

## TERMS OF REFERENCES

**Project Preparation facility activity for the project “Promoting private sector investment through large scale adoption of energy saving technologies and equipment for textile sector of Bangladesh”**

### **A. PROJECT TITLE**

Promoting private sector investment through large scale adoption of energy saving technologies and equipment for textile sector of Bangladesh

### **B. BACKGROUND**

Infrastructure Development Company Limited (IDCOL) was established on 14 May 1997 by the Government of Bangladesh. The Company was licensed by the Bangladesh Bank as a non-bank financial institution (NBF1) on 5 January 1998. Since its inception, IDCOL has been engaged in renewable energy and infrastructure sector development of the country with support from its development partners such as World Bank, ADB, JICA, IDB, KfW, GIZ, USAID etc.

Financing energy efficient projects is a recent initiative of IDCOL. Under this, IDCOL has already undertaken nationwide Improved Cook Stove (ICS) and Energy Efficient Brick Kiln programs. In addition, energy efficient boilers & industrial machineries and manufacturing of energy efficient components and appliances are within the focus areas of IDCOL.

Energy efficiency is widely recognized as the most fundamental short-run imperative for rapid, ambitious and cost-effective climate change mitigation. As a matter of fact, improved efficiency is the most cost-effective, least-polluting and readily-available energy source. It can help enhance the competitiveness of economies while also alleviating energy poverty with more available energy for the same levels of input. Energy productivity gains will lower the cost for the economy as a whole, enhance the supply security and reduces the need to develop new sources of energy supply to serve those without access to modern energy services for health and education enhancement. Accelerated energy efficiency can also create attractive green jobs and businesses.

IDCOL is trying to promote private sector investments in energy efficient equipment for textile sector in Bangladesh. This program aims to support entrepreneurs and business establishments in the textile sector, one of the largest industries of the country, with financial and market resources to avail investment opportunities for energy saving technology upgrades. IDCOL will be the DAE (Direct Access Entity), arranging concessional loans from Green Climate Fund (GCF) to finance textile businesses in Bangladesh to adopt energy efficient appliances.

The Program is designed to optimize the use of funding available in terms of leverage and sustainability, investing concessional resources optimally to enable adequate financing and creating market instruments to manage risks among market actors. In order to access financing

from the Program, the end borrowers will always be required to take on risk via minimal capital requirements.

The proposed program shall be executed via two components:

Component 1: Implementation costs and technical assistance activities.

For Component 1, GCF grant resources will finance third party expertise to provide technical assistance and develop non-financial mechanisms to support the implementation of the concessional loans and reduce risks for end borrowers, energy service and technology providers and LFI. These resources will help guarantee a sound and efficient Program, while also ensuring local capacity building so that a permanent mechanism remains in place beyond the availability of donor support. Resources for bridging information asymmetries, bankable project structuring, dissemination and capacity building activities and other associated minor costs are also considered under this component. IDCOL will be the Executing Entity in coordination with textile sector borrowers.

Component 2: Energy Saving Technology Loan for Textile sector with Preferential Rates.

Under this component, IDCOL will provide term loans with preferential rates directly to textile sector borrowers who will utilize the fund received to adopt energy efficient appliances. The cost of purchasing the energy saving technology and equipment will be the main subject of the loan, which will be utilized by the borrowers to retrofit and/or expand their factories, processes and building infrastructure. The loan may also be utilized for ancillary costs of installing and operating the energy saving technology such as transport, assembly and installation, training and technical transfer, customs, insurance and auxiliary equipment, connection and accessories, and other incidental costs.

The major activities under this component include but not limited to appraisal / due diligence of loan applications and project performance monitoring & evaluation. A pre-determined eligibility criteria for companies, minimum project/loan size, list of eligible energy saving technologies and equipment meeting pre-defined standards and specifications will facilitate a transparent, simplified and robust appraisal criteria for lending under the program.

The successful implementation of the sub-projects financed will contribute to reduce GHG emissions, supporting the achievement of the country's climate change goals. Program activities include financing and non-financing mechanisms that aim to improve the local technical capacity and knowledge on Electrical Efficiency (EE) investments by Implementing Entity (IEs) and textile factory owners.

In order to avail the loan from GCF the IDCOL has to submit to funding proposal to GCF.

However, before submitting the funding proposal, IDCOL wishes to carry out the project preparation activity. This will help IDCOL quantify and propose in a better way the impact of the funding on energy efficiency in textile sector, design the funding proposal to maximize the impact and beneficiaries of the funding and establish stronger baseline and monitoring and evaluation parameters that are currently available.

IDCOL requires the service of an international consultancy firm to assist in conducting the project preparation activities under PPF. The consultancy firm will support IDCOL in project and

programme preparation. Local consultants can be subcontracted by international consultancy firm if found to be necessary. Support will be commensurate to the funding proposal being developed, and to the activities in the PPF application.

There are many phases in project preparation, from early stages of project identification, concept development and establishing the enabling environment, to mid- and late-stage processes including project due diligence and project structuring.

Funding proposals developed with the PPF would be submitted to the GCF for approval.

### **C. OBJECTIVES OF THE CONSULTANT'S SERVICES**

Consultants are required to conduct the following activities:

1. Feasibility studies, as well as project design; along with advisory services and/or other services to financially structure a proposed activity.  
The consultants are expected to prepare a detailed Feasibility study report for project designing which will address all the necessary information on the textile sector and possibilities for adopting energy saving technologies.
2. Environmental, social and gender studies;  
The Environmental, social and gender studies have to be conducted in detail manner. The main purpose of this study is to find the environmental, social impact of this programme and to estimate the number of women who will be benefited from this programme
3. Risk assessments;  
The study will provide a detail risk assessment of the proposed project which will analyze and identify any substantial technical, operational, financial, social and environmental risks & other risks that the project may face, and propose respective risk mitigation measures with consultation from sectorial experts and relevant stakeholders.
4. Identification of programme/project-level indicators:  
The consultants are expected to suggest the impact and performance indicators for the program to ensure all problems are identified and alternative solutions are appraised which help in project designing and further development.

### **D. SCOPE OF WORK OF THE CONSULTANTS**

The detailed scope of activities to be carried out by the consultant are as follows:

1. Feasibility Study
  - a. Stakeholder consultations at national and project level implementation including with indigenous people if relevant (Minutes of meeting and photography). Develop the multi-stakeholder engagement plan and the consultations that will be conducted.

Key stakeholders who need to be consulted during feasibility study should include : Communities or populations who will be directly impacted from the programme, community leaders, government organizations (national and local, government organizations), private sectors, civil society organizations (CSOs), academicians or researchers, NGOs, employees, workers, subcontractors, LFI, suppliers, consultants, Ministry of Environment & Forest (MOEF), Ministry of Industries, Ministry of Energy and Power, textiles or energy technology or equipment suppliers.etc.

- b. Systematic analysis/baseline survey of textile sector and break up of energy consumption and list of energy intensive equipment/processes in textile sector.
- c. Quantify the impact of energy efficiency initiatives on a unit and program level both in terms of financial impact as well as other benefits
- d. Study including baseline data to quantify carbon emissions, vulnerability and projected referenced climate change impacts.
- e. Study on the project outcomes and the impact that will improve the baseline scenario.
- f. Visit at least 20 textile industries to conduct baseline survey on the resource consumption on different processes of textile industry & identify best practices in textile manufacturing technology, operation, process engineering & optimization
- g. Study on the market for the proposed financial product(s)/services including the historical data and forecasts.
- h. Identifying best available relevant energy efficiency technologies for textile industry
- i. Detailed economic and financial analysis (including the development of financial model to see if this kind of interventions are financially sustainable) & providing a summary report on financial analysis.
- j. Analysis of financial structures & interest rates available and barriers regarding the present day structures & access to finance for energy efficiency for small and medium enterprises .
- k. Revision to best efficient financial structures also aiding more Foreign Direct Investments and access to international finance for energy efficient technologies including possibilities of technology transfer possibilities.
- l. Preparing the budget/fund size.
- m. Justifying the level of concessionality.
- n. Facilitate and guide consultations to determine project strategy, priorities, key partners, and key barriers to success;
- o. Oversee and support completion of all background studies, ensuring they are appropriate in scope and provide required analyses in good quality;
- p. Provide technical and professional support to local experts and national stakeholders;
- q. Develop a Theory of Change (TOC) for project that adequately reflects project impacts;
- r. Develop co-financing framework and the assessment of resources leveraging potential;

## 2. Environmental, social and gender studies

- a. Obtaining secondary data through the review of data sources for laws and regulations, national reports, documents and website and internet( Review of GCF- ESS and gender guidelines and other relevant reports/documents, Review of the existing data that are available for the project intervention ,Review documents on climate change impacts on textiles industries )

- b. Review of current environmental policy, laws and regulations, specific policy, strategy and legal instruments on climate change and renewable energy
- c. Review of technology or equipment replacement procedure and disposal requirement of the Government of Bangladesh and IDCOL's guideline(Review environmental standards and energy saving technology , Understand EIA guidelines of Bangladesh and procedure ,Understand the national legal framework and standards & Review of international agreements and standards)
- d. Stakeholder consultation with communities or vulnerable populations, community leaders, government organizations (national and local, government organizations), private sectors, civil society organizations (CSOs), academicians or researchers, NGOs, employees, workers, subcontract, LFI, suppliers, consultants, MOEF, Ministry of Industries, Ministry of Energy and Power, textiles or energy technology or equipment suppliers
- e. Assessment of the previous environmental performance of particular equipment or appliance in one sample facility. This will include environmental audit of one sample facility to establish the past performance, any environmental issues or non-compliances of a facility;
- f. Assessment through an audit of an environmental (and social) management system of one sample facility;
- g. Potential environmental and social impacts of the new equipment and the disposal (final fate assessment) of the replaced equipment; and
- h. Consultation with stakeholders and supply chain that may be affected by the change in equipment
- i. Visit at least 20 textiles industries to understand existing technologies and performances on environmental aspects, for instance major environmental issues, social, health and safety as well as labor issues.
- j. Conduct interviews and focus group discussion with relevant communities, suppliers, owners, employees particularly who are affiliated with Environmental Management System (EMS), environmental staff of the textiles industries.
- k. Site visit and direct observation of at least 20 textiles industries for
  - Identification of potential positive impacts (environmental and social)
  - Identification of negative impacts (environmental and social)
  - Identification of potential negative environmental and social risks of changing old technologies or equipment
  - Evaluating labor safety and environmental compliance
  - Assessing environment and safety compliance
  - Assessing gender issues
- l. Development of Environmental and Social Management Plan, and how the project/programme will avoid or mitigate negative impacts at each stage (e.g. preparation, implementation and operation), in accordance with the Fund's Environmental and Social Safeguard (ESS) standard, IFC performance Standard, Guidance Notes on IFC PS & the World Bank's EHS Guidelines
- m. Demographic studies in the sectors: number of beneficiaries impacted, gender-wise impacts.
- n. Conduct a desk review of existing documents and reports; conduct consultations with key stakeholders to identify key gender equality gaps and challenges and assessment of the successes/failures of gender mainstreaming in textile sector.
- o. Gender analysis and action plan development in accordance with the Fund's Gender Policy and Action Plan.

### 3. Risk assessments

- a. Prepare risk assessment report based on the knowledge on risks identified through direct visit and observation of 20 textile factories as per existing national and regional law and regulations and OSHA etc.
- b. Identify all the Risk factors including
  - Operational such as workplace safety based on OSHA and SA-8000.
  - Social (occupational health and safety with special emphasis on fire, electrical and structural safety)
  - Environmental (identification of environmental risks like water pollution, air pollution, noise pollution and its impact on the immediate surroundings of the project)
- c. The risk due to lack of knowledge on energy efficiency has to be identified.
- d. Risk of adopting new technology, retrofitting of existing equipment in terms of higher production cost, stability of supply chain and marketability has to be identified.
- e. Identify the mitigation measure of the above risks
- f. Identification of any possible risk shift for introducing any new technology/ equipment and its mitigation measures needs to be addressed.

#### 4. Identification of programme/ project-level indicators

- a. Identification & measurement of GCF core indicators relevant to Program
- b. Detailed methodology formulated to be used for calculating this GCF core indicators.
- c. Describing how the project/programme's indicator values compare to the appropriate benchmarks (i.e. the indicator values for a similar project/programme in a comparable context).
- d. Providing means of verification of expected result quantified against each indicator.
- e. Framework for monitoring and measurement of the output and impacts of the Programme to measure achievement, progress and adapt required corrective measures.
- f. Prepare project M&E framework and logical framework with SMART indicators;

#### **E. TIMELINE OF WORK**

The consulting firm has to complete the work defined in the scope within a period of 5 months from the date of signing of contract.

#### **F. EXPECTED KEY DELIVERABLES**

1. Detail feasibility study reports for the project.
2. A summary report with a number of key findings and recommendation for consideration in further planning, and provides additional relevant background materials in a series of annexes to the feasibility report.
3. Environmental audit report of one sample facility
4. A detail Environmental and Social Management Framework Report
5. A gender assessment report.
6. A gender action plan.
7. A detail risk assessment report along with mitigation measures.

8. A guideline and a logical framework that set out, detail plans for interventions with the respective targets and predictions.
9. Framework for monitoring and measurement of the output and impacts of the Programme.
10. Develop a standard reporting format that will capture the effectiveness of planned and achieved output and outcomes.

### **G. Qualifying Requirement**

The International consultancy firm should fulfil the following minimum criteria:

| <b>S. No.</b> | <b>Qualifying Requirement</b>  | <b>Documents to be Submitted</b>  |
|---------------|--|---|
| 1.            | Consultant should be a registered/Incorporated firm/ company.  | Certificate of registration/incorporation   |
| 2.            | Should have the work experience in similar kind of work.   | Detailed CVs of proposed team members   |
| 3.            | The Consulting firm should have been profitable for at least two (2) of the last three (3) years i.e. FY 2016-17, 2017-18. | Audited financial statements  |
| 4.            | The capacity and the proposed methodology to complete the work within the specified timeframes                             | Detailed credentials  |
| 5.            | Track Record   | Expertise of working in energy efficiency initiatives in Bangladesh. Prior experience of working with IDCOL would be preferred. |