TERM OF REFERENCE (D2.09)

Position: Expert on Economic Feasibility and Technical Assessment of VEEPL Demonstration Schemes

Task Location: Hanoi, Quy Nhon and Ho Chi Minh City as required

Duration: Six (06) months tentatively starting by May 2009

Task Manager: Project Manager

1. Background

The Project Vietnam Energy Efficient Public Lighting (VEEPL) is a joint effort of the Global Environment Facility (GEF) and Vietnamese counterparts, aiming at encouraging application of the energy efficient practices among Public Lighting in Vietnam, and through that contributing to the reduction of Green House Gas (GHG) emission by the sector.

The project will contribute to the transformation of Vietnam’s Public Lighting from highly energy inefficient and polluting to energy efficient with greatly reduced pollution through the effective implementation of a carefully chosen and integrated mix of project components by relevant central government agencies, local governments, institutions, lighting industry and private sector.

One of the core project activities is to demonstrate to various stakeholders the viability and feasibility of energy efficient public lighting systems through actual design, implementation, and financing of such systems. For this purpose, VEEPL Project has provided technical support to the implementation of various demonstration street and school lighting projects in Quy Nhon, Ho Chi Minh City and Hanoi. One of the key elements of VEEPLP’s technical assistance has been providing technical assessment and economic feasibility analysis of the proposed demonstration projects.

In order to continue to providing such assistance to more demonstration projects VEEPLP is seeking the services of a qualified expert with suitable experience and qualification. This position is available through a 6 month performance based contract.

2. Duties and responsibilities

The major responsibility of the expert is to conduct the economic feasibility and technical assessment of VEEPL demonstration schemes implemented:

- In Quy Nhon City with the Subcontract “Implementation of Demonstration Schemes in Quy Nhon City” for 2008.
- In Ha Noi with Subcontract “Implementation of Demonstration of EEPL at schools of some levels (high schools, primary schools, and secondary schools) of Hanoi City”.

The technical assessment shall examine the suitability of choice of energy efficient technology and suitability of scheme design to ensure that the design exploits the full potential of energy savings offered by the energy efficient technology and is compliant with local standards and regulations. The technical assessment shall also provide a
comparison between the energy efficient technology being used in the project with conventional standard technology that was either previously used or could have been used in the absence of energy efficient technology.

The economic feasibility will provide complete assessment/comparison between energy efficient and standard technologies in terms of total investment and operational costs for the life of the project. The feasibility assessment will be detailed and will address all aspects of investment over the complete lifecycle of the project i.e. capital investment, operational costs, financing and loan repayment etc.

3. Scope of Work

- Work with PMU to develop a detailed working plan for the whole contract duration;
- Collect required data/information on demonstration schemes, as described in Section 2, from the relevant stakeholders. The relevant staff members at VEEPLP shall assist the experts in accessing such data/information.
- Meet with owners/implementers of demonstration projects to discuss various technical and economic aspects of the projects.
- Conduct the economic feasibility and technical assessment of the above-mentioned demonstration schemes, in line with description of technical assessment and economic feasibility provided in Section 2.
- Discuss the findings with the owners/implementers of demonstration projects and relevant staff at PMU.
- Prepare 3 information sheets, each providing summary of description of the project and key technical and economic findings for one type of demonstration project.
- Prepare final report that provides details of methodology/approach used to conduct the technical assessment and economic feasibility analysis, results and recommendations to assist other stakeholders in improving technical and economic design for similar energy efficient public lighting projects.

Deliverables

1. A detailed work plan, together with review/assessment and quality assurance process for the whole contract duration.
2. Interim report on data collection and key findings as discussed and agreed with the owners/implementers of demonstration projects and relevant staff at PMU.
3. Three project information sheets, each providing summary of description of the project and key technical and economic findings for one type of demonstration project.

All communications and reports must be in Vietnamese and English. All the above completed reports must be submitted to PMU.
**Overall quality requirement for the assignment**

Some key quality requirement for this assignment includes:

- A sound methodology/approach must be provided, consulted and agreed with the PMU at the beginning of the assignment. It should clearly show how the assignment will be accomplished in most effective and feasible manner.
- Review/assessment and quality assurance criteria should be explained clearly and with sufficient details in the reports.
- All queries and concerns raised by relevant stakeholders and VEEPL staff will be addressed by the expert in a satisfactory manner.

All reports will be provided in both English and Vietnamese languages (first in English and approved version in Vietnamese).

**Qualification and Experience**

Minimum qualifications of the expert are as follows:

- Bachelor or master degree in engineering, finance, economics, management or related fields.
- At least 5 year experience of conducting economic feasibility assessment of engineering/development projects. Experience with energy efficiency related projects will be considered an advantage.
- Knowledge and familiarity with lighting technologies and issues, greenhouse gas and carbon emission reduction issues will be considered an advantage.
- Demonstrated skills in the use of MS Office suite such as MS Word, Excel and PowerPoint.
- English language skills, written and spoken, are mandatory for this assignment.