Support for Development of Standard and Labelling Program for LED Linear Lamps

CLASP seeks to hire a consultant/organization to conduct a comprehensive market analysis and technical assessment study for development of new labelling program for LED Linear Lamps.

DUE: 30 December 2022 at 23:59 ET QUESTIONS: mchandra@clasp.ngo

About CLASP

CLASP serves at the epicenter of collaborative, ambitious efforts to mitigate climate change and in the global movement for clean energy access, through appliance energy efficiency policies. Our mission is to improve the energy and environmental performance of the appliances & equipment we use every day, accelerating our transition to a more sustainable world. We work hand-in-hand with governments, experts, industry, consumers, and other important stakeholders to propel policies and markets toward the highest quality, lowest resource-intensive appliances possible.

CLASP has worked in more than 100 countries since inception in 1999. CLASP is headquartered in Washington, DC, with teams in China, Europe and the United Kingdom, India, Indonesia, and Kenya. We are <u>mission-driven</u> and committed to a culture of diversity, transparency, collaboration, and impactful work. See our <u>Team Page</u> to learn more about us.

In India, CLASP works closely with Bureau of Energy Efficiency, and has supported the expansion of its appliance energy efficiency policy framework to cover a wide range of residential, commercial, and industrial energy intensive products. This has resulted in reduced greenhouse gas emissions and peak electricity demand, reduced consumer energy costs, and expanded access to high quality appliances. In partnership with key national stakeholders, we advance policy compliance, education and outreach initiatives to foster an ecosystem for resource-efficient appliances and equipment.

Background

The Government of India enacted the Energy Conservation Act 2001 (EC Act) in August 2001 and established BEE, a statutory body under Ministry of Power, Government of India to implement the EC Act in 2002. The Act identifies S&L as one of the major program areas for improving energy efficiency in the residential, commercial, and industrial sector. BEE launched the S&L program in May 2006 and currently it covers 30 product categories of which 11 are mandatory products.

A light-emitting diode (LED) linear lamp currently represents one of the most **energy efficient** type light source. Due to their high energy efficiency and longer life, these lights are rapidly replacing Fluorescent Tabular Lamps. LED Linear Lamps are installed in big volume in both indoor and outdoor lighting services used across residential, commercial and industrial applications.

In Fiscal Year 2020-21, India manufactured about 1.3 billion lamps including tube lights for general lighting services. Out of the population, market share of LED Linear lamps accounts for

16% which is close to 210 million lights produced in a year and used in India, thus resulting to decline the market of fluorescent lighting. Moreover, last year India has committed to phase out of compact fluorescent lamps (CFL) by 2025 and fluorescent tubular lamps by 2027 at Minamata Convention to protect human health and the environment from the adverse effects of mercury, so it is envisaged that transition from fluorescent technology to LED technology would be much faster and further transform the market toward to more efficient lighting.

It is estimated that the potential for energy efficiency improvement in LED linear lamp can be as much as more than 20% in comparison with the lighting products available in the market. Realizing the need to reduce the rising electricity demand and improve the efficiency in the lighting sector across the country, BEE plans to develop a voluntary star labelling program for LED linear lamps.

Timeline

Contract Timeframe: January 2023 – August 2023

Deadline for Application: 30 December 2022 at 23:59 ET

Application includes registering as a Consulting Partner and submitting the technical and financial proposals per the instructions below.

Deadline for Questions: 16 December 2022 at 23:59 ET

All questions must be addressed in English to Moumita Chandra at mchandra@clasp.ngo. We request all inquiries be made to this e-mail address and not by phone.

Scope of Work

The Consultant will be responsible for successfully executing the following activities and tasks as part of the study. Execution of all activities and tasks must be conducted in close consultation with BEE and CLASP.

Task 1: Comprehensive Market Assessment

- 1.1 Assess the size of the India's market for LED linear lamps (number, types, capacity/rating, manufacturers wise, type of manufacturers such as organized and unorganized in SME sectors and their market share) including units manufactured and sold, import vs domestic manufacturing, market segment of major manufacturers, component level supply chain for domestic manufacturing. Capture global landscape for LED linear lamps.
- 1.2 Develop questionnaire in consultation with CLASP, for collection of data to analysis the current market scenario, energy performance status etc.
- 1.3 Supply and distribution channel of finished product, its associated components and raw materials both by organized and unorganized sectors.
- 1.4 Identify the challenges and barriers that effecting market penetration. This may include barriers related to manufacturing, technology, consumer issues (service, price, quality, etc.), and policy implementation.

- 1.5 Estimate the future market growth in next 10 years. The forecast should be accompanied by an analysis of key drivers of market penetration (rural and urban).
- 1.6 Analysis of prominent and underrepresented small and medium manufacturers, and distributers. Reach out to at-least four community-based organizations to understand the issues relevant to underserved vulnerable populations in rural areas for purchase and use of efficient lighting equipment. Provide the recommendations to meet the needs of such communities and increase the access for efficient lighting to improve quality of life.
- 1.7 Assess the emerging technology available in global market on smart lamps and market of both AC and DC lamps etc.
- 1.8 Conduct life-cycle cost assessment and pricing comparison of LED linear lamp and its associated components.

Task 2: Development of test procedure

- 2.1 Identify and analyses relevant Indian/ISO/IEC test standard and standards in other developed countries.
- 2.2 Review and compare national and international test standards such as ISO/IEC as well as labelling program used by countries and regions such as China, Korea, Japan, EU, US, Australia etc. Analysis must include the comparison of testing conditions, testing methods and calculation methods for efficiencies.
- 2.3 Identify and provide assessment of existing test facilities in India including the national accreditation status and provide recommendations to address the gaps.

Task 3: Development of Energy Efficiency Metric and Labelling Scheme

- 3.1 Conduct a comparison of international labelling programs and energy efficiency metrics.
- 3.2 Design and develop an energy efficiency metric for LED linear lamps. The scheme should be developed in a template of schedule and address all the parameters in the respective clauses of the schedule template.

Task 4: National Impact Assessment and Technical Committee Meetings

- 4.1 Based on the final recommendations of labelling thresholds, quantify annual electricity consumptions, projected energy savings and associated cost savings, avoided generation capacity, GHG emission reductions and economic benefits. The impact assessment should be done based on logical assumptions of market transformation for short term (2030) and long term (by 2050).
- 4.2 Assess the implications of S&L policies on manufacturers, consumers ownerships, and requirements of subsidies/ incentives to promote the policy adoption, if needed.
- 4.3 Assist CLASP and BEE in planning and deliberating at the technical committee meetings for developing EE policy of LED linear lamps. Prepare necessary documents (e.g., presentation, meeting agenda and minutes, labelling schedule, and gazette notification) as required.

Key Milestones and Deliverables

- 1. Final comprehensive market and technical assessment report with key findings and recommendations.
- 2. Propose energy performance metric for LED linear lamps.
- 3. Draft schedule and gazette notification as applicable.

4. Preparation of necessary materials for launching of the labelling program by BEE

Submittal

Register as a Consulting Partner

Interested parties must register as a CLASP Consulting Partner.

Submit Technical and Financial Proposals

Interested parties should submit separate technical and financial proposals electronically, in English, via this <u>form link</u> (preferably in PDF format). The files should be named as per the following example:

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[CONTRACTOR_NAME] _Technical Proposal_ RFP 2022-12-30 [CONTRACTOR_NAME] _Financial Proposal_ RFP 2022-12-30
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The length of the technical proposal should not exceed 20 pages and should include:

- Detailed approach and methodology for the design, implementation, and management of the project.
- Detailed timeline for all project activities, tasks, milestones, and deliverables for the project within the time frame indicated above.
- Background and experience of conducting similar activities especially on lighting products.
- A summary of qualifications and experience of key personnel that will execute the project.

The financial proposal (in USD) should include a detailed budget with all direct and indirect cost estimates for executing the project, including a breakdown (in days) of the level of effort and costs associated with each team member that will be engaged in the project.

CVs and related summaries of experience and qualifications of proposed project team staff should be included in an Annex and should not exceed 10 pages.

Optional At This Stage – Fill Out Pre-Qualification Questionnaire (PQQ)

All contractors must <u>fill out the PQQ</u> before working with CLASP. This can be voluntarily completed at the RFP stage but will be mandatory if a contract is awarded.

The PQQ is a thorough due diligence screening aimed at gathering legal and financial information on prospective partners/vendors. Contract awards are conditional upon passing the due diligence screening. Organizations that have already completed the PQQ do not need to complete it again unless the structure of the business has changed. If you are unsure, please email Andrea Testa (atesta@clasp.ngo) to determine next steps.

Evaluation Procedure

A committee appointed by CLASP will evaluate proposals received. Selection of qualified companies or organizations will be based upon the following criteria:

- Technical Evaluation Factors
- Financial Evaluation Factors

All bids will be evaluated and ranked using Quality and Cost Based Selection (QCBS), with 80 percent of the score accorded to the technical proposal, and 20 percent to the financial proposal. The detailed evaluation criteria can be found in Annex A.

ANNEX A: EVALUATION CRITERIA

Technical Approach (35 points): The technical approach described in the proposals will be evaluated on:

- The demonstrated understanding of the overall project context (15).
- The detailed work plan and approach clearly defining the target objectives and the strategy to achieve the objectives as outlined in the scope of work (20).

Management Structure and Staff Qualification (25 points): The proposed management structure and staff will be evaluated on:

 The professional qualifications and the extent to which the requisite expertise and experience of the key personnel will directly contribute to the completion of the tasks (25).

Past Performance and Corporate Experience (20 points): The experience and capacities of the contractor will be evaluated based on:

- The past performance, familiarity, and experience in understanding policies and program related to standards and labelling (10).
- Extent of local expertise including experience, qualifications, and track record in implementation of similar programs (10).

Cost Evaluation Factors (20 points): While the overall Technical Evaluation is the key factor in reviewing the proposal, the cost evaluation will be an essential factor in determining the final contract award and ability to remain in the competitive range and will be evaluated for feasibility, completeness, and practicality.

CLASP looks forward to reviewing your responses and would like to thank you in advance for your participation in this Request for Proposals. CLASP will notify all respondents who submit proposals when a decision has been made.

CLASP is an equal opportunity employer that celebrates diversity and are committed to creating an inclusive environment for all employees. CLASP's goal is to be a diverse workforce that is representative, at all job levels, of the citizens we serve. CLASP complies with all federal, state and local employment law in the countries we operate and is committed to providing equal opportunity for all employees and applicants without regard to race, color, religion, national origin, sex, age, marital status, sexual orientation, gender identity or expression, pregnancy, disability, political affiliation, personal appearance, family responsibilities, matriculation, genetic information, military or protected veteran status, credit information or any other characteristic protected under federal, state or local law.

Each person is evaluated based on personal skill and merit. CLASP's policy regarding equal employment opportunity applies to all aspects of employment, including recruitment, hiring, job assignments, promotions, working conditions, scheduling, benefits, wage and salary administration, disciplinary action, termination, and social, educational and recreational programs.