

Terms of Reference (ToR): Program Officer for SREP-Supported Extended Bio-gas Project

1. Introduction

Nepal is one of six pilot countries identified for assistance under the Scaling-up Renewable Energy Program in Low Income Countries (SREP) by the SREP sub-committee of World Bank. As one of three programs under the Strategic Climate Fund, SREP aims to demonstrate the social, economic and environmental viability of low carbon development pathways in the energy sector. In particular, the objectives of SREP in Nepal are to: (i) leverage complementary credit and grant co-financing, (ii) bring about transformational impacts through scaling up energy access using renewable energy technologies (RETs), poverty reduction, gender and social inclusiveness and climate change mitigation, and (iii) ensure sustainable operations through technical assistance and capacity building. The Government of Nepal (GoN) has designated the Ministry of Finance (MoF) and the Ministry of Energy, Water Resources and Irrigation (MoEWRI) as the focal points for SREP. MoEWRI has designated the Alternative Energy Promotion Centre (AEPC) as the lead agency for SREP-related activities. The Waste to Energy under SREP is considered a sub activity of Renewable Energy and hence the SREP supported projects are part of the Government's plans and programs; and are being implemented by AEPC.

The SREP- Supported Extended Biogas Project, one of the SREP components aims to promote large off-grid biogas energy generation in the country where sponsors are commercial enterprises or municipalities. SREP seeks to deliver two primary categories of benefits from the use of its financial support: (i) increased access to renewable energy and (ii) increased production of renewable energy. The project consists of two components; Technical Assistance and Financing of Investments.

2. Background

To cost effectively and sustainably manage wastes produced from various commercial and municipal entities in Nepal, AEPC is proposing an innovative, private sector-led large biogas promotion approach. It is, however, important to note that the use of waste for energy recovery can be only conducted when economic incentives are clearly recognized and the wastes are properly collected. The program officer shall work closely with the senior program officer to promote the use of large biogas in Nepal.

The government of Nepal has provided subsidy for installing large biogas plants in four categories, namely commercial, institutional, community and municipal waste. To receive the subsidy for installing large biogas plants a process has been developed.

The process is divided in the following stages, summarized below:

- Intake: the applicant shows its intention to carry out a waste to energy project by submitting an application form.
- Screening: the applicant hires a Prequalified Consultant to perform a Feasibility Study on the Proposed Project. If the result of the study is positive and AEPC approves it, the applicant moves on to the next stage.
- Selection: the Applicant hires a Prequalified Consultant to perform a Detailed Feasibility Study on the proposed Project. Independent experts assess the study from a commercial, financial and technical viability and a Technical Review Committee approves or rejects the study based on the experts' recommendations.
- Notification: if the Technical Review Committee approves the Detailed Feasibility Study, a Letter of Commitment is issued to the Applicant confirming AEPC's support for the project.

The Bio energy section requires human resources to aid the process by reviewing the feasibility and detailed feasibility studies. The developer may start the construction/installation of the plants via a construction company. This construction company must abide by certain standards prescribed by AEPC. Before handing over the biogas plant to the developer/owner, the construction company must pass the testing and commissioning test. The program officer works directly under the Senior Bioenergy Expert and Project Manager to support the set objectives of SREP extended biogas project.

3. Objectives:

The objective of this position is to support the Senior Bio-energy Expert to carry out the in-component reviews of the feasibility and detailed feasibility studies, especially for sub-projects below 100 m³ and also for larger plants and maintain the subsidy processing system of biogas projects under SREP including support in operation related activities.

4. Scope of Services

The scope of Services shall include, but not necessarily be limited to the following

- Reviewing the received application for large biogas projects in line with the prepared evaluation guidelines.
- Review the FS/DFS studies carried out by the consultants.
- Recommend any changes that should be made in the prepared feasibility study.

- Contact the consulting company and manage the recommended changes necessary to get the FS/DFS approved and forward to Sr. Expert for further review.
- Check the appropriateness of the assumptions used (for example norms such as kg of dung/day and retention times inside the digester for each FS/DFS that is received)
- Checking of specifications of the bought out items including warranties/ guarantees and post sales services and budget estimates.
- Reviewing the limits of the project and items to be included as part of the project cost [scope of the project particularly post treatment requirements, cost of land development & office building etc. which has to be as per policy guidelines of AEPC.
- Assessing the reasonableness of the output parameters committed in the FS and DFS reports
- Maintain a track record of the individual projects and administer the projects for subsidy proceedings when the documentation is complete.
- May need to visit the field/site to verify the parameters mentioned in the FS/DFS and plant completion report for selected projects.
- Maintain proper documentation of the large biogas projects, database and other associated activities.
- Liaise with the developers and concerned stakeholders as and when necessary.
- Assist in organizing training and capacity building activities.
- Any other task assigned by the Senior Bioenergy Expert and Program Manager.

5. Performance and Reporting Requirement (Deliverables)

- Review, Analysis and Recommendations on the Feasibility Studies (FS) and Detailed Feasibility Studies (DFS)
- Documentation and filing of the projects and maintain their records in electronic version.
- Forward the project files for necessary approvals and coordinate with the subsidy administration.

6. Duration of Service

The Officer will be assigned for the project period, i.e. 31st August, 2021 with a provision of renew of contract, in case of satisfactory performance. The officer is expected to work full time during office hours within Kathmandu valley with required travels outside Kathmandu valley within Nepal on project related matters.

7. Office's required Qualification and Experience

Candidate should have at least Bachelors degree in Civil/Mechanical/Chemical /Agricultural or Environmental Engineering with minimum 3 years experience in total

and 2 years experience in rural/renewable energy projects/programs. Preference shall be given for proven experienced and having exposure to large biogas sector candidates.

The candidate should also have:

- The candidate should also have, as per items listed in the Scope of Work above, the ability to deliver the following for a variety of feedstock and processes/technologies:
- Knowledge on large biogas plants and feasibility and detailed feasibility reports;
- Knowledge base to understand the input and output parameters and technical processes involved in large biogas plants.
- Prior experience in appraising project proposals would be an advantage
- Knowledge in Nepal's energy sector; preferable in biogas and/or waste to energy sector;
- Excellent knowledge of the English language (both spoken and written) and excellent communication skills;
- Ability to work well with Government officials and community personnel; good reporting and coordination skills;
- Participated in relevant trainings
- Ability to work under pressure and stressful situations and manage heavy workloads

8. Facilities and logistics to the expert by the Client:

The Expert will be provided with the office space, computer with internet facilities, and office furniture. Necessary stationery, printing and copying facilities will also be provided by the Client.