

*Note: While the Bank/GEF PV project uses the “dealer model” as the business approach for dissemination, it was thought some poor remote areas are best served by small concessions. The TOR describes consultant work to identify the areas and define the most suitable type of concession approach.*

## **DESIGN OF A PILOT SOLAR HOME SYSTEMS AWARD PROCEDURE**

### **Background**

<Brief description of objectives, scope and status of implementation of Bank/GEF project, overview of application in country>

### **Objectives**

To design a concession pilot for Solar Home Systems for poverty areas in which project and Government (national, provincial, county) resources are combined to make small PV systems affordable for poor households in the poverty areas.

An award approach is adopted because a competitive market is unlikely to reach these areas as little profit is to be made (too few customers and high marketing and after sales services costs).

The pilot will need to be based on a number of design principles agreed with the Government:

1. The systems should not be free for households. However little, households need to demonstrate their willingness to pay for the services provided by PV;
2. The support is intended to make the smallest system (10 Wp) affordable to poor rural households. The smallest systems should receive the highest percentage “subsidy”. The larger the systems, increasingly smaller percentage subsidy. This could be achieved by setting the government subsidy as a fixed amount, for example, irrespective of the size of the PV system;
3. There must be a mechanism to limit the government subsidy to one per household in order to spread the benefits of the government subsidy;
4. Systems sold in such concession need to meet minimum requirements for quality, after sales services and warranty.

### **Scope of the Services**

#### **Task 1: Characterisation of Potential Target Market Areas**

The consultant will need to recommend and define a suitable size of a target market area. This can be a geographical area, a certain surface area, an administrative area, a number of households, etc, or a combination of these. The size of the area needs to be sufficient large to allow a financial attractive operation, but not too large making the provision of services unmanageable.

When the size of an area is defined the consultant needs to characterise at least 5 of these areas from which the potential target market area can be selected for implementation. Before commencing with this work, the consultant needs to prepare a list with most important characteristics of a market area relevant for potential bidders This list of area characteristics needs to be approved before proceeding with the detailed characterisation. Characteristics may include: the size of the area, number of households in such area, an assessment of willingness and ability to pay, poverty indicators, estimated size of area market, average solar irradiation, present use of PV and SHS, major markets, presence of other companies or other government programs already in the concession area, etc.

The people in the market area need to agree and fully support being included in a SHS pilot. Without the strong support of the main stakeholders the pilot is bound to fail. The consultant will need to specify how this “buy-in” will be obtained and what kind of agreement (and with whom) will need to be entered into to make sure the people in the market area fully support this initiative and will participate in this initiative. A draft agreement needs to be prepared in consultation with representatives of potential market areas.

**Task 2: Propose Financing Scheme**

The consultant will have to propose a financing scheme for the PV systems supplied under the pilot. The financing from the Project is fixed to 1.50 US\$/Wp or 2.00 US\$/Wp for systems using modules certified according to IEC 61215 [*change as necessary*]. The contribution from the government (national, provincial and county) is not fixed. The proposed contribution should be in line with the design principles given above. This would be the case if for instance the government contribution was fixed at 50 US\$ per system. In that case the smallest systems would receive the highest percentage subsidy (80% for a 10 Wp system and 45% for a 20 Wp system) and the consumers still need to pay something (15\$ for a 10 Wp system and 85\$ for a 20 Wp system).

**Task 3: Duties of the Contractor and Contract/Agreement**

The consultant needs to specify in detail what the duties and responsibilities of the award winner or contractor are. This includes at a minimum the accreditation requirements for PV Companies, but will most likely include additional requirements. For instance the requirements could include the establishment of one or more after sales service point in the market area. Establishment includes training, re-training, storage and/or provision of parts, etc. Also the quality criteria may be higher than for other areas as the areas are more difficult to reach and broken parts more difficult to replace. The criteria and conditions under which the contract can be withdrawn should be detailed and the appeals procedures specified. The contractor might also be required to post a bond or other financial guarantee. If so, the requirement should be detailed. The contractor may also be required to achieve a target, time bound level of sales.

The consultant must prepare a Contract or Agreement. It should clearly define the rights and obligations of the contractor, the rights and obligations of the people in the market area and the rights and obligations of the Project management office..

#### **Task 4: Design of Bidding Process**

The consultant needs to clearly specify what potential bidders are bidding for, e.g., . the exclusive right to market SHS in the market areas with the agreed financial support from both the Project and the government.

The consultant should assess whether only one contract for an area should be granted or if it would be more effective in terms of better products and services, to introduce two or more contractors in the area to add some degree of competition.

The consultant needs then to specify what the selection criteria will be. This can for instance be on the price the systems of different size will be offered to the rural households (price based selection requiring a minimum quality), the quality of the systems and services offered (quality based selection under a fixed price), or a combination of both (price and quality based selection). The bidding could also be on minimum subsidy requirements.

The consultant also needs to describe the bidding procedures and whether or not a bidding company will be involved. Also rules for implementation need to be specified. For instance the time frame after winning the concession the winning bidder needs to start installing the first system and progress over time. The winning bidder will need to sign a contract or agreement with the Project.

#### **Task 5: Monitoring**

The consultant needs to propose a monitoring program to assess progress and to assess whether or not the contractor meets the requirements agreed upon and included in the contract or agreement.

### **Deliverables**

Inception Report describing approach and how potential issues will be resolved – Within 2 weeks of contract award

List of potential market areas and their characteristics – Within 10 weeks after contract award

Financing Scheme and Contract or Agreement – Within 14 weeks of contract award

Bidding Procedure – Within 15 weeks of contract award

Final report – Within 17 weeks of contract award

### **Time Schedule**

The period of performance is four months.

### **Budget**

The budget for the assignment inclusive of fees and travel is \$25,000.

## **Consultant Qualification**

It is preferred that a firm with staff of different disciplines and experience in PV systems and rural electrification be contracted.