

TOR for Short Term Experts / Advisory Service Contract

Project No.: 05.2091.6-001.00

Project Title: Sustainable Energy for Development (SED)

Country: Bangladesh

Contract No.: 836038616

Consultant :

1. General Project Information in Brief

GTZ under its programme "Sustainable Energy for Development (SED)" is working for the popularization of renewable energy technologies in Bangladesh

2. Initial Situation:

The Government of Bangladesh (GOB) has taken a decision to implement the Efficient Lighting Initiative, a large scale efficient lighting program in the residential consumer sector. GTZ in collaboration with the World Bank have been working with the GOB to help develop a detailed design and implementation program for a demand side management (DSM) program based on bulk procurement and subsequent large-scale deployment of energy efficient lighting measures, primarily targeted to replace incandescent (filament) lamps (ILs) with efficient compact fluorescent lamps (CFLs). The program is aimed to achieve the following **key objectives**:

- (i) reducing peak demand (MW) and energy demand (MWh) to address current power shortages in a cost-effective manner, and
- (ii) facilitating the generation of additional revenues through the associated carbon credits to be obtained through the Clean Development Mechanism (CDM) process.

The February 18, 2009 consultation meeting with the GoB, GTZ, the World Bank and other relevant stakeholders emphasized the need to rollout CFLs in rural as well as urban areas, with an estimated minimum 6 million CFLs for rural areas. A study completed by Clean Energy Alternatives (CEA) in Dhaka in February 2009 surveyed lighting issues for the 10 largest urban areas; CEA, however, also collected survey data from 4 rural districts (out of 64 districts) to test the homogeneity of the data with urban areas. There were some differences between urban and rural power consumptive patterns albeit with statistical confidence being less than 95% for rural areas.

3. The advisory services of the consultant relate to the following subjects/areas:

Survey Objective:

A separate study is recommended to review existing REB electricity consumption data, identify data gaps with respect to light usage in rural areas, and to survey of rural areas to fill in these data gaps. This study would improve the confidence of ELIBs CFL rollout designs for the rural areas. The survey would cover 36 out of 72 PBSs and be started during the Phase I PP support period.

Tasks / Scope of Work

To meet the objectives of the proposed study, the consultants will extend their services as per the following ToRs: