues parameter	10. Section A.4.3 of the PoA-DD describes the process for proving additionality – the investment analysis method will be used for all CPAs. The CPA must consider and document within the financial model used to demonstrate additionality, all relevant factors affecting the costs and revenues associated with its implementation and operation. This must be done in line with UNFCCC guidelines (Guidance on the assessment of investment analysis) and local practices. The financial model should at least include the following items: a) Capital investment; b) Operating and maintenance costs; c) Income from electricity	The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of each of these above mentioned items. The CPA will include verifiable references for each item as per the Guidance on the assessment of investment analysis. The CME shall examine the financial model and the associated references. If these ranges of costs and revenues are referenced appropriately then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
	sales; d) Subsidies; e) Fiscal incentives (if any); f) Depreciation.					
Legal and regulatory parameter	11. Each CPA must carry out local stakeholder consultation and analysis of environmental impacts at CPA level and provide details in the CPA-DD.	The details on stakeholder consultation shall be included in the CPA-DD. In addition the CPA shall provide the following: □ Local stakeholder workshop invitation &/or advertisement; AND □ Local stakeholder consultation summary, report and/ or minutes; OR □ The comments from stakeholders; AND □ The responses to the comments. The CME shall review these documents and verify that stakeholder concerns were heard and addressed in which case this criterion is satisfied. However if in the opinion of the CME the stakeholders concerns were not adequately addressed the CPA is ineligible. The CPA shall demonstrate that it analysed all environmental impacts including complying with all local environmental regulations. In order to verify compliance with this requirement, the CME shall assess one or more of the following: □An environmental impact assessment Record of Decision issued by the Environmental Regulator (if required by local regulations); AND/OR □A valid environmental permit issued by the Environmental	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
		Regulator; AND/OR □An opinion/assessment by a professional versed in local environmental regulations demonstrating the project's compliance with local environmental regulations i.e. in the case that the project activity is not required to obtain environmental regulatory approval. If the CME has verified using these documents that the CPA is in compliance with the local environmental regulations this criterion is satisfied, otherwise the CPA is ineligible.				
Legal and regulatory parameter	12. The CPA implementer shall declare that to the best of their knowledge, all mandatory legal and regulatory requirements have been complied with.	A CPA should provide a Project Developer CDM Undertaking Agreement which can be used as evidence in this regard. If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	13. The CPA must use ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 13.0.0., including implementing the baseline and monitoring methodology therein.	The CPA-DD must makes use of methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" v13.0.0 including implementing the baseline and monitoring methodology. The CME shall examine the CPA-DD to ensure that ACM0002 v13.0.0 is used. If this is the case then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
Other	14. Each CPA must demonstrate the start date of the CPA through documentary evidence and demonstrate the additionality of the CPA according to section A.4.3 of this document.	Start date: As per the Glossary of terms the start date is defined as "the earliest date at which either the implementation or construction or real action of a CDM project activity or PoA begins". The CPA shall provide the CME with evidence that allows the actual start date to be verified itself and that it is not prior to 16/09/2011 (the start date of the PoA). The following (or equivalent) are examples of evidence that would allow the CME to verify the start date: □ Proof of first expenditure on the development of a new greenfield plant e.g. purchase of land (applicable for project type 1) OR □ Proof of replacement of equipment or retrofit or capacity addition e.g. purchase order for the project equipment or civils (applicable for project types 2, 3 or 4); OR □ A project implementation plan or similar document (in the case of an early stage project where the CDM start date has not been reached). If the date of first action is verified to be prior to 16/09/2011 then the CPA is ineligible. If the date of first action is verified to be subsequent to 16/09/2011 then the CPA is eligible and this criterion is satisfied. If first action is verified to have not have occurred yet then the CPA is eligible and this criterion is satisfied. Additionality:	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
		The CME shall examine the financial analysis (investment analysis) provided by the CPA that demonstrates additionality of the project activity in line with section A.4.3 of the PoA-DD. The CME will confirm that the analysis contains a clear comparison of the financial indicator and the financial benchmark. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CPA project activity cannot be considered as financially attractive and can thus be concluded to be additional.				
Other	15. Each CPA must implement the operational and management plan as detailed in section A.4.4.1.	The CPA shall provide: □ A Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	16. The coordinating entity will ensure that all CPAs under its PoA are neither registered as an individual CDM project activity nor included in another registered PoA.	All of the following shall be provided to the CME: □ Name, address and geographical coordinates of the CPA installation(s); □ List of all projects (reflecting the geographical location) using ACM0002 in the host country; □ List of registered PoAs promoting grid connected renewable energy technologies in the host country; □ List of other CDM project activities in which the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
		implementers of the CPA are listed as project participants. The CME shall verify that the CPA is not registered elsewhere as a CPA in another PoA or as a standalone CDM project. If the CPA is registered elsewhere it is ineligible under this PoA.				
Other	17. Each CPA shall be uniquely identified within a database of all CPAs maintained by the CME. Therefore the following data must be provided to the CME prior to inclusion in the PoA: i. Name of the CPA; ii. Name of the implementing entity of the CPA; iii. Contact details of the implementing entity including contact person, address, telephone and email address; iv. Type of renewable energy (solar, wind, hydro etc.); v. Installed capacity and other relevant technical specifications of each CPA; vi. Location of the CPA (GPS	All of the items listed above shall be provided to the CME by the CPA implementing entity. The CME shall crosscheck the CME database to ensure that the CPA is not already captured on the CME database. If the CPA is not already captured on the CME database then the CPA satisfies this eligibility criterion, as a CPA cannot be included more than once in a PoA.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wind power plant/unit:			
			13.	14.	15.	16.
	coordinates of the power house for example); vii. Verification status and monitoring reports of each CPA.					

The table below provides eligibility criteria for the following project types related to **Solar power plant/unit – Photovoltaic**:
17. Greenfield
18. Capacity addition
19. Retrofit of existing plants
20. Replacement of existing plant

Eligibility Criteria Grouping	**Eligibility Criteria**	**Procedure and Data Source**	**Solar power plant/unit - Photovoltaic:**			
			17.	**18.**	**19.**	**20.**
Technical	1. The project methodology is not applicable to the following: a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass fired power plants; c) Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the reservoir is less than 4 W/m^2.	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; AND/OR □ Project feasibility study. The CME shall examine such evidence and determine whether the project is not either of a) or b) or c) above. If this is found to be the case then this criterion is satisfied. If not the case then the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
Technical	2. The CPA is a solar power plant/unit making use of photovoltaic technology..	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a solar power plant/unit making use of photovoltaic technology.. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a solar power plant/unit making use of photovoltaic technology.then this criterion is satisfied.	✓	✓	✓	✓
	3. The CPA is a project activity that installs a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant).	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures	✓	**NA**	**NA**	**NA**

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
		etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a greenfield plant. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a greenfield plant, then this criterion is satisfied.				
Technical	4. In the case of capacity addition/retrofit of existing plants/replacement of existing plant (except for solar power capacity addition projects which use Option 2: on page 10 of the methodology to calculate the parameter $EG_{PJ,y}$), the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum	The CPA shall provide verifiable information to show that the existing plant started commercial operation prior to the start of a minimum historical reference period of five years. This might include: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; Furthermore, The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
	historical reference period and the implementation of the project activity. The CPA-DD should document whether option 2 on page 10 of the methodology will be used.	□ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. If applicable, the CPA must state if option 2 is chosen if the project activity is a capacity addition. The CME shall examine such evidence and where necessary conduct a site visit to verify these two points. If the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity then this criterion is satisfied. If the project activity is a capacity addition then if option 2 is stated as chosen, this criterion is satisfied.				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
Technical	5. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	The CPA shall provide details within the CPA-DD of the identification of the baseline scenario, as described in the PoA-DD. If the most plausible baseline scenario identified is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance, then this criterion is met and this methodology is applicable.	**NA**	✓	✓	✓
Technical	6. The CPA must provide the following technical details and these must be acceptable under ACM0002: a) The planned generation capacity (in kW or MW); b) The planned energy generation (kWh or MWh per year); c) Annual irradiation (kWh or MWh per m^2).	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Project feasibility study. The CME shall examine such evidence and whether it is acceptable under ACM0002. If this is found to be the case then this criterion is satisfied. If found not to be acceptable under ACM0002 then the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
Technical	7. Each CPA must provide, monitor and collect data as specified by the parameters as listed in sections E.6.3 and E.7.1.specific to the appropriate technology type of CPA.	The CPA shall : □ Provide data where necessary and implement a monitoring plan to monitor and collect data as per E.6.3 and E.7.1. in the CPA-DD upon inclusion of the CPA. The CPA implementing entity will provide a Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Technical	8. Each CPA is developed at a location within the borders of the Countries and is connected to the national or regional electricity grid of that particular country.	The CME shall verify that the CPA is at a location within the Countries by examining one of the following: □ Geographic coordinates of the project activity; OR □ Plant map/diagram with geographic references; OR □ Operating license or permit indicating location of project equipment; OR □ Other appropriate document. If the location is verified to be within the boundary of the Countries this criterion is satisfied, otherwise the CPA is ineligible.	✓	✓	✓	✓
Investment Climate	9. Parameters reflecting the investment climate affecting the	a) The CPA shall provide the CME with one of the following:	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
	CPA must be clearly defined and stated upfront. These must include, but are not limited to: a) Subsidies or other financial flows: Each CPA must provide affirmation that it will not receive any public funds resulting from official development assistance (ODA) from Parties included in Annex I to the Convention that would result in the diversion of ODA. b) Tariffs: Each CPA must provide details of typical tariffs that might be received within the host country, presented alongside the analysis to indicate typical costs of electricity in that host country. c) Depreciation: When conducting investment analysis to	□ An official letter from the CPA implementing entity confirming that funding for the project did not originate from an Annex 1 Party that resulted in diversion of ODA; OR □ A letter on the official letterhead of the Annex 1 Party funding agency confirming that funding for the project does not result in the diversion of ODA ; OR □ Any official document which indicates that funds for the project will be supplied from internal sources (e.g. capital vote application/board meeting minutes). Based on the evidence provided the CME shall verify that either no Annex 1 Party funding was used, or if Annex 1 Party funding was used, it did not result in the diversion of ODA in which case this criterion is satisfied. b) The CPA implementing entity shall provide, within the financial model used to demonstrate additionality, details of typical tariffs that would be received, taking into consideration the UNFCCC guidance on host party laws and policies designed to reduce emissions. Verifiable references for such rates will be provided. As per paragraph 44 and 45 of the CDM Project Standard v0.1.0 EB65 Annex 5, if national or sectoral policy exists, providing a comparative advantage to less emission intensive technologies or fuels, that were promulgated after 7 December 1997, such policies shall not be taken				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
	demonstrate additionality, each CPA must account for depreciation of equipment within financial models appropriately in line with UNFCCC guidelines and local practices. d) Power purchase agreements: Each CPA must have a power purchase agreement in place prior to the selling of any electricity. This agreement should state the agreed tariffs.	into account in identifying the baseline scenario. A hypothetical scenario without the policy shall be referred do. The CME shall examine the financial model and references to determine whether the tariffs are appropriate and thus meets this criterion. c) The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of depreciation and how it is appropriately dealt with in line with UNFCCC guidelines (Guidance on the assessment of investment analysis: depreciation (and other non-cash items) which were deducted for the estimation of gross profits and the tax thereon, should be added back to the net profits before calculating the appropriate financial indicator) and local practices, including official references of guidelines and local practices used. The CME shall examine the financial model and references to determine whether depreciation is taken into account and whether it is appropriately so done. If this is the case then this criterion is met. d) The CPA shall provide the CME with a copy of a power purchase agreement for the project prior to the selling of any electricity. A power purchase agreement may not be				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
		available at validation. If this is the case then the CPA should provide, at validation, a description of the programme under which electricity might be bought, for example, by a national utility, municipality, transmission and distribution company etc. Examples of these programmes include: □ A Renewable Energy Independent Power Producer Procurement Programme (REIPPP) as in South Africa; □ A feed in tariff structure etc. If this evidence is provided to the CME then this criterion is met.				
Range of costs and revenues parameter	10. Section A.4.3 of the PoA-DD describes the process for proving additionality – the investment analysis method will be used for all CPAs. The CPA must consider and document within the financial model used to demonstrate additionality, all relevant factors affecting the costs and revenues associated with its implementation and operation. This must be done in line with UNFCCC guidelines (Guidance on the assessment of investment analysis) and local	The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of each of these above mentioned items. The CPA will include verifiable references for each item as per the Guidance on the assessment of investment analysis. The CME shall examine the financial model and the associated references. If these ranges of costs and revenues are referenced appropriately then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
	practices. The financial model should at least include the following items: a) Capital investment; b) Operating and maintenance costs; c) Income from electricity sales; d) Subsidies; e) Fiscal incentives (if any); f) Depreciation.					
Legal and regulatory parameter	11. Each CPA must carry out local stakeholder consultation and analysis of environmental impacts at CPA level and provide details in the CPA-DD.	The details on stakeholder consultation shall be included in the CPA-DD. In addition the CPA shall provide the following: □ Local stakeholder workshop invitation &/or advertisement; AND □ Local stakeholder consultation summary, report and/ or minutes; OR □ The comments from stakeholders; AND □ The responses to the comments. The CME shall review these documents and verify that stakeholder concerns were heard and addressed in which case this criterion is satisfied. However if in the opinion of the CME the stakeholders concerns were not adequately addressed the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
		The CPA shall demonstrate that it analysed all environmental impacts including complying with all local environmental regulations. In order to verify compliance with this requirement, the CME shall assess one or more of the following: □An environmental impact assessment Record of Decision issued by the Environmental Regulator (if required by local regulations); AND/OR □A valid environmental permit issued by the Environmental Regulator; AND/OR □An opinion/assessment by a professional versed in local environmental regulations demonstrating the project's compliance with local environmental regulations i.e. in the case that the project activity is not required to obtain environmental regulatory approval. If the CME has verified using these documents that the CPA is in compliance with the local environmental regulations this criterion is satisfied, otherwise the CPA is ineligible.				
Legal and regulatory parameter	12. The CPA implementer shall declare that to the best of their knowledge, all mandatory legal and regulatory requirements have been complied with.	A CPA should provide a Project Developer CDM Undertaking Agreement which can be used as evidence in this regard. If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
Other	13. The CPA must use ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 13.0.0., including implementing the baseline and monitoring methodology therein.	The CPA-DD must makes use of methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" v13.0.0 including implementing the baseline and monitoring methodology. The CME shall examine the CPA-DD to ensure that ACM0002 v13.0.0 is used. If this is the case then this criterion is met.	✓	✓	✓	✓
Other	14. Each CPA must demonstrate the start date of the CPA through documentary evidence and demonstrate the additionality of the CPA according to section A.4.3 of this document.	Start date: As per the Glossary of terms the start date is defined as "the earliest date at which either the implementation or construction or real action of a CDM project activity or PoA begins". The CPA shall provide the CME with evidence that allows the actual start date to be verified itself and that it is not prior to 16/09/2011 (the start date of the PoA). The following (or equivalent) are examples of evidence that would allow the CME to verify the start date: □ Proof of first expenditure on the development of a new greenfield plant e.g. purchase of land (applicable for project type 1) OR □ Proof of replacement of equipment or retrofit or capacity addition e.g. purchase order for the project equipment or civils (applicable for project types 2, 3 or 4); OR □ A project implementation plan or similar document (in the case of an early stage project where the CDM start date has	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
		not been reached). If the date of first action is verified to be prior to 16/09/2011 then the CPA is ineligible. If the date of first action is verified to be subsequent to 16/09/2011 then the CPA is eligible and this criterion is satisfied. If first action is verified to have not have occurred yet then the CPA is eligible and this criterion is satisfied. Additionality: The CME shall examine the financial analysis (investment analysis) provided by the CPA that demonstrates additionality of the project activity in line with section A.4.3 of the PoA-DD. The CME will confirm that the analysis contains a clear comparison of the financial indicator and the financial benchmark. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CPA project activity cannot be considered as financially attractive and can thus be concluded to be additional.				
Other	15. Each CPA must implement the operational and management plan as detailed in section A.4.4.1.	The CPA shall provide: □ A Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
		satisfied.				
Other	16. The coordinating entity will ensure that all CPAs under its PoA are neither registered as an individual CDM project activity nor included in another registered PoA.	All of the following shall be provided to the CME: □ Name, address and geographical coordinates of the CPA installation(s); □ List of all projects (reflecting the geographical location) using ACM0002 in the host country; □ List of registered PoAs promoting grid connected renewable energy technologies in the host country; □ List of other CDM project activities in which the implementers of the CPA are listed as project participants. The CME shall verify that the CPA is not registered elsewhere as a CPA in another PoA or as a standalone CDM project. If the CPA is registered elsewhere it is ineligible under this PoA.	✓	✓	✓	✓
Other	17. Each CPA shall be uniquely identified within a database of all CPAs maintained by the CME. Therefore the following data must be provided to the CME prior to inclusion in the PoA: i. Name of the CPA; ii. Name of the implementing entity of the CPA;	All of the items listed above shall be provided to the CME by the CPA implementing entity. The CME shall crosscheck the CME database to ensure that the CPA is not already captured on the CME database. If the CPA is not already captured on the CME database then the CPA satisfies this eligibility criterion, as a CPA cannot be included more than once in a PoA.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit - Photovoltaic:			
			17.	18.	19.	20.
	iii. Contact details of the implementing entity including contact person, address, telephone and email address; iv. Type of renewable energy (solar, wind, hydro etc.); v. Installed capacity and other relevant technical specifications of each CPA; vi. Location of the CPA (GPS coordinates of the power house for example); vii. Verification status and monitoring reports of each CPA.					

The table below provides eligibility criteria for the following project types related to **Solar power plant/unit – concentrated heat (concentrated solar thermal**:
21. Greenfield
22. Capacity addition
23. Retrofit of existing plants
24. Replacement of existing plant

Eligibility Criteria Grouping	**Eligibility Criteria**	**Procedure and Data Source**	**Solar power plant/unit – Concentrated solar thermal:**			
			21.	**22.**	**23.**	**24.**
Technical	1. The project methodology is not applicable to the following: a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass fired power plants; c) Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; AND/OR □ Project feasibility study. The CME shall examine such evidence and determine whether the project is not either of a) or b) or c) above. If this is found to be the case then this criterion is satisfied. If not the case then the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	reservoir is less than 4 W/m^2.					
Technical	2. The CPA is a solar power plant/unit making use of concentrated solar thermal (concentrated heat) technology..	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a solar power plant/unit making use of concentrated solar thermal (concentrated heat) technology.. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a solar power plant/unit making use of concentrated solar thermal (concentrated heat) technology then this criterion is satisfied.	✓	✓	✓	✓
	3. The CPA is a project activity that	The CPA shall provide a project description including, where	✓	**NA**	**NA**	**NA**

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	installs a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant).	possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a greenfield plant. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a greenfield plant, then this criterion is satisfied.				
Technical	4. In the case of capacity addition/retrofit of existing plants/replacement of existing plant (except for solar power capacity addition projects which use Option 2: on page 10 of the methodology to calculate the parameter $EG_{PJ,y}$), the existing plant started commercial operation	The CPA shall provide verifiable information to show that the existing plant started commercial operation prior to the start of a minimum historical reference period of five years. This might include: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. The CPA-DD should document whether option 2 on page 10 of the methodology will be used.	etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; Furthermore, The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. If applicable, the CPA must state if option 2 is chosen if the project activity is a capacity addition. The CME shall examine such evidence and where necessary conduct a site visit to verify these two points. If the existing				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
		plant started commercial operation prior to the start of a minimum historical reference period of five years, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity then this criterion is satisfied. If the project activity is a capacity addition then if option 2 is stated as chosen, this criterion is satisfied.				
Technical	5. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	The CPA shall provide details within the CPA-DD of the identification of the baseline scenario, as described in the PoA-DD. If the most plausible baseline scenario identified is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance, then this criterion is met and this methodology is applicable.	**NA**	✓	✓	✓
Technical	6. The CPA must provide the following technical details and	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	these must be acceptable under ACM0002: a) The planned generation capacity (in kW or MW); b) The planned energy generation (kWh or MWh per year); c) Annual irradiation (kWh or MWh per m^2).	□ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Project feasibility study. The CME shall examine such evidence and whether it is acceptable under ACM0002. If this is found to be the case then this criterion is satisfied. If found not to be acceptable under ACM0002 then the CPA is ineligible.				
Technical	7. Each CPA must provide, monitor and collect data as specified by the parameters as listed in sections E.6.3 and E.7.1.specific to the appropriate technology type of CPA.	The CPA shall : □ Provide data where necessary and implement a monitoring plan to monitor and collect data as per E.6.3 and E.7.1. in the CPA-DD upon inclusion of the CPA. The CPA implementing entity will provide a Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Technical	8. Each CPA is developed at a	The CME shall verify that the CPA is at a location within the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	location within the borders of the Countries and is connected to the national or regional electricity grid of that particular country.	Countries by examining one of the following: □ Geographic coordinates of the project activity; OR □ Plant map/diagram with geographic references; OR □ Operating license or permit indicating location of project equipment; OR □ Other appropriate document. If the location is verified to be within the boundary of the Countries this criterion is satisfied, otherwise the CPA is ineligible.				
Investment Climate	9. Parameters reflecting the investment climate affecting the CPA must be clearly defined and stated upfront. These must include, but are not limited to: a) Subsidies or other financial flows: Each CPA must provide affirmation that it will not receive any public funds resulting from official development assistance (ODA) from Parties included in Annex I to the Convention that would result in the diversion of	a) The CPA shall provide the CME with one of the following: □ An official letter from the CPA implementing entity confirming that funding for the project did not originate from an Annex 1 Party that resulted in diversion of ODA; OR □ A letter on the official letterhead of the Annex 1 Party funding agency confirming that funding for the project does not result in the diversion of ODA ; OR □ Any official document which indicates that funds for the project will be supplied from internal sources (e.g. capital vote application/board meeting minutes). Based on the evidence provided the CME shall verify that either no Annex 1 Party funding was used, or if Annex 1 Party funding was used, it did not result in the diversion of	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	ODA. b) Tariffs: Each CPA must provide details of typical tariffs that might be received within the host country, presented alongside the analysis to indicate typical costs of electricity in that host country. c) Depreciation: When conducting investment analysis to demonstrate additionality, each CPA must account for depreciation of equipment within financial models appropriately in line with UNFCCC guidelines and local practices. d) Power purchase agreements: Each CPA must have a power purchase agreement in place prior to the selling	ODA in which case this criterion is satisfied. b) The CPA implementing entity shall provide, within the financial model used to demonstrate additionality, details of typical tariffs that would be received, taking into consideration the UNFCCC guidance on host party laws and policies designed to reduce emissions. Verifiable references for such rates will be provided. As per paragraph 44 and 45 of the CDM Project Standard v0.1.0 EB65 Annex 5, if national or sectoral policy exists, providing a comparative advantage to less emission intensive technologies or fuels, that were promulgated after 7 December 1997, such policies shall not be taken into account in identifying the baseline scenario. A hypothetical scenario without the policy shall be referred do. The CME shall examine the financial model and references to determine whether the tariffs are appropriate and thus meets this criterion. c) The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of depreciation and how it is appropriately dealt with in line with UNFCCC guidelines (Guidance on the assessment of investment analysis: depreciation (and other				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	of any electricity. This agreement should state the agreed tariffs.	non-cash items) which were deducted for the estimation of gross profits and the tax thereon, should be added back to the net profits before calculating the appropriate financial indicator) and local practices, including official references of guidelines and local practices used. The CME shall examine the financial model and references to determine whether depreciation is taken into account and whether it is appropriately so done. If this is the case then this criterion is met. d) The CPA shall provide the CME with a copy of a power purchase agreement for the project prior to the selling of any electricity. A power purchase agreement may not be available at validation. If this is the case then the CPA should provide, at validation, a description of the programme under which electricity might be bought, for example, by a national utility, municipality, transmission and distribution company etc. Examples of these programmes include: □ A Renewable Energy Independent Power Producer Procurement Programme (REIPPP) as in South Africa; □ A feed in tariff structure etc. If this evidence is provided to the CME then this criterion is met.				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
Range of costs and revenues parameter	10. Section A.4.3 of the PoA-DD describes the process for proving additionality – the investment analysis method will be used for all CPAs. The CPA must consider and document within the financial model used to demonstrate additionality, all relevant factors affecting the costs and revenues associated with its implementation and operation. This must be done in line with UNFCCC guidelines (Guidance on the assessment of investment analysis) and local practices. The financial model should at least include the following items: a) Capital investment; b) Operating and maintenance costs; c) Income from electricity sales; d) Subsidies; e) Fiscal incentives (if any);	The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of each of these above mentioned items. The CPA will include verifiable references for each item as per the Guidance on the assessment of investment analysis. The CME shall examine the financial model and the associated references. If these ranges of costs and revenues are referenced appropriately then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	f) Depreciation.					
Legal and regulatory parameter	11. Each CPA must carry out local stakeholder consultation and analysis of environmental impacts at CPA level and provide details in the CPA-DD.	The details on stakeholder consultation shall be included in the CPA-DD. In addition the CPA shall provide the following: □ Local stakeholder workshop invitation &/or advertisement; AND □ Local stakeholder consultation summary, report and/ or minutes; OR □ The comments from stakeholders; AND □ The responses to the comments. The CME shall review these documents and verify that stakeholder concerns were heard and addressed in which case this criterion is satisfied. However if in the opinion of the CME the stakeholders concerns were not adequately addressed the CPA is ineligible. The CPA shall demonstrate that it analysed all environmental impacts including complying with all local environmental regulations. In order to verify compliance with this requirement, the CME shall assess one or more of the following: □An environmental impact assessment Record of Decision issued by the Environmental Regulator (if required by local regulations); AND/OR □A valid environmental permit issued by the Environmental Regulator; AND/OR	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
		□An opinion/assessment by a professional versed in local environmental regulations demonstrating the project's compliance with local environmental regulations i.e. in the case that the project activity is not required to obtain environmental regulatory approval. If the CME has verified using these documents that the CPA is in compliance with the local environmental regulations this criterion is satisfied, otherwise the CPA is ineligible.				
Legal and regulatory parameter	12. The CPA implementer shall declare that to the best of their knowledge, all mandatory legal and regulatory requirements have been complied with.	A CPA should provide a Project Developer CDM Undertaking Agreement which can be used as evidence in this regard. If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	13. The CPA must use ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 13.0.0., including implementing the baseline and monitoring methodology therein.	The CPA-DD must makes use of methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" v13.0.0 including implementing the baseline and monitoring methodology. The CME shall examine the CPA-DD to ensure that ACM0002 v13.0.0 is used. If this is the case then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
Other	14. Each CPA must demonstrate the start date of the CPA through documentary evidence and demonstrate the additionality of the CPA according to section A.4.3 of this document.	Start date: As per the Glossary of terms the start date is defined as "the earliest date at which either the implementation or construction or real action of a CDM project activity or PoA begins". The CPA shall provide the CME with evidence that allows the actual start date to be verified itself and that it is not prior to 16/09/2011 (the start date of the PoA). The following (or equivalent) are examples of evidence that would allow the CME to verify the start date: □ Proof of first expenditure on the development of a new greenfield plant e.g. purchase of land (applicable for project type 1) OR □ Proof of replacement of equipment or retrofit or capacity addition e.g. purchase order for the project equipment or civils (applicable for project types 2, 3 or 4); OR □ A project implementation plan or similar document (in the case of an early stage project where the CDM start date has not been reached). If the date of first action is verified to be prior to 16/09/2011 then the CPA is ineligible. If the date of first action is verified to be subsequent to 16/09/2011 then the CPA is eligible and this criterion is satisfied. If first action is verified to have not have occurred yet then the CPA is eligible and this criterion is satisfied.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
		Additionality: The CME shall examine the financial analysis (investment analysis) provided by the CPA that demonstrates additionality of the project activity in line with section A.4.3 of the PoA-DD. The CME will confirm that the analysis contains a clear comparison of the financial indicator and the financial benchmark. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CPA project activity cannot be considered as financially attractive and can thus be concluded to be additional.				
Other	15. Each CPA must implement the operational and management plan as detailed in section A.4.4.1.	The CPA shall provide: □ A Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	16. The coordinating entity will ensure that all CPAs under its PoA are neither registered as an individual CDM project activity	All of the following shall be provided to the CME: □ Name, address and geographical coordinates of the CPA installation(s); □ List of all projects (reflecting the geographical location)	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	nor included in another registered PoA.	using ACM0002 in the host country; □ List of registered PoAs promoting grid connected renewable energy technologies in the host country; □ List of other CDM project activities in which the implementers of the CPA are listed as project participants. The CME shall verify that the CPA is not registered elsewhere as a CPA in another PoA or as a standalone CDM project. If the CPA is registered elsewhere it is ineligible under this PoA.				
Other	17. Each CPA shall be uniquely identified within a database of all CPAs maintained by the CME. Therefore the following data must be provided to the CME prior to inclusion in the PoA: i. Name of the CPA; ii. Name of the implementing entity of the CPA; iii. Contact details of the implementing entity including contact person, address, telephone and email address; iv. Type of renewable energy	All of the items listed above shall be provided to the CME by the CPA implementing entity. The CME shall crosscheck the CME database to ensure that the CPA is not already captured on the CME database. If the CPA is not already captured on the CME database then the CPA satisfies this eligibility criterion, as a CPA cannot be included more than once in a PoA.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Solar power plant/unit – Concentrated solar thermal:			
			21.	22.	23.	24.
	(solar, wind, hydro etc.); v. Installed capacity and other relevant technical specifications of each CPA; vi. Location of the CPA (GPS coordinates of the power house for example); vii. Verification status and monitoring reports of each CPA.					

The table below provides eligibility criteria for the following project types related to **Wave power plant/unit**:
25. Greenfield
26. Capacity addition
27. Retrofit of existing plants
28. Replacement of existing plant

Eligibility Criteria Grouping	**Eligibility Criteria**	**Procedure and Data Source**	**Wave power plant/unit:**			
			25.	**26.**	**27.**	**28.**
Technical	1. The project methodology is not applicable to the following: a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass fired power plants; c) Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the reservoir is less than 4 W/m^2.	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; AND/OR □ Project feasibility study. The CME shall examine such evidence and determine whether the project is not either of a) or b) or c) above. If this is found to be the case then this criterion is satisfied. If not the case then the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
Technical	2. The CPA is a wave plant/unit.	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a wave plant/unit. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a wave plant/unit then this criterion is satisfied.	✓	✓	✓	✓
	3. The CPA is a project activity that installs a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant).	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR	✓	**NA**	**NA**	**NA**

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
		□ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a greenfield plant. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a greenfield plant, then this criterion is satisfied.				
Technical	4. In the case of capacity addition/retrofit of existing plants/replacement of existing plant (except for wave power capacity addition projects which use Option 2: on page 10 of the methodology to calculate the parameter $EG_{PJ,y}$), the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. The CPA-DD should	The CPA shall provide verifiable information to show that the existing plant started commercial operation prior to the start of a minimum historical reference period of five years. This might include: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; Furthermore, The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
	document whether option 2 on page 10 of the methodology will be used.	□ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. If applicable, the CPA must state if option 2 is chosen if the project activity is a capacity addition. The CME shall examine such evidence and where necessary conduct a site visit to verify these two points. If the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity then this criterion is satisfied. If the project activity is a capacity addition then if option 2 is stated as chosen, this criterion is satisfied.				
Technical	5. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible	The CPA shall provide details within the CPA-DD of the identification of the baseline scenario, as described in the PoA-DD.	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
	baseline scenario, as a result of the identification of baseline scenario, is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	If the most plausible baseline scenario identified is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance, then this criterion is met and this methodology is applicable.				
Technical	6. The CPA must provide the following technical details and these must be acceptable under ACM0002: a) The planned generation capacity (in kW or MW); b) The planned energy generation (kWh or MWh per year); d) Flow rate at the planned project site (m^2/s).	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Project feasibility study. The CME shall examine such evidence and whether it is acceptable under ACM0002. If this is found to be the case then this criterion is satisfied. If found not to be acceptable under ACM0002 then the CPA is ineligible.	✓	✓	✓	✓
Technical	7. Each CPA must provide, monitor and collect data as specified by the parameters as listed in sections	The CPA shall : □ Provide data where necessary and implement a monitoring plan to monitor and collect data as per E.6.3 and E.7.1. in the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
	E.6.3 and E.7.1.specific to the appropriate technology type of CPA.	CPA-DD upon inclusion of the CPA. The CPA implementing entity will provide a Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.				
Technical	8. Each CPA is developed at a location within the borders of the Countries and is connected to the national or regional electricity grid of that particular country.	The CME shall verify that the CPA is at a location within the Countries by examining one of the following: □ Geographic coordinates of the project activity; OR □ Plant map/diagram with geographic references; OR □ Operating license or permit indicating location of project equipment; OR □ Other appropriate document. If the location is verified to be within the boundary of the Countries this criterion is satisfied, otherwise the CPA is ineligible.	✓	✓	✓	✓
Investment Climate	9. Parameters reflecting the investment climate affecting the CPA must be clearly defined and stated upfront. These must include, but are not limited to: a) Subsidies or other financial flows:	a) The CPA shall provide the CME with one of the following: □ An official letter from the CPA implementing entity confirming that funding for the project did not originate from an Annex 1 Party that resulted in diversion of ODA; OR □ A letter on the official letterhead of the Annex 1 Party	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
	Each CPA must provide affirmation that it will not receive any public funds resulting from official development assistance (ODA) from Parties included in Annex I to the Convention that would result in the diversion of ODA. b) Tariffs: Each CPA must provide details of typical tariffs that might be received within the host country, presented alongside the analysis to indicate typical costs of electricity in that host country. c) Depreciation: When conducting investment analysis to demonstrate additionality, each CPA must account for depreciation of equipment within financial models appropriately in line with UNFCCC	funding agency confirming that funding for the project does not result in the diversion of ODA ; OR □ Any official document which indicates that funds for the project will be supplied from internal sources (e.g. capital vote application/board meeting minutes). Based on the evidence provided the CME shall verify that either no Annex 1 Party funding was used, or if Annex 1 Party funding was used, it did not result in the diversion of ODA in which case this criterion is satisfied. b) The CPA implementing entity shall provide, within the financial model used to demonstrate additionality, details of typical tariffs that would be received, taking into consideration the UNFCCC guidance on host party laws and policies designed to reduce emissions. Verifiable references for such rates will be provided. As per paragraph 44 and 45 of the CDM Project Standard v0.1.0 EB65 Annex 5, if national or sectoral policy exists, providing a comparative advantage to less emission intensive technologies or fuels, that were promulgated after 7 December 1997, such policies shall not be taken into account in identifying the baseline scenario. A hypothetical scenario without the policy shall be referred do. The CME shall examine the financial model and references to determine whether the tariffs are appropriate				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
	guidelines and local practices. d) Power purchase agreements: Each CPA must have a power purchase agreement in place prior to the selling of any electricity. This agreement should state the agreed tariffs.	and thus meets this criterion. c) The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of depreciation and how it is appropriately dealt with in line with UNFCCC guidelines (Guidance on the assessment of investment analysis: depreciation (and other non-cash items) which were deducted for the estimation of gross profits and the tax thereon, should be added back to the net profits before calculating the appropriate financial indicator) and local practices, including official references of guidelines and local practices used. The CME shall examine the financial model and references to determine whether depreciation is taken into account and whether it is appropriately so done. If this is the case then this criterion is met. d) The CPA shall provide the CME with a copy of a power purchase agreement for the project prior to the selling of any electricity. A power purchase agreement may not be available at validation. If this is the case then the CPA should provide, at validation, a description of the programme under which electricity might be bought, for example, by a national utility, municipality, transmission and distribution company etc. Examples of these programmes include: □ A Renewable Energy Independent Power Producer				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
		Procurement Programme (REIPPP) as in South Africa; □ A feed in tariff structure etc. If this evidence is provided to the CME then this criterion is met.				
Range of costs and revenues parameter	10. Section A.4.3 of the PoA-DD describes the process for proving additionality – the investment analysis method will be used for all CPAs. The CPA must consider and document within the financial model used to demonstrate additionality, all relevant factors affecting the costs and revenues associated with its implementation and operation. This must be done in line with UNFCCC guidelines (Guidance on the assessment of investment analysis) and local practices. The financial model should at least include the following items: a) Capital investment; b) Operating and maintenance costs; c) Income from electricity	The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of each of these above mentioned items. The CPA will include verifiable references for each item as per the Guidance on the assessment of investment analysis. The CME shall examine the financial model and the associated references. If these ranges of costs and revenues are referenced appropriately then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
	sales; d) Subsidies; e) Fiscal incentives (if any); f) Depreciation.					
Legal and regulatory parameter	11. Each CPA must carry out local stakeholder consultation and analysis of environmental impacts at CPA level and provide details in the CPA-DD.	The details on stakeholder consultation shall be included in the CPA-DD. In addition the CPA shall provide the following: □ Local stakeholder workshop invitation &/or advertisement; AND □ Local stakeholder consultation summary, report and/ or minutes; OR □ The comments from stakeholders; AND □ The responses to the comments. The CME shall review these documents and verify that stakeholder concerns were heard and addressed in which case this criterion is satisfied. However if in the opinion of the CME the stakeholders concerns were not adequately addressed the CPA is ineligible. The CPA shall demonstrate that it analysed all environmental impacts including complying with all local environmental regulations. In order to verify compliance with this requirement, the CME shall assess one or more of the following: □An environmental impact assessment Record of Decision issued by the Environmental Regulator (if required by local regulations); AND/OR □A valid environmental permit issued by the Environmental	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
		Regulator; AND/OR □An opinion/assessment by a professional versed in local environmental regulations demonstrating the project's compliance with local environmental regulations i.e. in the case that the project activity is not required to obtain environmental regulatory approval. If the CME has verified using these documents that the CPA is in compliance with the local environmental regulations this criterion is satisfied, otherwise the CPA is ineligible.				
Legal and regulatory parameter	12. The CPA implementer shall declare that to the best of their knowledge, all mandatory legal and regulatory requirements have been complied with.	A CPA should provide a Project Developer CDM Undertaking Agreement which can be used as evidence in this regard. If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	13. The CPA must use ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 13.0.0., including implementing the baseline and monitoring methodology therein.	The CPA-DD must makes use of methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" v13.0.0 including implementing the baseline and monitoring methodology. The CME shall examine the CPA-DD to ensure that ACM0002 v13.0.0 is used. If this is the case then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
Other	14. Each CPA must demonstrate the start date of the CPA through documentary evidence and demonstrate the additionality of the CPA according to section A.4.3 of this document.	Start date: As per the Glossary of terms the start date is defined as "the earliest date at which either the implementation or construction or real action of a CDM project activity or PoA begins". The CPA shall provide the CME with evidence that allows the actual start date to be verified itself and that it is not prior to 16/09/2011 (the start date of the PoA). The following (or equivalent) are examples of evidence that would allow the CME to verify the start date: □ Proof of first expenditure on the development of a new greenfield plant e.g. purchase of land (applicable for project type 1) OR □ Proof of replacement of equipment or retrofit or capacity addition e.g. purchase order for the project equipment or civils (applicable for project types 2, 3 or 4); OR □ A project implementation plan or similar document (in the case of an early stage project where the CDM start date has not been reached). If the date of first action is verified to be prior to 16/09/2011 then the CPA is ineligible. If the date of first action is verified to be subsequent to 16/09/2011 then the CPA is eligible and this criterion is satisfied. If first action is verified to have not have occurred yet then the CPA is eligible and this criterion is satisfied. Additionality:	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
		The CME shall examine the financial analysis (investment analysis) provided by the CPA that demonstrates additionality of the project activity in line with section A.4.3 of the PoA-DD. The CME will confirm that the analysis contains a clear comparison of the financial indicator and the financial benchmark. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CPA project activity cannot be considered as financially attractive and can thus be concluded to be additional.				
Other	15. Each CPA must implement the operational and management plan as detailed in section A.4.4.1.	The CPA shall provide: □ A Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	16. The coordinating entity will ensure that all CPAs under its PoA are neither registered as an individual CDM project activity nor included in another registered PoA.	All of the following shall be provided to the CME: □ Name, address and geographical coordinates of the CPA installation(s); □ List of all projects (reflecting the geographical location) using ACM0002 in the host country; □ List of registered PoAs promoting grid connected renewable energy technologies in the host country; □ List of other CDM project activities in which the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
		implementers of the CPA are listed as project participants. The CME shall verify that the CPA is not registered elsewhere as a CPA in another PoA or as a standalone CDM project. If the CPA is registered elsewhere it is ineligible under this PoA.				
Other	17. Each CPA shall be uniquely identified within a database of all CPAs maintained by the CME. Therefore the following data must be provided to the CME prior to inclusion in the PoA: i. Name of the CPA; ii. Name of the implementing entity of the CPA; iii. Contact details of the implementing entity including contact person, address, telephone and email address; iv. Type of renewable energy (solar, wind, hydro etc.); v. Installed capacity and other relevant technical specifications of each CPA; vi. Location of the CPA (GPS	All of the items listed above shall be provided to the CME by the CPA implementing entity. The CME shall crosscheck the CME database to ensure that the CPA is not already captured on the CME database. If the CPA is not already captured on the CME database then the CPA satisfies this eligibility criterion, as a CPA cannot be included more than once in a PoA.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Wave power plant/unit:			
			25.	26.	27.	28.
	coordinates of the power house for example); vii. Verification status and monitoring reports of each CPA.					

The table below provides eligibility criteria for the following project types related to **Tidal power plant/unit**:
29. Greenfield
30. Capacity addition
31. Retrofit of existing plants
32. Replacement of existing plant

Eligibility Criteria Grouping	**Eligibility Criteria**	**Procedure and Data Source**	**Tidal power plant/unit:**			
			29.	**30.**	**31.**	**32.**
Technical	1. The project methodology is not applicable to the following: a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass fired power plants; c) Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the reservoir is less than 4 W/m^2.	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; AND/OR □ Project feasibility study. The CME shall examine such evidence and determine whether the project is not either of a) or b) or c) above. If this is found to be the case then this criterion is satisfied. If not the case then the CPA is ineligible.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
Technical	2. The CPA is a tidal plant/unit.	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a tidal plant/unit. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a tidal plant/unit then this criterion is satisfied.	✓	✓	✓	✓
	3. The CPA is a project activity that installs a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant).	The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR	✓	**NA**	**NA**	**NA**

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
		□ Environmental Impact Assessment (EIA) proceedings; that demonstrate that the CPA is a greenfield plant. The CME shall examine such evidence and where necessary conduct a site visit to verify the project type. If the CPA facility is verified to be a greenfield plant, then this criterion is satisfied.				
Technical	4. In the case of capacity addition/retrofit of existing plants/replacement of existing plant (except for tidal power capacity addition projects which use Option 2: on page 10 of the methodology to calculate the parameter $EG_{PJ,y}$), the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. The CPA-DD should	The CPA shall provide verifiable information to show that the existing plant started commercial operation prior to the start of a minimum historical reference period of five years. This might include: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; Furthermore, The CPA shall provide a project description including, where possible: □ Plant diagrams; AND/OR □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
	document whether option 2 on page 10 of the methodology will be used.	□ References to the facility currently in the public domain (e.g. shareholders reports, media articles, press releases, brochures etc.); AND/OR □ Operating permit applications as applicable; AND/OR □ Environmental Impact Assessment (EIA) proceedings; that demonstrate that no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. If applicable, the CPA must state if option 2 is chosen if the project activity is a capacity addition. The CME shall examine such evidence and where necessary conduct a site visit to verify these two points. If the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity then this criterion is satisfied. If the project activity is a capacity addition then if option 2 is stated as chosen, this criterion is satisfied.				
Technical	5. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible	The CPA shall provide details within the CPA-DD of the identification of the baseline scenario, as described in the PoA-DD.	**NA**	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
	baseline scenario, as a result of the identification of baseline scenario, is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance.	If the most plausible baseline scenario identified is .the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance, then this criterion is met and this methodology is applicable.				
Technical	6. The CPA must provide the following technical details and these must be acceptable under ACM0002: a) The planned generation capacity (in kW or MW); b) The planned energy generation (kWh or MWh per year); c) Flow rate at the planned project site (m^2/s).	The CPA shall provide the following: □ Manufacturers specifications/operating manual; AND/OR □ Design engineers notes, specifications or diagrams; AND/OR □ Plant diagrams; AND/OR □ Commissioning certificate; AND/OR □ Operating permit applications as applicable; AND/OR □ Project feasibility study. The CME shall examine such evidence and whether it is acceptable under ACM0002. If this is found to be the case then this criterion is satisfied. If found not to be acceptable under ACM0002 then the CPA is ineligible.	✓	✓	✓	✓
Technical	7. Each CPA must provide, monitor and collect data as specified by the parameters as listed in sections	The CPA shall : □ Provide data where necessary and implement a monitoring plan to monitor and collect data as per E.6.3 and E.7.1. in the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
	E.6.3 and E.7.1.specific to the appropriate technology type of CPA.	CPA-DD upon inclusion of the CPA. The CPA implementing entity will provide a Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.				
Technical	8. Each CPA is developed at a location within the borders of the Countries and is connected to the national or regional electricity grid of that particular country.	The CME shall verify that the CPA is at a location within the Countries by examining one of the following: □ Geographic coordinates of the project activity; OR □ Plant map/diagram with geographic references; OR □ Operating license or permit indicating location of project equipment; OR □ Other appropriate document. If the location is verified to be within the boundary of the Countries this criterion is satisfied, otherwise the CPA is ineligible.	✓	✓	✓	✓
Investment Climate	9. Parameters reflecting the investment climate affecting the CPA must be clearly defined and stated upfront. These must include, but are not limited to: a) Subsidies or other financial flows:	a) The CPA shall provide the CME with one of the following: □ An official letter from the CPA implementing entity confirming that funding for the project did not originate from an Annex 1 Party that resulted in diversion of ODA; OR □ A letter on the official letterhead of the Annex 1 Party	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
	Each CPA must provide affirmation that it will not receive any public funds resulting from official development assistance (ODA) from Parties included in Annex I to the Convention that would result in the diversion of ODA. b) Tariffs: Each CPA must provide details of typical tariffs that might be received within the host country, presented alongside the analysis to indicate typical costs of electricity in that host country. c) Depreciation: When conducting investment analysis to demonstrate additionality, each CPA must account for depreciation of equipment within financial models appropriately in line with UNFCCC	funding agency confirming that funding for the project does not result in the diversion of ODA ; OR □ Any official document which indicates that funds for the project will be supplied from internal sources (e.g. capital vote application/board meeting minutes). Based on the evidence provided the CME shall verify that either no Annex 1 Party funding was used, or if Annex 1 Party funding was used, it did not result in the diversion of ODA in which case this criterion is satisfied. b) The CPA implementing entity shall provide, within the financial model used to demonstrate additionality, details of typical tariffs that would be received, taking into consideration the UNFCCC guidance on host party laws and policies designed to reduce emissions. Verifiable references for such rates will be provided. As per paragraph 44 and 45 of the CDM Project Standard v0.1.0 EB65 Annex 5, if national or sectoral policy exists, providing a comparative advantage to less emission intensive technologies or fuels, that were promulgated after 7 December 1997, such policies shall not be taken into account in identifying the baseline scenario. A hypothetical scenario without the policy shall be referred do. The CME shall examine the financial model and references to determine whether the tariffs are appropriate				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
	guidelines and local practices. d) Power purchase agreements: Each CPA must have a power purchase agreement in place prior to the selling of any electricity. This agreement should state the agreed tariffs.	and thus meets this criterion. c) The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of depreciation and how it is appropriately dealt with in line with UNFCCC guidelines (Guidance on the assessment of investment analysis: depreciation (and other non-cash items) which were deducted for the estimation of gross profits and the tax thereon, should be added back to the net profits before calculating the appropriate financial indicator) and local practices, including official references of guidelines and local practices used. The CME shall examine the financial model and references to determine whether depreciation is taken into account and whether it is appropriately so done. If this is the case then this criterion is met. d) The CPA shall provide the CME with a copy of a power purchase agreement for the project prior to the selling of any electricity. A power purchase agreement may not be available at validation. If this is the case then the CPA should provide, at validation, a description of the programme under which electricity might be bought, for example, by a national utility, municipality, transmission and distribution company etc. Examples of these programmes include: □ A Renewable Energy Independent Power Producer				

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
		Procurement Programme (REIPPP) as in South Africa; □ A feed in tariff structure etc. If this evidence is provided to the CME then this criterion is met.				
Range of costs and revenues parameter	10. Section A.4.3 of the PoA-DD describes the process for proving additionality – the investment analysis method will be used for all CPAs. The CPA must consider and document within the financial model used to demonstrate additionality, all relevant factors affecting the costs and revenues associated with its implementation and operation. This must be done in line with UNFCCC guidelines (Guidance on the assessment of investment analysis) and local practices. The financial model should at least include the following items: a) Capital investment; b) Operating and maintenance costs; c) Income from electricity	The CPA implementing entity shall provide within the financial model used to demonstrate additionality, details of each of these above mentioned items. The CPA will include verifiable references for each item as per the Guidance on the assessment of investment analysis. The CME shall examine the financial model and the associated references. If these ranges of costs and revenues are referenced appropriately then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
	sales; d) Subsidies; e) Fiscal incentives (if any); f) Depreciation.					
Legal and regulatory parameter	11. Each CPA must carry out local stakeholder consultation and analysis of environmental impacts at CPA level and provide details in the CPA-DD.	The details on stakeholder consultation shall be included in the CPA-DD. In addition the CPA shall provide the following: □ Local stakeholder workshop invitation &/or advertisement; AND □ Local stakeholder consultation summary, report and/ or minutes; OR □ The comments from stakeholders; AND □ The responses to the comments. The CME shall review these documents and verify that stakeholder concerns were heard and addressed in which case this criterion is satisfied. However if in the opinion of the CME the stakeholders concerns were not adequately addressed the CPA is ineligible. The CPA shall demonstrate that it analysed all environmental impacts including complying with all local environmental regulations. In order to verify compliance with this requirement, the CME shall assess one or more of the following: □An environmental impact assessment Record of Decision issued by the Environmental Regulator (if required by local regulations); AND/OR □A valid environmental permit issued by the Environmental	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
		Regulator; AND/OR □An opinion/assessment by a professional versed in local environmental regulations demonstrating the project's compliance with local environmental regulations i.e. in the case that the project activity is not required to obtain environmental regulatory approval. If the CME has verified using these documents that the CPA is in compliance with the local environmental regulations this criterion is satisfied, otherwise the CPA is ineligible.				
Legal and regulatory parameter	12. The CPA implementer shall declare that to the best of their knowledge, all mandatory legal and regulatory requirements have been complied with.	A CPA should provide a Project Developer CDM Undertaking Agreement which can be used as evidence in this regard. If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	13. The CPA must use ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 13.0.0., including implementing the baseline and monitoring methodology therein.	The CPA-DD must makes use of methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" v13.0.0 including implementing the baseline and monitoring methodology. The CME shall examine the CPA-DD to ensure that ACM0002 v13.0.0 is used. If this is the case then this criterion is met.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
Other	14. Each CPA must demonstrate the start date of the CPA through documentary evidence and demonstrate the additionality of the CPA according to section A.4.3 of this document.	Start date: As per the Glossary of terms the start date is defined as "the earliest date at which either the implementation or construction or real action of a CDM project activity or PoA begins". The CPA shall provide the CME with evidence that allows the actual start date to be verified itself and that it is not prior to 16/09/2011 (the start date of the PoA). The following (or equivalent) are examples of evidence that would allow the CME to verify the start date: □ Proof of first expenditure on the development of a new greenfield plant e.g. purchase of land (applicable for project type 1) OR □ Proof of replacement of equipment or retrofit or capacity addition e.g. purchase order for the project equipment or civils (applicable for project types 2, 3 or 4); OR □ A project implementation plan or similar document (in the case of an early stage project where the CDM start date has not been reached). If the date of first action is verified to be prior to 16/09/2011 then the CPA is ineligible. If the date of first action is verified to be subsequent to 16/09/2011 then the CPA is eligible and this criterion is satisfied. If first action is verified to have not have occurred yet then the CPA is eligible and this criterion is satisfied. Additionality:	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
		The CME shall examine the financial analysis (investment analysis) provided by the CPA that demonstrates additionality of the project activity in line with section A.4.3 of the PoA-DD. The CME will confirm that the analysis contains a clear comparison of the financial indicator and the financial benchmark. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CPA project activity cannot be considered as financially attractive and can thus be concluded to be additional.				
Other	15. Each CPA must implement the operational and management plan as detailed in section A.4.4.1.	The CPA shall provide: □ A Project Developer CDM Undertaking Agreement (wherein CPA participants agree to adhere to the requirements of the Programme including responsibilities in respect to additionality criteria and monitoring requirements). If this evidence is provided to the CME then this criterion is satisfied.	✓	✓	✓	✓
Other	16. The coordinating entity will ensure that all CPAs under its PoA are neither registered as an individual CDM project activity nor included in another registered PoA.	All of the following shall be provided to the CME: □ Name, address and geographical coordinates of the CPA installation(s); □ List of all projects (reflecting the geographical location) using ACM0002 in the host country; □ List of registered PoAs promoting grid connected renewable energy technologies in the host country; □ List of other CDM project activities in which the	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
		implementers of the CPA are listed as project participants. The CME shall verify that the CPA is not registered elsewhere as a CPA in another PoA or as a standalone CDM project. If the CPA is registered elsewhere it is ineligible under this PoA.				
Other	17. Each CPA shall be uniquely identified within a database of all CPAs maintained by the CME. Therefore the following data must be provided to the CME prior to inclusion in the PoA: i. Name of the CPA; ii. Name of the implementing entity of the CPA; iii. Contact details of the implementing entity including contact person, address, telephone and email address; iv. Type of renewable energy (solar, wind, hydro etc.); v. Installed capacity and other relevant technical specifications of each CPA; vi. Location of the CPA (GPS	All of the items listed above shall be provided to the CME by the CPA implementing entity. The CME shall crosscheck the CME database to ensure that the CPA is not already captured on the CME database. If the CPA is not already captured on the CME database then the CPA satisfies this eligibility criterion, as a CPA cannot be included more than once in a PoA.	✓	✓	✓	✓

Eligibility Criteria Grouping	Eligibility Criteria	Procedure and Data Source	Tidal power plant/unit:			
			29.	30.	31.	32.
	coordinates of the power house for example); vii. Verification status and monitoring reports of each CPA.					

A CPA using a combination of the above project types:

It cannot be determined at a PoA level which combination of the above described project types might be used in combination with each other within the development of a CPA, if at all. However, if a CPA is developed using a combination of the above described project types then that CPA must show how it meets each of the eligibility criteria associated with each of the distinct project types listed within the combination.

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