

## **Advance Action on Recruitment of Consultants**

### **Invitation for Submission of Expressions of Interest (EOI)**

### **Consulting Services for Project Implementation**

**Country/ Borrower:** Republic of the Philippines

**Project:** PHI: Philippine Energy Efficiency Project (Project No. 42001)

#### **OUTLINE TERMS OF REFERENCE FOR CONSULTANTS**

1. The implementation consulting team will require the services of a multidisciplinary team of international (40 person-months) and national (87 person-months) consultants. The consultancy firm will be responsible for the timely delivery of the output requirements.

2. The international consultants will have experience in (i) implementation of large-scale efficient lighting projects including commercial, residential, and public lighting; (ii) energy-efficiency testing of appliances and capacity building; (iii) lamp waste management technologies and operation; (iv) design and management of energy-efficiency funds; and (v) design and facilitation of efficient-building projects.

3. The national consultants are expected to have (i) a good understanding of the energy sector in the Philippines, and (ii) expertise in the conduct of monitoring and verification of energy-efficiency projects including the conduct of consumer surveys.

#### **A. Component 1.1: Retrofit of Government Buildings**

4. Under this component, the consultant will perform pre- and post-installation monitoring, verify energy savings, and prepare case study reports. This is expected to require 12 person-months of consulting services (4 international and 8 national) over 2 years. The consultant will (i) conduct validation audits of the buildings with the assistance of government energy officers to finalize the scope of supply and services; (ii) prepare technical specification and bidding documents; (iii) help with bid evaluations, contract negotiations, and contract award; (iv) coordinate retrofits and issuance of acceptance certificates; and (v) prepare case study reports and facilitate dissemination.

#### **B. Component 1.2: National Residential Lighting Program**

5. This component includes the preparation of bidding documents (including technical specifications), program implementation coordination, management, and monitoring of compact fluorescent lamp (CFL) and light-emitting diode (LED) distribution and collection of incandescent bulbs.

6. To streamline the CFL procurement and distribution program, an energy-efficiency expert (specializing in energy-efficient lighting) will be appointed under the advance procurement action. This component will need 25 person-months of consulting services (6 international and 19 national) over 2 years. At least one individual consultant will be fielded in the fourth quarter of 2008. The consultant will (i) finalize project design including flow charts, logistical preparation, and indelible labeling requirements; (ii) establish appropriate international

and national certification specifications for CFLs; (iii) determine the number of bid packages for CFLs, quantity to be included in each bid package, and selection of regional delivery points; (iv) prepare technical specifications for CFLs and bidding documents; and (v) discuss the scope of LEDs for use as general lighting in nonelectrified *barangays* (villages) with the executing and implementing agencies, and finalize distribution channels.

7. This component will also include (i) coordination of CFL distribution and collection of incandescent lamps, including the preparation of inventories of the collected incandescent lamps and progress reporting on CFL distribution; (ii) conduct of monitoring and verification of the energy and demand impacts using approved methodology; (iii) provision of relevant documentation to facilitate the determination of CERs (Carbon Emission Reductions) under programmatic CDM (Clean Development Mechanism); and (iv) preparation of case study reports and facilitate dissemination.

### **C. Component 1.3: Public Lighting Retrofit Program**

8. This component will retrofit street lighting in three selected electric cooperatives and traffic lights in a local government unit. It will require 9 person-months of consulting services (3 international and 6 national) over 2 years. The consultants will (i) conduct validation audits of the sites to finalize the scope of supply and services; (ii) prepare technical specifications and bid documents; (iii) assist in bid evaluations, contract negotiations, and contract award; (iv) coordination of retrofits and issuance of acceptance certificates; (v) conduct of pre- and post-installation monitoring and verification of energy and demand savings; and (vi) prepare case study reports and facilitate dissemination.

### **D. Component 1.4: Energy Efficiency Testing and Lamp Waste Management**

9. This component will expand the capacity of the appliance-testing laboratory to test energy-efficiency performance of a wider range of appliances, and require 9 person-months of consulting services (3 international and 6 national) over 2 years as implementation support. The consultants will (i) review the current operations of the lighting and appliance-testing laboratory, and finalize the scope of the additional testing facilities and the requirements in terms of product standards and laboratory certification; (ii) prepare technical specifications for testing equipment and bidding documents; and (iii) prepare documentation for the laboratory accreditation to ISO 17025 and coordinate the accreditation application process. The team will prepare technical specifications and bid documents for the lamp waste management facility; and help with bid evaluations, contract negotiations, and contract award for this component.

### **E. Component 2.1: Super Energy Service Company**

10. The consulting firm will provide 32 person-months (8 international and 24 national) of consulting over 2 years. The consultants will be hired on a performance-based contract, with incentives to develop new business for the super energy service company (ESCO).

11. The consultant will (i) confirm identified projects for demonstration; (ii) assist proponents of demonstration projects in preparing technical and financial details; (iii) develop standard documentation; (iv) develop equipment specification and tender documents; and (v) help evaluate bids.

**F. Component 2.2: Efficient-Building Initiative**

12. For the implementation of this component, one international (5 person-months) and one national (6 person-months) consultant will be appointed intermittently over 2 years. The consultants will (i) assess the proposed rating system for new and retrofitted buildings; (ii) streamline existing initiatives into a single-building rating system for the Philippines; (iii) draft specifications and conduct industry-wide consultation; (iv) finalize specification for the rating system; (v) develop specifications for the scoring mechanism and software; (vi) support procurement; (vii) develop and design the accreditation requirement and procedures for implementation of the rating system; (viii) develop the training curriculum for accrediting assessors; (ix) review and upgrade the design of the buildings selected for demonstration to meet the system requirements; and (x) certify buildings using the system.