

CALL FOR PROPOSAL

Title of Consulting Service	Energy and Environmental Monitoring of Brick Kilns
Project Name	BUILDING Energy Efficiency in Nepal (BEEN)
Funding Agency	European Union under SWITCH - Asia Programme
Applications Calling Office	MinErgy Private Limited
Address	Dakshinkali Chowk, Lagankhel-5, Lalitpur

ABBREVIATIONS

BC	Black Carbon
BEEN	BUILDING Energy Efficiency in Nepal
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CV	Curriculum Vitae
EE	Energy Efficiency
GESI	Gender Equality and Social Inclusion
GHG	Green House Gas
GKSPL	Greentech Knowledge Solutions Pvt Ltd
MinErgy	MinErgy Private Limited
NGO	Non Government Organization
NO _x	Nitrogen Oxides
PAN	Permanent Account Number
RE	Renewable Energy
RFP	Request for Proposals
SEC	Specific Energy Consumption

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TERMS OF REFERENCE (TOR)

FOR

ENERGY AND ENVIRONMENTAL MONITORING OF BRICK KILNS

Project Background

MinErgy in partnership with Universität Innsbruck (UIBK), Austria (lead) and Greentech Knowledge Solutions Pvt Ltd (GKSPL), India and Asociación Española de Normalización (UNE), Spain is implementing a four-year project **BUILDING Energy Efficiency in Nepal (BEEN)** with funding support from European Commission under its SWITCH-Asia Programme. The overall objective of BEEN is to contribute to the development of low-carbon and resource-efficiency in the Nepalese building sector by integrating energy efficiency (EE) and renewable energy (RE) measures in design and construction of new buildings and in retrofitting of existing buildings.

BEEN project aims to contribute to the development of low-carbon and resource-efficient (RE) construction in Nepal's construction sector by facilitating the design, construction and renovation of climate-friendly buildings. BEEN aims to promote the materials that use low energy usage and resource efficiency both in their production and throughout their lifespan, thereby contributing to the reduction of buildings' carbon footprint.

Purpose and Objective

Brick industries in Nepal are considered to be energy intensive and highly polluting. Coal is the main fuel for firing bricks. The brick sector annually consumes about 500,000 tons of imported coal. Excessive use of coal is one of the main causes of environmental pollution. The major pollutants from brick industry are Black Carbon (BC), Particulate Matter (PM), Sulphur Dioxide (SO₂) and Carbon Dioxide (CO₂). Also, it is one of the primary sources of industrial Green House Gas (GHG) emissions in context of Nepal.

One of BEEN's key initiatives involve promoting hollow fired bricks as a resource efficient and environment friendly building materials. Hollow brick requires less clay which results into lesser fuel consumption and better environmental performance. Also, its application results into better thermal performance in the building. However, there is no credible data available on energy and environmental performance of brick industries with hollow brick production. Hence, this research has been designed to generate scientific data on energy and environment performance of brick industries with hollow brick production.

The overall objective of this assignment to monitor energy and environmental performance of brick kilns with solid and hollow brick production. The specific objectives are:

- Measure stacks emissions (SPM, SO_x, NO_x, CO, CO₂) of the brick kilns under baseline conditions and with solid and hollow brick production.
- Determine specific energy consumption (SEC) of the brick kilns under baseline conditions and with solid and hollow brick production.

Scope of Work

- Prepare an inception report encompassing a literature review, task methodology, and a comprehensive outline of tasks and associated timelines.
- Develop necessary forms and tools for monitoring and data collection.
- Facilitate coordination with BEEN and two selected brick entrepreneurs (located in Lalitpur and Pokhara) for the monitoring process.
- Conduct stack emission measurements, one with solid brick production and another during hollow brick production, adhering to standardized testing protocol.
- Conduct lab analysis of fuel samples.
- Measure fuel consumption and brick production for at least 2 days of brick firing.
 - *NOTE: The firing days could vary depends upon the firing method, speed of brick firing and technology. Hence, the method should be decided in consultation with BEEN and the brick entrepreneur.*
- Analyze environmental performances and energy consumption based on lab results and field measurements.
- Prepare a report with detailed methodology, results and comparative analysis, including recommendations.

Inputs From BEEN

- BEEN will provide instruments (thermocouples, scanners and weighing machines) for energy monitoring.
- Coordination and technical assistance for energy and environmental monitoring.

Deliverables & Timeline

The assignment shall be completed within 2 months from signing the contract. Deliverables with the proposed timeline for the assignment is as below:

Deliverables	Timeline
Signing of contract	5 th April 2024
Inception report	12 th April 2024
Draft report with primary data	20 th May 2024
Presentation of findings to the team	23 rd May 2024
Final report	31 st May 2024

Required Qualification and Experience of Proposed Professionals

The team shall comprise with at least following members:

- **Team Leader/ Energy Expert:** At least Master's Degree in the engineering or related field and at least 7 years of related professional experience. S/he should have good experience of leading team and very good skill in analyzing and synthesizing the study report.

- **Environmental Expert:** At least Bachelor's Degree in Environment Engineering/Science or related field and at least 7 years of related professional experience. The Environmental Expert should have knowledge on environmental monitoring of brick industries.
- **Research Assistant:** At least Bachelor Degree in engineering, environment or related field and 2 years' professional experience.
- **Field Assistant (2 nos. for each kiln):** Basic education with prior experience with brick industries. This is primarily for energy monitoring and can be identified during inception phase.

Instruction for Submission of Proposals

- This RFP is open to all eligible firm / company/ organization
- RFP application should contain following documents:
 - i. Organization Documents
 - Copy of company/firm registration certificate
 - Copy of VAT /PAN registration certificate
 - Copy of tax clearance certificate of Fiscal Year 2079/80
 - ii. Technical Proposal (Annex 1 to 7)
 - iii. Financial Proposal (Annex 8 and 9)
- RFP documents shall be submitted via mail by 5:00 PM on 29th March 2024 attaching all the documents and writing a mail to info@beenproject.org with subject line “*Proposal for energy and environmental monitoring of brick kilns*”.
- Document received after the closing time for submission of proposals shall not be considered for evaluation.

Preparation of Proposal

- The proposal shall have two components:
 - a) the Technical Proposal
 - b) the Financial Proposal
- The proposal, and all related correspondence exchanged by the proponent shall be in English language.
- The applicants are expected to examine in detail the documents constituting this RFP.
- Deficiency in providing the information required for scoring will result in rejection of a proposal.
- It is required that the applicants are responsive and incorporates ways to ensure Gender Equality and Social Inclusion (GESI) and Greening the Initiatives (*such as avoiding single use of plastic, green transportation, green events) in the proposal.

a. Technical Proposal

Technical proposal should comprise of the following documents:

- An application letter regarding the submission of a technical proposal should be filled in the format of *Annex 1* and attached as Annex 1.

- Applicant’s information should be filled in the format of *Annex 2* and attached as Annex 2.
- Specific experience in the past 5 years of the organization should be filled in the format of *Annex 3*. Proof of specific experience should be submitted. These should be attached as Annex 3.
- A description of the methodology and work plan. This should be attached as Annex 4.
- A time schedule showing the time proposed to undertake the activities indicated in the work plan should be attached as Annex 5.
- The list of proposed teams along with their qualification should be filled in the format of *Annex 6* and attached as Annex 6.
- Latest CVs signed by the proposed professional staff should be attached as Annex 7
- The technical proposal shall not include any financial information.

b. Financial Proposal

- Application letter for financial proposal should be filled in the format of *Annex 8* and attached as Annex 8
- The proponent is requested to submit an estimated budget with detailed breakdown comprising human resources (segregated by time involvement of team members), travel, accommodation, per-diem, communication cost, consultation meeting cost and stationeries. Proposed cost must be inclusive of all applicable taxes in Nepalese currency. This should be attached as Annex 9.
- Activities and items in the technical proposal but not priced shall be assumed to be included in the prices of other activities or items.

Evaluation of Proposal

The proposals will be evaluated on the basis of their responsiveness to the TOR. First of all the eligibility of proposals submitted will be determined.

c. Eligibility Criteria

Proponents should have submitted a complete set of following documents:

S.N	Criteria	Compliance
1	Company/Firm Registration Certificate	
2	Tax Clearance of FY 2077/78	
3	Filing date extension for FY 2079/80	
4	VAT/PAN Registration	
5	Technical Proposal (Annex 1 to Annex 7)	
6	Financial Proposal (Annex 8 and 9)	

A proposal will be rejected at this stage if it does not meet the eligibility criteria.

d. Technical Proposal Ranking Criteria

Proposals which meet the eligibility criteria will be ranked on the basis of the ranking criteria. Each responsive proposal shall be given a technical score on the following criteria

SN	Criteria	Score
1	Relevant experience of the firm	20
2	Methodology & approach	30
3	Equipment proposed for environmental monitoring	20
4	Team composition and experience	30

A proposal will be rejected at this stage if it does not respond to important aspects of the TOR or if it fails to achieve the minimum technical qualifying score which is 60.

e. Financial Proposal Evaluation Criteria

- After completion of the evaluation of the technical proposal, the financial proposal will be evaluated for those proponents who pass the technical evaluation.
- In case of a discrepancy between a partial amount and the total amount, or between words and figures, the former will prevail. In addition, activities and items described in the Technical proposal but not priced, shall be assumed to be included in the prices of other activities or items.
- Out of the qualifying firms, a financial score of 100 will be given to the organization with lowest financial proposal.
- The financial scores of the other financial proposals shall be computed based on the formula.
- Financial Score of proposal under consideration = $100 \times \frac{\text{Price of lowest financial proposal}}{\text{Price of the Financial Proposal under consideration}}$.

f. Cumulative Ranking Criteria

- The proposals shall then be ranked according to their combined technical and financial scores.
- Weight given to technical proposal is 80% and Weight given to the financial proposal 20%
- Cumulative Score = Technical Score * 80% + Financial Score * 20%
- The firm achieving the highest combined technical and financial score will be invited for negotiations.

Acceptance of Proposal:

All rights are reserved with BEEN either to approve or disapprove any proposal without giving any reasons whatsoever. If needed, the consultant will be asked for modifications and presentations of the proposal before approval.

11 Annexes

Annex 1: Letter of Application

(Letterhead of the proponent)

Date:

MinErgy Private Limited

Dakshinkali Chowk, Lagankhel-5

Sir/Madam

1. Being duly authorized to represent and act on behalf of “*the Applicant name*”, and having reviewed and fully understood all the short-listing information provided, we hereby apply to be short-listed as Consultant for *Energy and Environmental Monitoring of Brick Kilns*.
2. MinErgy Pvt Ltd and its authorized representatives are hereby authorized to verify the statements, documents, and information submitted in connection with this application.
3. MinErgy Pvt Ltd and its authorized representatives are authorized to contact any of the signatories to this letter for any further information.
4. All further communication concerning this application should be addressed to the following person

Name:

Designation:

Company:

Contact information:

5. We declare that we have no conflict of interest in the proposed procurement proceedings by MinErgy Pvt Ltd and we have not been punished for an offense relating to the concerned profession or business.
6. We declare that none of the team members or the organization have been blacklisted.
7. We declare that no case of corruption is pending against the organization, its Board members or the team designated to the study.
8. The undersigned declares that the statements made and the information provided in the application are complete, true and correct in every detail.

Sign:

Name:

For and on behalf of (name of Applicant):

Official Stamp

Annex 2: Applicant's Information Form

1. Name of Firm/Company:
2. Type of Constitution (*Partnership/ Pvt. Ltd/Public Ltd/ Public Sector/ NGO*)
3. Date of Registration / Commencement of Business:
4. Country of Registration:
5. Registered Office/Place of Business:
6. Telephone No; E-Mail Address
7. Name of Authorized Contact Person / Designation/ Address/Telephone:
10. Total number of staff:
11. Number of professional staff:

Annex 3: Organizational Specific Experience

Details of similar assignments undertaken in the previous five years

Assignment 1:

Assignment name	Name of Client:
Country:	Duration of assignment (months):
Location within country:	Start date (month/year):
	Completion date (month/year):
Approx. value of the services provided by consultant under the contract (in current NRs)	Name of joint venture partner or sub-consultants, if any:
Description of assignment	
Description of actual services provided in the assignment:	

(Please add tables for additional assignments)

Annex 4: Methodology And Work Plan

Annex 5: Time Schedule

Annex 6: Proposed Team

S. N	Name	Position	Highest Qualification	General Work Experience	Specific Work Experienc e	Nationalit y

Annex 7: Signed Resume of Proposed Team

Annex 8: Financial Proposal

Date:

MinErgy Private Limited

Dakshinkali Chowk, Lagankhel-5

Sir/Madam

We, the undersigned, offer to provide the consulting services for Energy and Environmental Monitoring of Brick Kilns in accordance with your Request for Proposal (RFP) dated 15th March 2024. Our attached Financial Proposal is for the sum of [*Amount in words and figures*]. This amount is inclusive of the local taxes, which we have estimated at [*Amount(s) in words and figures*].

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations.

We acknowledge and accept the MinErgy's right to inspect and audit all records relating to our Proposal irrespective of whether we enter into a contract with the MinErgy as a result of this Proposal or not. We confirm that we have read, understood and accept the contents of the Terms of Reference (TOR) and other attachments and inclusions included in the RFP.

We understand you are not bound to accept any proposal you receive.

The undersigned declares that the statements made and the information provided in the application are complete, true and correct in every detail.

Sign:

Name:

For and on behalf of (name of Applicant):

Official Stamp

Annex 9: Detailed Budget Breakdown