

**German Financial Cooperation with Bangladesh**

***Renewable Energy Programme (REP)***

**Invitation for Expression of Interest**

**for**

**Consulting Services for the Renewable Energy Programme (REP)**

**Infrastructure Development Company Limited (IDCOL)**

**UTC Building, Level-16**

**8 Panthapath, Kawran Bazar**

**Dhaka-1215, Bangladesh**

**July 2018**

## INVITATION FOR EXPRESSION OF INTEREST

1. Infrastructure Development Company Limited (IDCOL), the Project-Executing Agency (PEA, §2) hereby invites qualified independent consultants to submit a prequalification document for consulting services required (see §3.) under the Renewable Energy Programme (REP). Funds have been earmarked for this project by the German bilateral Financial Cooperation, implemented by KfW.
2. Infrastructure Development Company Limited (IDCOL) was established on 14 May 1997 by the Government of Bangladesh, to help ensure economic development of the country and improve the standard of living of the people through sustainable and environment-friendly investments. IDCOL's mission is to catalyse and optimize private sector participation in promotion, development, and financing of infrastructure as well as renewable energy (RE), and energy efficient projects in a sustainable manner through public-private-partnership initiatives. The company now stands as the market leader in private sector energy and infrastructure financing in Bangladesh. IDCOL's stakeholders include the government, private sector, NGOs, multilateral and bilateral institutions, academics and the people of Bangladesh at large.
3. Within the scope of the German Financial Cooperation with Bangladesh, both governments agreed in October 2016 to implement a Renewable Energy Programme (REP) to increase the use of RE in Bangladesh. The principle objective of the REP is to improve the access to energy from renewable sources, focussing especially on income-generating activities. Within the REP it is envisaged that a soft loan of up to EUR 60 million, as well as a grant of up to EUR 8.5 million will be provided by KfW to IDCOL for programme implementation. The programme is complemented by a Technical Assistance (TA) package, for which up to EUR 1.3 million will be granted by KfW. Until final contract closing between KfW and IDCOL, the tender is explicitly subject to the availability of funding.
4. The requested services of the consultant comprise long-term support and strategic consultancy to IDCOL as specified in the draft Terms of References for the pre-qualified Consultant (Annex 1) to ensure an efficient and successful implementation of the REP programme. This may include but is not limited to:
  - The design and implementation of targeted capacity and training measures for IDCOL employees, existing and potential customers including on-the job training, conferences, workshops and study tours during project implementation
  - Strengthening the institutional framework
  - Strengthening IDCOL's outreach to establish a sound pipeline of potential RE projects to be funded by IDCOL

The Consultant needs to be adequately qualified for this interdisciplinary assignment, covering economic, financial and technical topics, as well as environmental and social aspects. As a general requirement, the Consultant shall have adequate education, professional knowledge and experience in handling similar tasks in the past. A team comprising of various experts with relevant expertise and other professional as well as administrative support staff shall provide the services. Additionally, efficient management and backstopping services shall be made available.

5. Consultants are free to associate themselves with other firms to ensure that all required know-how and experience are available to them. An international Consultant is expected to associate with a Bangladesh consulting firm, active in the Bangladesh RE sector for at least 5 years. A branch office in Bangladesh of the international Consultant and/or office of the Bangladesh partner consulting firm is required.

6. The prequalification document in English language shall have the following structure and content and shall be presented in the same sequence as shown below:
- (i) **Covering Letter**, comprising the firm's name, address, contact person, telephone, fax and email if applicable mention the association for this project.
  - (ii) **Presentations of firms** (maximum 10 pages), inclusive clear statements of type, property and key task of the association, if applicable.
  - (iii) **Statements and Declarations:**
    - a) Declaration of submitting a proposal in case of being short-listed;
    - b) Statement on **affiliations** of any kind with other firms which may present a conflict of interest in providing the envisaged services.
    - c) In case of an **association** – the intended contractual arrangement with international and local firms, nominating the lead consultant and including letters of intent of participating firms (in case of local partners a fax copy of such letter of intent is sufficient).
    - d) Declaration to observe the highest standard of ethics during execution of the contract. Applicants should be aware that any fraudulent or corrupt activities disqualify them immediately from participation in the selection process and will be subject to further legal investigation. The said declaration shall be submitted and duly signed according to the following form:



- e) **Certified statement of financial capacity** of the lead consultant and all associated partners showing the necessary turnover of more than 5,000,000 *EUR* (Balance sheet, statement of turnover or annual tax statement or profit and loss account all of the last three years).
- (iv) **List of project references** carry out as Annex 2 (EU-Format) covering the last eight years and strictly related to the envisaged services (*maximum 16 references*).
- (v) **List of available personnel structure** for the envisaged services with information about education, professional experience, regional experience, years with firm, specific project-related experience and experience in similar posts (see Annex 3). This list shall allow a profound judgement on the consultants' general ability to provide the required personnel having the specific experience for the project in case of an offer. Personal belongs to the firm or have a long cooperation gets more points.

Interested consultants are requested to submit concise and clear, but substantial documents and to adhere to the above structure. Non-compliance with this invitation or faulty information shall lead to non-qualification. Any surplus of information not specific to the material requested will be penalized.

7. The prequalification proposal shall be submitted by mail in one original and one copy to the Tender Agent (ah-Advice International, Mr Andreas Hahn, Germanenweg 9, 65527 Niedernhausen, Germany) latest by the date indicated in the advertisement. This is the binding delivery address. Sending prequalification proposals by e-mail shall lead to non-qualification.
8. One hard copy and one soft copy of the prequalification proposal shall be submitted to the Project-Executing Agency (Infrastructure Development Company Limited (IDCOL), UTC Building, Level-16, 8 Panthapath, Kawran Bazar, Dhaka-1215, Bangladesh) on the same date. Sending prequalification proposals by e-mail shall lead to non-qualification.
9. All cost for a site visit, obtaining information/data and preparation/submission of the prequalification document, meetings, negotiations, etc. in relation with the prequalification or the subsequent proposal shall be borne by the consultants.
10. At any time, PEA either at its own initiative or in response to clarifications requested by an interested consultant may clarify this invitation. Such information shall be sent in writing by facsimile or e-mail to all parties, which have informed PEA about their participation.
11. It is planned to establish a short-list of not more than five prequalified consultants and to invite technical and financial proposals from these consultants.
12. The evaluation procedure for the prequalification process will follow the latest version of the „Guidelines for the Assignment of Consultants in Financial Cooperation with Partner Countries“ (refer to homepage of KfW development bank: [www.kfw-entwicklungsbank.de](http://www.kfw-entwicklungsbank.de)). Only financially capable firms which have submitted the necessary statements (see § 7 iii) satisfying the set conditions will be evaluated. Specific evaluation criteria and their individual weight are presented in the following table:

	<b>Criteria</b>	<b>Maximum Score</b>
<b>1</b>	<b>Evidence of relevant experience</b> gained in the renewable energy sector (grid-connected commercial / industrial-scale photovoltaic systems, mini-grids, solar-powered irrigation systems, biogas based power generation) by consultants during the past 8 (eight) years (experience of the firm).	<b>40</b>
1.1	Experience in handling similar projects. 4 references expected.	15
1.2	Working experience in the framework of public entities / governments in developing countries and emerging markets. 6 references expected out of which 2 from Bangladesh.	15
1.3	Working experience in Bangladesh and South-East Asia. 6 references expected out of which 2 from Bangladesh.	10
<b>2</b>	<b>Suitability for this specific project (experience of the available experts)</b>	<b>60</b>
2.1	Assessment of the technical expertise in the RE sector (grid-connected commercial / industrial-scale photovoltaic systems, mini-grids, solar-powered irrigation systems, biogas based power generation) in regard to the tasks expected (refer to the listed key personnel)	15
2.2	Assessment of financial and economic expertise specific to this project (refer to the listed key personnel)	15
2.3	Assessment of environmental and social risks expertise specific to this project (refer to the listed key personnel)	10
2.4	Assessment of the key personnel in permanent employment and always available (backstopping)	10
2.5	Form of the application documents to be provided by consultant: Are they complete, concise and related to the project, clearly arranged and structured?	10

13. After having completed the evaluation of the prequalification documents, a short-list consisting of five highest ranked Consultants or less scoring a minimum of 70 points will be established. Short-listed firms will be invited to submit a technical and financial proposal; firms not pre-qualified will be informed accordingly. Consultants scoring less than 7 points under 2.3 will be excluded from further evaluation, and respective bids rejected.

14. PEA is not bound to select any consultant.

15. The preparation and the submission of the prequalification document is the responsibility of the applicant and no relief or consideration can be given for errors and omissions. The prequalification documents should be strictly as per the formats attached to this invitation for expression of interest.

16. After opening the prequalification documents until preparation of the short-list of the qualified consultants, no communication of any type shall be entertained unless called for by PEA.

## Annex 1

# Draft Terms of Reference

## German Financial Cooperation with Bangladesh Renewable Energy Programme (REP)

(Remark: Annexes mentioned are in Draft stage and are subject to change, final ToR will be provided during tendering phase)

### 1. INTRODUCTION

Bangladesh ranks number 8 in the list of countries by population in 2016 and its need for energy supply continues to rise as a result of the country's dynamic economic development and modernization. In its Vision 2021, the Government of Bangladesh set a target of providing electricity to all its citizens by 2021. According to the 7th Five-Year Plan, 10% of the country's total power demand shall be generated from RE. In the last decade, preferably households not connected to the public grid, were given access to basic electricity supply by promoting Solar Home Systems (SHS). According to the Renewables 2017 Global Status Report, Bangladesh is now the world's largest Solar Home System (SHS) market with more than 4 million units installed. Other solar applications to improve rural energy supply include solar water pumps for drinking water supply and irrigation, as well as mini-grids based on photovoltaic (PV)-battery hybrid systems backed-up by Diesel generators.

The Bangladesh market for grid-connected photovoltaic systems installed on commercial and industrial buildings is still in its infant stages. Government incentives, such as feed-in tariffs, capital subsidies or tax credits, required to stimulate PV rooftop market development are still missing. However, attractive financing is being offered by IDCOL at interest rates of 6% for a credit period of 10 years with up to 1 year grace-period. Apart from the actual low-interest financing, grid-connected PV-systems for own consumption are becoming attractive due to the fact that they present a lower cost source of electrical power for commercial and industrial companies. In order to compensate operators of industrial PV rooftop systems for any electricity evacuated via the public grid, a Net-metering policy is currently under preparation and is expected to be approved in 2018.

### 2. BACKGROUND

#### 2.1 Renewable Energy Programme (REP) at a Glance

Within the scope of the German Financial Cooperation with Bangladesh, both governments agreed in October 2016 to implement a Renewable Energy Programme (REP) to increase the use of RE in Bangladesh. The principle objective of the REP is to improve the access to energy from renewable sources, focusing especially on income-generating activities. It consists of two main components:

Component A: Investment in commercial/industrial-scale grid connected PV power plants

Component B: Investments in other renewable technologies (e.g. solar based mini grids, PV irrigation pumps, biogas based power generation, domestic biogas plants)

Within the REP it is envisaged that a soft loan of up to EUR 60 million (mainly for Component A), as well as a grant of up to EUR 8.5 million (mainly for Component B) will be provided by KfW to IDCOL for project implementation. The REP is complemented by a Technical

Assistance (TA) package, for which up to EUR 1.3 million will be granted by KfW. This technical assistance package is to be awarded to the consulting industry in the framework of a two-stage international bidding procedure. The tender is explicitly subject to the availability of funding until final contract closing between KfW and IDCOL.

## **2.2 Executing Agency at a Glance**

Infrastructure Development Company Limited (IDCOL) was established on 14 May 1997 by the Government of Bangladesh, to help ensure economic development of the country and improve the standard of living of the people through sustainable and environment-friendly investments. IDCOL's mission is to catalyze and optimize private sector participation in promotion, development, and financing of infrastructure as well as renewable energy (RE), and energy efficient projects in a sustainable manner through public-private-partnership initiatives. IDCOL was licensed by the Bangladesh Bank as a non-bank financial institution (NBFI) on 5 January 1998. The company now stands as the market leader in private sector energy and infrastructure financing in Bangladesh. IDCOL is managed by an eight-member independent Board of Directors comprising four senior government officials, three representatives from the private sector and a full time Executive Director and Chief Executive Officer. It has a multi-skilled work force comprising financial and market analysts, engineers, lawyers, IT experts, accountants and environmental and social safeguard specialists. IDCOL's stakeholders include the government, private sector, NGOs, multilateral and bilateral institutions, academics and the people of Bangladesh at large.

## **2.3 Target Group**

The target group of the REP consists of Bangladesh energy users who benefit from an improved and ecologically sustainable electricity supply. Enterprises and investors, as well as different types of Partner Organizations (POs) willing to invest in grid-connected RE technologies act as sub-borrowers who, by utilizing the financing offered by IDCOL, implement RE projects and thereby contribute to an improved energy mix with an increased share of RE. The target group also includes user groups in areas of Bangladesh that are not yet or inadequately connected to the electricity grid.

## **2.4 Objective and Indicators**

The principal objective of the REP is to improve the access to energy from renewable sources, focusing especially on income-generating activities.

The following indicators will be used for measuring the outcome of the REP:

1. Electricity generation capacity installed from grid-connected PV plants, primarily on commercial and industrial roof tops of at least 53.5 MW<sub>p</sub>.
2. Electricity generation capacity installed from off-grid renewable energy technologies of at least 2.8 MW<sub>p</sub>.
3. One year after launching of all plants financed from the FC contribution at least 37.600 CO<sub>2</sub> emissions are saved per year.
4. For the implementation of both, grid-connected and off-grid investments, IDCOL applies capacities developed under the accompanying measure and ensures the respect of relevant standards.



### **3. OBJECTIVES OF THE ASSIGNMENT**

The overall objective of this assignment is to provide long-term support and strategic consultancy to IDCOL to ensure an efficient and successful implementation of the REP. This may include but is not limited to:

- The design and implementation of targeted capacity and training measures for IDCOL employees, existing and potential customers including on-the job training, conferences and workshops during project implementation in the areas of project and eligibility criteria, project appraisal process, monitoring, reporting, automatic information processing etc.
- Strengthening of the institutional framework
- Strengthening IDCOL's outreach to establish a sound pipeline of potential RE projects to be funded by IDCOL

The TA package is designed to be complimentary to the term of the loan, which is 60 months. However, it is expected that a large part of the services will be provided in the years 1-3. Over the last two years, only monitoring and reporting are expected to continue.

### **4. SCOPE OF WORK**

In order to reach the objectives set out in this assignment, the Consultant is expected to conduct the following tasks but may not be limited to these. Moreover the Consultant is expected to apply his own expert knowledge towards accomplishing the overall objective as efficiently as possible. The consultant shall execute the tasks in close collaboration with IDCOL. Besides continuous on-the-job training of IDCOL employees, the Consultant is expected to offer task-specific training units with a total duration of 4 expert months (for details see Component A, Task 5).

#### **4.1 COMPONENT A – Commercial and Industrial PV Rooftop Power Plants**

The financing of grid-connected PV rooftop systems represents a new product and customer segment for IDCOL. The project appraisal, financing and review of large-scale projects is being carried out by IDCOL's Renewable Energy (RE) Department, which has so far mainly implemented small-scale RE projects in the off-grid sector.

#### **Task 1: Development of Financial Products and Concepts**

Goal: IDCOL ensures the provision of adequate and demand-oriented financing for the eligible investments in grid-connected PV plants.

##### **1. Financial Products and Concepts**

- Organize workshops / interviews with selected investors / sub-borrowers / Engineering Procurement and Construction Companies (EPCs) / Energy Service Companies (ESCOs) and analyze their needs in terms of project financing.
- Analyze IDCOL's existing financial product portfolio, including eligibility criteria and check the suitability for commercial and industrial (C&I) PV rooftop projects
- If required, propose suitable measures for improvement and adaptation of existing financial products.
- Suggest opportunities to apply new financing instruments for solar rooftop projects develop new concepts for promotional financing schemes and conduct innovative pilots.

- Check the suitability and accuracy of the existing IDCOL financial tool used for the financial assessment of PV rooftop project proposals.
- Propose suitable measures to improve the IDCOL financial tool.

## **Task 2: Empanelment of External Consultants**

Goal: IDCOL has access to a larger pool of qualified technical experts who provide task-specific consultancy (e.g. project development, construction supervision, quality assurance, business model development, PV system performance testing, etc.).

### 1. Empanelment

- Describe the field of activity of external consultants within the scope of C&I PV rooftop projects (e.g. ensuring compliance with eligibility criteria and technical requirements for solar PV projects).
- Prepare the respective Terms of Reference for external consultants and support IDCOL in the selection process (including pre-qualification, shortlisting and final empanelment of external consultants).
- Check also neighboring countries (e.g. India) for qualified companies and technical/financial experts who could be contracted by IDCOL.
- Ensure that the selection process of external consultants will be finalized within the first four months of the REP.

### 2. Performance Check of Consultants (limited to first five assignments)

- Assign and steer external consultants in close collaboration with IDCOL for specific tasks defined.
- Check final results and services provided by external consultants and give feedback to IDCOL regarding the quality of services provided.

## **Task 3: Building-up the REP Project Pipeline**

Goal: IDCOL's position in the C&I PV rooftop market is consolidated and a strong project pipeline for the REP is established.

### 1. Stakeholder Analysis

- List relevant key stakeholders active in the commercial/industrial (C&I) PV rooftop market (e.g. project developers, investors, finance institutions, manufacturers, EPC companies, Lender's Independent Engineers (LIEs)).
- Based on the information received from different stakeholder groups, prepare and regularly update the list of key stakeholders active in Bangladesh and neighboring countries.
- Define focal regions where IDCOL should offer its financial products.
- Consolidate all stakeholder data collected in the IDCOL data base.

### 2. Project Pipeline Development

- Analyze IDCOL's approach to develop project pipelines (e.g. definition of project type and selection criteria, product quality requirements, project progress monitoring and documentation, decision-making process).
- Propose suitable measures for optimizing project pipeline development and adjust the process if required.

- Regularly update IDCOL's technical standards for PV rooftop systems and include KfW quality-, and product-testing requirements (as described in Annex 4) in credit application forms
- Prepare a technical guideline/handbook for LIE's to conduct a detailed technical analysis of new project proposals including an inspection of premises with respect to available roof-space for PV panels, structural integrity of roofs, possible shading effects and impacts on energy yield.
- Conduct meetings/workshops/interviews with commercial and industrial associations, project developers and potential investors, identify the most relevant industrial sectors and assess the opportunities for IDCOL project financing. As activities in the area of marketing and outreach will be tendered separately, the Consultant has to ensure that duplication of work is avoided.
- Test and/or develop roof identification tools and methods (e.g. satellite-based, aerial photographs, drones etc.)
- Further develop the existing tool for project pipeline management and assessment of project feasibility (Excel sheet).

#### **Task 4: Support of Project Appraisal Process and Monitoring**

Goals: IDCOL's appraisal procedures for C&I PV rooftop projects are up to date and in line with sectoral developments and policy changes. IDCOL has a set of tools that enable an effective and efficient project appraisal process.

##### Sub-Loan / Project Appraisal Procedure

- Analyze IDCOL's project data collection and appraisal approach, compare it with the current regulations of the Central Bank and practices of other banks and propose suitable measures for process streamlining and adaptation of documentation requirements.
- Suggest and develop a set of tools, supporting the appraisal process (e.g. operationalized checklist developed for the assignment, customer databases). Identify meaningful possibilities for automatic data processing and develop a concept and roadmap for web-based/digitalized processes (e.g. of project appraisal, credit approval, disbursement processes and reporting).
- Develop and implement a suitable monitoring concept for impact assessment and project management.
- Organize a monitoring and impact assessment by independent experts taking into account *the Eligibility Criteria and Implementation Guidelines for C&I scale Grid-connected PV Projects* as described in Annex 5.
- Provide support to IDCOL in the pre-sanction phase and check developer's PV system design, energy yield calculations, system costs, Environmental and Social Impact Assessments (ESIAs) etc., and submit a due diligence report (limited to the first 5 PV rooftop projects financed by IDCOL under the REP).
- Provide support to IDCOL after sanction for providing quality assurance services and performance testing of PV rooftop power plants (limited to the first 5 PV rooftop projects financed by IDCOL under the REP).
- Analyze and present the results of PV system performance testing to keep high level of system quality (e.g. on conferences, workshops).

- Assist IDCOL to develop a guideline to set performance standard requirements to be maintained by the EPCs and set punitive measures in case of failure to meet the same
- Enable KfW to undertake a prior review of project documentation (including a site visit) for first five (5) PV rooftop projects to be re-financed under the REP.
- In order to enable KfW to appraise the first five PV rooftop projects and give its *No Objection*, the following documents shall be provided:
  - Appraisal report of IDCOL
  - Inception Report of the Lender's Independent Engineer.
  - Environmental and Social Appraisal Report
  - Detailed Project Report (DPR) /Techno Economic Viability (TEV) study/Yield Assessment Report.
  - IDCOL's sanction letter to the sub-borrower (if already concluded).
  - Other information KfW may reasonably request for appraising the projects
- Continuously review IDCOL's appraisal guidelines, identify improvement potential and propose measures for optimization in line with sectoral developments and policy changes.

#### **Task 5: Task-specific Training Units**

Goals: Investors, financial institutions and insurance companies know about the potentials and limits of solar PV installations and are confident about their reliability and longevity. Project developers and EPC are aware of internationally accepted quality and product testing requirements and comply with Environmental, Health and Safety (EHS) standards during system installation and operation. Lender's Independent Engineers are familiar with IDCOL's and KfW's technical requirements and ensure its compliance. IDCOL's technical staff is able to evaluate and accept the rendered services of contracted consultants.

##### **1. Task-specific Training**

- Conduct awareness building workshops for potential investors, sub-borrowers, financial institutions, business associations of target industries and insurance companies, including study tours to existing PV installations.
- Conduct specific trainings for project developers and EPCs, e.g. on system performance improvement, special requirements for roof-mounting, EHS.
- Conduct technical trainings for LIEs, e.g. on installation quality, acceptance testing of PV rooftop systems, performance testing and on-site system quality checks, including hand-on trainings and study tours to existing PV installations and testing institutions.
- Include IDCOL technical staff members in trainings mentioned above and if required, provide task-specific trainings on demand (e.g. assessment of results provided by design and simulation software used by EPCs).

#### **4.2 COMPONENT B – Other Renewable Technologies**

Under this component of the REP, financing for the development of other renewable energy projects will be availed by investors or other project owners. The project types to be supported may include but are not limited to the following technologies: Solar PV based mini-grids, solar irrigations pumps, biogas based power-generation, medium-sized biogas plants and domestic biogas plants. Other innovative RE technologies in an early stage of

development (such as municipal waste to energy concepts, solar cold storage or solar charging-stations) considered by IDCOL are subject to agreement of KfW regarding all relative aspects (technical feasibility criteria, project selection process, environmental and social management plans, etc.).

IDCOL's current investments in RE technologies funded under this component mainly require further development of funding concepts, adequate independent monitoring and selective support for project implementation. This is to ensure that the projects financed under the REP comply with technological standards and, in addition, ensure adequate handling and avoidance of relevant operational risks and unintended negative effects.

### **Task 1: Project Coordination, Implementation and Continuation**

Goals: IDCOL ensures the provision of adequate and demand-oriented financing for eligible investments in various off-grid renewable energy technologies. RE projects financed under the REP comply with agreed eligibility criteria, standards and relevant implementation guidelines.

#### **1. Supporting Project Coordination and Implementation**

- Review of IDCOL's existing financial product portfolio for standard RE applications (solar based mini grids, PV irrigation pumps, biogas based power generation, domestic biogas plants) and list the main lessons learnt (e.g. gained within the scope of the Productive Use of Renewable Energy Programme (PUREP))
- Adjust existing funding concepts and financial products for other innovative RE technologies (e.g. municipal waste to energy concepts, solar cold storage), if required
- Include an annual review of the adequacy of the grant element
- Support IDCOL in identifying design consultants for RE projects with sufficient knowledge on impact of plant design on load side
- Propose specific technical standards for each component of mini-grid plant along with key parameters to look into while selecting equipment
- Provide specific guidance on supplier and equipment enlistment process, ensuring after sales service from suppliers based on contractual bindings and suggest strategies to ensure such bindings.
- Ensure that new projects using standard RE applications (as listed above) will comply with agreed eligibility criteria, standards and relevant implementation guidelines (provided in Annex 5).
- Adjust eligibility criteria, standards and implementation guidelines for other innovative RE technologies, if required and seek agreement with IDCOL and KfW.
- Submit the first three project proposals of each technology to KfW for *No Objection* with the exception of domestic biogas projects. If deemed necessary, an extension of this process to include additional projects (number to be determined), can be agreed between KfW and IDCOL.
- Provide in-depth support to IDCOL during appraisal and implementation of the first three individual RE projects (technology-specific).
- Seek approval of KfW for projects intending to deploy medium to large sized biogas plants.

## Task 2: Support of Impact Assessment and Monitoring

Goal: For projects financed under the REP, adequate handling and avoidance of relevant operational risks and unintended negative effects is ensured.

### 1. Impact Monitoring and Risks

- Review existing monitoring tools for sponsors & IDCOL field team for reporting during construction and operation phases; identify deficiencies and suggest improvements, modifications, addition.
- Develop and implement a suitable monitoring concept for impact assessment and proper project management.
- Suggest a mechanism to ensure monitoring tools are effectively being used by all relevant stakeholders with expected outcomes.
- Visit each sub-project financed under the REP and conduct a monitoring and impact assessment, taking into account the *Eligibility Criteria and Implementation Guidelines for Other Renewable Energy Projects* as described in Annex 5.
- Analyze and monitor potential environmental risks and other negative effects (e.g. in case of solar irrigation pumps: monitoring of groundwater depletion risk, and arsenic pollution of irrigation water, in case of battery-based systems the question of battery recycling).
- Analyze potential social risks (e.g. missing social acceptance of certain RE technologies, unintended creation of dependency structures between farmers and investors, etc.).

## 5. DELIVERABLES AND TIMETABLE

The assignment is foreseen to be conducted within 60 months after signing the consulting agreement (expected September 2018). Within the scope of the assignment, the Consultant shall submit at least the following deliverables:

No.	Deliverables	Delivery
1.	Inception report	2 weeks after commencement of services
2.	Quarterly progress reports of Consultant	4 weeks after commencement of services
3.	Semi-annual progress reports of PEA	6 months after commencement of services
4.	Final report	12 weeks after successful project implementation
5.	Reports on trainings and workshops, training materials, process descriptions, presentations, Terms of Reference, etc.	As applicable

The Consultant shall fulfil IDCOL's reporting obligations to KfW and support IDCOL in the preparation of semi-annual progress reports. The contents of reports will have to be agreed with IDCOL and will be specified in the consulting agreement. Generally, all reports have to be prepared in DIN-A4 format and in editable electronic form (Word, Excel, PowerPoint, etc.) as well as in Acrobat PDF format (with minimum number of files). Size of letters and line spacing shall be adequate. All reports must be signed by IDCOL and countersigned by the Consultant. All reports, concepts, summaries or other written deliverables shall be provided in English language.

## 6. PRINCIPLES OF WORK

Although the Consultant’s scope of work during execution of his services has been outlined as detailed as possible in Chapter 4, the Consultant shall bear in mind that the list of tasks and activities cannot be considered as complete. Rather, it is the Consultant’s responsibility to critically assess the scope of services indicated and to propose extensions or amendments depending on his own professional judgement and the know-how he will acquire during preparation of the proposal. It is the duty of the Consultant to meet and coordinate his activities with all relevant stakeholders. In meeting the Terms of Reference, the Consultant will review any existing relevant study reports previously done.

## 7. SKILLS AND EXPERIENCE

The Consultant needs to be adequately qualified for this interdisciplinary assignment, covering economic, financial and technical topics, as well as environmental and social aspects. As a general requirement, the Consultant shall have adequate education, professional knowledge and experience in handling similar tasks in the past. In particular it is required, that the Consultant has sufficient knowledge and experience in at least the following fields:

- Expertise and proven track record in institutional and human capacity development / training
- Experience in working and coordinating with public entities / governments
- Minimum 10 year working experience in RE energy sector (grid-connected commercial / industrial-scale photovoltaic systems, mini-grids, solar-powered irrigation systems, biogas based power generation), out of which minimum 5 years working experience in Bangladesh
- Analytical, well-structured work approach
- Excellent cross-cultural skills

An international Consultant is expected to associate with a Bangladesh consulting firm, active in the Bangladesh RE sector for at least 5 years. A Bangladesh branch office of the international Consultant and/or office of the Bangladesh partner consulting firm is required. It is expected that the Consultant considers sufficient manpower for the field, home office and backstopping with relevant expertise as well as excellent command of the English written and spoken language in his offer. The list of experts can include, but does not necessarily need to be limited to the following experts:

No.	Key Position	Area of specific expertise	Minimum qualification and professional experience
1.	Project Manager / Team Leader	Overall project management and coordination, institutional and human capacity development, reporting	University degree, preferably in business management, engineering or financing with min. 15 years of experience in consultancy and RE

2.	Specialist/s Renewable Energy Sector and Technologies	RE market analysis, business development, grid integration of RE, technical trainings	Graduate Electrical / Mechanical Engineer with at least 10 years RE sector experience
3.	Specialist / Energy Sector Financing	Business and financial product development, funding of power generation projects, financial trainings	Graduate in Business Administration and/or Business Economist with min. 10 years of experience in power/energy project financing
4.	Specialist / Socio-Economics	Management of ESIA's, project monitoring, socio-economic trainings	Graduate Sociologist / Environmental Engineer etc. with at least 10 years of experience in an advisory role in environmental and resource protection, developing and implementing environmental management plans, protecting neighboring communities or areas with biodiversity values; at least 5 years of experience in conducting ESIA's

Experts who do not comply with the minimum requirements listed above will be excluded from the evaluation, and respective bids rejected. An individual expert may cover more than one key position. In this case, his capabilities in each position will be evaluated individually. Therefore, CVs should clearly demonstrate the relevant experience. The services of the Consultant shall be conducted to great extent in Bangladesh. Local presence of the team leader is expected. All logistic/transportation and accommodation, etc. shall be considered within the responsibility of the Consultant.

## 8. SIMPLIFIED REIMBURSEMENT PROCEDURE

Within the scope of KfW's simplified reimbursement procedure, the Consultant will:

- Examine invoices submitted by contractors on the basis of the supply and service contracts to determine whether the services and supplies being invoiced were actually performed
- Examine that the payment has fallen due and all necessary documents are available as required in the supply and service contracts
- Examine that the documents to be presented include valid down payment and implementation guarantees in accordance with the specimen required by KfW, (validity, guarantee amount), if applicable, insurance policies and transport documents.



- Examine whether the regulations concerning the disbursement procedure that are agreed between the Employer and KfW – and are passed on to the Consultant – are being adhered to
- In so far as the above mentioned conditions are met,
  - certify the copy of the contractor's invoice
  - certify the disbursement request to be addressed to KfW by the Employer accordingly
- The Consultant will keep the relevant documents ready for inspection by PEA/KfW.

#### 9. Sub-Contracting

In case the Consultant intends to engage sub-contractors, the Consultant shall bear full responsibility for the services they perform. The assignment of all activities to one or more sub-contractors is not permissible.

#### 10. Miscellaneous

The terms of reference are indicative and may undergo a change.

## Annex 2

### Project References

Please provide information contained in the table below summarizing the major relevant projects related to this project.

#### Template References

Ref (maximum 15)	Project title		...					
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by legal entity (%)	No. of staff provided	Name of client	Origin of funding	Dates (start/end)	Name of partners if any
...	...	...	...	...	...	...	...	...
Description of project						Type of services provided		
...						...		

### Annex 3

#### Presentation of Staff Characteristics

The following data have to be indicated for the key experts proposed for the different posts. Tables may be adjusted according to the proposal and to the number of proposed key staff.

#### Project Manager / Team Leader

Criteria	Name	
Professional education related to project and post	degree(s)	
Professional experience, from first job after professional education	years	
Specific project-related experience. Similar project with similar tasks	N° of projects with > 1 year input	
Regional experience	countries	
Employment status with firm	years as employee	
In case of associate/retainer: accumulated years during short- or long-term assignments for the bidder	accumulated years	
Leadership experience (team leader, project manager)	N° of projects	

#### Foreign/International Professional Long-term Key Staff

Criteria	Name	NN 1	NN 2	NN 3
	Post / function			
Professional education related to project and post	degree(s)			
Professional experience, from first job after professional education	years			
Specific project-related experience (acc. to post). Similar project with similar tasks	N° of projects with > <b>six</b> months input			
Regional experience	countries			
Employment status with firm	years as employee			
In case of associate/retainer: Accumulated years during short- or long-term assignments for the bidder	accumulated years			

**Foreign/International Professional Short-term Key Staff**

Criteria	Name	NN 1	NN 2	NN 3
	Post/Function			
Professional experience, from first job after professional education	years			
Specific project-related experience (acc. to post). Similar project with similar tasks.	N° of projects			
Experience in developing countries	countries			

**Home Office Support (Backstopping) of the Lead Consultant**

Criteria	Name	
Professional Experience	years	
Regional Experience	countries	
Management Experience	years	
Years with firm	years	

**Local/regional long-term key staff**

Criteria	Name	NN 1	NN 2	NN 3
	Post/Function			
Professional education related to project and post	degree(s)			
Professional experience, from first job after professional education	years			
Specific project-related experience (acc. to post). Similar project with similar tasks	N° of projects with > six months input			
Employment status with firm and/or accumulated years during short- or long-term assignments for the bidder	years			

**Annex 4**

**KfW Quality- and Product-Testing Requirements**

## **Annex 5**

### **Eligibility Criteria, Standards and Relevant Implementation Guidelines**