



THE WORLD BANK



**African Renewable Energy Access
Biomass Energy Initiative for Africa
Call for Proposals for Pilots Projects**

Energy Sector (Energy for Africa & Access to the Poor) - TF No. 09402 - Project ID No. P116419

Introduction:

The World Bank is requesting proposals for innovative pilot projects that demonstrate new approaches to modernizing biomass energy in Sub-Saharan Africa. This request for proposals is part of a new initiative called the Biomass Energy Initiative for Africa (BEIA) which is administered by the World Bank Africa Energy Unit (AFTEG) and financed by the Energy Sector Management Assistance Program (ESMAP) Africa Renewable Energy Access (AFREA) Trust Fund, provided by the Government of the Netherlands.

The rationale for these pilot projects is that biomass is and will continue to be for many decades a predominant local source of energy in Sub-Saharan Africa, since it is used for home cooking, heating and also commercial and industrial applications such as for bakeries, charcoaling, lime production, bricks and tile production, tobacco drying and other uses. Modernization of this sector with a view to obtaining a sustainable supply, efficient usage and new modern and cleaner applications of biomass energy is necessary and can be justified based on health, energy security, socio-economic, and global and local environmental reasons.

Objectives:

The Biomass Energy Initiative for Africa will co-finance about 10-15 promising pilots of innovative biomass energy projects throughout the Sub-Saharan Africa region that could advance the biomass agenda, in terms of learning how to apply new knowledge/experience, and/or increased institutional capacity and understanding of biomass energy. These pilots are intended to present knowledge of building blocks for World Bank operations. Proposals can be submitted for the following themes:

Enabling market conditions for high quality and high performance modern cooking stoves:

In order to increase access to cleaner cooking stoves many conditions need to exist for improving the cooking stove marketplace. To list the most important conditions, higher quality of biomass stoves can provide better performance in terms of cleaner combustion and lower indoor emissions, higher energy efficiency, improved safety and longer durability. Also such stoves ideally should be affordable and manufacturers should achieve scale economies in order to reduce costs. Micro-credit for households could facilitate uptake. Environmental benefits of stoves such as carbon emission reductions could generate important credits benefiting end users. Furthermore, public campaigns to raise awareness of the dangers of indoor air pollution, the advantages of quality cooking stoves and other preventive actions could be promoted.

Additionally government policies should attract investments to promote higher quality and cleaner cooking stoves for the benefit of the poor with elimination or reduction of import tariffs, lowering sales tax and less paperwork while introducing better cooking technologies into the

country. Setting up standards for minimum stove quality and providing knowhow to the local stove industry should improve stove performance, acceptability and usage of stoves.

Initiatives addressing some or all of the above issues are expected to produce results toward better market conditions and enlarge markets for cleaner and quality cooking stoves.

Modernization of the charcoal industry:

With growing urbanization in Sub-Saharan Africa countries, there is also a growing demand for charcoal as the fuel of choice in urban areas. Charcoal related issues in Africa today are: a lack of sustainability of wood supply for the production of charcoal; low efficiency of charcoaling process; lack of respect and transparency of charcoaling actors; uncertain legal status of the charcoal supply chain actors; and low efficiency and indoor air pollution of the charcoal stoves in households. Nevertheless the charcoal industry in Africa represents nearly 50% of all charcoal produced in the world, moves hundreds of millions of dollars and generates hundreds of thousands of jobs. Related to the informality and in many cases (perceived) illegality of this industry, there is a lack of effective sector planning and incentives for optimal and sustainable use of the natural resources; there is also much waste of resources due to the inefficiencies of the charcoaling process, and the long distances to haul the charcoal over poorly maintained roads to consuming centers makes charcoal more expensive than necessary for the end-users.

Proposed projects could possibly deal with the organization, formality and legality of the charcoal sector, the improvement of the charcoaling process, the establishment of local mechanisms with involvement of charcoal stakeholders to support sustainable charcoal production, explore co-financing opportunities within existing financial incentives such as e.g., Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD) or Clean Development Mechanism (CDM), and/or the promotion of better sector planning and dialogue and policy reform to create incentives for rational use of the resources.

Demonstrating the feasibility of social biofuels:

Small-scale liquid biofuels such as ethanol and vegetable oils could be appropriate energy solutions for African rural communities, given that these can be produced locally, have a level of investment that is suitable for national investors, and are already available in the international market proven technologies for producing biofuels at small scale, as well as for its use for cooking, lighting (lamps) and powering generators of electricity. Biofuels produced at a small scale for local needs are not likely to jeopardize food production but instead generate local income.

BEIA seeks to support initiatives that demonstrate that biofuels can be produced and consumed locally in a proven sustainable and financially viable way, with the participation of local private entrepreneurs as investors in the biofuel business.

Increasing power capacity with bioelectricity:

There are in Africa numerous situations in which biomass can be viably used for power generation, given that the cost of biomass fuel is low while the opportunity cost for electricity is high. Typical examples include biomass waste from forest and agro industries, like sugar, rice, coffee and saw mills. However, rather than just supply internal industry needs, excess power can be supplied to the surrounding village for use in households, cottage industries and institutions.

BEIA seeks to support projects that can demonstrate that biomass can be a viable option to generate power and heat for households and rural industries, be it off-grid or even connected to a small grid.

Grantee Requirements

Eligible proposals should be written in English and budget should be in the range of US\$100,000 to US\$150,000 and they must be completed within 24 months from the date of first receipt of grant funds. The projects should include leveraging of financial resources from other sources (e.g. other donors, government funds, private sector investments, and beneficiary contributions). For most projects the co-financing should be at least 25% of the total budget. For projects that invest in private commercial production facilities, at least 50% co-financing is required. Co-financing can be contributions like labor cost, materials, rental of office space and vehicles usage directly related to the project, and must be verifiable by auditors.

Proponents should meet criteria as provided below:

- Applying organizations should be African non-governmental organizations, private companies, and government owned enterprises or institutions,¹ registered in any Sub-Saharan Africa country; a partnership between the African based organization and other organizations (from inside and outside Africa) are acceptable if it would make the proposed project more effective. Synergies and cooperation between NGOs; private sector and governments are encouraged as it should produce more sustainable projects with lasting impacts;
- Applicants should be able to demonstrate proof of legal identity and financial viability (e.g. registration under national law, published documentation, existence of bank account, accounting capability, non-violation of tax laws, etc.);
- Proposed activities should reflect one of the thematic areas of BEIA (enabling market conditions for quality cooking stoves; modernizing the charcoal industry; demonstrating the feasibility of social biofuels enterprises; or increasing local power generation capacity of bioelectricity);
- Proposal objectives and outcomes should be directly relevant to socio-economic development and poverty alleviation, and demonstrate the constructive role of biomass energy in achieving the Millennium Development Goals;
- The results of the projects should be replicable and scalable;
- Proponents should demonstrate sound local experience in the recipient countries/markets proposed, and sound technical expertise and prior management experience in related activities and projects;
- Projects should preferably show financial sustainability by the end of the project, or, proof of continuous support to realize financial sustainability beyond the end of the 24-month period;
- Proponents should propose a monitoring and evaluation system, with clear and quantifiable indicators for project inputs, outputs and outcomes;
- AFTEG will not fund equipment that is not explicitly required to complete the work outlined in the proposal (equipment may be purchased only to support the proposed activities), and the grantee must follow World Bank procurement regulations (procure with at least three vendors to select the lower cost with acceptable quality); nor personnel or administrative

¹ These government enterprises or institutions must be legally and financially autonomous from the central government budget and fully operate under commercial laws.

- expenses that are not related to the project; and revolving funds and acquisition of real estate such as land and buildings is never acceptable;
- Proponents of quality wood fuel cooking stoves, should meet the Shell Foundation/Aprovecho benchmarks for wood stove energy efficiency and emissions (www.esmap.org/beia.html), if not at the beginning at least by the end of the first six months of implementation; and
- The deadline for submission is August 05, 2009, and proposals should be submitted to Jing Li at jli6@worldbank.org clearly identified on the subject line as “BEIA Pilot Proposal + [name of the proponent].” Questions regarding this call for proposals should be directed to Rogério Carneiro de Miranda (rmiranda@worldbank.org), clearly identified on the subject line as “BEIA Pilots Q&A;” questions will be responded to by the end of each working week before the deadline.

Upon award the grantees should:

- Maintain financial records and accounts adequate to reflect the operations, resources and expenditures related to the activities and have in place a transparent accounting system that will meet the requirements of a World Bank audit;
- Submit to the World Bank prior to implementation of activities, a Basic Financial Statement (Statement of Receipts and Payments and Balance Sheet for the latest financial year), or else an Audit Certificate or notarized Opinion regarding the Financial Statement (Management letter from the auditor on the findings and recommendations as to internal control weaknesses, accounting policies and practices, etc.);
- Agree to operate in accordance with all laws prevailing in the country, including insurance, social security, taxation, etc.;
- Plan to submit: (i) monthly reports (2 pages) on project progress, achievements, problems and solutions; (ii) quarterly (10-12 pages) technical reports with project progress, difficulties, achievements and deliverables, accompany by a financial report (disbursements, release of own co-financing, etc); and (iii) a comprehensive final report of accomplishments, with conclusions, lessons learned and recommendations for scaling up and replication, by the end of the 24-month period;
- Budget to participate in two meetings: (i) a three days kick-off meeting in a central African city with all other pilot project coordinators within two months of the project beginning; and (ii) a wrap-up meeting also of three days’ duration within two months of project conclusion; and
- Engage in close and frequent communication with the AFTEG Task Manager (in English) to inform about project progress.

Proposal evaluation:

The proposals will be evaluated on the merits of their quality by a team of five AFTEG members, and will be based on the following criteria and point system:

	<u>Point</u>
(i) Specific experience and implementing capacity of the proponents’ organizations;	[25]
(ii) Adequacy of the proposed methodology and work plan in accordance with the proposal;	[30]
(iii) Key professional staff qualifications and competence for the assignment;	[25]
(iv) Innovation and sustainability of the proposal.	[20]

Note: Call for proposals in Portuguese and French versions, Proposal Application Format, Shell Foundation/Aprovecho benchmarks for wood stoves, BEIA Results Framework and Budget Template are all available for download at www.esmap.org/beia.html.