

GEF

REQUEST FOR PROJECT PREPARATION GRANT (PPG)
PROJECT TYPE: MEDIUM-SIZED PROJECT
THE GEF TRUST FUND

Submission date: 13 January 2010

GEF PROJECT ID¹: 4184

GEF AGENCY PROJECT ID: XX/THA/09/XXX

COUNTRY(IES): Thailand

PROJECT TITLE: Promoting Small Biomass Power Plants In Rural Thailand For Sustainable Renewable Energy Management And Community Involvement

GEF AGENCY(IES): UNIDO, (select), (select)

OTHER EXECUTING PARTNER(S): Forest Industry Organization (FIO), the Department of Alternative Energy Development and Efficiency (DEDE), and Department of Industrial Promotion

GEF FOCAL AREA(s): Climate Change

GEF-4 STRATEGIC PROGRAM(s): CC-SP4: Promoting Sustainable Energy Production from Biomass

NAME OF PARENT/PROGRAM/UMBRELLA PROJECT (if applicable):

A. PROJECT PREPARATION TIMEFRAME

Start date of PPG	01 April 2010
Completion date of PPG	28 February 2011

B. PAST PROJECT PREPARATION ACTIVITIES (\$)

List of Past Project Preparation Activities	Output of the Activities	Project Preparation Amount (a)	Co-financing (b)	Total c = a + b
N.A.				
Total Project Preparation Financing				

C. PROPOSED PROJECT PREPARATION ACTIVITIES (\$)

Describe the PPG activities and justifications:

PPG funding will be utilized to design the full-fledge project document. With duration of 9 months, the full project document development will cover several studies including feasibility studies of potential project sites, barriers analyses for the development of small biomass power plant in different aspects, preparation of a business plan for the demonstration plants, stakeholder consultations and resource mobilizations. FIO and UNIDO will work together with assistance provided by local and international experts to design and complete the project document based on a logical framework analysis.

The following activities are proposed for the PPG phase:

Activity 1: Feasibility studies, baseline and barriers analyses

The activity will identify and assess critical barriers on a promotion and development of a community based biomass power plant in Thailand. The activity will result in:

¹ Project ID number will be assigned by GEFSEC. If PIF has already been submitted, please use the same ID number as PIF.

- Feasibility studies of five-potential FIO's plantation sites. The study will analyse and assess biomass fuel capacity, technology feasibility, environmental impact assessment, community acceptance and social impact assessment, as well as economic feasibility and financial assessment.
- A review and assessment of current policies, related law and regulations, and institutional arrangement relevant to the development and management of community based biomass power plant.
- A review and evaluation of past, on-going, and planned initiatives related to the promotion and development of a community based biomass power plant in order to build the new project on past experiences, avoid duplication and strengthen partnerships and synergies.
- An analysis of the barriers to promote and develop a community-based biomass power plant.
- A report from community dialogues and sensitization regarding their perception and willingness to have a biomass power plant installed in their communities.
- An identification of a demonstration site based on technical, social, and economical criteria.

Activity 2: Preliminary design of pilot plants and Identification of potential contractors

This Activity will result in:

- One community dialogue to discuss and on-site information collection as inputs to the project document; and
- Draft layouts and drawings of a pilot plant and fuelwood preparation areas for cost estimation
- Identification and contacts of potential contractors of a biomass gasification package.

Activity 3: Detailed project design and project document preparation

There are four main components to be achieved at this stage. Firstly, technical and programming parameters of the project will be defined by logical framework analysis exercise based on information gathered from other activities. The exercise will fully identify agreed objectives, expected outcomes, expected outputs, groups of activities, objectively verifiable indicators, means of verification, risks, and assumptions. Secondly, the planning exercise for the project will take place to design an implementation arrangement, an implementation plan, a monitoring and evaluation plan, and a communication strategy. Thirdly, the component will involve the cost-benefit analysis of the GEF intervention in comparison to a business-as-usual scenario. Potential greenhouse gas emissions reduction will be calculated in the analysis. The final component will be the writing up and compactness of the project document. The national workshop will be organized to verify the project document. Any necessary change and revision will be made and finalized accordingly.

Activity 4: Consultation and Resource Mobilization

During the PPG phase, the activity will result in two key outputs: first, substantive inputs to develop a full-fledged project document; and second, commitments from potential co-financing partners including governmental agencies, bilateral donors and private sector in particular biomass gasifier vendors.

FIO and UNIDO will take a leading role to ensure effective and inclusive consultation throughout PPG phase. A series of meetings and workshops will be conducted at both national and local level to enable discussions among concerned partners: governmental agencies, donors, the private sectors, local NGOs, local academic institutes, and community groups. Bilateral and multi-lateral agencies in the country who actively involve in biomass energy technology and development will be further

consulted and invited to partner with the project.

List of Proposed Project Preparation Activities	Output of the PPG Activities	Project Preparation Amount (a)	Co-financing (b)	Total c = a + b
1: Feasibility study, baseline and barrier analysis	i) The feasibility study report ii) Reports of detailed analysis iii) Identification of a demonstration site		72,000	72,000
2: Selection of demonstration sites and preliminary design of pilot plants	i) Preliminary design of pilot plant ii) Preparation of business plan for the demonstration plants	3,000	3,000	6,000
3: Detailed project design and project document preparation	A full-fledged project document	18,000	25,000	43,000
4: Consultation and resource mobilization	i) All stakeholder sufficiently consulted ii) Co-financing agreements officially received	4,000	10,000	14,000
Total Project Preparation Financing		25,000	110,000	135,000

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

	Project Preparation	Agency Fee
GEF financing	25,000	2,500
Co-financing	110,000	
Total	135,000	

E. PPG REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES)¹

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

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

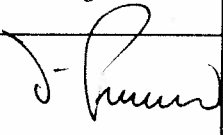
F. PPG BUDGET REQUEST

Cost Items	Total Estimated Person Weeks for GEF Grant (PW)	GEF (\$)	Co-financing (\$)	Total (\$)
Local consultants *	52	3,000	73,000	76,000
International consultants*	6	18,000		18,000
Travel			14,000	14,000
Meeting facilities		4,000	10,000	14,000
Project Management			13,000	13,000
Total PPG Budget		25,000	110,000	135,000

* 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.

G. GEF AGENCY(IES) CERTIFICATION

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

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Mr. Dmitri Piskounov Managing Director, UNIDO GEF Focal Point		8 Jan. 2010	Mr. Jossy Thomas	+43-1- 26026-3727	J.Thomas@unido.org

Annex A

Consultants Financed by the Project Preparation Grant (PPG)

Position / Titles	\$/ Person Week ¹	Estimated PWs ²	Tasks to be performed
Local			
Energy Engineer	1000	3	1. To design draft drawings on a pilot plant and fuelwood preparation areas for cost estimation 2. To contact and indentify potential contractors for the gasification system both international and local contractors
International			
International GEF climate change expert	3000	6	1. To suggest international best practices on a community based biomass power plant approaches into the project design; 2. With the local energy expert, to advise on the selection of pilot sites; 3. To assist local project team in a preliminary design of pilot plants; 4. To define project scope and provide recommendations on the suggested project strategy to maximize the link between global and local benefits; 5. To provide international methodologies of designing an effective GEF project and to work closely with a local expert in detailed designing the project components to be included the project document including; 5.1. Project parameters namely agreed objectives, expected outcomes, expected outputs, groups of activities, objectively verifiable indicators, means of verification, risks, and assumptions; 5.2 Project management structure and plan namely an implementation arrangement, an implementation plan, a monitoring and evaluation plan, and a communication strategy; 5.3 The cost-benefit analysis of the GEF intervention in comparison to a business-as-usual scenario. Potential green house gas emissions reduction will be calculated in the analysis;

			6. Facilitating in consultation forum as input for logical frame development
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¹ Provide dollar amount per person week.

² Provide person weeks needed to carry out the task and corresponds to the dollar amount per person week in the previous column.

Local consultant to be financed by co-financing

Local			
Energy And Climate Change Expert	1000	73	<p>1. To review current policies, related laws and regulations, and institutional arrangement relevant to the development and management of community based biomass power plants;</p> <p>2. To review and evaluate past, on-going, and planned initiatives related to the promotion and development of a community based biomass power plant in order to build the new project on past experiences, avoid duplication and strengthen partnerships and synergies;</p> <p>3. To analyze the barriers to promote and develop community-based biomass power plants;</p> <p>4. To prepare site selection criteria, provide technical inputs to the community dialogues and site selection;</p> <p>6. To work with DEDE, UNIDO, FIO and international expert to undertake a preliminary design of pilot plants;</p> <p>7. To work closely with an international expert in detailed design of the project components including:</p> <p>7.1 Project parameters namely agreed objectives, expected outcomes, expected outputs, groups of activities, objectively verifiable indicators, means of verification, risks, and assumptions;</p> <p>7.2 Project management structure , implementation plan, monitoring and evaluation plan, business plan and a communication strategy;</p> <p>7.3 The cost-benefit analysis of the GEF intervention in comparison to a business-as-usual scenario. Potential green house gas emissions reduction will be calculated in the analysis;</p> <p>7.4 Finalising the project document;</p>

			<p>8. Facilitating in consultation forum as input for logical frame work development;</p> <p>9. To participate consultations with other bilateral and multi-lateral institutions in the country, which are funding biomass projects;</p> <p>10. Lead on partnership development and Co-funding Coordination as well as overall institutional arrangements - Securing co-financing for the project from RTG and possibly other donors and multi-national corporations.</p>
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