

# Product Specification for Solar Lanterns

## Request for proposal

### Background

SEWA is a member-based organization of self-employed women workers with membership of over 1,300,000 across seven states in India. SEWA provides microfinance, insurance products, training, rural production and marketing, and housing services to its members. It is also active in Afghanistan and Sri Lanka. SEWA intends to sell during a period of 3 years 200,000 rechargeable off-grid solar lanterns to its clients in 4 states (Gujarat, Rajasthan, Bihar and UP) in India. Delivery will be 50,000 in Year 1 and 75,000 in each of the subsequent 2 years. This RFP is for the first phase of the project, which involves procurement and delivery of 50,000 solar lanterns.

The SEWA's Hariyali Bond seeks to finance the introduction of 200,000 lights and cook stoves over the next 3 years. This will be a very high profile project that has the potential of really launching a company's product in this space. We are therefore looking for strong partners who wish to work with us closely and to innovate to create the best product possible.

The purpose of this RFP is to lay out a common standard that will be used in evaluating the best vendors with products that will suit the needs of this project. An independent committee will be appointed to make the choice and the decision of the committee will be final and binding.

The weight given to each of the criteria discussed below will be solely at the discretion of the committee making the final selection. While price is a key consideration (i.e., the products need to be appropriate for very low-income users) quality is also an extremely important parameter and will be evaluated as such (i.e., a "low cost" product is only cost effective if it performs adequately and lasts for a reasonable period of time).

## Product Considerations

### Technical Specifications:

Companies should submit technical information for a product they propose to include in the program using the specification sheet. For existing products, the results should be based on laboratory measurements of product samples. If the performance data reported were generated by an independent laboratory, the submitting company should provide information (including contact information) about the testing program or laboratory under which the measurements were made. If a product is not yet available the company should provide a detailed roadmap of what they will be developing, the committed price points, and the delivery schedule, at detailed sub tasks show with dates of delivery. During the selection process, the technical specifications will be considered along with some of the parameters outlined below.]

### Pricing of the product:

Given that the product is targeted at people living at the base of the pyramid, there is a great deal of price sensitivity and this will be a very significant criterion in making our final evaluation. Submissions should include per unit wholesale pricing and distributor discounts for the purchase of the first 50,000 units.

### Portable nature of the light:

The lights are meant to be used as household products. Products that can be moved easily from one spot to another within the house, and even transported externally with little effort if needed, are desirable. The ingenuity and design of how it can be deployed inside the house (hung, put on a stand, etc) will all play a critical role in evaluating the user friendliness of the product. Submissions should include a short narrative statement that describes the portability of the products.

### Multiple power and focal settings:

A light that has multiple power settings will have an advantage as this would allow for longer running time and allow for different types of usage. Submissions should include information about the product's light settings.

#### Duration of the light:

The light must be capable of providing at least 4 to 6 hours of light per day of solar charging at or above 20 lumens. Lights that produce more light for a longer period of time will be considered more favorably.

#### Lumen Depreciation:

The light output must not be reduced (depreciated) below 70% of its rated output level after 2,000 hours of operation. Lower rates of lumen depreciation over the 2,000 hour period will be viewed more favorably.

#### Charging source:

The battery(s) may be recharged through a variety of means including solar PV, biomass electricity, physical recharging with a dynamo, AC mains, or other approaches. We will look for innovative solutions in this space that provide the best combination of price and performance. Products that have multiple options on how they may be charged will be viewed favorably.

#### Additional Applications beyond Lighting:

Products that provide additional services, such as mobile phone charging, will be viewed favorably. Other potentially desirable features might include ability to operate small fans, radios, or other products with small power requirements. Submissions should include information about product capabilities beyond lighting and a quantitative assessment of how utilization of those capabilities impacts the available energy for lighting (e.g. how many hours of lighting are possible per day of solar charging if a mobile phone is also charged on the same day?). Currently the strongest preference is for a lighting product that also includes mobile phone charging capability.

#### Replacement of parts:

Designs that allow for parts that are either worn out or broken to be replaced fairly easily will be viewed positively. This is especially true in the case of battery replacement. Company submissions should include information about the relative ease of component replacement, including a listing of tools that are required for replacement of key components.

### Service Warranties for the Product:

Submissions should include a description of the warranty terms associated with the product. We will expect the product to carry a minimum two - years warranty during which time all the components, including the battery, must function at full specification. Longer warranties will be viewed positively. Vendors should provide an explanation of how faulty lights will be serviced in the field or at a central location.

### Vendor Considerations

Rural customers are not all the same, and vendors should provide information on their entire solar lantern product line. Vendors are requested to provide information on distributor discounts, payment terms, channel considerations like drop or batch shipping, handling returns and repair capability, and capability to produce a stream of attractive and competitive products for the rural marketplace that offer the latest advantage of price performance. The vendor relationship should permit SEWA to offer the rural consumer the latest and best.

### Operational Parameters

Vendors should provide information on its operations including years in business, size of business etc. , organizational and infrastructure strength ( locations, people, warehouses, return and repair handling etc), technology strength particularly for lights where the technology is rapidly evolving, installed base of customers for volume, and marketing strength. Vendors should submit information showing “ product pull” and acceptance of their product in the rural marketplace

### Distribution Network:

One of the important considerations in selecting the vendor will be the distribution network that they are able to provide. This will involve a network of wholesalers/wholesale depots in the region from which the direct sales force can source the product. Submissions should include a description of the distribution network for product and spare parts delivery that the company has in place or will establish for the project.

### Financial Strength:

A key criterion for vendor selection would be the financial strength of the proposed vendor with regards to ability to supply and service 200,000 lanterns over the duration of the project. Key financial parameters include details of equity capital, any future capital raising plans, projected capital expenditure and details of sanctioned term loans and working capital lines. Submissions should include details on the above-mentioned parameters along with the audited financial statements of the company for the past three years along with financial projections for the next five years.

### Training:

The supplier company will be expected to set up a service centre at SEWA's selected location. The company will train rural youth in after-sales service, repairs, and maintenance. The submission should include a description of company capabilities as they relate to capacity building and a proposal, including costs, for setting up the service center.

### Timeline:

The proposal should be submitted within two weeks from the date of posting.

Any questions related to this Terms of Reference should be directed to Shrimati Reema Nanavaty, [email:reemananavaty@sewa.org](mailto:reemananavaty@sewa.org) Telephone: (079) 26589729