



**REQUEST FOR PROJECT PREPARATION GRANT (PPG)**  
**PROJECT TYPE: Full-Sized Project**  
**THE GEF TRUST FUND**

**Submission date:** 09 March 2009  
**Re-submission date:** 27 August 2009

**GEFSEC PROJECT ID:** 3921  
**GEF AGENCY PROJECT ID:** XX/PAK/09/X01  
**COUNTRY:** Pakistan  
**PROJECT TITLE:** Promoting sustainable energy production and use from biomass in Pakistan  
**GEF AGENCY:** UNIDO  
**OTHER EXECUTING PARTNERS:** Alternate Energy Development Board (AEDB) and Small and Medium Enterprise Development Authority, Government of Pakistan  
**GEF FOCAL AREA:** Climate Change  
**GEF-4 STRATEGIC PROGRAM:** CC - SP4 – Promoting sustainable energy from biomass.  
**NAME OF PARENT/PROGRAM/UMBRELLA PROJECT:** N/A

**A. PROJECT PREPARATION TIMEFRAME**

|                 |          |
|-----------------|----------|
| Start date      | Dec 2009 |
| Completion date | May 2010 |

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

N/A

**C. PROJECT PREPARATION ACTIVITIES (\$)**

Preparing and detailing a strategy to promote market based adoption of modern biomass energy technologies for process heat application in SME cluster and power generation in rural areas of Pakistan in support of national rural electrification efforts.

1. Collection of supplemental data

Baseline data has been gathered during the preparation of the PIF, but additional data is needed for a careful analysis of the energy use patterns in SME clusters in selected areas as well as of policy and regulatory frameworks relevant to modern biomass energy technologies, and to identifying support institutions and capacity needs of market players and enablers. This will be done during the PPG phase.

*1.1 Energy patterns in SMEs and rural areas.*

Detailed information will be collected on the energy use patterns in SMEs in remote areas of Pakistan to identify the set of SMEs to target under this project - SMEs that have the potential to adopt modern biomass energy technologies - and to specify the technologies to be used. Likewise, detailed information will be collected on the communities that could adopt modern biomass energy technologies to convert available agricultural wastes or develop dedicated forest for such projects.

*1.2 Review of the relevant legal and regulatory framework*

A detailed review of the existing policy and regulatory frameworks for the energy and related sectors will be carried out. This will involve analysis of the provisions in the National Energy Policy, the Policy for development of renewable energy for power generation, as well as other related policies like the policy governing SMEs. A proposal will be made on the process for developing a comprehensive policy and associated regulatory framework that provides clear guidelines and

protection to market players in the modern biomass energy technologies sub-sector.

### *1.3 Detailed capacity needs assessment*

Market enablers and support institutions will be consulted on their capacity development needs. Once capacity gaps are identified, interventions will be proposed.

## 2. Stakeholder consultations

Stakeholders have been consulted in preparation of the PIF of this project. More detailed consultations, focusing on details of the project implementation and the roles and contributions of the various stakeholders, will take place during PPG phase.

### *2.1 Consultations with government and institutional stakeholders*

Governmental institutions and public agencies interested by the project objective and activities will be consulted to discuss their views on the detailed objectives of and institutional arrangements for this project, to assess whether their involvement in its execution can be enlarged, to secure their commitment to critical outputs and to agree on the activities they could undertake as a part of their contribution to the project success. These consultations will also be used to review exiting policy and regulatory frameworks and to propose strategies for improvements, and to review existing capacities and to propose adequate capacity building measures. The consultations will be facilitated through bilateral consultations with the relevant parties, workshops at national and local levels and close involvement of the Alternative Energy Development Board of Pakistan (AEDB).

### *2.2 Consultations with market parties and NGOs*

Some market parties were consulted during the preparation of the PIF, but further consultations with additional stakeholders are needed to detail the capacities and needs and cooperation with technology manufacturers, distributors and retailers as well as to coordinate arrangements for pilot projects with the governmental bodies and the AEDB. This will also take place via bilateral meetings with the major parties and their associations, and workshops.

## 3. Design of pilot/demonstration projects

As part of the project, market parties and SME clusters will be invited to invest in selected pilot projects to demonstrate the technical feasibility and commercial viability of modern biomass energy technologies for process heat applications and power generation. These investments need to be detailed and coordinated with other project activities, with a view to creating synergies between the public and private sectors during the implementation of the pilots. The pilots will need to be selected in such a manner that they address the identified critical barriers. The PPG phase will focus on the identification of the pilot/demonstration projects and developing detailed designs with full costing of the pilot projects.

## 4. Project strategy and implementation detailing

Based on the activities described above, the detailed planning of the full-sized project will be completed. Collaboration with related initiatives will be ensured when designing project strategies and defining the scope and activities for the pilot projects.

In summary, the PPG activities, which will lead to the GEF project document, will include:

- Evaluation of the social, economic and financial sustainability of proposed project activities;
- Identification of a set of viable outcomes, outputs and activities that constitute the most cost effective response to the identified threats and barriers;
- Costing of expected project outcomes and outputs, co-financing sources and co-financing commitments in compliance with the GEF incremental principle;
- Estimation of potential GHG emission reductions and a cost-effectiveness analysis

| - A monitoring and evaluation plan, including a set of impact indicators to track the project's progress and effectiveness, baseline and target values on indicators. |  |                                |                        |                    |
|---|--|--------------------------------|------------------------|--------------------|
| List of Proposed Project Preparation Activities   | Output of the PPG Activities   | Project Preparation Amount (a) | UNIDO Co-financing (b) | Total<br>c = a + b |
| 1. Collection of supplemental/ baseline data and analysis   | Supplementary data collected is used in finalizing the project document        | 12,000                         | 20,000                 | 32,000             |
| 2. Stakeholder consultations  | Stakeholder buy-in in the proposed project implementation strategy.            | 12,000                         | 6,000                  | 18,000             |
| 3. Design of pilot/ demonstration projects  | Detailed feasibility studies of pilot projects.                                | 24,000                         | 40,000                 | 64,000             |
| 4. Project strategy and implementation detailing  | Detailed GEF project document produced for UNIDO approval and CEO endorsement. | 22,000                         | 24,000                 | 46,000             |
| <b>Total Project Preparation Financing</b>  |  | 70,000                         | 90,000                 | 160,000            |

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

|                    | Project Preparation | Agency Fee |
|--------------------|---------------------|------------|
| GEF financing      | 70,000              | 7,000      |
| UNIDO Co-financing | 90,000              |            |
| <b>Total</b>       | 160,000             | 7,000      |

#### F. PPG BUDGET REQUESTING FINANCE BY GEF

| Cost Items                 | Total Estimated Person Weeks (PW) | GEF (\$) | UNIDO Co-financing (\$) | Total (\$) |
|----------------------------|-----------------------------------|----------|-------------------------|------------|
| Local consultants*         | 30                                | 20,000   | 10,000                  | 30,000     |
| International consultants* | 15                                | 30,000   | 30,000                  | 60,000     |
| Travel                     |                                   | 16,000   | 25,000                  | 41,000     |
| Miscellaneous              |                                   | 4,000    | 25,000                  | 29,000     |
| <b>Total PPG Budget</b>    |                                   | 70,000   | 90,000                  | 160 000    |

\* Additional information regarding consultants is provided in Annex A.

#### D. GEF AGENCY CERTIFICATION

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|--|--|
| This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation. |  |
| Mr. Dmitri Piskounov<br>Managing Director<br>Programme Development and Technical<br>Cooperation Division<br>UNIDO<br><br>GEF Agency Coordinator      | Mr. Alois P. Mhlanga<br>Industrial Development Officer<br>Renewable and Rural Energy Unit<br>Energy and Climate Change Branch<br>PTC Division, UNIDO<br><br>Project Contact Person |
| Date:  | Tel. and Email: +43 1 26026 5169; a.mhlanga@unido.org  |

## Annex A

### Consultants Financed by the Project Preparation Grant (PPG)

| <b>Position Titles</b>   | <b>\$/<br/>Person Week</b> | <b>Estimated<br/>PWs</b> | <b>Tasks to be performed</b>   |
|--------------------------|----------------------------|--------------------------|--|
| Local consultant         | 1,000                      | 20                       | Collect supplemental data on energy use patterns in SME clusters, and undertake analysis to identify SME clusters to be targeted under this project.   |
|                          |                            | 10                       | Hold consultations with public and private sector stakeholders regarding the regulatory, technical and marketing activities and demonstration projects.  |
| International consultant | 4,000                      | 3                        | <ul style="list-style-type: none"><li>• Provide expertise on the international best practices and lessons learnt in the design and implementation of similar projects</li><li>• Assist in the preparation of the project's logical framework and M&amp;E plan, with a set of measurable impact and progress indicators.</li><li>• Review and profile baseline and barrier information delivered by the local experts.</li><li>• Assist the local project team to define project scope and provide recommendations on the suggested project strategy and design.</li><li>• Assess sustainability of suggested project outcomes and outputs.</li><li>• Recommend possible demonstration projects.</li><li>• Provide other guidance for the implementation of the PPG and preparation of the FSP proposal, as needed.</li></ul> |
|                          |                            | 3                        | Collect supplemental data on energy use in SME clusters in rural areas, and assess the potential for the use of modern biomass energy technologies.  |
|                          |                            | 2                        | Hold consultations with public and private sector stakeholders regarding the regulatory, technical and marketing activities and demonstration projects.  |
|                          |                            | 7                        | Undertake detailed designing of the 3 pilot/ demonstration projects and project strategy   |