TEMPLATE FOR SUBMISSION PROJECT PROPOSAL

Request for Proposals -Installation of Solar PV and waste-to-energy systems in Mozambique

ANNEX 1 - OVERVIEW

PART 1

1.1.Project Title:	*(full title and subtitle of project)*		
1.2.Name of Applicant:	*Name of Applicant* Full Contact Details:		
1.3 Type of Applicant and full address	*(please select or specify)* - Private, public or public-private company - Individual project developer/investor (registered as company) - Governmental institution (e.g. ministry, utility, electrification agency, municipality) - NGO or cooperative		
1.4.1 Total Project Cost	**1.4.2 UNIDO/GEF Grant requested**	**1.4.3 Applicant's own funding**	**1.4.4 Co-funding of other partners (if applicable)**
US$	US$	US$	US$
100%	in % of total	in % of total	in % of total
1.5 Project Implementation Duration *(please include a gantt chart to show implementation plan)*	months		
1.6 Technical Project Focus	**Renewable Energy type:** •		**Energy Services to be provided:** •

1.7 Summary of key features and main project concept:

Briefly describe and explain the key features and main concept (project idea or business idea) and rationale for the project.

This may summaries the core problems, the objectives, the innovative technology/solutions to address these problem like

- *what key activities will be undertaken to achieve the solutions,*
- *how the project will generate its main benefits, what are the benefits, who are the beneficiaries and how the benefits and results will be sustained or replicated.*
- *how the project works, why it is important and what the key features are.*
- *Note: **A detailed technical drawing of the project must be included as an annex to the proposal.***

PART 2: PROJECT INFORMATION

2.1 Relevance of Project and Problem Analysis

- ✓ *Demonstrate the relevance of the proposal to the objectives of the UNIDO/GEF project as well as for industrial sector i.e. project has high replication potential and the energy will be used for industrial use, amount renewable energy generated per year should be stated etc.*
- ✓ *Show that the project is in line with the national priorities (such as Renewable plans, poverty reduction, social development) and energy legislation.*
- ✓ *Please indicate, the degree of readiness for replication and scaling-up of the project*

2.2 Overall Project Objective(s) and Impact

- ✓ *Present how the project aims at contributing to resolve the problems described in the problem analysis with special reference to energy security and productivity.*
- ✓ *The project demonstrates a clear positive social, economic, environmental and direct/indirect economic development impact through a positive Economic Net Present Value (ENPV) which must be presented (cost-benefit analysis) as well as the methodology used in determining the ENPV.*
- ✓ *Demonstrate the positive impact of the project regarding social, economic and environmental sustainable development and. propose quantifiable indicators to measure these achievements Indicate how the action will improve the situation of target groups/beneficiaries.*

2.3 Specific Objectives and Effectiveness

- ✓ *Prepare a list of specific objectives to be reached to overcome the identified problems and contribute to the overall objectives (e.g. installation of solar systems for office, small hydropower potential study, business plan support and training for energy service companies). The specific objectives of the project shall clearly reflect the identified needs of the target groups and final beneficiaries. They shall be realistic, results-orientated and measurable.*

- ✓ *It shall be indicated that the most promising, cost-effective and feasible strategy alternative are selected to achieve the overall objective. A "with and without project" scenario has been analysed based on feasibility studies of different technology and location options.*
- ✓ *With regard to the implementation of demonstration and investment projects the economic and financial analyses must show that the best technology alternative is chosen by showing that Economic and Financial Net Present Value (ENPV/FNPV) is higher than that for other alternatives.*
- ✓ *In the case of demonstration and investment projects the cost-effectiveness analyses (CEA) and/or cost benefit analyses (CBA) must show that the UNIDO/GEF subsidy element (grant) is justified (e.g. negative FNPV) i.e. the investment program/project cannot be financed through loans or the UNIDO/GEF grant reduces the payback period. The UNIDO/GEF project grant should make a difference and the project would not have been implemented without UNIDO/GEF project support.*

2.4 Project Results (Outputs)

Provide a list of expected results and final products the project will deliver after successful completion of the foreseen activities described in 2.5. In other words, describe the main things produced by the project for each of the main sets of activities. These outputs should be within the control of the project and should generally be the main deliverables of the project. Specific and measurable quantitative indicators of achievement of the outputs should be provided as much as possible.

1. 2. 3.

2.5 Main Project Activities

List the main activities needed for achieving the main project results described in 2.4 and indicate when they would be completed (see time and expert deployment schedule in annex 2) and who would be responsible.

Results	**Main activities (extend as needed)**	**Responsible partner**
1.1		
2.1		
3.1		
4.1		
5.1		

6.1		

2.6 Feasibility and Efficiency of the Project

- ✓ *Demonstrate the general feasibility of the project and the efficiency of the suggested implementation method.*
- ✓ *Describe the role of the various actors and stakeholders (applicant, (local) partner(s), target groups, local authorities, etc.), their added value and the reasons for which these roles have been assigned to them. The technical feasibility of the project is shown (particularly in case of demonstration and investment projects) showing that:*
    1. *the project builds on a reliable technology, or replicates a proven energy service delivery model and/or technology.*
    2. *The energy resources/feedstock is available in the long-term as it is generated by the concerned.*
    3. *The project foresees adequate set up for operation (technical, management, financial).*
    4. *Technical risks are clearly defined and proper mitigation measures are proposed (see section on risk analysis).*
- ✓ *Include a detailed technical design of the project including a calculation of the renewable energy generated per year and CO2 emission savings.*
- ✓ *It must be identified that the applicant and its partners have sufficient management capacity and stable financial sources of finance to implement the project. The project proposal must have a monitoring and evaluation scheme based on internationally recognized M&E practices.*
- ✓ *Key lessons from other comparable earlier or ongoing activities are clearly analysed and incorporated in the proposal.*

2.7 Final Beneficiaries

Describe the main target groups directly involved or concerned during project implementation and the final beneficiaries which are benefiting from the project results.

- ✓ *How will the project identify and address their needs?*
- ✓ *How far will the project address the needs of the peri-urban and rural poor, ethnic minorities and women?*

2.8 Sustainability and potential for national replication or scaling-up

- ✓ *Show the multiplier effect of the project. Supported demonstration and investment projects have a good potential for replication and should lead to commercialization and widespread technology deployment. The project should suggest replication activities.*
- ✓ *Explain how sustainability will be secured after completion of the project. All potential users should have adequate access to benefits and delivered services during and after the project. All technical studies produced by the project relevant for knowledge sharing and capacity building will be published through the UNIDO/GEF project website.*
- ✓ *Show that there is adequate ownership of the project by the target group(s) and project partners. The partners bring in substantial co-funding and in-kind support. Once the project achieves the objectives the target group(s) will use the services and will continue to provide and maintain infrastructure.*
- ✓ *Ensure that as much as possible local capacities are applied during the project implementation. International applicants need either a branch in the respective country or must have a local implementing partner. Projects without local implementing partners will be rejected. Companies with international branches have to prove the engagement of local staff during project implementation.*
- ✓ *Ensure that constructed infrastructure will be maintained and financed locally as far as possible. The energy resources/feedstock is available locally and the technology will be obtained locally and will be imported only if necessary (necessary procurement will be done locally). The import component is as small as possible. Financial sustainability is ensured (sources of revenue for covering all future operating and maintenance costs, etc.). The finance of the project company is sustainable in a long-term view.*

2.9 Innovation, learning and dissemination

Describe the main innovation in the project idea. Highlight the innovative approaches and technologies which the project will work with, what new ideas, simplicity, increased affordability, creative partnerships, collaboration and understanding the project is expected to develop, and how the lessons learnt will be captured and disseminated (including technology transfer).

2.10 Risk analysis

Describe the risk factors that will affect the implementation, completion and sustainability of the project. This should include at least a list of risks associated with each activity proposed accompanied by relevant corrective measures to mitigate such risks. A good risk analysis would include a range of risk types including physical, environmental, political, economic and social risks.

Main risk factors	Mitigating measures

2.11 Monitoring and Evaluation (M&E)

List the M&E that will be needed to track and report on the progress of the project by identifying problems and providing timely remedy for such problems. Please briefly describe the approach to M&E with measurable indicators.

PART 3: FINANCIAL INFORMATION

3.1 Total eligible direct project costs and requested UNIDO/GEF grant amount: (in US$)

- ✓ *Provide a detailed budget breakdown of the total eligible direct project costs and funding structure as indicated in the example below.*
- ✓ *Give a realistic overview on the co-funding from different partners. It should be noted that major cost items should be supported by documentary evidence such as quotations etc.*
- ✓ *UNIDO reserves the right reject proposed costs should they not be supported by documentary evidence or should they not be within range of internationally acceptable ranges.*

Total Eligible Direct Costs (all activities)		**Indicative Budget Schedule**
Budget Items	**Costs (US$)**	**% of total costs**
A. Personnel Costs		
B. Transportation		
C. Equipment and Supplies		
D. Services (to be itemized)		

E. Workshops and Training		
F. Other Costs		
G. Evaluation & Audit		
Total Costs		

Funding Structure of Project (UNIDO/GEF Grant and Co-Funding)			
Budget Items	**UNIDO/GEF**	**Applicant funding**	**GEF/UNIDO co-funding in %** *Up to 33% per kW of installed capacity for Waste-to-energy projects; up to 28% per kW of installed capacity for solar PV projects*
A. Personnel Costs			
B. Transportation			
C. Equipment and Supplies			
D. Services (to be itemized)			
E. Workshops and Training			
F. Other Costs			
G. Evaluation & Audit			
Subtotal Direct Eligible Costs			

PART 4: APPLICANT INFORMATION

4.1 Applicant and partners

Name of Partner	Type of Organization	Legal Registration No.	Contact Person	Full Post Address	E-mail Address	Office and Mobile Phone *(add country code)*	Year of Establishment
Applicant							
Partner 1							
Partner 2							

4.2 Type of partnership

Select one (mark with "x"):

"Private – Private"	
"Private – Public"	
"Public – Public"	

4.3 Experience / expertise of project team:

Highlight experience / expertise of relevance to the proposed project /(detailed CV must be included as annexes)

Project team	Name of Expert(s)	Relevant Experience and Education
Lead applicant		
Partner 1		
Partner 2		

PART 5: CERTIFICATION BY LEAD APPLICANT

Signature:	
Name:	
Position in organization:	
Date and Location:	

Organizational Stamp of Lead Applicant:

ANNEX 2a - SCOPE OF SUPPLY AND SERVICES

The Scope of Supply and Works – Equipment and Technical Services

The project contractor/developer/investor will procure, transport to the project site and install and commission solar PV water pumps or waste-to-energy systems to deliver up to 20 kW of installed capacity (for solar systems) and up to 50m3 of biogas production (for waste-to-energy systems), linked to productive uses that are based in the following technologies: (i) Conservation and Agro-Processing (Solar Dryers/Cold storage/Ventilation/Solar Systems for Processing/Grinding/Milling/Pealing/Packaging/etc.); (ii) Solar water pumping and Irrigation (solar water pumps, elevated water storage); (iii) Waste-to-Energy (Biomass/Biogas anaerobic digester Systems).

The scope of works and supply includes the following: complete technical design of the system, procurement and shipment of the selected RE equipment, installation, commissioning, operation and documentation. The contractor/developer/investor is obliged to provide UNIDO with the performance characteristics of all major equipment to be supplied as part of this demonstration project. UNIDO reserves the right to request more information on the performance of the equipment being proposed. In addition, UNIDO reserves the right to request the contractor/developer/investor for the names of the suppliers of the different equipment.

a) *The contractor/developer/investor's responsibility*

The contractor/developer/investor is committed to provide the following:

- All technical staff and local labor including any consultants as required;
- Provision of materials, utilities, services, manpower, general civil work etc. related to dismantling, start up, trial runs and testing;
- All other costs to ensure the realization of this project.

b) *Guarantee Requirements*

The contractor/developer/investor guarantees the quality of all the work as specified in developed terms of reference (TOR). The contractor/developer/investor guarantees that engineering design, specifications, technical documentation and other documents, which are the basis for the investment project, are in accordance with project objectives and comply with TORs. Any deviation will deem the proposal inadmissible. The contractor/developer/investor guarantees that the machinery, equipment and all other technological components will be new, of recent conception, without any defect or malfunction, and that the time for the technical guarantee will be 12 months, starting from the date of the commissioning.

c) Delivery Period

A time schedule for the implementation should be developed by the Contractor including delivery, start up and training of personnel. Delivery of the equipment to the project site should be within 6 months after the signature of the contract. The overall duration of the contract is 12 months.

d) Reporting

Progress reports shall be submitted to UNIDO in accordance with the provisional time schedule. The reports should be provided in English; the format and number of copies are given in the contract.

1. Inception report, elaboration of the plan of action for the contract execution in collaboration with UNIDO including feasibility studies, equipment selection with justification and the work plans with related timetable. The inception report should be submitted within a month after the signature of the contract.

2. Progress reports, confirming progress of project to date (each quarter) and including a copy of the bidding documents, purchase orders and related invoices associated with the purchase of parts, equipment and services.

3. Final report, upon completion of the work describing all the works performed under the contract including commissioning and project documentation.

e) Guarantee Requirements

The contractor/developer/investor must guarantee the quality of all the work as specified in this RFP. The contractor/developer/investor guarantees that engineering design, specifications, technical documentation and other documents, which are the basis of the proposed biomass energy system, are in accordance with the project objective. The contractor/developer/investor must also guarantee that the machinery, equipment and all other technological components will be new, of recent conception, without any defect or malfunction, and that the time for the technical guarantee will be at least 12 months, starting from the date of the commissioning. If second-hand refurbished equipment is included in the proposal (like wind turbines), written guarantee should be provided by the contractor/developer.

f) Conditions

The contractor/developer/investor has the responsibility to read and understand the provisions and conditionality of accessing the GEF grant under this pilot project as captured in this RFP. UNIDO reserves the right to determine the form and nature of support that each project proposal can access from this project. This will be determined from the full proposal that will be presented in the final proposal that UNIDO will receive and review. UNIDO reserves the right to conduct on-site visits to the project being proposed for verification.

Grant payment terms will be determined by UNIDO and will depend on the work plan submitted and capital expenditure projections derived from the work plan. In this connection, the contractor/developer/investor should present a detailed work plan with full costing.

g) Compliance with laws and regulations of Mozambique and international norms

This demonstration project should comply with the applicable laws and regulation in Mozambique. As such, as a pre-condition for accessing the grant contract, the contractor/developer/investor should secure all applicable approvals of the project that include a) Environmental Impact Assessment; b) Energy Purchase Agreement with local off-taker(s) and national grid operator (if necessary) c) Erection Permit; d) License for production and grid connection (if necessary). In the case that the rules and regulations in Mozambique are silent on specific aspects applicable to the pilot project, UNIDO reserves the right to request that the project complies with known and acceptable international standards and norms. Failure on the part of the contractor/developer/investor to secure requisite regulatory approvals for the project approvals within 6 months of receiving this request for full proposal will result in UNIDO terminating the grant contract.

ANNEX 2b - BILLS OF QUANTITIES OF THE EQUIPMENT AND SUPPLIES[1]

Item No.	**Description**	Unit	Qty	Unit Price	Price (US$)
1	Item 1	Nos.			
2	Item 2	Nos.			
3	Item 3	Nos.			
	Total Cost	Nos			

Submission Date for Proposals

Your detailed proposal should be submitted via provided e-mail account RFx1100161767@unido.org **as soon as possible** but not later than **19 November 2021.**

[1]The bill of quantities indicates the major items expected for the desired system. Other miscellaneous and minor items are foreseen and will depend on the manufacturer of the equipment. Performance characteristics of all major equipment must be provided as an annex.