## Support for Development of India Standard and Labelling Program for Table Fans and Pedestal Fans

### Introduction

<u>CLASP</u> serves at the epicenter of collaborative, ambitious efforts to mitigate climate change and in the global movement for clean energy access, through appliance efficiency. 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, donor organizations and others to propel policies and markets toward the highest-quality, lowest resource-intensive appliances possible.

CLASP has worked in more than 100 countries since our inception in 1999. CLASP is headquartered in Washington, DC, with teams in Europe, Kenya, India, China, and Indonesia. We are mission-driven 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 policy framework to cover a wide range of residential, commercial and industrial energy-using 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 in 2002, a statutory body under Ministry of Power, Government of India to implement the EC Act 2001. The Act identifies S&L as one of the major areas for improving energy efficiency in the residential, commercial, and industrial sector. BEE launched the S&L program in May 2006 and currently covers 30 product categories, of which 10 are mandatory products.

Table fans are propeller-bladed fans with a smaller diameter, having two or more blades and intended for use with free inlet and outlet of air. It may be a table fan or bracket-mounted fan for wall or ceiling mounting. Table fans are lightweight, electrically-powered devices designed to provide air circulation without the need for installation. It also gives more flexibility with placement options because of its light weight. Table fans are manufactured across sweep sizes of 200 mm, 250 mm, 300 mm, and 400 mm. However, the most commonly used category is of 400 mm sweep size. Table fans are portable, not as bulky, have an oscillating mechanism and take up lesser space at home.

Pedestal-mounted fans require a separate power source and a dedicated electrical circuit. The number of blades usually varies from two to five and are made of either metal or plastic. The fans with plastic blades are light in weight, while the fans with metal blades are heavier. Most pedestal fans have options for height adjustment and tilt feature mechanisms to direct the airflow.

Electric table fans and pedestal fans are common electric appliances used in houses, offices, shops, and business establishments to provide air circulation and to cool down temperature.

These fans circulate air, which enhances the evaporation rate of sweat from the body due to which the body is cooled.

It is estimated that the potential for energy efficiency improvement in these products can increase by ~50% in comparison with the current market scenario. Realizing the need to reduce rising electricity demand and improve the efficiency in the cooling segment across the country, BEE plans to develop a voluntary star labelling program for Table Fans and Pedestal Fans.

CLASP seeks to hire a consultant to conduct a comprehensive market and technical assessment study for the development of the new labelling program for Table Fans and Pedestal Fans.

#### 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 Indian market for Table Fans and Pedestal Fans (number, types, sweep sizes and capacity, manufacturer-wise, type of manufacturers such as organized and unorganized in large and MSME 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 the global landscape for Table Fans and Pedestal Fans.
- 1.2 Develop a questionnaire in consultation with CLASP for the collection of data to analyse the current market scenario, energy performance status etc.
- 1.3 Supply and distribution channels of finished products both across the organized and unorganized sectors.
- 1.4 Identify the challenges and barriers that affect 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 the next 10 years. The forecast should be accompanied by an analysis of key drivers of market penetration (rural and urban).
- 1.6 Analysis of the industry in the organized and unorganized sectors, covering large and MSME sectors, and distributers.
- 1.7 Reach out to four community-based organizations to understand the issues relevant to underserved vulnerable populations in rural areas for purchase and use of efficient cooling equipment. Provide the recommendations to meet the needs of such communities and increase the access to cooling to improve quality of life.

#### Task 2: Development of test procedure

- 2.1 Identify and analyse relevant Indian/ISO/IEC and other global test standards.
- 2.2 Review labelling programs of few developing countries and regions namely China, Korea, Japan, EU, US, Australia and United4Efficiency model regulations. Analyses must include the comparison of testing conditions, testing methods and energy efficiency requirements.
- 2.3 Identify and provide an assessment of existing test facilities in India including the national accreditation status and provide recommendations to address the gaps.
- 2.4 Facilitate lab testing, if required, and conduct detailed analysis of the lab test data to generate performance metrics.

#### 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 Table Fans and Pedestal Fans.

3.3 Prepare product schedule on the prescribed BEE template addressing all the components required for BEE product schedules in consultation with CLASP

#### Task 4: National Impact Assessment and Technical Committee Meetings

- 4.1 Based on the final recommendations of labelling thresholds, quantify annual electricity consumption, projected energy savings and associated cost savings, avoided generation capacity and GHG emission reductions. 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 policy adoption, if needed.
- 4.3 Assist CLASP and BEE in planning and deliberating at technical committee meetings for Table Fans and Pedestal Fans. Prepare necessary documents (e.g. presentation, meeting agenda and minutes, labelling schedule, and gazette notification) as required.

#### Key milestones and deliverables of the study include:

- Final comprehensive market and technical assessment report with key findings and recommendations.
- Propose energy performance metric for table fans and pedestal fans.
- Draft product schedule using BEE template.
- Preparation of necessary material for launching of the program by BEE.

#### Timeline

The project is expected to commence in March 2022 and conclude by December 2022.

#### **Evaluation Procedure**

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

- Technical evaluation factors
- Cost 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.

#### Submittal

#### **Register as a Consulting Partner**

Interested parties must register as a CLASP Consulting Partner.

#### Fill Out Pre-Qualification Questionnaire (PQQ)

All candidates must <u>fill out the PQQ</u>. The PQQ is a thorough due diligence screening aimed at gathering legal and financial information on prospective partners/vendors. If questions are not applicable, please type "N/A" and go to the next question. While the form can be saved, we recommend completing it in one sitting to avoid potential complications. You will be notified once you submit the PQQ.

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 (<u>atesta@clasp.ngo</u>) to determine next steps.

#### Submit Technical and Financial Proposals

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

- [CONTRACTOR\_NAME] \_Technical Proposal\_ RFP \_07\_03\_2022\_Cooling Products
- [CONTRACTOR\_NAME] \_Financial Proposal\_ RFP\_07\_03\_2022\_Cooling Products

The deadline for applying is **March 07**, **2022**. Proposals must be submitted via the form link above. Proposals must be submitted online via the CLASP website, filling out all the requested information and attaching both technical and financial proposals. The length of the proposal should not exceed 20 pages

The technical proposal 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 cooling products.
- A summary of qualifications and experience of key personnel that will execute 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.

The financial proposal (in USD) should include a detailed budget that includes 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.

# Consultants are requested to submit their technical and financial proposals separately for i) Table Fans, ii) Pedestal Fans and iii) for Both Products.

All questions may be addressed to Ms. Moumita Chandra, via email to <u>mchandra@clasp.ngo</u>. The last date for submission of questions related to this RFP is **February 25, 2022**. We request all inquiries be made by e-mail.

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.