

COMPETITIVE BIDDING

REQUEST FOR PROPOSAL (RFP) DOCUMENT

For the selection of Consultants for the Preparation of Detailed Project Report and Preparation of Bid Documents for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala - January 2014



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BACKGROUND NOTE

Increasing environmental consciousness, the prominence of climate change concerns and energy constraints globally have prompted an intensified focus on energy efficiency measures, resulting in a significant increase in the usage of CFLs and linear fluorescent tubes. Fluorescent lamps, whether they are tubes or compact, give off light by the process of fluorescence. The standard parts of a fluorescent lamp are the tube, the electrodes at the end caps and the ballast. The tube is a glass cylinder that is coated with a layer of phosphorus on the inside. The tube is filled with an inert gas, typically argon, and a small amount of elemental mercury in a liquid form. The contents of the tube are kept under very low pressure. At the end of each tube is an electrode that is connected to the pins on the lamp's outside. The electrodes on each end are usually made of tungsten wire and are coated with a material that gives off electrons when a current runs through the electrode. The ballast regulates the flow of the current through the electrodes both at startup and during normal operation of the lamp. Older ballasts were typically a magnetic inductor housed in the lamp fixture. For CFLs, the ballast is electronic and typically attached to the tube. The base of the tube contains the ballast that regulates the flow of current to the bulb. The components of common CFL ballasts are an electronic circuit board, a plastic housing and a metal screw base that fits into light sockets.

When the lamp is first turned on, the electrodes 'boil off' electrons from their coating materials. These electrons flow across the tube and ionize the gas, creating an electric arc across the tube. The energy of the arc in the tube changes the mercury inside from a liquid to a gas. As the mercury gas collides with the electrons and ions in the tube it becomes more energized. When the mercury electrons drop back to the initial lower energy state they emit ultraviolet radiation. The phosphorus



coating on the inside of the tube then absorbs this ultraviolet radiation and re-emits the energy as visible light and a small amount of heat. Fluorescent lamps eventually fail when the emissive coating on the electrodes is depleted. This process causes the ends of tubes to blacken as they age.

The life span of a CFL is rated in hours. This number, called the rated life, for most CFLs is between 6,000 to 10,000 hours. Assuming that the average bulb is used 4 hours per day, a 6,000 hour rated bulb should last 4.10 years and a 10,000 hour bulb should last 6.85 years. When fluorescent lamps reach the end of their life, they are to be disposed properly otherwise some of the mercury in the lamp can be emitted to the environment. The amount, type of mercury, and deposition of the emission depends upon what the method of disposal.

The need for an environmentally acceptable, yet cost effective, used Compact Fluorescent Lamp (CFL) management programme has become one of the environmental priorities in Kerala. Interventions needed include separation at source, drop-off centers, collection, Transportation, storage, processing of waste including recycling as many of the constituent materials and treatment of waste for recovering mercury.

Hence, following would be the focus areas of the project for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala.

- i) Preliminary survey, collection of primary and secondary data and planning for a safe disposal system based on best practice system successfully implemented elsewhere
- ii) Draft detailed project report and Bid documents based on Primary survey and Data evaluation and selection of environmentally acceptable cost



effective management programme, covering separation at source, drop-off centres, collection, Transportation storage, processing of waste including recycling as many of the constituent materials and treatment of waste for recovering mercury.

- iii) Final detailed project report and Bid documents based on comments and Observations on above reports.



TENDER TITLE: REQUEST FOR PROPOSAL (RFP) DOCUMENT

For the selection of Consultants for the Preparation of Detailed Project Report and Preparation of Bid Documents for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala January– 2014

TENDER NO : EMC/DPR/FL/2014/T-34

CONTRACT PERIOD : 16 Weeks

DATE OF ISSUE : 27/01/2014

PRE-PROPOSAL MEETING : 03/02/2014

CLOSING DATE : 12/02/2014



SECTION 1: LETTER OF INVITATION



SECTION 1: LETTER OF INVITATION

No. EMC/DPR/FL/2014/T-34

21.01.2014

From:

Director
Energy Management Centre
SrikrishnaNagar, Sreekaryam,
Trivandrum 695017,
Kerala, India

To: All Prospective Bidders

1. DIRECTOR, EMC, invites proposals to provide consulting services for the Preparation of Detailed Project Report and Preparation of Bid Documents for the Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala.
2. The background information and Terms of Reference for the consulting services are provided in Section 5 of the Request for Proposal (RFP)
3. This RFP is available to all prospective consultants.
4. A firm will be selected under Least Cost Based Selection (LCS) Method and procedures described in this RFP
5. The RFP includes the following documents:
 - Section 1 - Letter of Invitation
 - Section 2 - Instructions to Consultants (including Data Sheet)
 - Section 3 - Technical Proposal - Standard Forms
 - Section 4 - Financial Proposal - Standard Forms
 - Section 5 - Terms of Reference



Section 6 - Draft Contract Document

6. A Pre-proposal meeting will be held on 03/02/2014 at EMC wherein all issues/clarifications sought by bidders will be discussed and finalized. The deadline for receipt of proposals shall be on the date mentioned in the Notice Inviting Proposal
7. EMC reserves the right to accept or reject any or all proposals, and to annul the selection process and reject all proposals at any time prior to the award of contract, without thereby incurring any liability or any obligation in any form to the affected firms on any grounds.

Yours sincerely,

Director,
Energy Management Centre Kerala,
SrikrishnaNagar, Sreekaryam,
Trivandrum 695017,
Kerala, India



SECTION 2: INSTRUCTION TO CONSULTANTS



SECTION 2: INSTRUCTION TO CONSULTANTS

Definitions

- (a) "EMC" means Energy Management Centre Kerala.
- (b) "Client" means EMC (the agency with which the selected Consultant signs the Contract for the Services).
- (c) "Consultant" means any private or public entity that will provide the Services to the Client under the Contract.
- (d) "Contract" means the Contract signed by the Parties and all the attached documents listed in bid document and the Appendices.
- (e) "CQS" means Consultant's Qualification Selection.
- (f) "Data Sheet" means such part of the Instructions to Consultants used to reflect specific country and assignment conditions.
- (g) "Day" means calendar day.
- (h) "Government" means the Government of Kerala.
- (i) "Instructions to Consultants" (Section 2 of the RFP) means the document which provides shortlisted Consultants with all information needed to prepare their Proposals.
- (k) "Joint Venture" means a Consultant which comprises two or more Partners each of whom will be jointly and severally liable to the Client for all the Consultant's obligations under the Contract.
- (l) "Partner" means any of the entities that make up the Joint Venture; and Partners means all those entities.
- (m) "Personnel" means qualified persons provided by the Consultant and assigned to perform the Services or any part thereof.



- (n) "Proposal" means a technical proposal or a financial proposal, or both.
- (o) "RFP" means this Request for Proposal.
- (p) "Services" means the work to be performed pursuant to the Contract.
- (q) "Standard Electronic Means" includes facsimile and email transmissions.
- (r) "Terms of Reference" (TOR) means the document included in the RFP as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.



1. INTRODUCTION

General

- 1.1 Energy Management Centre Kerala (EMC), will select a consulting firm /organization (the Consultant) in accordance with the method of selection specified in the Data Sheet. The Consultants are invited to submit a technical and a financial proposal (the Proposal) as specified in this RFP Document and the Data Sheet for this Assignment. The Assignment shall be implemented in accordance with the terms and Conditions specified in the Data Sheet and other sections of the RFP Document.
- 1.2 Consultants should familiarize themselves with local conditions and take them in to account in preparing their Proposals. To obtain first-hand information on the assignment and local conditions, Consultants are encouraged to visit Kerala.
- 1.3 The Consultant shall provide all the inputs specified in the Data Sheet.
- 1.4 Consultants shall bear all costs associated with the preparation and submission of their Proposals. Costs might include site visit; collection of information; and, if selected, attendance at contract negotiations etc.
- 1.5 EMC is not bound to accept any proposal and reserves the right to annul the selection process at any time prior to contract award, without thereby incurring any liability to the Consultants.
- 1.6 In preparing their Proposals, Consultants are expected to examine in detail the documents comprising the RFP. Material deficiencies in providing the information requested may result in rejection of a Proposal.



Conflict of Interest

1.7 EMC requires that Consultants provide professional, objective, and impartial advice and at all times hold the Client's interests paramount, avoid conflicts with other assignments or their own corporate interests and act without any consideration for future work. Consultants shall not be recruited for any assignment that would be in conflict with their prior or current obligations to other clients, or that may place them in a position of not being able to carry out the assignment in the best interest of EMC. Without limitation on the generality of the foregoing, Consultants, and any of their associates shall be considered to have a conflict of interest and shall not be selected under any of the circumstances set forth below:

- (i) If a Consultant combines the function of consulting with those of contracting and/or supply of equipment; or
- (ii) If a Consultant is associated with or affiliated to a contractor or manufacturer; or
- (iii) If a Consultant is owned by a contractor or a manufacturing firm with departments or design offices offering services as Consultants. The Consultant should include relevant information on such relationships along with a statement in the Technical Proposal cover letter to the effect that the Consultant will limit its role to that of a Consultant and disqualify itself and its associates from work, in any other capacity or any future project within the next five years, that may emerge from this assignment (including bidding or any part of the future project). The contract with the Consultant selected to undertake this assignment will contain an appropriate provision to such effect; or



- (iv) If there is a conflict among consulting assignments, the Consultant (including its personnel) and any subsidiaries or entities controlled by such Consultant shall not be recruited for the relevant assignment. The duties of the Consultant depend on the circumstances of each case. While continuity of consulting services may be appropriate in particular situations if no conflict exist, a Consultant cannot be recruited to carry out an assignment that, by its nature, will result in conflict with another assignment of such Consultant. For example, a Consultant engaged to prepare engineering design for an infrastructure project shall not be recruited to prepare an independent environmental assessment for the same project; similarly, a Consultant assisting a client in privatization of public assets shall not purchase, nor advise purchasers of, such assets or a Consultant hired to prepare terms of reference for an assignment shall not be recruited for the assignment in question.

Fraud and Corruption

- 1.8 EMC requires that consultants observe the highest standard of ethics during the execution of such contracts. In such pursuance of this policy, EMC:
- (i) defines, for the purposes of this provision, the terms set forth below as follows:
- (a) "**corrupt practice**" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and



- (b) **"fraudulent practice"** means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the borrower, and includes collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the borrower of the benefits of free and open competition).
- (ii) will reject a Proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract; and
- (iii) will declare a firm ineligible, either indefinitely or for a stated period of time for awarding any EMC contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, any EMC contract.

Association Arrangements and Joint Ventures

1.9 Association arrangements or Joint Ventures are not allowed.

Proposal Validity

1.10 The Data Sheet indicates how long the Consultants' Proposals must remain valid after the submission date.

Participation of Government Employees

1.11 No current government employee shall be deployed by the consultant without the prior written approval by the appropriate authority.

Cost of RFP Document

1.12 The cost of RFP Document of amount indicated in Data Sheet in favor of "Director, Energy Management Centre Kerala" payable at Thiruvananthapuram shall be in the form of Account Payee Demand Draft



from any scheduled commercial bank or Nationalized bank. A proposal without the cost of RFP document shall be rejected, as nonresponsive.

Bid Security

1.13 Bid Security (Earnest Money Deposit)

- a. The Bid Security of amount indicated in Data Sheet in favor of "Director, Energy Management Centre Kerala" payable at Thiruvananthapuram shall be in the form of Account Payee Demand Draft or Bank Guarantee from any of the scheduled commercial bank or Nationalized bank having its branch in Thiruvananthapuram. In case of Demand Draft it shall be payable at Thiruvananthapuram and in case of Bank Guarantee it should be in an acceptable form provided in **Appendix-III to Data Sheet**. The bid security is to remain valid for a period of 180 days beyond the final bid validity period. EMC shall reject any bid not accompanied by appropriate bid security, as non-responsive.
- b. The bid security of the successful Bidder shall be returned as promptly as possible once he has signed the Contract and furnished the required performance security.
- c. Bid securities of the unsuccessful bidders shall be returned to them at the earliest after expiry of the final bid validity and latest on or before the 30th day after the award of the contract to successful bidder.
- d. The bid security may be forfeited:
 - (i) if a Bidder withdraws its bid during the period of bid validity.
 - (ii) if the Successful Bidder fails to: sign the Contract within required time frame; or furnish a performance security.



- e. Common single Bid Security and RFP Document Fee shall be submitted irrespective of the number of packages for which proposal is submitted.

2. CLARIFICATIONS AND AMENDMENTS TO RFP DOCUMENTS

- 2.1 Consultants may request a clarification of any of the RFP documents on or before the date indicated in Data Sheet. Any request for clarification must be sent in writing to the address indicated in the Data Sheet. The Client will respond in writing and will send written copies of the response, including an explanation of the query but without identifying the source of inquiry, to all Consultants. Should the Client deem it necessary to amend the RFP as a result of a clarification, it shall do so following the procedure under Sub-Clause 2.2.
- 2.2 At any time before the submission of Proposals, the Client may, whether at its own initiative, or in response to a clarification requested by a firm, amend the RFP by issuing an addendum. The addendum shall be sent to all Consultants and will be binding on them. To give Consultants reasonable time in which to take an amendment into account in their Proposals, the Client may at its discretion, if the amendment is substantial, extend the deadline for the RFP submission.

3. PREPARATION OF THE PROPOSAL

3.1 Consultant's Proposal (the Proposal) will consist of following components

- a. Cost of RFP document
- b. Bid Security



- c. The Technical Proposal including details of claim of eligibility criterion laid down in Notice inviting Proposal, and
 - d. The Financial Proposal
- 3.2 Cost of RFP document and Bid Security shall be placed in Envelope I. If the Cost of RFP Document and Bid Security is found proper then only technical and financial proposals will be entertained
- 3.3 The Proposal, as well as all related correspondence exchanged by the Consultants and the Client, shall be in English. All reports prepared by the contracted Consultant shall also be in English.
- 3.4 The Proposal should include a cover letter signed by person(s) with full authorization to make legally binding contractual (including financial) commitments on behalf of the firm. The Technical Proposal should clearly demonstrate the Consultant's understanding of the assignment requirements and capability and approach for carrying out the tasks set forth in the TOR through the nominated experts.

4. THE TECHNICAL PROPOSAL

General

- 4.1 The Technical Proposal shall not include any information related to financial proposal and
- 4.2 Technical Proposals containing information related to financial proposal shall be declared non-responsive.
- 4.3 The following table summarizes the content and maximum number of pages permitted for each type of Proposal. If the maximum number of pages is exceeded, a penalty will be applied during evaluation of the Proposal. A page



is considered to be one printed side of A4 size paper. Technical Proposal not in compliance will result in the Proposal being deemed non-responsive.

Content	Content Limit	Form
Profile and General Experience of Applicant	Maximum Five (5) pages, introducing the firms background and general experience.	Form TECH-2A
Relevant Experience of Applicant	Project Data Sheet illustrating firm relevant experience specifically grouped into type of experience required No promotional material should be included. <i>(Project data sheet should be supported by completion certificate. Where work has not been completed it will be supported by work order/letter of award.)</i>	Form TECH-2B
General approach and methodology, work plan	maximum fifteen (15) pages inclusive of charts and diagrams .	Form TECH-4 & TECH-8
Comments on Terms of Reference	No limit, but to be concise and to the point.	Form TECH-3.
List of Proposed Expert Team	Brief details of CVs of Proposed Team	Form TECH-5
Experts' CVs	Maximum of Four (4) pages for each expert's CV. <i>(Proof: Signature of expert or its authorised representative.)</i>	Form TECH-6
Personnel schedule	Schedule of deployment of experts and support staff as proposed in approach and methodology and provisions of RFP document.	Form TECH-7
Financial Statement of Applicant.	Financial details of company supported by audited financial statement. <i>(Proof: verified by Chartered Accountant)</i>	Form TECH-9



Technical Proposal Content

4.4 The Technical Proposal shall contain information indicated in the following paragraphs from (i) to (x) using the Standard Technical Proposal Forms (Form TECH-1 to Form TECH-8). Such information must be provided by the Consultant and each Associate (in case association or joint venture is allowed).

- (i) A brief description of the organization and outline of recent experience of the consultant on assignments of a similar nature is required in prescribed form. For each assignment, the outline should indicate inter-alia, the assignment, contract amount and the consultant's involvement. Information should be provided only for those assignments for which the consultant was legally contracted by the client as a corporate entity or as one of the major participating consulting firms within an association (joint venture). In case the assignment was carried out in joint venture then the JV agreement is to be submitted. Assignments completed by individual experts working privately or through other consulting firms cannot be claimed as the experience of the Consultant, or that of the Consultant's Associate(s), but can be claimed by the individuals themselves in their CVs. Consultants should be prepared to substantiate the claimed experience if so requested by the Client. Hence, lead member will not be changed during the currency of the contract.
- (ii) A concise, complete, and logical description of how the Consultant's team will carry out the services to meet all requirements of the TOR.



- (iii) A work plan showing in graphical format (bar chart) the timing of major activities, anticipated coordination meetings, and deliverables such as reports required under the TOR.
- (iv) An organization chart indicating relationships amongst the Consultant and any Associate(s), the Client, and other parties or stakeholders, if any, involved in the assignment.
- (v) Comments, if any, on the TOR to improve performance in carrying out the assignment. Innovativeness will be appreciated, including workable suggestions that could improve the quality/effectiveness of the assignment. In this regard, unless the Consultant clearly states otherwise, it will be assumed by the Client that work required to implement any such improvements, are included in the inputs shown on the Consultant's Staffing Schedule.
- (vi) The Technical Proposal shall not include information related to financial proposal. Technical Proposals containing information related to financial proposal shall be declared non-responsive.

Personnel

- (vii) The name, age, background employment record, and professional experience of each nominated expert, with particular reference to the type of experience required for the services should be presented in the prescribed CV format.
- (viii) Only one CV may be submitted for each position.
- (ix) Higher rating will be given to nominated experts from the consulting firm who are regular full-time employees. The Client defines a regular full-time employee to be a person who has been employed



continuously by the Consultant for more than twelve (12) months prior to the date of submission of the Proposal.

- (x) The Client requires that each expert confirm that the content of his/her curriculum vitae (CV) is correct and the experts themselves or his authorized representative should sign the certification of the CV. It is mandatory to have contact details (phone number, email id, contact address) and letter of authorization of the expert in case the CV is signed by authorized representative. A zero rating will be given to a nominated expert if the expert:
 - a) has not signed the CV by himself or by authorized signatory of applicant firm; or
 - b) is a current employee of EMC or State Government of Kerala or Government aided institution.

5. FINANCIAL PROPOSAL

- 5.1 All information provided in Consultants' Financial Proposal will be treated as confidential.
- 5.2 The Financial Proposal is to be submitted in the requisite forms enclosed.
- 5.3 No proposed schedule of payments should be included in Consultants' Financial Proposals.
- 5.4 Consultants shall quote the rates in Indian Rupees only.
- 5.5 Form FIN-2 is an acknowledgement that, in preparation and submission of the Technical and Financial Proposals, Consultants have:
 - (i) not taken any action which is or constitutes a corrupt or fraudulent practice; and



- (ii) agreed to allow the Client, at their option, to inspect and audit all accounts, documents, and records relating to the Consultant's Proposal and to the performance of the ensuring Consultant's Contract.
- 5.6 The rates to be quoted shall be in the format given in Data Sheet and it shall include all costs / expenses and statutory taxes excluding Service Tax. The Client shall pay Service Tax as applicable on prevailing rates.

6.0 SUBMISSION, RECEIPT AND OPENING OF PROPOSALS

- 6.1 The original Proposal (Cost of RFP Document, Bid Security), Technical and Financial Proposals) shall contain no interlineations or overwriting, except as necessary to correct errors made by Consultants themselves. Any such corrections, interlineations or overwriting must be initialed by the person(s) who signed the Proposal.
- 6.2 An authorized representative of the Consultant shall initial all pages of the proposal. The representative's **authorization must be confirmed by a written power of attorney** accompanying the proposals.
- 6.3 For each proposal, the consultant shall prepare the **number of copies** as indicated in the Data Sheet.
- 6.4 The Technical Proposal shall be marked "**ORIGINAL**" or "**COPY**" as appropriate and placed in separate envelopes. All required copies of the Technical Proposal as specified in the Data Sheet will be made from the original. If there are discrepancies between the original and the copies of the Technical Proposal, the original governs.
- 6.5 The original and all copies of the Technical Proposal to be sent to the Client shall be placed in a sealed envelope clearly marked "**TECHNICAL PROPOSAL.**"



Similarly, the original Financial Proposal shall be placed in a sealed envelope clearly marked "**FINANCIAL PROPOSAL**" and with a warning "**DO NOT OPEN WITH THE TECHNICAL PROPOSAL.**" The envelopes (Envelope 1 -Cost of RFP Document, Bid Security, Envelope 2 - Technical and Envelope 3 -Financial Proposals shall be placed into an outer envelope and sealed. All the envelopes shall bear the submission address, Contract number, title of the Project and other information indicated in the Data Sheet. **If the Financial Proposal is not submitted by the Consultant in a separate sealed envelope and duly marked as indicated above, this will constitute ground for declaring both Technical and Financial Proposals non- responsive.**

- 6.6 Proposals must be delivered at the indicated Client submission addresses on or before the time and date stated in the Data Sheet or any new date established by the Client according to provisions of Sub-Clause 2.2.

7. PROPOSAL EVALUATION

General

- 7.1 From the time the Proposals are opened to the time the contract is awarded , if any consultant wishes to contact the client on any matter related to its proposal, it should do so in writing at the address indicated in the Data sheet. Any effort by a Consultant to influence the Client in examination, evaluation, ranking of Proposals or recommendation or award of contract may result in rejection of the Consultant's Proposal.
- 7.2 A two stage procedure will be adopted in evaluating the proposals:
- (a) A technical evaluation which will be carried out prior to opening of financial proposals
 - (b) A financial evaluation



7.3 Envelope-1 shall be opened first. If the RPF Document Cost and Bid Security are not found to be in order then the proposal shall be treated as non-responsive and shall not be evaluated further.

Notwithstanding the foregoing EMC reserves their rights to exercise in assessing the past experience of Consultant with EMC's projects currently being implemented and such consultants whose performance had not been satisfactory, will not be considered for evaluation/award.

Evaluation of Technical Proposals

7.4 The eligibility criteria will be first evaluated as defined in Notice of RFQ for each bidder. Detailed technical evaluation will be taken up in respect of only those bidders, who meet with the prescribed eligibility criteria.

7.5 The Client's 'Technical Committee' (TC) will be responsible for evaluation and ranking of Proposals received.

7.6 The TC evaluates and ranks the Technical Proposals on the basis of Proposal's responsiveness to the TOR using the evaluation criteria and points system specified in the Data Sheet. Each Technical Proposal will receive a technical score (St). A Proposal shall be rejected if it does not achieve the minimum technical mark of 750 from the maximum of 1,000 points.

7.7 A Technical Proposal may not be considered for evaluation in any of the following cases:

- (i) the Consultant that submitted the Proposal belongs to one of the cases described in *Sub-Clause 1.6* to and failed to make a proper statement to that effect in the cover letter ; or
- (ii) the Technical Proposal was submitted in the wrong format; or
- (iii) the Technical Proposal included details of costs of the services; or



- (iv) the Technical Proposal reached the Client after the submission closing time and date specified in the *Data Sheet*.
- 7.8 After the technical evaluation is completed, the Client shall notify Consultants whose Proposals did not meet the minimum qualifying technical mark or Consultants whose Technical Proposals were considered non-responsive to the RFP requirements, indicating that their Financial Proposals will be returned unopened after completion of the selection process. The Client shall simultaneously notify, in writing Consultants whose Technical Proposals received a mark of 750 or higher, indicating the date, time, and location for opening of Financial Proposals. (Consultants' attendance at the opening of Financial Proposals is optional).
- 7.9 Before completion of the evaluation of Technical Proposal, the Client may at its sole discretion invite all or any of the eligible Consultants to make a presentation on their Technical Proposal to facilitate the understanding and evaluation of Technical Proposal. The scope of such presentation shall be limited to information already provided in the Technical Proposal.

8. OPENING AND EVALUATION OF FINANCIAL PROPOSALS

- 8.1 At the opening of Financial Proposals, Consultant representatives who choose to attend, will sign an Attendance Sheet.
- 8.2 The marks of each Technical Proposal that meets the minimum mark of 750 will be read out aloud. Each Financial Proposal will be checked to confirm that it has remained sealed and unopened.
- 8.4 The Client's representative will open each Financial Proposal. Such representative will read out aloud the name of the Consultant and the total price shown in the Consultant's Financial Proposal. This information will be



recorded in writing by the Client's representative. The lowest bidder will be invited for contract negotiation.

9.0 CONTRACT NEGOTIATIONS AND AWARD OF CONTRACT

- 9.1 The Consultant who is invited for contract negotiations will, as a pre-requisite for attendance at the negotiations, confirm availability of all experts named in its proposal except in the cases of absence on account of death or medical incapacity. Failure in satisfying such requirements may result in the Client proceeding to initiate the negotiation process with the next lowest bidder. Representatives conducting negotiations on behalf of the Consultant must have written authority to negotiate and conclude the Contract.
- 9.2 **Technical Negotiations:** This will include a discussion of the Technical Proposal, the proposed technical approach and methodology, work plan and schedule, and organization and personnel, and any suggestions made by the Consultant to improve the TOR. The Client and the Consultants will finalize the TOR, personnel schedule, work schedule, logistics, and reporting. These documents will then be incorporated in the Contract as "Description of Services." Special attention will be paid to clearly defining the inputs and facilities required from the Client to ensure satisfactory implementation of the assignment. The Client shall prepare minutes of negotiations which will be signed by the Client and the Consultant.
- 9.3 Negotiations will conclude with a review of the draft Contract. To complete negotiations the Client and the Consultant will initial the agreed Contract. If negotiations fail, the Client will invite the second lowest Consultant to negotiate a Contract.
- 9.4 After completing negotiations the Client shall award the Contract to the selected Consultant and notify the other Consultants who could have been invited to negotiate a Contract that they were unsuccessful. After Contract



signature the Client shall return the unopened Financial Proposals to the consultants whose Technical Proposals have not secured the minimum qualifying mark, or were found to be technically non-responsive

9.5 The selected Consultant is expected to commence the Assignment on the date and at the location specified in the Data Sheet.

10. DURATION OF ASSIGNMENT

10.1 The duration of assignment for satisfactory performance of the services the contract will be the period defined in Data Sheet.

11. PERFORMANCE SECURITY

The consultant will furnish within 10 days of the issue of Letter of Acceptance (LOA), an Account Payee Demand Draft/Unconditional Bank Guarantee (in prescribed format) in favour of "**Energy Management Centre Kerala** " payable/en-cashable at **Thiruvananthapuram**, from any Nationalized or scheduled commercial Bank in India having its office at Thiruvananthapuram for an amount equivalent to **5 % (five percent) of the total contract value** towards Performance Security valid for a period of **six (6) months** beyond the stipulated date of completion of services. The Bank Guarantee will be released after six month and rectification of errors, if any, found during appraisal/approval of DPRs by competent authorities whichever is later.



Section 2: Data Sheet to Instruction to Consultants

Paragraph	Reference
1.1	<p><i>Name of the Client:</i></p> <p>Energy Management Centre Kerala (EMC)</p> <p><i>Client's Representative:</i></p> <p>Director, Energy Management Centre Kerala , EMC</p> <p><i>Method of selection: Least Cost based Selection (LCS) Method</i></p>
1.2	<p><i>Financial Proposal to be submitted together with Technical Proposal: Yes</i></p> <p><i>Name of the assignment is:</i></p> <p>Preparation of Detailed Project Report and Preparation of Bid Documents for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala - January – 2014</p> <p><i>Required DPRs and scope of work is to be found in Terms of Reference (Section-5)</i></p> <p>Tender No is: TENDER NO : EMC/DPR/FL/2014/T-34/ Date 21.01.2014</p> <p><i>There shall be a pre-proposal meeting as under:-</i></p> <p>Schedule: 03/02/2014 at 3.00 Pm</p> <p><i>Venue of pre-proposal meeting:</i></p> <p>Energy Management Centre, Kerala , SrikrishnaNagar, Sreekaryam, Trivandrum 695017, Kerala, India Tel: +91-471-2594922,2594924, Website : www.keralaenergy.gov.in</p>



- 1.3 *The Client will provide the following inputs and facilities: As mentioned in Terms of Reference (ToR)*
- 1.4 Proposals must remain valid for 120 days from the submission date.
- 1.5 Cost of RFP Document: Rs. 600 + VAT @ 5%.
- 1.6 The Security amount is Rs. 25,000/-
- 1.7 Clarifications may be requested in writing on or before 02.02.2014.
The address for requesting clarifications is:
Director , Energy Management Centre, Kerala , SrikrishnaNagar,
Sreekaryam, Trivandrum 695017, Kerala, India,Tel: +91-471-
2594922,2594924, , FAX:- 0471 - 2594923
- 1.8 Under this contract the Consultant's payments are **Output and Deliverables Based.**
The Consultant shall quote Consultancy Charges for satisfactory performance of the Services under the contract in terms of Lumpsum Fee for the total work with cost break up for each Item mentioned in Form FIN-2, FIN-3 and FIN-4 of Financial Proposals to facilitate stage wise payments.
It is expected that consultant has quoted its fee considering all requirements for satisfactory performance of the services included in ToR. If the consultant has not considered any component for performance of the services, no extra payment shall be made on this account.
- 1.9 Amounts payable by the Client to the Consultant under the contract shall be subjected to deduction of applicable taxes, if any. The Client will pay Service Tax, on prevailing rates as applicable on the consultancy charges.



1.10 Proposals are to be submitted in 2 sets i.e. one original and one copy.
Proposals must be submitted no later than the following date and time:
12/02/2014 at 1500 hrs.

1.11 Technical Proposals shall be evaluated on the basis of following pre-identified criteria:

(a) Following Technical criteria that would be considered for selection of preferred bidder:-

S.No	Criteria	Score_Allocate
1	Firms General Experience & Experience in Similar Assignments	300
2	Approach & Methodology for proposed assignment	200
3	Qualification and Experience of Team Leader & Other Key Personnel	500
Total		1000

(b) The members of the Technical Committee (EMC) will carry out the evaluation of proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria. Each responsive proposal will be given a technical score.

(c) Narrative Evaluation Criteria and Detailed Marking Scheme is attached at Appendix-I & Appendix-II to Data Sheet.

1.12 Expected date for opening of Financial Proposals will be notified later.

1.13 Expected date for contract negotiations: to be notified.



- 1.14 Expected date for commencement of consulting services: two week after issuing Letter of Award.
- 1.15 The duration of the assignment shall be **four months (16 weeks)** and all activities are to be completed in this period. This will be applicable for all the sectors under this assignment.
- Inception Phase - 6 weeks
 - Draft DPR and Bid Document Preparation Phase - 6 weeks,
 - Final DPR and Bid Documents Phase – 4 weeks



APPENDIX I to DATA SHEET

NARRATIVE EVALUATION CRITERIA

I. QUALIFICATION OF PROPOSER (300 Points)

A. Experience in Preparation of Detailed Project Report (270 points)

Criteria: The extent and depth of experience of the firm in preparation of Project Reports in Eligible Sectors those are similar to the requirement of the TOR in terms of Technical parameters, quantum of work and required inputs and financial parameters.

Factors to consider: Each reference project included in the technical proposal will be judged against the criteria established. Higher scores will be given to a firm, which has more experience for projects with relevant nature. A consultant who has primary responsibility (i.e. the lead consultant) will be given a score higher than a consultant whose responsibility was secondary (i.e. associate consultant).

Eligible Sectors: Eligible Sectors include (i) Safe disposal of Fluorescent lamps, (ii) Hazard waste disposal (iii) Re-cycling of e-waste (iv) Chemical Process Plants. The Consultant should have done at least one successful project in the above category in order to be eligible.

B. Experience in Similar Geographical Areas (30 points)

Criteria: Extent of experience in similar geographical region taking in consideration elements such as population size, economic development stage and possibly other social factors.

Factors to consider: Higher scores will be given to a firm with better regional experiences.



II. APPROACH AND METHODOLOGY (200 Points)

A. Understanding of Objectives (20 points)

Criteria: General understanding of the project requirements; coverage of principal components as requested in TOR; and site visit assessment.

Factors to consider: The three following aspects will be considered:

General understanding	45%
Components coverage	45%
Site visit	10%

Maximum points will be given if all the three aspects are positively judged.

B. Quality of Methodology (70 points)

Criteria: The degree to which the presented written methodology/approach addresses the requirements of the TOR.

Factors to consider: Assessment of the inter-relationship of work program and methodology write-up. A consistent relationship is to be given maximum points.

C. Work Program (50 points)

Criteria: A work program showing graphical presentation of activities (bar chart).

Factors to consider: Work program will be assessed on logical sequence of events.

D. Personnel Schedule (40 points)

Criteria: Relationship between required person-months and proposed work program.

Factors to consider: The Personnel Schedule will be assessed based on phasing of activities of the work program and allocation and timing of expert's individual inputs. Total requirements close to estimated work requirements will be assessed as



well as the appropriateness of time allocated to the task to be performed in terms of individual expertise.

E. Proposal Presentation (20 points)

Criteria: Clarity and ease of assessment of the entire proposal (including material presentation).

Factors to consider If all items requested in the invitation letter are covered in a clear and easily understandable form and the proposal is assembled in a professional manner, maximum points will be given.

III. PERSONNEL (500 Points) Expertise

Criteria: Separate assessment of each expert listed in the Request for Proposal. Each expert is to be evaluated against the tasks assigned in accordance with four main criteria:

- a. general experience such as academic qualification and the no. of years of related experience: (20%)
- b. project related experience based on the number of relevant projects implemented: (50%)
- c. Experience for projects funded under Externally Aided Projects funded by WB, ADB, JICA etc. or under any GOI funded project - (20%); and
- d. For assessing full time permanent employment the personnel deployed who has worked for the current employer on a regular/permanent full-time basis continuously for the last 12 months - (10%)

Key Personnel

Minimum No of Key personnel estimated by the Client and the Maximum Marks for Expertise to be considered for evaluation purposes are given in below.



Sl.	Designation of Key Experts	No of Experts	Maximum Marks (X)
1	Team Leader cum e-waste Management Expert	1	200
2	Environmental Management Expert	1	60
3	Basic and Detail Engineering Expert	1	60
4	Project Management Expert	1	60
5	Financial Expert	1	90
6	Documentation Expert	2	30



APPENDIX II to Data Sheet

DETAILED MARKING SCHEME FOR TECHNICAL EVALUATION

S.No.	Criteria	Weightage (%)	Maximum Marks
1	Firms General Experience & Experience in Similar Assignments	100%	300
A	<p>Experience in Projects in Eligible Sectors - (i) Safe disposal of Fluorescent lamps, (ii) Hazard waste disposal (iii) Re-cycling of e-waste (iv) Chemical Process Plants</p> <p>Category and Max marks per Project</p> <ol style="list-style-type: none"> 1. DPR - max 20 marks per project 2. Feasibility Study - max 15 marks per project 3. Bid Documentation - max 10 marks per project 4. Design Review - max 8 marks per project <p>Evaluation Criterion</p> <ol style="list-style-type: none"> i. Consultant should have done minimum one project in Eligible Sector I, ie solid waste Management. ii. Project not falling in any of the above explicit category shall be treated based on best proximity to above categories. iii. Maximum of 70 marks will be awarded in each eligible sector <p>Threshold Project Cost: Only those projects will be considered which have Project Cost more than Rs 10 Crore.</p>	90%	270
B	Experience in Similar Geographical Areas	10%	30
(i)	No services provided in any similar geographic area.		0
(ii)	Services provided in any one or two similar geographic area		10
(iii)	Services provided in any 3 or 4 similar geographic area.		20
(iv)	Services provided in any 5 or more than 5 similar geographic nature states		30
2	Approach & Methodology for proposed assignment	100%	200



A	Understanding of Objectives	10%	20
(i)	General Understanding (45%)		9
(ii)	Components coverage (45%)		9
(iii)	Site visit (10%)		2
B	Quality of Methodology	30%	70
C	Work Program	25%	50
D	Organisation and Personnel	25%	40
E	Proposal Presentation	10%	20

QUALIFICATION AND EXPERIENCE OF TEAM LEADER & OTHER KEY PROFESSIONALS - 500

Marks

S.No.	Criteria	Weightage (%)	Maximum Marks
A	Team Leader/ Expert	100%	200
A1	Qualification & Experience		
(i)	Academic qualification	40%	80
(ii)	Project related experience based on the number of relevant projects implemented	40%	80
(iii)	Experience for projects funded under Externally Aided Projects funded by WB, ADB, JICA, KfW etc. or under any GOI funded project	10%	20
(iv)	For assessing full time permanent employment the personnel deployed who has worked for the current employer on a regular/permanent full-time basis continuously for the last 12 months	10%	20
A2	Other Experts /Documentation	100%	300



(ii)	Expert in Environment Management	20%	60
(iii)	Expert in Basic and Detail Engineering	20%	60
(iv)	Expert in Project Management	20%	60
(v)	Expert in Finance	30%	90
(vi)	Expert In Documentation	10%	30



APPENDIX-III TO DATA SHEET

Bid Security Form (Bank Guarantee)

(Bank's Name, and Address of Issuing Branch or Office) **Beneficiary:**.....
..... (name and address of Employer) **Date:**.....

Bid Security No.:.....

Whereas M/s.....(insert the name of the Consultant) (hereinafter called the "Consultant") has submitted its technical & financial proposals for the work of.....(insert the name of work for which proposal is submitted) (hereinafter called the "Proposal") under Package No.....on dated..... against the Employer's Notice Inviting Tenders (NIT) Notice Inviting Proposal/ Invitation for Bid (IFB) No.....(Insert NIT/NIP/IFB number as per publication in news paper or website).

Furthermore, we understand that, according to your conditions, proposals must be supported by a Bid Security.

At the request of the Consultant, we.....(insert name of the bank) hereby irrevocably undertake to pay you any sum or sums not exceeding in total amount of.....(insert bid security amount in figures)(amount in words) upon

receipt by us of your first demand in writing accompanied by a written statement stating that the Consultant is in breach of its obligation(s) under the RFP conditions, because the Consultant:

- (a) has withdrawn its Proposal during the period of Proposal validity specified by the Consultant in the Technical Proposal Form; or
- (b) does not accept the correction of errors in accordance with the Instructions to Consultants (hereinafter "the ITC") of the RFP Document; or
- (c) having been notified of the acceptance of its Proposal by the Employer during the period of proposal validity, (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITC.

This guarantee will expire: (a) if the Consultant is the successful Consultant, upon our receipt of copies of the Contract Agreement signed by the Consultant and the performance security issued upon the Instruction of the Consultant; and (b) if the Consultant is not the successful Consultant, upon the earlier of (i) our receipt of a copy your notification to the Consultant of the name of the successful Consultant; or (ii) forty-five days after the expiration of the Consultant's proposal.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

.....(Bank's seal and authorized signature(s)).....



Section 3: Technical Forms



FORM TECH-1: TECHNICAL PROPOSAL

[Location, Date]

To

Director
Energy Management Centre Kerala
SrikrishnaNagar, Sreekaryam,
Trivandrum 695017,
Kerala, India

Dear Sir/Madam:

We, the undersigned, offer to provide the consulting services for *[Insert title of assignment]* in accordance with your Request for Proposal dated *[Insert Date]* and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope.

We are submitting our Proposal in individual capacity without entering in association with or as a Joint Venture. We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, i.e., before the date indicated in the Data Sheet, we undertake to negotiate on the basis of the proposed personnel. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in the Data Sheet *(Please indicate date)*.

We understand you are not bound to accept any Proposal you receive. We remain,

Yours sincerely,

Authorized Signature *[In full and initials]*:

Name and Title of Signatory:

Name of Firm:

Address:



FORMTECH-2: CONSULTANT'S ORGANIZATION AND EXPERIENCE

FORM TECH-2A: Consultant's Organization

[Provide here a brief (maximum five pages) description of the background and organization of the Consultant]

Name of the Consultants Organisation:	
Address of Registered Office of Consultant:	
Year of Establishment:	
Contact Person with Contact Details:	
Annual Turnover* in last three years (in Lakhs) FY 2012 13: FY 2011-12: FY 2010-11: Average Annual Turnover for above three Financial Years: <i>(*Audited Statements to be enclosed)</i>	
Net worth of Agency <i>(Positive/ Negative)</i> :	
Experience in Similar Assignment: - Number of years: - Total assignments: - Assignments completed in last 3 years: - Similar Assignments in last 3 years:	
Any Award or Felicitation received by your Agency:	
Any Other Relevant Details:	



FORM TECH-2B: Consultant's Experience

[The following information should be provided in the format below for each reference assignment for which your firm, either individually as a corporate entity or as one of the major companies within a consortium, was legally contracted by the Employer. Consultant should specifically state the service covered, to facilitate the technical evaluation of the Proposals.]

Assignment name:	Approx. value of the contract (in INR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total Number of person-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in INR)
Start date (month/year): Completion date (month/year):	Number of professional person-months provided by the joint venture partners or the Sub- Consultants:
Name of joint venture partner or sub-Consultants, if any for the assignment:	
Name of senior regular full time employees of the firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):	
Narrative description of Project*: Narrative description of project should specifically provide the details of: a) Project Cost b) Service covered c) Capacity /Size of the project	
Description of actual services* provided in the assignment:	

*(Completion Certificate from Employer regarding experience should be furnished)

Firm's Name:

Signature of Authorized Representative:.....



Form TECH-3: Comments and Suggestions on the Terms of Reference FORM

TECH-3A: On the Terms of Reference

[Present and justify here any modifications or improvement to the Terms of Reference you are proposing to improve performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding others, or proposing a different phasing of the activities). Such suggestions should be concise and to the point, and incorporated in your Proposal.]

- 1.
- 2.
- 3.
- 4.



Form TECH-4: Description of Approach, Methodology and Work Plan for Performing the Assignment [As per the details mentioned in the NARRATIVE EVALUATION CRITERIA]

Technical Approach and Methodology, Work Plan, and Organization and Personnel

a) Technical Approach and Methodology. In this section you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.

b) Work Plan. In this section you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule.

c) Organization and Personnel. In this section you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support personnel. The manpower requirement given in the TOR is an indicative minimum requirement. The consultant should assess the specific and realistic manpower with reference to specific project package and it should be consistent with the proposed Work Schedule



FORMTECH-5: TEAM COMPOSITION, TASK ASSIGNMENTS AND SUMMARY OF CV

Team Leader and Key Professionals only

Surname , First Name	Area of Expertise	Position Assigned	Task Assigned	Employment Status with Firm (full-time/ other)	Education/ Degree (Year/ Institution)	No. of Relevant Projects Handled	No. of years of relevant project experience	CV signature (by expert/by other)



FORMTECH-6: CURRICULUM VITAE (CV) FOR PROPOSED EXPERTS

[Summary of CV: Furnish a summary of the above CV. The information in the summary shall be precise and accurate. The information in the summary will have bearing on the evaluation of the CV]

1. Proposed Position *[only one candidate shall be nominated for each position]:*
2. Name of Firm *[Insert name of firm proposing the expert]:*
3. Name of Expert *[Insert full name]:*
4. Date of Birth:Citizenship:
5. Education *[Indicate college/university and other specialized education of expert, giving names of institutions, degrees obtained, and dates of obtainment]:*
6. Membership of Professional Associations: _
7. Other Training *[Indicate significant training since degrees under 5 - Education were obtained]:*
8. Publication: *[List of details of major technical reports/papers published in recognized national and international journals]*
9. Languages *[For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]:*
10. Employment Record *[Starting with present position, list in reversed order, every employment held.]*
List all positions held by staff member since graduation, giving dates, names of employing organization, title of positions held and location of assignments. For experience period of specific assignment must be clearly mentioned, also give Employer references, where appropriate.]:
From [Year]:To [Year]:Employer: Positions held:.....

11A. Detailed Tasks Assigned *[List all tasks to be performed under this assignment]*

11B. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned *[Among the assignments in which the expert has been involved, indicate the following information for those assignments that best illustrate the expert's capability to handle the tasks listed under point 11.]*

Name of assignment or project:.....

Year:

Location:

Client:

Main project features:

Positions held:

Activities performed:

I, the undersigned, certify to the best of my knowledge and belief that:

- (i) This CV correctly describes my qualifications and my experience.
- (ii) I am not employed by the Executing /Implementing Agency
- (iii) I am/I am not in regular full-time employment with the Consultant/Sub-Consultant.
- (iv) In the absence of medical incapacity, I will undertake this assignment for the duration and in terms of the Personnel Schedule in Form TECH-6 provided team mobilization takes place within the validity of this proposal or any agreed extension thereof.



(v) I am willing to work on the project and I will be available for entire duration of the project assignment and I will not engage myself in any other assignment during the currency of this assignment on the project.

(vi) I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me my qualification and my experience

I am committed to undertake the assignment within the validity of Proposal.

(I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.)

Date: [Day/Month/Year]

Full name of authorized representative

[Signature of expert or authorized representative of the firm]¹

¹ *(This CV can be signed by a senior representative of the Consultant provided that if the Consultant's proposal is ranked first, a copy of the CV signed by the expert and/or specialist must be submitted to the Client prior to the commencement of contract negotiations.)*



FORMTECH-7: FINANCIAL STRENGTH OF THE CONSULTANT
FORMAT FOR FINANCIAL STRENGTH OF THE CONSULTANT

Rs. Crores

Year	Capital	Reserves	Net Worth	Profit/Loss	Turnover	Advisory/Consultancy Services Turnover
2012-13						
2011-12						
2010-11						

.....

(Signature of Authorized Signatory)

This is to certify that the above information has been examined by us on the basis of relevant documents, books of accounts & other relevant information and the information submitted above is as per record.

Signature, address, Seal & Membership No. of Chartered Accountant

Section 4: Financial Proposal

Section 4: Financial Proposal - Standard Forms

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided under Para5 of Section 2. Forms FIN-1, FIN-2, FIN-3, FIN-4 are to be used whatever is the selection method indicated in Para 4 of the Letter of Invitation and Data Sheet

**Form FIN-1: Financial Proposal
SUBMISSION FORM**

[Location, Date]

To:

Director
Energy Management Centre
SrikrishnaNagar, Sreekaryam,
Trivandrum 695017,
Kerala, India

Dear Sir /Madam:

We, the undersigned, offer to provide the consulting services for **[Insert name of Assignment and Reference Number]** in accordance with your RFP dated *[Insert Date]* and our Technical Proposal. Our attached Financial Proposal is for the sum of *[Insert amount(s) in words and figures in Indian Rupee]*. This amount is exclusive of the service tax.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in Clause Reference 1.4 of the Data Sheet.

No fees, gratuities, rebates, gifts, commissions or other payments have been given or received in connection with this Proposal.

We understand you are not bound to accept any Proposal you receive.

We remain, Yours sincerely,

Authorized Signature *[In full and initials]*: Name and Title of Signatory:

Name of Firm:

Address:

FORM FIN-2: GRAND SUMMARY OF COST

Project Title: Request for Proposal (RFP) for the selection of Consultants for the Preparation of Detailed Project Report and Preparation of Bid Documents for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala

SL.	Description of Services	Consultancy Fee (in Indian Rupee in figures and words)
(A)	Consultancy fee for providing services for the Preparation of Preparation of Detailed Project Report and Preparation of Bid Documents for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala as per Terms of Reference (ToR) complete to the satisfaction of Client	
[B]	Add Service Tax as per prevailing rates	
[C]	Total Consultancy fee including Service Tax [A]+[B]	

Note: While quoting financial offers, applicants are requested to see Clause 1.8 of Data Sheet to Instruction to Consultants under Section 2. During Evaluation of Financial proposals, the quoted Consultancy fee excluding service tax shall be considered. The client shall pay the Consultant, the Service Tax, on prevailing rates as applicable on the consultancy charge

Authorized Signature [In full and initials]:
 Name and Title of Signatory:
 Name of Firm with Company Seal:

FORM FIN-3: Breakup of Cost

Project Title: Request for Proposal (RFP) for the selection of Consultants for the Preparation of Detailed Project Report and Preparation of Bid Documents for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala

SNo	Description	Consultancy Fee in Indian Rupee	
		(In figures)	(In words)
A1	Remuneration for Professional Staff		
A2	Remuneration for Sub-Professional Staff		
A3	Transportation		
A4	Duty Travel on Site		
A5	Office Rent		
A6	Office Supplies, Utilities and Communication		
A7	Office Furniture and Equipment		
A8	Reports and Document Printing		
A9	Survey and Investigation Expenses		
	Total Costs		

Note : The Summary & break-up of cost as given in format FIN-3 is to facilitate assessment of reasonableness of costs and conducting negotiation in accordance with Clause 9 of Section 2.

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm with Company Seal:.....

Section 5: Terms of Reference (ToR)

Section 5: Terms of Reference (ToR)

1. Introduction

Energy Management Centre, Kerala (EMC), seeks the services of suitably qualified and registered domestic Consulting Firms/Agencies/Companies to provide Consultancy services for Preparation of Detailed Project Report and Preparation of Bid Documents for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala

The Consulting Firm will be required to have staff of suitably qualified Professionals being competent to carry out all of related duties and equipped with necessary facilities for conducting desired study and preparation of reports.

- (i) After acceptance of consultants' program by client, the Consultants will be fully responsible to mobilize the resources required to maintain the agreed schedule of work within the total person months agreed under the contract for the services. In case of any delays, which are not beyond the control of consultants, the client reserves the right to require Consultancy Firm to provide additional resources and personnel as may be required to make up the lost time, for which no additional payment shall be made.
- (ii) Whenever power point presentation or otherwise are sought for, the consultants shall make themselves available to various committees.

2. Scope , Coverage and Distribution

The aim of this exercise is to prepare Detailed Project Report and Preparation of Bid Documents for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala

3. Objectives of the Study

The primary objective of the consultancy is to undertake Preparation of Detailed Project Report and Preparation of Bid Documents for Recovery (Collection), Recycling and Disposal of Compact Fluorescent and linear Fluorescent Lamps in Kerala.

The DPR should be bankable to get financial assistance under different schemes of GOI or other External Funding, if available. Govt. of Kerala may also consider to provide part financial assistance through State Plan or other sources for implementation of proposed project. Following Acts standards and any other guidelines laid by Ministry of Environment

& Forest, Government of India and Government of Kerala shall be considered while preparing the detailed project report.

- Water (Prevention and Control of Pollution) Act, 1974
- The Air (Prevention and Control of Pollution) Act, 1981
- The Environment (Protection) Act, 1986
- The Hazardous Substance(handling and Storage) Rules,1989
- The Municipal Solid Waste (Management and Handling Rules), 2000
- E-Waste (Management and Handling) rules 2011
- Any other Guideline issued by Government of India, Government of Kerala and any other International guidelines, those are relevant for planning, design and implementation of such projects.

4. Scope of Work

The consultants will carry out a multi-stage exercise to formulate the DPR and Bid Documents in close collaboration with the EMC, Kerala.

The scope of this ToR broadly covers the following phases:

4.1 Preparation of Detail Project Report

The objective is to cover entire Kerala by setting up adequate number of collection and processing centers for Recovery (Collection), Recycling and Disposal of spent Compact Fluorescent and linear Fluorescent Lamps. The Project shall identify distinct roles and responsibilities of identified stakeholders from the point of collection to its final disposal and shall consider best available technologies and practices. The technology shall be environmentally acceptable, yet cost effective and shall consider best practices to ensure compliance with relevant acts and guidelines, for the responsible collection /handling of spent Compact Fluorescent and linear Fluorescent Lamps. The Project Proposal shall target a maximum collection efficiency of spent CFLs and other linear fluorescent tubes and proportional processing capabilities.

The scope of the spent lamp recycling and disposal project includes.,

(1) Mechanisms for separation of spent lamps at source, drop-off centres, collection storage and transportation to processing/treatment centres, targeting a collection efficiency of at least 60%.

(2) Identification of proven environment friendly and cost effective best available technologies for disposal which includes separation and recycling of as many of the constituent materials including mercury from the spent lamp as possible.

(3) Identification of proven environment friendly and cost effective best available technologies for mercury recovery.

(4) Disposal arrangements for Non- recyclable waste and any other waste as per environmentally acceptable standards

(5) setting out the relevant responsibilities and key roles of various stakeholders, including consumer, Lamp manufacturing Industries, Local self governments, Waste collection and Transporting contractor, Waste Treatment and Recycling Facility owner, Fund Administrator etc.

(6) Detailed designs, drawings, cost estimates and capital investment plan

(7) Bidding documents for planning and implementation of the project

The assignment shall include the following but not limited to:

A. General Framework

- (i) Collecting information on lamp usage data, lamp life pattern and present disposal practices through industry data and by conducting surveys and its analysis
- (ii) Studying the best practices models on a global scale for the collection and disposal of spent lamps and selection of best available techniques relevant to Kerala scenario
- (iii) Assessing the generation quantity of spent lamps and selection of processing capacity of each regional treatment facility considering the consumption growth pattern for 15 years
- (iv) Assessing adequacy of any existing infrastructure / facility for effective segregation and collection of spent lamps by suitable integration or proposing new facilities if existing systems are in adequate
- (v) Planning and Zoning and locating regional treatment facilities and its justification
- (vi) Carrying out a Life cycle Cost analysis to determine the selected best available technology for disposal and recycling of spent lamps
- (vii) Proposing Recycling of as many of the constituent materials including mercury from the spent lamp and identifying various users for such products. including the monitory revenue from sale of such items

B. Design & Engineering

- (i) Basic Design and Detailed engineering of Disposal facilities including mercury recovery plant and other recycling/disposal system.
- (ii) Design and Detailed Engineering of related Electrical, Mechanical and Instrumentation systems.
- (iii) Preparation of detailed working drawings and plant specifications

C. Stakeholder Consultation

- (i) Detailed consultations shall be conducted with various stakeholders like EMC, general public along with Local/Urban Bodies , Lamp Industry

representatives, Government departments like State PCB, Environment and forest department, interested NGOs, etc with specific deliberations on project proposals, to receive opinions and identification of land etc. The suggestions received from the consultations shall be documented and reviewed and be considered in finalising the designs.

D. Project Cost & Financial Viability

- (i) Preparation of project cost estimate including capital, O&M Costs based on the above and preparation of financial analysis and economic analysis including internal rate of return/economic rate of return of the project. Justify the assumptions made by illustrations, which are executable.
- (ii) The cost estimate shall be based on the current schedule of rates of Government of Kerala with respect to civil construction and all other cost estimate shall be based generally accepted standards/norms/indices. There shall not be any lump sum provision in the estimate. For items not covered in the schedule of rates market rates shall be adopted with evidence.
- (iii) **Operation and Maintenance cost**, mechanism and suggested user charges for self-sustainability of the system including manpower planning.
- (iv) Evaluation of the **financial Feasibility and affordability** of the Project for investment should consider imposition alternate mechanism full recovery of the project cost within a suitable period with options by imposing an upfront recycling cost in the retail price of lamps and revenues earned through sale of recyclable materials. Any other innovate mechanism for full viability of the project shall also be proposed. However financial performance of the project purely from recycling of recovered materials shall be established prior to considering alternate/innovative financial mechanism, for project cost recovery and self financial sustainability of the system

E. Institutional Strengthening & Capacity Building

- (i) Recommending organizational set up for operation and maintenance of the system. Identifying requirements of staff along with costs, Involving the EMC and other relevant stake holders at all stages.
- (ii) Recommending laboratory facilities along with trained lab personnel and lab equipment for monitoring and verification of the quality plan.
- (iii) Preparing strategies for training of various stakeholders;

F. Implementation Plan

- (i) Prepare the project implementation schedule for execution. This will also include drawing up project budget with monthly/quarterly target, furnish

network analysis such as CPM, PERT for purposes of effective project monitoring and regular reports.

- (ii) Suggesting use of modern technologies and information system for implementation of project.

G. Environment & Social Consideration

- (i) Preparation of Environmental and Social assessment Report to prepare necessary impact assessment and Environmental Mitigatory Plans.
- (ii) Identifying specific protection arrangement for trees and other sensitive environmental components. Tree cutting requirement if any shall be clearly identified and listed with schedule of permission from regulatory authorities to facilitate cutting.

H. Approvals/ permissions

- (i) Wherever permission from a state or central government organization is required in implementation of the project, it would be clearly mentioned in the DPR.
- (ii) Clearances/ Permission from other Ministries namely Ministry of Environment and Forest, KSPCB/CPCB, etc, if required, should be highlighted in DPR.

4.2 Land Requirement

The project design shall be based on public land owned/acquired by Government of Kerala, urban/Local Bodies. The consultant shall calculate the actual land requirement for each project area with a view for future expansion.

4.3 Outputs and Deliverables

Under this contract the Consultant's payments will be on output and deliverables based. It is very important for the consultants to note the exact outputs required and their contents. The desired outputs & deliverables under this contract are as shown in the table below.

Report	Due Date	No of copies, type & language	Contents
Inception Phase			
Preliminary Report and Quality Assurance plan	End of week 6	2 hard copies and original version of soft copy in English	Conducting surveys , data collection on lamp use , assessment of existing lamp disposal methods, Stakeholder Consultations, Evaluation of best available techniques for safe disposal, summary of findings based on completed situation assessment and feasibility studies for technical, financial, social, cultural, environmental, legal, institutional and economic aspects; Data & record collected; Studies carried out; Options proposed and selected; identification of land for project facility; Outline description of Project; Expected Project costs, approvals, and other deliverables as per ToR etc.

DPR and Bid documents Preparation Phase			
Draft DPR and Bid documents	End of week 12	Same as above	Methodology, Detailed Engineering, design, drawing, specifications, estimation etc. as per ToR. Draft Bid documents
Final DPR and Bid documents	Within four weeks after comments on draft DPR	5 hard copies And original version of soft copy in English	As above but accommodating all points recommended by the Client.

4.4 Reports To Be Submitted By The Consultant To EMC

4.4.1 All reports, documents and drawings obtained by the consultant are to be submitted by him to the client under this assignment. The analysis of data and the design proposals shall be based on the data derived from the primary surveys and investigations carried out during the period of assignment. The sources of data and model relationships used in the reports shall be indicated with complete details for easy reference.

4.4.2 Since the project preparation is quite expensive and time consuming, the projects under this assignment are proposed to prepare in various stages and at the end of each stage decision shall be taken at competent level and conveyed to consultants whether to proceed for next stage. Project preparation activities will be split into stages as brought out below.

Stage 1: Preliminary data collection including Quality Assurance Plan;

The consultants has to discuss with EMC on the details of the preliminary data, and any comments, revisions and modifications in the data suggested by EMC shall be incorporated.

Stage 2: Draft Detailed Project Report (DDPR) and Draft Bid Documents

The Draft DPR Submission as given below:

Vol I – Data Collection, Surveys, Investigations, Detailed analysis and Design Basis

Vol II - Main Report together with Detailed Designs, Economic, Financial and Environmental Reports

Vol III - Data for Materials and Works for Processing plant Facility including buildings, Detailed Estimates of Plant equipments, Quantities and Cost

Vol IV – Drawings

Vol V – Draft Bid Documents

Stage 3: Final Detailed Project Report (DPR) and Bid documents

The CDs should be properly indexed and a catalogue giving contents of all CDs and print-outs of the contents should be handed over to EMC at the time of submission of the Final Report.

- 4.4.3 Time schedule in respect of all such stages has been indicated in earlier Paragraphs. Consultant shall be required to complete, to the satisfaction of the client, all the different stages of assignment within the time frame indicated in the schedule of submission pertaining to Reports and Documents for becoming eligible for payment for any part of the next stage.
- 4.4.4 The Consultant shall submit to the client the final reports and documents in bound volumes in perfect binding (and not as spiral binding , stick binding, Comb binding etc) after completion of each stage of work as per the schedule and in the number of prescribed copies. Further, the reports shall also be submitted in CDs in addition to the hard copies. The soft copy shall be in original version and shall not be converted in pdf form. Consultant shall submit all other reports mentioned specifically in the TOR.
- 4.4.5 The time schedule for various submissions shall be strictly adhered to. No time- over-run in respect of these submissions will normally be permitted. Consultant is advised to go through the entire terms of reference carefully and plan his work method in such a manner that various activities followed by respective submissions as brought out are completed as stipulated. Consultant is, therefore, advised to deploy sufficient number of supporting personnel, both technical and administrative, to undertake the assignment. As far as possible, the proposal should include complete information such as number of such persons, name, position, period of engagement, etc. The Consultant is also advised to start necessary survey works/data collection from the beginning so as to gain time in respect of various other activities in that stage.

5. Interaction With EMC and Other Line Agencies

- 5.1. During entire period of services, the Consultant shall interact continuously with EMC and provide any clarification as regards methods being followed and carry out modification as suggested by EMC. A programme of various activities shall be provided to EMC and prior intimation shall be given regarding start of key activities such as survey/investigation etc. So that inspections of EMC officials could be arranged in time.
- 5.2. All equipment, software and books etc. required for satisfactory services for this project shall be obtained by the Consultant at their own cost and shall be their property.

6. Data And Software

- 6.1 The CDs containing all basic as well as the processed data from all studies and investigations, report, appendices, annexure, documents and drawings

shall be submitted to EMC at the time of the submission of the Draft DPR.
The data can be classified as follows:

- (i) **Data Collection from various sources, Surveys and Other Studies**
- (ii) **Rate Analysis:** The Consultant shall submit the rate analysis for various works items including the data developed on computer in this relation so that it could be used by the client later for the purpose of updating the cost of the project.

(iii) Economic and Financial Analysis.

7. Expertise

7.1. Personnel Requirement

The Consultant shall be required to form a multi-disciplinary team for this assignment. The consultant Team shall be manned by adequate number of experts with relevant experience in the execution of similar detailed design assignments.

7.2 Replacement of Key Personnel

Key Personnel shall not be replaced by the Consultant without prior permission of EMC. The substitute key personnel replacing the key personnel should be equally qualified or better qualified. Consultancy fee shall be deducted by 5% in case of replacement of Team Leader. Consultancy fee shall be deducted by 2% for each replacement of other key personnel.

During execution of contract, the expert or person who is not found able to deliver or perform as per the expectation of client which is supposed to be within his control, he shall be demobilized by the consultant with immediate effect and arrange his replacement with prior approval of client

8. Payment To The Consultants

- 8.1 The consultancy charges for performance of the services under the contract shall be paid by the client as per payment schedule given in Terms of Reference.
- 8.2 The client shall pay the Consultant, the Service Tax, on prevailing rates as applicable on the consultancy charges.
- 8.3 It is expected that consultant has quoted amount considering all requirements for satisfactory performance of the services included in ToR. If the consultant has not considered any component for performance of the services, no extra payment shall be made on this account.
- 8.4 The Consultant will be paid consultancy fee as a percentage of the quoted price of the specific Assignment as per the schedule given below:-

.Table 5. Payment Terms		
S. No	Description	Payment %
1	On submission of the details of Preliminary data	10
2	On Submission of Draft DPR and Draft Bid Documents	40
3	On approval of Draft DPR and Draft Bid Documents by EMC based on comments of EMC	50
4	Total	100

8.5 The client reserves the right to stop the consulting assignment for full or part of the assignment at any stage of its execution by the Consultant in specific cases, if required by funding agency. In the event of such discontinuation of full or part of the assignment, the Consultant shall be compensated to the extent of the work done by it.

9. Project Reviews

9.1 The project performance of the Consultant will be reviewed by EMC, at regular intervals. Based on the reviews, EMC will suggest the Consultant for the measures to improve the performance in the execution of project component. Before proceeding for next stage there shall be a detailed review of the Consultant's work performance in the previous stages. The proceedings for suspension / termination of Contract shall be as per provisions of General Conditions of Contract under Section-2 of the Contract Agreement.