



**PROJECT PREPARATION GRANT (PPG)**  
**PROJECT TYPE: Medium-sized Project**  
**TYPE OF TRUST FUND: GEF Trust Fund**

Submission date: 24 September 2012  
 Re-submission date: 16 October 2012  
 Re-submission date: 27 June 2013  
 Re-submission date: 10 October 2013

**GEF PROJECT ID: 5154**  
**GEF AGENCY PROJECT ID: 120568**  
**COUNTRY(IES): Republic of Kenya**  
**PROJECT TITLE: Sustainable conversion of waste to clean energy for GHG emission reduction**  
**GEF AGENCY(IES): UNIDO**  
**GEF FOCAL AREA(S): Climate Change (CC)**

**A. PROJECT PREPARATION TIME FRAME**

Start date of PPG	12/01/2013
Completion date of PPG	11/30/2014

**B. PROPOSED PROJECT PREPARATION ACTIVITIES (\$)**

Describe the PPG activities and justifications:

1. Supplemental data collection

Some baseline and market structure data has been collected during the preparation of PIF. But an additional data needed for planning the project in detail will be collected during the PPG stage.

Details on existing human and institutional technical capacity in waste to energy (WTE) technologies will be collected. This will be useful for planning the trainings to be conducted during the project stage. Planning and project management capacity of the executing agency will also be assessed.

Banks / financial institutions will participate in the project, especially as trainees for capacity development. Some of the potential banks include Kenya Commercial Bank, National Industrial Credit (NIC) Bank, Development Bank of Kenya and National Bank of Kenya. They will be identified during the PPG stage. This will be an initiative for improving the capacity of the banks and financial institutions to understand about the WTE projects so as to enable lending and funding for the future replication WTE projects.

2. Finalization of incentives for WTE projects

Incentive facility will be finalised for supporting WTE projects. The exact details on the incentives, its management, modalities, procedures and release of the incentive will be worked out in detail during the PPG stage.

3. Identification of the university and finalization of sustainable operating procedure for the WTE information and learning platform

The project envisages creation of an “information and learning platform” at a University or an Institution for

continuous training and sustained momentum on WTE related developments in the country. Identification of the university or institution and the exact procedures for the sustainable operation of the platform will be elaborated with the help of PPG grant.

#### 4. Stakeholder consultations

Key stakeholders have been already consulted during the preparation of the PIF. Detailed consultations will be undertaken to design the project, including the demonstration projects. This will also help in assessing the human and institutional capacities.

#### 5. Selection of potential sites and conduct of feasibility studies

Based on the existing data / studies, WTE power plant sites have been identified for a cumulative capacity of 1.3 MW<sub>e</sub> and 120 kW<sub>th</sub>. Detailed feasibility studies will be conducted for these identified demonstration sites along with the site that has expressed interest for replication.

During the project period, the technical design will be done as well as the feasibility study will be prepared in detail. The following information is planned to be established /collected /analyzed during the feasibility study:

- Practical power plant installed capacity
- Project investment cost
- Techno-economic feasibility (viability) of the plants
- Detailed baseline assessment (along with baseline investment cost)
- Chemical analysis of bio-waste and its suitability for land application
- Global environmental benefits
- Socio economic benefits
- Replication potential

Efforts will be made to increase the cumulative demonstration capacity as well as identifying new sites, if needed, for increasing the demonstration capacity. Any suitable site with good feasibility will be considered.

#### 6. Preparation and finalization of the CEO endorsement document

Key threats and barriers to the project will be identified and described. Logical Framework Analysis (LFA) will be conducted to define the project goal, objectives, outcomes, outputs and activities, including success indicators and delineation of responsibilities. Costing of expected project outcomes and outputs, co-financing sources and co-financing commitments in compliance with the GEF incremental principles will be carried out.

The project document will also describe the environmental, social, economic and financial sustainability of the proposed project activities. Implementation plan will be prepared, which will include identification of implementation partners, risk mitigation measures and budget allocations. Monitoring and evaluation (M&E) plan will be prepared including a set of impact indicators to track the project's progress, effectiveness, baseline and target values on indicators.

The proposed methodology and assumptions for the calculation of incremental / additional benefits in the PIF would be further researched and strengthened. Initial estimates of direct and indirect global environmental benefits made during the PIF stage will be refined. These benefits will be studied and confirmed in the CEO endorsement document.

Based on the above information, a medium sized project document will be completed for submission, approval and endorsement.

<b>List of proposed project preparation activities</b>	<b>Output of the PPG activities</b>	<b>Trust fund</b>	<b>Grant amount (a)</b>	<b>Co-financing (b)</b>	<b>Total c = a + b</b>
Supplemental data collection	<ol style="list-style-type: none"> <li>1. Assessment report on the existing human and institutional technical capacity in developing WTE power plants.</li> <li>2. Banks/financial institutions identified.</li> </ol>	GEF TF	7,000	10,000	17,000
Finalization of incentives	<ol style="list-style-type: none"> <li>1. Extent of incentives decided.</li> <li>2. Exact modalities and procedures finalized.</li> <li>3. Exact amount of incentives for each demonstration projects investigated and finalized.</li> </ol>	GEF TF	8,000	10,000	18,000
Identification of the institution / university and finalization of sustainable operating procedure for the information / learning platform	<ol style="list-style-type: none"> <li>1. Most appropriate university institution at which the information and learning platform would function identified.</li> <li>2. Sustainable operation procedure ready for the information and learning platform.</li> </ol>	GEF TF	6,000	14,000	20,000
Stakeholder consultations	<ol style="list-style-type: none"> <li>1. Human and institutional capacity assessed.</li> <li>2. Detailed consultation report on project design including the demonstration projects prepared.</li> </ol>	GEF TF	7,000	20,000	27,000
Selection of potential sites and carrying out the detailed feasibility studies	<ol style="list-style-type: none"> <li>1. Detailed feasibility study reports prepared for WTE projects.</li> <li>2. Promising sites identified for further project development.</li> </ol>	GEF TF	36,000	40,000	76,000
Preparation and finalization of medium sized project document.	<ol style="list-style-type: none"> <li>1. Strengthening the methodology &amp; assumptions for the estimation of the global environmental benefits.</li> <li>2. Strengthening the methodology &amp; assumptions for the estimation of the incremental benefits.</li> <li>3. Detailed project document completed for submission, approval and endorsement.</li> </ol>	GEF TF	36,000	6,000	42,000
<b>Total Project Preparation Financing</b>			<b>100,000</b>	<b>100,000</b>	<b>200,000</b>

**C. FINANCING PLAN SUMMARY FOR PROJECT PREPARATION GRANT: (\$)**

	<b>Project Preparation</b>	<b>Agency Fee</b>
Grant Amount	100,000	9,500
Co-financing <sup>1</sup>	100,000	
<b>Total</b>	200,000	9,500

**D. PPG AMOUNT REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES)<sup>1</sup>**

Trust Fund	GEF Agency	Focal Area	Country Name/Global	(in \$)		
				PPG (a)	Agency Fee(b)	Total c = a + b

<sup>1</sup>No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

**E. PPG BUDGET**

Cost Items	Total Estimated Person Weeks for Grant (PW)	Grant Amount (\$)	Co-financing (\$)	Total (\$)
Local consultants*	23	23,000	30,000	53,000
International consultants*	19	57,000	30,000	87,000
Travel		11,000	11,000	22,000
Stakeholder consultations		5,000	14,000	19,000
Workshop expenses		0	11,000	11,000
Laboratory analysis		4,000	4,000	8,000
<b>Total PPG Budget</b>		100,000	100,000	200,000

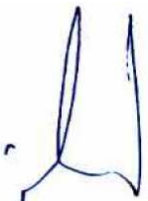
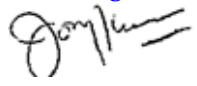
\* Annex A for Consultant cost details should be prepared first before completing this table. See notes on Annex A for the required detailed information. This table is the sum of all local and international consultants presented in Annex A.

<sup>1</sup> UNIDO contribution is USD 60,000 in cash and co-financing from others will be USD 40,000 in kind.

**F. GEF AGENCY(IES) CERTIFICATION**

This request has been prepared in accordance with GEF policies and procedures and meets the GEF LDCF/SCCF/NPIF Trust Fund criteria for project identification and preparation.

**This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.**

<b>Agency Coordinator, Agency name</b>	<b>Signature</b>	<b>DATE(MM/dd/yyyy)</b>	<b>Project Contact Person</b>	<b>Telephone</b>	<b>Email Address</b>
Mr. Philippe Scholtès, Officer-in-Charge, Programme Development and Technical Cooperation Division - PTC, UNIDO GEF Focal Point		10/10/2013	Jossy Thomas Industrial Dev. Officer Energy & Climate Change Branch, PTC UNIDO	+43 - 1 - 26026- 3727	<a href="mailto:j.thomas@unido.org">j.thomas@unido.org</a> 

**Annex A**

**Consultants Financed by the Project Preparation Grant (PPG) from GEF**

<b>Type of Consultant</b>	<b>Position / Titles</b>	<b>\$/PW<sup>2</sup></b>	<b>Estimated PWs<sup>3</sup></b>	<b>Tasks to be Performed</b>
Local	National Expert	1,000	8	<ul style="list-style-type: none"> <li>- Collecting supplemental data including technical capacity</li> <li>- Identifying relevant banks / financial institutions willing to participate in the project for capacity development trainees</li> </ul>
Local	National Expert	1,000	12	<ul style="list-style-type: none"> <li>- Identifying the potential sites for further development</li> <li>- Assisting the conduct of feasibility studies</li> </ul>
Local	National Expert	1,000	3	<ul style="list-style-type: none"> <li>- Finalizing the exact amount of incentive for the project</li> <li>- Identifying and finalizing the modalities, procedures and operation of the incentive</li> <li>- Investigating the amount of incentives for each of the demonstration projects</li> </ul>
International	International Expert	3,000	5	<ul style="list-style-type: none"> <li>- Providing expertise and guidance for the implementation of the PPG and preparation of the FSP proposal, as needed</li> <li>- Assisting the preparation of project's logical framework and M&amp;E plan with a set of measurable impacts and progress indicators</li> <li>- Reviewing the baseline and barrier information delivered by the local expert</li> <li>- Assisting the local project team to define project scope and provide recommendations on the suggested project strategy and design</li> <li>- Assessing sustainability of suggested project outcomes and outputs</li> <li>- Preparing detailed design of project implementation plan</li> <li>- Strengthening the methodology &amp; assumptions for estimating the global environmental benefits</li> <li>- Strengthening the methodology &amp; assumptions for estimating the incremental benefits</li> <li>- Preparing and submitting full-sized project document</li> </ul>
International	International Expert	3,000	2	<ul style="list-style-type: none"> <li>- Identifying the most appropriate university / institution at which the information and learning platform would be established</li> <li>- Recommending steps/procedures for sustainable operation of the platform</li> </ul>
International	International Expert	3,000	12	Conduct of feasibility study for 3 of the demonstration sites out of the total 5 sites (4 demo sites + 1 potential site).
		Total	42	

<sup>2</sup> Provide dollar amount per person week (PW).

<sup>3</sup> Provide person weeks needed to carry out the task