

Request for Proposal for Conducting Investment Grade Energy Audits (IGEA) at identified Government buildings under “Promotion of ESCO model” program- 5th phase.

Prepared By



Bureau of Energy Efficiency

Ministry of Power, Government of India

To be submitted to,

The Secretary,
Bureau of Energy Efficiency,
4th Floor, Sewa Bhawan,
R. K. Puram, New-Delhi 110 066.

Last date of Submission of RfP: 29th May, 2023

Contents

1. Advertisement	4
1.1. Critical Information.....	4
2. Name of work	5
3. General terms & conditions.....	5
3.1. Eligibility criteria for the bidder	7
3.2. Earnest Money Deposit (EMD)	7
3.3. Conflict of Interest	8
3.4. Performance Security	8
3.5. Tender Validity	8
3.6. Signing and Sealing of Tender.....	8
3.7. Cost of RfP	8
3.8. Contents of the RfP	8
3.9. Submission of Tenders:	9
3.9.1. Technical Proposal.....	9
3.9.2. Financial Proposal	9
3.9.3. Selection	9
3.10. Selection process	10
3.10.1. Preliminary Scrutiny (Consideration of responsiveness).....	10
3.10.2. Bid Evaluation Methodology	10
3.10.3. Evaluation of Tenders.....	10
3.11. Minor Informality/Irregularity/Non-Conformity	11
3.12. Tender currencies in Indian Rupees	11
3.13. Evaluation of Technical Proposals	11
3.14. Late Tender	12
3.15. Alteration and Withdrawal of Tender.....	12
3.16. Contacting BEE.....	12
3.17. Penalty Clause.....	12
3.18. Corrupt or Fraudulent Practices	12
3.19. Quality and reporting.....	13
3.20. Confidentiality	13
3.21. Disclaimer.....	13
3.22. Authorized Signatory (Agencies / Firms).....	13
3.23. Conditions for Consortium	14
3.24. Contact details of the Agencies / firms.....	14
3.25. Amendment of RfP.....	14

3.26.	Terms of payment	14
3.27.	Termination of contract	14
3.28.	Integrity Pact.....	14
3.29.	Scope of Work	16
	Procedure to follow	16
	Data to be collected	16
	Preparatory work for Audit	17
	Data analysis	17
	List Possible Efficiency Projects	17
	Baseline.....	18
	Risk Responsibility Matrix	18
	Project Financials	18
	IGEA Report	18
I.	Annexure I: Form of undertaking for Integrity Pact	19
	FORM OF UNDERTAKING	19
II.	Annexure II: Format for financial proposal.....	21
III.	Annexure- III: RfPForms	22
	RfP Form 1: RfP Letter Proforma	22
	RfP Form 2: Eligibility and Other Details	24
	RfP Form 3: Proposed Work Plan and Methodology including the timelines.....	25
	RfP Form 4: Resumes of the members in the proposed team as per clause (f) under section 3.9.1 of the RfP	26
	RfP Form 5: Declaration Letter	27
IV.	Annexure IV: Building Details	28

Letter of Initiation

1. Advertisement

This Request for Proposal (RfP) document is for “Conducting Investment Grade Energy Audits (IGEA) at identified Government buildings”.

Objective of the Request for Proposal (RfP):

The objective of conducting the study is to establish baseline energy consumption, identify energy saving opportunities and assess techno-financial viability of identified energy saving opportunities so that energy saving measures can be taken further through ESCO model. The broad goal is to promote energy efficiency projects through ESCO route by creating a pool of successful pilot projects.

Interested agencies/firms may download the RfP document from the website: www.beeindia.gov.in. In case the RfP is downloaded, intimation may be sent at the email id: asengupta@beeindia.gov.in.

Interested agencies/firms may contact Mr Arijit Sengupta, Director; BEE, Email: asengupta@beeindia.gov.in; for any clarification.

1.1. Critical Information

Availability of RfP document	BEE website(https://beeindia.gov.in/) and CPP portal(https://eprocure.gov.in/eprocure/app)
Last date for acceptance of queries	10 th May, 2023 at 10 AM
Date for pre-bid meeting	12 th May, 2023 at 5 PM (Virtual Mode-Link will be uploaded later)
Last date for receipt of RfP document	29 May, 2023 at 3 PM
Place, time and date of opening of technical proposals	BEE Conference Room, 4h Floor, Sewa Bhawan, RK Puram, New Delhi-110066 29 May, 2023 at 3:30 PM
Place, time and date of opening of financial proposals	To be informed later (Only to technically qualified bidders)
Validity of RfP document	120 days from the date of opening
Timeline to complete job	45 days from date of award of work order
Contact Person for queries	Mr. Arijit Sengupta, Director, BEE asengupta@beeindia.gov.in
Submission of RfP address to	The Secretary, Bureau of Energy Efficiency 4 th Floor, Sewa Bhawan, R.K.Puram, New Delhi-110066, India Tel:(+91)-112676-6700 , Fax: (+91)-1126178352

Note: BEE will use Email as a primary mode of communication and will upload all relevant information on BEE website (<http://www.beeindia.gov.in>).

About Bureau of Energy Efficiency (BEE)

The mission of Bureau of Energy Efficiency (BEE) is to develop policy and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act (EC Act), 2001 with the primary objective of reducing energy intensity of the Indian economy. This will be achieved with active participation of all stakeholders, resulting in accelerated and sustained adoption of energy efficiency in all sectors.

The setting up of Bureau of Energy Efficiency (BEE) provides a legal framework for energy efficiency initiatives in the country.

Under the provisions of the Energy Conservation Act, 2001, Bureau of Energy Efficiency has been established with effect from 1st March, 2002.

2. Name of work

“Hiring of Agency for conducting Investment Grade Energy Audit (IGEA) of identified buildings of Council of scientific & Industrial Research and Delhi Development Authority, (CSIR, DDA).

Bidder can apply for any or all of the entities.

However, Bidder will get selected for carrying out the work only for one entity. The selected bidder will not be considered for the selection process of the other entities. The sequence to bid opening will be A,B,C,D,and E.

Disclaimer:

- Though adequate care has been taken while preparing the RFP document, the Bidders shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within ten (10) days from the date of notification of RFP/Issue of the RFP documents, it shall be considered that the RFP document is complete in all respects and has been received by the Bidder.
- The agency should visit each and every building/facility for carrying out IGEA. Documentary evidences should be provided to support the claim of visit.
- The bidders are free to visit the facilities as described at their own cost after fixing a mutually convenient date with the facility owners.
- Facility Owner reserves the right to modify, amend or supplement this RFP document including all formats and Annexure.
- While this RFP has been prepared in good faith, neither Facility Owner nor their employees make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFP, even if any loss or damage is caused by any act or omission on their part.

3. General terms & conditions:

- General terms used in the RFP-
 - Facility Owner: Facility Owner means the Owner of the building at which the IGEA shall takes place. For example: CSIR , DDA
 - Identified Agency (IA): Identified agency is that agency that shall be appointed by BEE based upon its technical and financial qualification through open bidding to carry out IGEA at identified government buildings.
 - IGEA: Investment Grade Energy Audit
 - ESCO: Energy Service Company (ESCO) is the agency which shall implement the energy saving opportunities identified in the RFP.
- The bidder shall not, without the Facility Owner's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the Facility Owner in connection therewith, to any person other

than the person(s) involved in the IGEA. Further, the agency shall not, without the Facility Owner's prior written consent, make use of any document or information mentioned for other than the purpose of the IGEA.

- The bidder has to give consent to undergo "Integrity Pact" upon being qualified for the bid before award of contract.
- The agency should visit each and every building/facility for carrying out IGEA. Documentary evidences should be provided to support the claim of visit. The team of the IA has to arrange for its travelling, lodging, boarding, local transportation, accessories for carrying out energy audit, etc.
- The Identified Agency (IA) has to provide the names and contact details of the Team to be deployed at site, to the Facility Owner and BEE, in writing, upon award of work.
- The IA has to bear all the costs related to photocopy, print outs, stationary, etc. while conducting the Energy Audit at site.
- The IA has to bear all costs related to measurements that need to be carried out.
- The IA shall provide professional, objective and impartial advice, at all times to BEE, strictly avoiding conflicts with other assignments or its own corporate interests, and acting without any consideration for future work.
- The IA has an obligation to disclose to BEE any situation of actual or potential conflict that impacts its capacity to serve the best interest of BEE. Failure to disclose such situations may lead to the disqualification of the IA or the termination of the empanelment / work of the IA and / or sanctions by BEE.
- The Language of the Technical Proposal, Financial Quotations and IGEA reports shall be English. All the correspondences and documents relating to the IGEA shall be written in English. If any document of the Facility Owner is in language other than English, the IA has to bear the costs of translations.
- BEE reserves the right to withdraw the work & get it completed by any other agency at the risk & cost of the IA, if performance of the IA is unsatisfactory. Further, the said agency may be de-listed for a period of one year for participating in any of the bids invited by BEE.
- BEE reserves the right not to seek any deficient document, clarifications from the bidders after opening of technical bid. If any bid is found to be in non-conformance to the tender conditions or deviating from the tender, BEE reserves the right to reject such bid without seeking any clarification. Bidder to take cognizance of the same and submit their bid accordingly. The Facility Owner reserves the right to reject a bidder if their past track record has been unsatisfactory and if bidder is engaged in a current project but is unable to keep up with the project schedule in quantity/ quality as prescribed by Project In-charge and if BEE has sufficient reason to believe that the Bidder is unsuitable for taking up a project in this tender.
- **Force Majeure:** For purposes of this work, Force Majeure means an event beyond the control of the IA and not involving the IA's fault or negligence and which is not foreseeable and not brought about at the instance of the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees, lockouts excluding by its management, and freight embargoes.
 - If a Force Majeure situation arises, the IA shall promptly notify BEE in writing of such conditions and the cause thereof within 48 to 72 hours of occurrence of such event. Unless otherwise directed by BEE in writing, the IA shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

- If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.
- The contract shall be written in English language. All correspondence and other documents pertaining to the contract, which the parties exchange, shall also be written accordingly in that language.
- Any kind of activities that not covered under the “scope of work”, BEE will not consider these activities to cover the cost incurred.
- In the event of any dispute or difference between the IA and the Facility Owner/BEE, the first option shall be to resolve the dispute amicably between the parties through a joint committee; in the event that this does not resolve the problem at hand, the same shall be referred to the Conciliation Committee of Independent Experts (CCIE) for resolving the dispute. In the event, there is no resolution at the level of CCIE, the parties may hire a third-party independent arbitrator appointed with mutual consent of both the parties, as prescribed under the Arbitration Act. The professional fee for the arbitrator shall be equally shared by both the parties. It is the condition of this clause that all the hearing of the arbitration will take place at BEE location and shall be subjected to the jurisdiction at BEE location.
- The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.
- Bidder requiring any Techno-Commercial clarification of the bid documents may contact in writing or by E Mail.

Name	Address	Contact Number	Email id
Mr. Arijit Sengupta, Director	BEE, 4 th Floor, Sewa Bhawan, R K Puram, New Delhi-110066	01126766718	asengupta@beeindia.gov.in;

Verbal clarifications and information given by the Facility Owner/BEE or its employees or its Representatives shall not be in any way entertained. Further information can be obtained at the provided address during the office hours.

3.1. Eligibility criteria for the bidder

- Should have minimum of 1 Accredited Energy Auditors, 1 Sector Expert of buildings and minimum of 2 Certified Energy Auditors (excluding Accredited Energy Auditors) on the roll of the firm as on 31 March, 2023.
- Should have satisfactorily completed at least 5 detailed energy audits out of which at least 3 should be IGEA for commercial buildings having connected load of 200 kW and above and having central air conditioning systems.
- Should provide copy of the earlier work orders & completion certificates.
- Should have experienced & qualified staff as per requirements laid down in the section “Staff Requirements” for executing IGEA in buildings.

3.2. Earnest Money Deposit (EMD)

The EMD of INR 50,000 through a demand draft payable at New Delhi drawn in favour of Bureau of Energy Efficiency must accompany with the technical bid. Bids received without earnest money will

not be considered. The earnest money deposited shall be returned to the unsuccessful bidder within 30 days without interest. The EMD by the successful bidders will be adjusted towards the subsequent payments to be made to the winning agency. If any of the agencies are registered as an SME and have valid documentation, then rules by Ministry of MSME for EMD will apply.

3.3. Conflict of Interest

- The agencies / firms who are selected for the work will have to maintain the confidentiality of the information compiled. In no case the agencies / firms would be allowed to use the data or share the information with any third party.
- BEE shall hold the copyrights over any of the data collected or compiled during the course of the awards.

3.4. Performance Security

Within fourteen (14) working days of the receipt of notification of award from BEE, the successful agency/firm shall furnish the Performance Security in the form of Demand Draft or online payment in acceptable form from nationalized/commercial bank. The value of Performance Security would be 3% of total contract value. Performance security should remain valid for a period of sixty (60) days beyond the date of completion of all contractual obligations.

3.5. Tender Validity

The tenders shall remain valid for acceptance for a period of 120 days after the date of tender opening prescribed in the tender document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

3.6. Signing and Sealing of Tender

- A Bidder shall submit one hard copy of “Technical Bid” along with one soft copy of technical bid in a pen-drive. The pen drive shall be enclosed in the technical bid envelope only. In case of any discrepancy, the hardcopy technical bids shall be considered for all references.
- The original and other copies of the tender shall either be typed or written in indelible ink and the same shall be signed by the Bidder or by a person(s) who has been duly authorized to bind the Bidder to the contract. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the tender.
- All the copies of the tender shall be duly signed at the appropriate places as indicated in the tender documents and all other pages of the tender including printed literature, if any shall be initialled by the same person(s) signing the tender. The tender shall not contain any erasure or overwriting, except as necessary to correct any error made by the Bidder and, if there is any such correction; the same shall be initialled by the person(s) signing the tender.
- The Bidder is to seal the original technical bid along with pen-drive writing the address of BEE and the tender reference number on the envelopes.

3.7. Cost of RfP

- The agency / firm shall bear all costs associated with the preparation and submission of its RfP, including cost of presentation for the purposes of clarification of the bid, if so desired by the purchaser. BEE will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the qualifying process. BEE reserves the right to cancel the RfP and is not liable for any outcome due to the action taken.

3.8. Contents of the RfP

- The agency / firm are expected to examine all instructions, forms, terms & conditions and Statement of Work in the RfP documents. Failure to furnish all information required for submission of the RfP Document not substantially responsive to the RfP in every respect will be at the agencies / firms’ risk and may result in the rejection of the RfP.

3.9. Submission of Tenders:

3.9.1. Technical Proposal:

- a) The technical proposal should include-
- b) Organization background
- c) Organization's suitability for this activity
- d) Proposed Methodology for carrying out this work
- e) A proposed work plan / timeline of the study
- f) CVs of team members including their roles in the project (a minimum of 1 Accredited Energy Auditors, 1 Sector Expert of buildings and minimum of 2 Certified Energy Auditors (excluding Accredited Energy Auditors) shall be there on the roll of the organization.
- g) An organization with an annual turnover of Rs.25 lakhs from energy audit services in any one year during the last 3 completed financial years (i.e.,2019-20,2020-21,2021-22and 2022-23 **(if available)**).
- h) Declaration of bidding agency on its letter head to sign "Integrity Pact" with BEE upon being qualified for the bid and before award of contract.
- i) The technical proposal as per requirement of the pre-qualification criterion is to be submitted in a separate envelope titled "Technical Proposal for Request for Proposal Conducting Investment Grade Energy Audits (IGEA) at identified Government buildings under "Promotion of ESCO model" program" and named ENVELOP 'A'.

3.9.2. Financial Proposal:

- a) It should be developed in a transparent manner and contain estimation of costs as per major expense categories including all the taxes, except the GST, if any.
- b) Evaluation will be based on the total lump sum cost quoted by the bidder for per building in respective group. Financial bid with the lowest cost among all bids, will be awarded as L1 bidder.
- c) The format for financial proposal shall be as per format given at **Annexure-II**.

Bidder should not contact other competitive bidders in matters relating to this bid. The Bidders must ensure that they deposit their tenders not later than the closing time and date specified in Notice Inviting Tender (NIT). In the event of the specified date for submission of tender falls on or is subsequently declared a holiday or closed day for BEE, the tenders will be received up to the appointed time on the next working day.

3.9.3. Selection

A committee will evaluate the above proposals (technical and financial) based on the qualifications specified below:

- Past experience of carrying out the similar assignment inline to the detailed scope of work.
- Prior experience with working on energy efficiency/conservation in building sector.
- Approach & Methodology
- No consortium is allowed

The separate sealed envelopes contain technical and financial proposals to be submitted to BEE at the following address:

The Secretary,
Bureau of Energy Efficiency
(Govt of India, Ministry of Power)
4th Floor, Sewa Bhawan,
R. K. Puram, New Delhi.
Pin No.-110066

3.10. Selection process:

3.10.1. Preliminary Scrutiny (Consideration of responsiveness)

Preliminary scrutiny of the proposal will be made to determine whether they are complete, whether required process fee has been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Proposals not conforming to such preliminary requirements will be prima facie rejected.

3.10.2. Bid Evaluation Methodology

The following is the Bid process/ evaluation methodology that will be adopted by BEE. RfPs are available on BEE Web-site www.beeindia.gov.in.

- Alternate bids will not be allowed.
- It will be a two-envelope single bid.
- All the applicants whose bids are found to be responsive in technical evaluation shall be considered for financial evaluation. The agencies will be qualified as technically responsive based on meeting the **qualification criterion** spelt above. The financial bids of those agencies found to be technically responsive will be open and the work will be awarded based on the lowest financial quote.

3.10.3. Evaluation of Tenders

- Basic Principle
 - Tenders will be evaluated on the basis of the terms & conditions already incorporated in the tender document, based on which tenders have been received and the terms, conditions etc. mentioned by the Bidders in their tenders. No new condition will be brought in while scrutinizing and evaluating the tenders.

- Preliminary Scrutiny of Tenders
 - BEE will examine the Tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed stamped and whether the Tenders are generally in order.
 - BEE will determine the substantial responsiveness of each Tender to the tender Document. For purposes of these clauses, a substantially responsive Tender is one, which conforms to all the terms and conditions of the tender Documents without material deviations. Deviations from, or objections or reservations to critical provisions such as those concerning, Warranty, EMD, Taxes & Duties, Force Majeure and Applicable law will be deemed to be a material deviation. BEE's determination of a Tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.
 - If a Tender is not substantially responsive, it will be rejected by BEE and cannot subsequently be made responsive by the Bidder by correction of the nonconformity.
 - The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the tender document. The tenders, which do not meet the basic requirements, are liable to be treated as non – responsive and will be summarily ignored.
- The following are some of the important aspects, for which a tender shall be declared non – responsive and will be summarily ignored;
 - Bid form (signed and stamped) not enclosed
 - Tender is unsigned.
 - Requisite fees or earnest money deposit has not been paid

- Tender validity is shorter than the required period.
- Poor/ unsatisfactory past performance in any such projects of BEE.
- Bidders who stand deregistered/banned/blacklisted by any Govt. Authorities.
- Bidder has not quoted for the entire energy consuming equipment's in the building.

3.11. Minor Informality/Irregularity/Non-Conformity

If during the preliminary examination, if BEE find any minor informality and/or irregularity and/or non-conformity in a tender, BEE may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the Bidders. Wherever necessary, BEE will convey its observation on such 'minor' issues to the Bidder by registered/speed post/email etc. asking the Bidder to respond by a specified date. If the Bidder does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored/**rejected**.

3.12. Tender currencies in Indian Rupees

The Bidders have to quote their prices in Indian currencies only.

3.13. Evaluation of Technical Proposals:

- Only the technical proposals considered as technically responsive would be evaluated based on the bidder's capabilities, experience, approach and methodology and the CV's of the proposed personnel and the scores would be given.
- The proposals would be evaluated on the basis of evidence of satisfying all the qualification requirements. The specific experience would be evaluated on the basis of the information provided in ENVELOPE-A along with the prescribed documents.

Evaluation parameters and criteria for proposal.

Parameter	Criteria	Minimum Qualification Criteria	Weightage/Mark	Total Mark
Technical qualification*	Completion of Investment grade Energy Audit (IGEA) of buildings	More than 5	30	30
	Qualification, experience & competence of the proposed team. Details of documentary evidences in support of the proposed team to be provided (as mentioned under clause 3.9.1(f) of this RfP.	As per clause 3.9.1(f) of this RfP.	30	30
	Methodology, Work Plan & Understanding of Scope of Work	Clarity & understanding of Scope of Work, Approach & Methodology Proposed (Qualitative)	20	40

		Work Plan (Qualitative), Timeline (Qualitative)	20	
	Total			100
Financial	Financial quote of L1 among the technically qualified (obtaining minimum 80 marks) ones will be selected			

*Bidders will be considered technically qualified upon securing at least 80 marks out of 100.

However, BEE in its sole/absolute discretion can apply whatever criteria deemed appropriate in determining the responsiveness of the Proposals submitted by the respondents.

ENVELOPE-B (Financial Bid) will be opened only for bidders who have been found successful after evaluation in terms of the outlined criteria, meeting a minimum technical score on the information furnished in ENVELOPE-A (Technical Bid).

3.14. Late Tender

A tender, which is received after the specified date and time for receipt of tenders will be treated as “late” tender and will be ignored. No request to consider such Bidders will be entertained.

3.15. Alteration and Withdrawal of Tender

- The Bidder, after submitting its tender, is permitted to alter / modify its tender so long as such alterations / modifications are received duly signed, sealed and marked like the original tender, within the deadline for submission of tenders. Alterations / modifications to tenders received after the prescribed deadline will not be considered.
- No tender should be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a Bidder withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the Bidder in its tender.

3.16. Contacting BEE:

- From the time of submission of tender to the time of awarding the contract, if a Bidder needs to contact BEE for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.
- In case a Bidder attempts to influence BEE in BEE’s decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the Bidder shall be liable for rejection in addition to appropriate administrative actions being taken against that Bidder, as deemed fit by BEE.

3.17. Penalty Clause

Delay at any stage in execution of the contract due to reasons solely attributed to successful agency/firm/bidder beyond the time schedule as agreed or any extension thereof granted by the BEE shall attract penalty at the rate of 2.5% of the total contract value per week of delay subject to maximum of 10% of the total contract value.

3.18. Corrupt or Fraudulent Practices

It is required by all concerned bidders to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, BEE defines, for the purposes of this provision, the terms set forth below as follows:

- “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
- “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of BEE, and includes collusive practice among Bidders (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive BEE of the benefits of free and open competition;
- 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 in question;
- Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the Facility Owner if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

3.19. Quality and reporting

- All the measuring instruments such as Ultrasonic Flow Meter, Three Phase Power Analyzers, Single Phase Power Analyzers, Data Loggers, Thermal instruments etc. shall be duly calibrated and carry calibration certificate from NABL accredited laboratory valid on the date of carrying out energy audit.
- Periodic reporting to the Facility Owner/BEE regarding status of energy audit as agreed. The progress may be communicated over telephone, text messages, messages over internet or e-mails, to ensure smooth and timely completion of the work.
- The IGEA and job cards shall be in the format as provided by the Facility Owner/BEE.
- Four nos. of hard copies (in color) of draft and final IGEA report shall be submitted by the Identified Agencies along with soft copies and PPT.
- Identified Agencies shall make a PPT presentation (Online/Offline) before finalization of report.
- Identified agency shall also make a PPT in front of ESCO bidders for implementation of energy saving opportunities identified in IGEA, if needed.

3.20. Confidentiality

BEE require that recipients of this document to maintain its contents in the same confidence as their own confidential information and refrain from any public disclosure whatsoever.

3.21. Disclaimer

BEE and/or its officers, employees disclaim all liability from any loss or damage, whether foreseeable or not, suffered by any person acting on or refraining from acting because of any information including statements, information, forecasts, estimates or projections contained in this document or conduct ancillary to it whether or not the loss or damage arises in connection with any omission, negligence, default, lack of care or misrepresentation on the part of BEE and/or any of its officers, employees.

3.22. Authorized Signatory (Agencies / Firms)

- The "Authorized Signatory" as used in the RfP shall mean the one who has signed the RfP document forms.
- The authorized signatory should be the duly Authorized Representative of the agencies / firms, for which a certificate of authority will be submitted. All certificates and documents (including any clarifications sought and any subsequent correspondences) received hereby, shall, as far as possible, be furnished and signed by the authorized signatory. The power of authorization or any other document consisting of adequate proof of the ability of the

Signatory to bind the agency / firm shall be annexed to the bid. BEE may reject outright any proposal not supported by adequate proof of the signatory's authority.

3.23. Conditions for Consortium

- No consortium allowed.

3.24. Contact details of the Agencies / firms

- The agencies / firms who want to receive BEE response to queries should give their contact details to BEE. The agencies / firms should send their contact details in writing at the BEE contact address.

3.25. Amendment of RfP

- At any time prior to the last date for receipt of bids, BEE, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective agency/ firm, modify the RfP Document by an amendment. In order to provide prospective agencies / firms reasonable time in which to take the amendment into account in preparing their bids, BEE may, at their discretion, extend the last date for the receipt of bids and/or make other changes in the requirements set out in the RfP.

3.26. Terms of payment

The payment shall be made by BEE on achieving milestones on verification of invoice as follows:

- 50% of the order/ contract value as on successful submission of draft final report within 30 days of issue of workorder.
- 50% of the order/ contract value on successful completion of final IGEA report and final acceptance of the report by BEE. The final report needs to be submitted within 45 days of issue of workorder.
- If final report is not submitted within 45 days of issue of workorder then Liquidated damage will be applicable, BEE shall attract penalty at the rate of 2.5% of the total contract value per week of delay subject to maximum of 10% of the total contract value.

3.27. Termination of contract

BEE shall have the right to terminate the contract of the agency at any time during the tenure of the work, if the performance of the agency is found to be unsatisfactory or violation of any clause of the RfP pertaining to execution of the work. For termination of the contract, BEE shall provide the agency a notice of minimum of 15 days, to allow the agency to clarify its position of unsatisfactory performance observed by BEE. If the clarification provided by the agency is not up to the satisfaction of the competent authority of BEE, the contract of the agency will be terminated.

3.28. Integrity Pact

A. An agreement between the prospective vendors/ bidders and the buyer, committing the persons/ officials of both sides, not to resort to any corrupt practices in any aspect/ stage of the contract. Only those vendors/ bidders, who commit themselves to such a Pact with the buyer, would be considered competent to participate in the bidding process. In other words, entering into this Pact would be a preliminary qualification. The essential ingredients of the Pact include:

- Promise on the part of the principal not to seek or accept any benefit, which is not legally available.
- Principal to treat all bidders with equity and reason.
- Promise on the part of bidders not to offer any benefit to the employees of the principal not available legally.
- Bidders not to enter into any undisclosed agreement or understanding with other bidders with respect to prices, specifications, certifications, subsidiary contracts, etc.
- Bidders not to pass any information provided by Principal as part of business relationship to others and not to commit any offence under PC/ IPC Act.

- Foreign bidders to disclose the name and address of agents and representatives in India and Indian Bidders to disclose their foreign principals or associates.
 - Bidders to disclose the payments to be made by them to agents/ brokers or any other intermediary.
 - Bidders to disclose any transgressions with any other company that may impinge on the anti-corruption principle.
- B. Integrity Pact, in respect of a particular contract, shall be operative from the date IP is signed by both the parties till the final completion of the contract. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.
- C. The Bidder shall also furnish an undertaking on its letter-head as per the format attached in **Annexure-I** duly signed and sealed by the authorised signatory of the Bidder and submitted as a part of the Technical Bid under this RFP Document.
- D. Note- Integrity Pact shall be signed between BEE and qualified agency before awarding of contract.

3.29. Scope of Work

To achieve the objectives, the IA is expected to carry out an Investment Grade Energy Audit (IGEA) which includes conducting a baseline study of all the agreed parameters, identification of energy efficiency projects, carrying out a detailed feasibility study for each of the options identified, including technical specifications, performance parameters, financials and execution plan. The basic building details regarding energy consumption and equipment's are provided in Annexure II.

- Discussions with Key Facility Personnel: The first step is a set of initial discussions between the IA and key officials of the Facility Owner to understand the requirement of the project, the benefits of energy efficiency, and the approach that will be used in the IG Energy Audit. The purpose of these meetings will be to ensure that the key personnel thoroughly understand and support the process, and that relevant Facility Owner staff have an adequate understanding of the process since they will be providing the IA with essential data and specifications about the Facility Owner premises for the Audit.
- Site Visits: Next, the IA shall visit all facilities involved in the Project for which the award has been given to ascertain the availability of data and system complexity; formulate a data collection plan and other issues. Site visits will ensure that the Facility Owner participants are informed and able to assist as needed.

Procedure to follow

- Identified Agency (IA) needs to deploy the team along with requisite instruments to the Project site within 7 days of date of Letter of Award (LoA). IA shall conduct a kick-off meeting within 1 week of Letter of Award (LoA) with the Facility Owner/BEE.
- The IA has to complete the energy audit of the Project within 45 days from the date of Letter of Award (LoA), subject to receipt of all the data required from the client.
- The baseline parameters such as operating hours, power consumption, operating head, operating flow, voltage, frequency, power factor, Quality, current, etc. shall be agreed at the time of preparation of IGEA.
- The IA has to submit the first draft of the IGEA report to the Facility Owner within 30 days from the date of kick off meeting.
- The Facility Owner shall provide comments, suggestions on the draft IGEA report within 1 week from the date of submission of IGEA and the IA shall provide the Final IGEA report to the Facility Owner/BEE within one week from the date of receipt of comments, suggestions.
- The IA may be required to further incorporate the comments / suggestions made by the Facility Owner/BEE after mutual discussions.

Data to be collected

Can include but not limited to the following:

- Architectural drawings – Plans, elevations & sections.
- Building envelope details: Roof, windows, glazing, walls and shading.
- Total building occupancy and hour wise occupancy pattern for a typical day.
- Number and locations of Energy consuming equipment's (Chillers, AHUs, Pumps, Heaters, Boilers, Lights, APFC, Power panels etc.) in the establishment and connected loads, contract demand.
- Relevant billing data for the past 12 months for electricity and other fuels used.
- Relevant cost details for operation and maintenance of the present energy consuming equipments installed.
- Operation hours of the individual equipment on a daily basis, seasonal (as may be applicable) for the past 12 months

- Operational details including flow, head, temperature, power and other relevant parameters of the equipments.
- Electricity loads of the individual equipments at different operating loads.

Preparatory work for Audit:

- Evaluate HVAC system performance
- Evaluate Pumping system performance
- Evaluate Electrical system performance
- Evaluate Lighting system performance
- Evaluate all other energy consuming equipments performance
- Evaluate building envelope and air infiltration
- Prepare data sheets to capture operational details of the appliances in more detail as maybe required for the detailed audit.

Data analysis

Conduct the following analysis to establish the baseline of the entire project as well as for individual systems:

- Analyze design parameters and actual operating parameters of the different equipments with a view to identifying problems in achieving efficiencies
- Evaluate the performance of all major energy consuming equipments. Historical data analysis to establish the power consumption trends.
- Evaluate building equipment operations and maintenance to identify operational measures for achieving efficiencies.
- Analyze electrical systems such as transformers, DG sets, LT panels, APFC panel for the harmonics, power factor etc.
- Analyze heat transfer through building envelope and suggest measures to improve envelope performance.

List Possible Efficiency Projects

The detailed energy audit carried out at the various facilities will identify energy efficiency measures. The measures that have the technically feasible solutions and economically viable solutions will be further developed into energy saving projects that will be listed in the IGEA report. Based on the analysis, the list of projects with good potential for saving energy (and water if applicable) that includes the following information:

1. Configuration of the existing system
2. Configuration of the proposed system
3. Estimated energy savings and other benefits
4. Financial projections including the Life cycle savings-based analysis and its payback period..
5. Impact on productivity and contract demand and other related aspects
6. Energy Saving potential and investment along with R&M costs shall be supported from recommendations
7. Implementation plan

The Identified Agency (IA) shall engage with Manufacturers for soliciting energy saving potential recommendations along with investment and Repair & Maintenance (R&M) costs involved, to be included in the IGEA reports. Prevailing market rate will be considered for estimation of cost of equipment's.

Baseline

The Baseline of energy use for Major energy consuming devices is calculated from all relevant information, such as operating conditions, measurements of various system equipment, log book trends, historical data, information from plant operators and mechanics, and any previous test reports on the existing operating conditions.

Risk Responsibility Matrix

Risks such as Technical, Performance, Operational, Financial, and Environmental etc. shall be indicated in the IGEA along with responsibility and risk mitigation measures.

Project Financials

The Project Financials (cost benefit and financial analysis) are calculated using the detailed cost estimates obtained for all equipment and projected savings. This allows the potential projects to be classified according to their cost effectiveness. Cash flow considerations are also taken into account along with sensitivity analysis.

IGEA Report

The audit report is the foundation for the implementation of the measures in the audit report, and is the key document used by institutions to assess the technical and financial viability of the Project. The Broad content of the IGEA report should be as follows:

- a) Executive Summary: Provides brief description of the facilities covered, measures evaluated, analysis methodology, results and a summary table presenting the cost and savings estimates for each recommended measure. It also includes a summary of the recommended measures and costs as well as the financial indicators of the Project.
- b) Background: Extensive energy related background about the Facility and the Project
- c) Facility Description: Details of the existing facilities targeted, such as lighting, HVAC Pumps, motors, heaters, boilers etc.
- d) Energy Scenario: Energy consumption details of all facilities included in the audit and their energy sources including monthly or seasonal variations that may have occurred over the period as agreed in the IGEA.
- e) Baseline parameters and Adjustments: Methodology followed in establishing the baseline parameters and criteria. Provide the baseline parameters and the calculation procedure in an annex.
- f) Data Collection: List the various types of data collected and their sources. Include the data in the annex.
- g) System mapping: Describe the methodology followed for system mapping and include the maps and process flow diagrams in the annex.
- h) List of Potential EEMs: A list of all identified measures with estimates of the savings and payback periods on investments, and a summary of the selected EEMs chosen for further development.
- i) Reporting: 2 Hard copies of the IGEA report with soft copies in PDF shall be submitted.

Building details is attached at **Annexure- IV**.

I. Annexure I: Form of undertaking for Integrity Pact

FORM OF UNDERTAKING

(to be given on the letter-head of the Bidder/ Lead Member)

To

.....
BUREAU OF ENERGY EFFICIENCY (BEE),
4th Floor, Sewa Bhawan,
R.K. Puram,
New Delhi - 110066

Subject: BID for the “.....”

Reference: RFP No..... dated:

Dear Sir,

I/ we have taken note of the Integrity Pact (Appendix) appended to the aforesaid RFP. We understand that only those Bidders who commit themselves to such a Pact with BEE/ Principal, would be considered competent to participate in the bidding process; signing of this Integrity Pact and furnishing the same as a part of my/ our Bid, is an essential preliminary qualification requirement.

I/ We understand that the Integrity Pact shall be deemed to form a part and parcel of the RFP document and the contract/ agreement to be subsequently executed by the BEE with the Successful Bidder and we undertake to remain bound by its provisions.

I/ We hereby confirm and undertake that in the event I/ we commit any violation of the Integrity Pact it would entail disqualification from the bidding process and if the work has been awarded to me/ us, then it would lead to cancellation of the letter of award and termination of our contract/ agreement with BEE, and my/ our exclusion from future business dealings with BEE/ Principal as per the existing provisions of GFR 2017, Prevent of Corruption Act, 1988 and other Financial Rules/ Guidelines as may be applicable to BEE/ Principal.

I/ We further undertake that in case I/ we engage any subcontractor, if permitted under the RFP document and the contract/ agreement, I/ we as the Principal Contractor/ Consultant/ Vendor, shall take the responsibility ensuring adoption of the Integrity Pact by the subcontractor engaged by me/ us.

{I/ We further certify that I am competent and authorized to give this undertaking on behalf of _____(name of the Bidder). The duly signed Integrity Pact is enclosed with my/ or Bid.}

Yours faithfully,

(Signature of the Authorized Signatory of the Bidder/ Lead Members)

Seal/ Stamp of Bidder

II. Annexure II: Format for financial proposal

[Location, Date]

FROM: (Name of Firm)

TO: (Name and Address of Client)

Subject: Financial proposal for Request for Proposal for Conducting Investment Grade Energy Audits (IGEA) at identified Government buildings under “Promotion of ESCO model” program.

I / We, the undersigned, offer to provide the energy audit services for the above in accordance with your Request for Proposal dated [Date], with our Technical and Financial Proposals.

The financial proposal shall take into account all expenses and tax liabilities associated in execution of the deliverables as per the RfP except the GST. GST, if any, will be applicable as per prevailing rates.

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., [Date].

S. No.	Name of Group	Number of buildings	Total cost excluding of GST as per scope of work (in Rs.)	Total cost excluding of GST as per scope of work (in words)
A.	1	2	3	

Other terms & conditions

Note:

Quoted prices shall be inclusive of duties, taxes, loading/unloading, travel expenses etc. except GST. GST as applicable shall be payable extra and no other charges shall be payable extra. This is an open tender and applicable to BEE Empanelled & Non-Empanelled agencies both. Agencies/firms could bid for the sector for which it has been empanelled with BEE or having similar prior work experience in case of non-empanelment for applied sector. Non-Empanelled agencies may also bid for any sector for any group subject to having similar prior work experience. However, proof of sectoral expertise in case the agencies opt for group belonging to sectors other than its expertise or in case the agencies are not empanelled with BEE, as per empanelment with BEE.

- The prices shall remain FIRM till completion of the project.
- The bidder shall submit PAN and GST Registration Certificate in support of claim of GST.
- If there is a discrepancy between words and figures, the amount written in words will prevail.
- BEE does not issue any concessional sales tax form C or D or any other form.
- BEE does not issue any Road Permit.
- The offered prices should be firm and no request for variation of prices shall be entertained till completion of the project.

We confirm that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

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

Yours sincerely,

Authorized Signature:

Name and Title of Signatory:

Name of the Firm:

Seal:

Annexure- III: RfP Forms

The proposal is to be submitted in the following format along with the necessary documents as listed. The proposal shall be liable for rejection in the absence of requisite supporting documents.

RfP Form 1: RfP Letter Proforma

To
The Secretary
Bureau of Energy Efficiency
4th Floor, Sewa Bhavan,
R.K. Puram,
New Delhi -110066
India
Sir/ Madam,

Sub: Request for Proposal for Conducting Investment Grade Energy Audits (IGEA) at identified Government buildings under “Promotion of ESCO model” program in the proposal.

The undersigned agency, having read and examined in detail all the RfP documents in respect of appointment of an agency for BEE do hereby express their interest to provide audit Services as specified in the scope of work.

Our correspondence details are:

1	Name of the Firm	
2	Address of the Firm	
3	Name of the contact person to whom all references shall be made regarding this RfP	
4	Designation of the person to whom all references shall be made regarding this RfP	
5	Address of the person to whom all references shall be made regarding this tender	
6	Telephone (with STD code)	
7	E-Mail of the contact person	
8	Fax No. (with STD code)	

We have enclosed the following:

Form 2: Eligibility and Other details

Form 3: Approach and Methodology

Form 4: Resumes of the members in the proposed team (groupwise).

Form 5: Declaration Letter.

Registered Power of Attorney executed by the agency in favour of the Principal Officer or the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this RfP. We hereby declare that our Proposal is made in good faith and the information contained is true and correct to the best of our knowledge and belief.

Thanking you,
Yours faithfully

(Signature of the Representative of agency)

Name :

Designation :

Seal :

Date :

Place :

Business Address:

Witness:		Consultant:	
Signature		Signature	
Name		Name	
Address		Designation	
		Company	
Date		Date	

RfP Form 2: Eligibility and Other Details

1	Name of Firm/Company				
2	Year and Place of Registration/Incorporation				
3	Number of Projects done in the field of detailed energy audit (IGEA) and its details.				
		FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23 (If Available)
4	Annual Turnover from energy audit Services*				

*Enclose a copy of Audited Financial Statement

Witness:		Consultant:	
Signature		Signature	
Name		Name	
Address		Designation	
		Company	
Date		Date	

RfP Form 3: Proposed Work Plan and Methodology including the timelines.

The work plan shall be task specific with defined roles and responsibility of team member as per given scope of work. However, the agency shall include a description on duration of activities shall be indicated in the form of a bar chart.

1	Name of Firm/Company	
2	Year and Place of Registration/Incorporation	
3	Detailed workplan and methodology	

Witness:		Consultant:	
Signature		Signature	
Name		Name	
Address		Designation	
		Company	
Date		Date	

RfP Form 4: Resumes of the members in the proposed team as per clause (f) under section 3.9.1 of the RfP

Agencies shall submit full resumes of the project leader and members of the team proposed for the assignment, including contact information as per the following format (in max. 2 pages).

1. Name:
2. Complete Contact Information:
3. Proposed Position:
4. Educational Qualification:
5. Employment Record:
6. Relevant Work Experience / Work Undertaken that best illustrates capability to handle the proposed task:
7. Certification / Signature:

RfP Form 5: Declaration Letter

Declaration Letter on official letter head stating the following:

We are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this contract

We are not black-listed by any Central / State Government / Public Sector Undertaking in India

Witness:		Consultant:	
Signature		Signature	
Name		Name	
Address		Designation	
		Company	
Date		Date	

III. Annexure IV: Building Details

Below mentioned are the buildings managed by CSIR and DDA on which audit is required to be conducted.

Table 1: List of buildings.

SL.NO	Buildings/Units	Region/Location	Group of Buildings
1	CSIR-IMTECH 39A, Sector 39A, Chandigarh, 160036	Chandigarh	A 10 Buildings
2	CSIR-IIIM Jammu canal Road, Jammu. 180001	Jammu	
3	CSIR - IGIB, Mall Road Near Jubilee Hall Hostel, Delhi - 110007	Delhi	
4	CSIR - IGIB, Mathura Road Sukhdev Vihar Bus Depot, Delhi 110025	Delhi	
5	CSIR-NPL Dr KS Krishnan Marg, Pusa, New Delhi, Delhi 110012	New Delhi	
6	CSIR-Indian Institute of Petroleum, Dehradun CSIR-Indian Institute of Petroleum Mohkampur, Haridwar Road Dehradun-248005, India	Dehradun	
7	CSIR-National Institute Of Science Communication and Policy Research 14, SV marg campus New Delhi- 67	New Delhi	
8	CSIR-National Institute Of Science Communication and Policy Research Dr. K S Krishnan Marg, New Delhi-110012	New Delhi	
9	CSIR-CRRI Delhi-Mathura Road, P.O. CRRI, New Delhi-110025	New Delhi	
10	CSIR-IHBT Post Box No. 6, Palampur, 176061	Palampur	
11	CSIR-IICT Uppal Rd, IICT Colony, Tarnaka, Hyderabad, Telangana 500007	Hyderabad	

12	CSIR - Centre for Cellular & Molecular Biology(Main Campus Building) Habsiguda, Uppal Road Hyderabad - 500 007 Telangana, India	Hyderabad	B 10 Buildings
13	CSIR - Centre for Cellular & Molecular Biology(Brit Building) Habsiguda, Uppal Road Hyderabad - 500 007 Telangana, India	Hyderabad	
14	CSIR - Centre for Cellular & Molecular Biology(CRF building) Habsiguda, Uppal Road Hyderabad - 500 007 Telangana, India	Hyderabad	
15	CSIR - Centre for Cellular & Molecular Biology(LaCONES Building) Habsiguda, Uppal Road Hyderabad - 500 007 Telangana, India	Hyderabad	
16	CSIR - Centre for Cellular & Molecular Biology(Staff Qtrs. Building) Habsiguda, Uppal Road Hyderabad - 500 007 Telangana, India	Hyderabad	
17	CSIR-CLRI 265V+CMJ, Sardar Patel Rd, near Indian Institute Of Technology, CLRI Staff Quarters, Adyar, Chennai, Tamil Nadu 600020	Chennai	
18	CSIR SERC & CSIR CMC CSIR Rd, CSIR Campus, Tharamani, Chennai, Tamil Nadu 600113	Chennai	
19	CSIR-Central Electrochemical Research Institute Alagappapuram, Karaikudi-630003	Karaikudi	
20	CSIR-NIIST Industrial Estate P.O, Pappanamcode, Thiruvananthapuram, Kerala 695019	Thiruvananthapuram	
21	CSIR-Central Mechanical Engineering Research Institute M G Avenue, Durgapur-713209	Durgapur	

22	CSIR-Central Glass and Ceramic Research Institute 196, Raja Subodh Chandra Mallick Rd, Jadavpur, Kolkata, West Bengal, India	Kolkata	C 7 Buildings
23	CSIR- Central Institute of Mining & Fuel Research Barwa Road, Dhanbad- 826001(Jharkhand)	Dhanbad	
24	CSIR-Central Drug Research Institute, Lucknow Sector-10, Jankipuram Extension, Sitapur Road, Lucknow-226031	Lucknow	
25	CSIR-Central Institute Of Medicinal And Aromatic Plants P.O.CIMAP, Lucknow 226 015	Lucknow	
26	CSIR-NBRI RANAPRATAP MARG.LUCKNOW, 226001	Lucknow	
27	CSIR-AMPRI, Bhopal Hoshangabad Road, near Habibganj Naka, Bhopal, Madhya Pradesh 462026	Bhopal	
28	CSIR-National Chemical Laboratory, Pune 411008 Dr.Homi Bhabha Road, Pashan Pune 411008	Pune	
29	CSIR- CENTRAL SALT & MARINE CHEMICALS RESEARCH INSTITUTE Gijubhai Badheka Marg, Bhavnagar - 364 002, Gujarat, (India)	Bhavnagar	
30	CSIR-NEERI, Nagpur Nehru Marg, Wardha road, Nagpur-440020	Nagpur	
31	CSIR-National Institute of Oceanography Dona Paula, Goa. Pincode : 403004	Goa	
32	CSIR-NAL(Belure Building) BENGALURU WMW8+CW2, Wind Tunnel Rd, Ambedkar Nagar, Kempapura, Bellandur, Bengaluru, Karnataka 560017	Bengaluru	
33	CSIR-NAL(NAL Building)	Bengaluru	

	BENGALURU XM62+9H5, HAL Old Airport Rd, Kodihalli, Bengaluru, Karnataka 560017		
34	CSIR-NAL(4PI Building) BENGALURU NAL Belur campus, Wind Tunnel Rd, Bengaluru, Karnataka 560037	Bengaluru	
35	CFTRI, Mysuru Cheluvamba Mansion, Valmiki Main Rd, opp. Railway Museum, Devaraja Mohalla, CFTRI Campus, Kajjihundi, Mysuru, Karnataka 570020	Mysuru	
36	Delhi Development Authority, Press bldg., INA, Vikas Sadan	New Delhi	E 5 Buildings
37	Delhi Development Authority Vikas Minar, 21 st floor Vikas Minar - 110002	New Delhi	
38	Delhi Development Authority, DDA zonal Office building at Madhuban Chowk.	New Delhi	
39	Delhi Development Authority, Manglapuri Office	New Delhi	
40	Delhi Development Authority, ShahpurJat Office	New Delhi	

Kindly download Excel Sheets for CSIR Building data from below links.

CSIR Building Details 1 [_CSIR Building Deatils 1.xlsx](#)
CSIR Building Details 2 [_CSIR Building Details 2.xlsx](#)

Generally, Office Buildings, Schools, Guest Houses, Hospitals, Street Lights etc drawing power from CSIR and DDA shall be covered in the scheme. The relevant data readily available is enclosed at Annexure- 1. Therefore, bidders are requested to visit the site before bid submission to get better understanding of the scope of IGEA for CSIR and DDA Buildings.

DDA Building details

Annexure
Building Information & Energy Data

S.No.	Item	Value	
1	Connected Load (KW) or Contract Demand (KVA)	1227 KVA	
2	Installed Capacity: DG/GG Sets (KVA or KW)	1250 KVA, 250 KVA, 160 KVA	
	a) Annual Electricity Consumption, purchased from Grid (kWh)	2440915 kWh	
	b) Annual Electricity Consumption, through Diesel Generating (DG)/Gas	-	
3	Generating (GG) Set(s) (kWh)	-	
	c) 170 kw Solar Plant On Grid Ground mounted	289110 kWh	
	d) Total Amount Electricity Consumption, Utilities + DG/GG Sets (kWh)	2646605 kWh	
4	a) Annual Cost of Electricity from Grid	Rs. 34238946=00	
	b) Annual Cost of Electricity generated through DG/GG Sets (Rs.)	Rs 288077=00 (approx)	
	c) Total Amount Electricity Cost, Utilities + DG/GG Sets (Rs.)		
5	Area of the building (excluded parking, lawn, roads, etc.)	Built up area floor wise (sqm) with nos. of rooms	
		Conditioned Area (in sqm)	
		Conditioned Area (as % of built up area)	
6	Working Hours (e.g., day working / 24 hour working)	9:30 AM - 6:00 PM	
7	Working days/week (e.g., 5/6/7 days per week)	5 days	
	Total no. of Employees	-	
8	Office	Average no. of Persons at any time in office during working hours	
9	a) Installed Capacity of Air Conditioning System (TR)	2408 TR (1990 HP)	
	b) No. of window and Split A/c with capacity (TR)	33 Nos, 4A-5TR	
	c) No. of Water coolers and Air heaters	28 Nos.	
10	Installed Lighting load (kW) (if available)	-	
11	HSD (or any other fuel oil used, specify)/Gas consumption in DG/GG Sets (litres/cu. Meters) in the year	3213 LTR	
12	Fuel (e.g., FO, LDO, LPG NG) used for generating steam/water heating in the year (in appropriate units)	-	
13	Water Requirement (Litres or cu.meters/day) if available	-	
	Major Loads in Building e.g., lighting, cooling tower pump, water pumping motors, Transformers details, present power factor, Boilers, etc. (Insert additional rows if required)		
	S.No.	Name	KW Load/KVA/Ton
	1	Lighting Load	98.86 (approx) kW
	2	Transformer	4000 kVA + 2000 kVA (standby)
14	3	HVAC System / Pumping system	2408 TR
	4	STP	-
	5	Water Body/fountain	-
	6	Booster Pump/ Borewell Pump	75.2 kW
	7	Fire Pump	12.50 kW
	8	Lift & Escalators	50 kW
	9	Water Treatment Plant	-
15	EPI (Energy Performance Index) in kWh/sqm/year Energy includes electricity purchased and generated (excluding electricity generated from on-site renewable resources)		
16	Details of any other energy consuming equipments		

Type and Category wise Building Connected Load

Category	Type of fittings	Watts	No of Fittings	Total Loads (KW)	Total Load (KW)
Lighting	1x20W LED Box	20W	1628 (Approx)	32.56 kW	98.88 kW
	2x20W LED fitting	40W	600 (Approx)	24 kW	
	2x2 LED Panel	36W	1200 (Approx)	42.3 kW	
Fans	Ceiling fan	60W	1580 (Approx)	94.80 kW	134.1 kW
	Exhaust fan	100W	131 (Approx)	39.3 kW	

Table-2 : Details of Major Lighting Inventory

S.No	Items
1	DG set rating (KVA)
2	Total Units generated (KWh)
3	Diesel Consumption (ltrs.)
4	No. of hours used
5	Avg. load
6	Percentage loading
7	Cost of diesel (RS./ltr.)

Value
1250kVA, 250kVA, 16kVA → Backup
—
3213 Ltr.
—
—
—
Rs 69.66 (avg)

Table-4: Details of AC Plants

S.no.	Items	Nos. of Installed	Individual Capacity (TR/KW/hp)	Total Capacity
1	Chiller	—		
2	AHU's	—		
3	CS AHU's	—		
4	Cooling Tower	—		
5	Primary Chilled water pump	—		
6	Secondary Chilled water pump	—		
7	Condenser Water pump	—		
8	CT Fan	—		
9	Heat Pump	—		

Table-5 : Contact Details of the Organisation and the Contact Person

S.No.	Organisation	Details
a)	Name of the Organisation	Delhi Development Authority
b)	Postal Address	Press bldg., INA, Vikas Sadan.
c)	Phone No.	
	Contact Person	EE(E), ELD-V, DDA
a)	Name & Designation	Executive ENGINEER (E)
b)	E-mail Address	edxidda@gmail.com
c)	Phone Nos	011-24661901

Executive Engineer
 Electrical Division No.
 D.D.A., Vikas Sadan
 New Delhi-110023

VIKAS MINAR

Annexure			
Building Information & Energy Data			
S.No.	Table1: Primary Data		Year:
	Item	Value	
1	Connected Load (KW) or Contract Demand (kVA)	650 kVA	
2	Installed Capacity: DG/GG Sets (KVA or KW)	690 kVA	
3	a) Annual Electricity Consumption, purchased from Grid (kWh)	10,71,190	
	b) Annual Electricity Consumption, through Diesel Generating (DG)/Gas Generating (GG) Set(s) (kWh)	250	
	c) 120 kwp Solar Plant On-Grid Ground mounted	NIL	
	d) Total Amount Electricity Consumption, Utilities + DG/GG Sets (kWh)	10,71,440	
4	a) Annual Cost of Electricity from Grid	1,71,08,030	
	b) Annual Cost of Electricity generated through DG/GG Sets (Rs.)	62,620	
	c) Total Amount Electricity Cost, Utilities + DG/GG Sets (Rs.)	1,71,70,650	
5	Area of the building (excluded parking, lawn, roads, etc.)	Built up area floor wise (sqm) with nos. of rooms	19,800
		Conditioned Area (In sqm)	2,000
		Conditioned Area (as % of built-up area)	10%
6	Working Hours (e.g., day working / 24 hour working)	8.5	
7	Working days/week (e.g., 5/6/7 days per week)	5	
8	Office	Total no. of Employees	1000
		Average no. of Persons at any time in office during working hours	750
9	a) Installed Capacity of Air Conditioning System (TR)	470	
	b) No. of window and Split Acs with capacity (TR)	280 AC OF 1.5 TR	
	c) No. of Water coolers and Air heaters	20 water coolers	
10	Installed Lighting load (kW) (if available)	80kW	
11	HSD (or any other fuel oil used, specify)/Gas consumption in DG/GG Sets (litres/cu. Meters) in the year	700 Ltr	
12	Fuel (e.g., FO, LDO, LPG NG) used for generating steam/water heating in the year (in appropriate units)	NIL	
13	Water Requirement (Litres or cu.meters/day) if available	Data not available with this division	
14	Major Loads in Building e.g., Lighting, cooling tower pump, water pumping motors, Transformers details, present power factor, Boilers, etc. (Insert additional rows if required)		
	S.No.	Name	kW Load/KVA/Ton
	1	Lighting Load	80 kW
	2	Transformer	2500 kVA
	3	HVAC System / Pumping system	NIL
	4	STP	NIL
	5	Water Body/Fountain	NIL
	6	Booster Pump/ Borewell Pump	75 kW
	7	Fire Pump	186 kW
	8	Lift & Escalators	150 kW
9	Water Treatment Plant	NIL	
15	EPI (Energy Performance Index) in KWH/sqm/year Energy Includes electricity purchased and generated (excluding electricity generated from on-site renewable resources)	54.1	
16	Details of any other energy consuming equipments		

Type and Category wise Building Connected Load						
Category	Type of fittings	Watts	No of Fittings	Total Loads (KW)	Total Load (KW)	
Lighting	LED batten	20	150	3	80	
	Downlighter	130	15	1.95		
	Flood light	250	10	2.5		
	Post lantern	25	22	0.55		
	2x2 Panel light	36	2000	72		
Fans	Ceiling fan	80	700	56	64.6	
	Ceiling fan	60	50	3		
	BLDC Ceiling fan	28	200	5.6		

Signature
 SE(E), NZ, DDA
 11/3/23
 Anil

Table-2 : Details of Major Lighting Inventory



S.No.	Items	Value
1	DG set rating (KVA)	690
2	Total Units generated (kWh)	250
3	Diesel Consumption (Ltrs.)	700
4	No. of hours used	1.67
5	Avg. load	150 kW
6	Percentage Loading	23.07%
7	Cost of diesel (RS./ltr.	Approx Rs.90/Ltr

Table-4: Details of AC Plants

S.no.	Items	Nos. of Installed	Individual Capacity (TR/KW/hp)	Total Capacity
1	Chiller			
2	AHU's			
3	CS AHU's			
4	Cooling Tower			
5	Primary Chilled water pump			
6	Secondary Chilled water pump			
7	Condenser Water pump			
8	CT Fan			
9	Heat Pump			

Table-5 : Contact Details of the Organisation and the Contact Person

S.No.	Organisation	Details
a)	Name of the Organisation	Delhi Development Authority Vikas Minar
b)	Postal Address	21st floor Vikas Minar-110002
c)	Phone No.	011-23370632
Contact Person		
a)	Name & Designation	Anshul Goel, AEE(E)/ELD-8
b)	E-mail Address	
c)	Phone Nos.	011-23370632


 11/3/23
 Signature
 SE(E).NZ. DDA


Office Building Madhuban chowk

Annexure - B Building Information & Energy Data

S.No.	Table: Primary Data Item	Year: 2022 Value
1.	Connected Load (KW) or Contract Demand (kVA)	232 KW
2	Installed Capacity DG/GG Sets (KVA or KW)	160 KVA
	a) Annual Electricity Consumption, purchased from grid (kWh)	324174
	b) Annual Electricity Consumption, through Diesel Generating (DG)/Gas	
3	Generating (GG) Set(s) (kWh)	1200 kWh
	c) 120 kw Solar Plant On Grid Ground mounted	
	d) Total Amount Electricity Consumption, Utilities + DG/GG Sets (kWh)	1200 kWh
4	a) Annual Cost of Electricity from Grid	Rs. 50,67,683/-
	b) Annual Cost of Electricity generated through DG/GG Sets (Rs.)	
	c) Total Amount Electricity Cost, Utilities + DG/GG Sets (Rs.)	
5	Area of the building (excluded parking, lawn, roads, etc.)	6336 sq.m (w/o Basement)
	Built up area floor wise (sqm) with nos. of rooms	
	Conditioned Area (in sqm)	
	Conditioned Area (as % of built up area)	
6	Working Hours (e.g., day working / 24 hour working)	8-9 hr.
7	Working days/week (e.g., 5/6/7 days per week)	6 days per week
	Total no. of Employees	200 - 300 approx.
8	Office	
	Average no. of Persons at any time in office during working hours	
9	a) Installed Capacity of Air Conditioning System (TR)	60 TR
	b) No. of window and Split Acs with capacity (TR)	13 M Window 13 split
	c) No. of Water coolers and Air heaters	17 Water coolers 13 Air Heaters
10	Installed Lighting load (kW) (if available)	65.85 kW
11	HSD (or any other fuel oil used, specify)/Gas consumption in DG/GG Sets (litres/cu. Meters) in the year	
12	Fuel (e.g., FO, LDO, LPG NG) used for generating steam/water heating in the year (in appropriate units)	
13	Water Requirement (Litres or cu.meters/day) if available	
	Major loads in Building e.g., lighting, cooling tower pump, water pumping motors, Transformers details, present power factor, Boilers, etc. (Insert additional rows if required)	
		kW Load/kVA/ton
	S.No. Name	
	1 Lighting Load	630 KVA
	2 Transformer	
	3 HVAC System / Pumping system	40 KLD
	4 STP	
	5 Water Body/Fountain	7.5 FW
	6 Booster Pump/Borewell Pump	7.5 FW
	7 Fire Pump	4.6 FW
	8 Lift & Escalators	
	9 Water Treatment Plant	
15	EPI (Energy Performance Index) in kWh/sqm/year Energy includes electricity purchased and generated (excluding electricity generated from on-site renewable resources)	
16	Details of any other energy consuming equipments	

Category	Type of fittings	Type and Category wise Building Connected Load		Total Load (KW)	
		Watts	No of Fittings	Total Loads (KW)	Total Load (KW)
Lighting	T-5	2x28	821	45.976	61.772
	LED	1x18	180	5.320	
	CFL	1x18	166+90=264	4.752	
	CFL	2x18	159	5.724	
Fan	LED	20	30	1.600	4.086
	Fan	36	18	1.640	
	CFL	18	31	1.550	
	LED	100	12	2.200	
FAN	Ceiling Fan	60	357	21.420	38 kW
	Desert cooler	60	106	6.360	
	Exhaust	60	52	3.120	
	Ventilation	500	16	0.000	
					103.85 kW

Table-2 : Details of Major Lighting Inventory

S No	Items	Value
1	DG set rating (KVA)	160 KVA
2	Total Units generated (kWh)	1200
3	Diesel Consumption (ltrs.)	250 Ltr (approx)
4	No. of hours used	14 hr approx. Per year
5	Avg. load	120
6	Percentage Loading	80%
7	Cost of diesel (RS./litr.	—

Table-4: Details of AC Plants

S.No.	Items	Nos. of Installed	Individual Capacity (TR/KW/hp)	Total Capacity
1	Chiller	NA	NA	NA
2	AHU's			
3	CS AHU's			
4	Cooling Tower			
5	Primary Chilled water pump			
6	Secondary Chilled water pump			
7	Condenser Water pump			
8	CT Fan			
9	Heat Pump			

Table-5 : Contact Details of the Organisation and the Contact Person

S.No.	Organisation	Details
a)	Name of the Organisation	DDA
b)	Postal Address	DDA zonal office building at Madhuban chowk sec-14 Rohini Delhi-110085
c)	Phone No.	
	Contact Person	Satyendra AE (8826308609)
a)	Name & Designation	
b)	E-mail Address	eeeldgdda@gmail.com
c)	Phone Nos.	011-27554734

[Signature]
27/02/2023
AE(E)-I

[Signature]
27/2/23
Executive Engineer
Electrical Division-9
D.D.A.

MANGLAPURI OFFICE

Annexure
Building Information & Energy Data

Table1: Primary Data		Year:
S.No.	Item	Value
1	Connected Load (KW) or Contract Demand (kVA)	
2	Installed Capacity: DG/GG Sets (KVA or KW)	107 KVA
	a) Annual Electricity Consumption, purchased from Grid (kWh)	160 KVA
	b) Annual Electricity Consumption, through Diesel Generating (DG)/Gas	152287 KWH
3	Generating (GG) Set(s) (kWh)	
	c) 120 kwp Solar Plant On-Grid Ground mounted	
	d) Total Amount Electricity Consumption, Utilities + DG/GG Sets (kWh)	
4	a) Annual Cost of Electricity from Grid	
	b) Annual Cost of Electricity generated through DG/GG Sets (Rs.)	
	c) Total Amount Electricity Cost, Utilities + DG/GG Sets (Rs.)	
5	Area of the building (excluded parking, lawn, roads, etc.)	Built up area floor wise (sqm) with nos. of rooms 3565 Sq.m
		Conditioned Area (in sqm)
		Conditioned Area (as % of built-up area)
6	Working Hours (e.g., day working / 24 hour working)	8-10 hr.
7	Working days/week (e.g., 5/6/7 days per week)	5-6 days per week
8	Office	200 (approx)
		Average no. of Persons at any time in office during working hours
		180 person.
9	a) Installed Capacity of Air Conditioning System (TR)	1.5TR to 2TR
	b) No. of window and Split Acs with capacity (TR)	26 No.
	c) No. of Water coolers and Air heaters	Water cooler - 4
10	Installed Lighting load (kW) (if available)	
11	HSD (or any other fuel oil used, specify)/Gas consumption in DG/GG Sets (litres/cu. Meters) in the year	3500 LTR
12	Fuel (e.g., FO, LDO, LPG NG) used for generating steam/water heating in the year (in appropriate units)	-
13	Water Requirement (Litres or cu. meters/day) if available	1000 Ltr/Day
	Major Loads in Building e.g., Lighting, cooling tower pump, water pumping motors, Transformers details, present power factor, Boilers, etc. (Insert additional rows if required)	
	S.No.	Name
	1	Lighting Load
	2	Transformer
14	3	HVAC System / Pumping system
	4	STP
	5	Water Body/Fountain
	6	Booster Pump/ Borewell Pump
	7	Fire Pump
	8	Lift & Escalators
	9	Water Treatment Plant
15	EPI (Energy Performance Index) in KWH/sqm/year Energy includes electricity purchased and generated (excluding electricity generated from on-site renewable resources)	
16	Details of any other energy consuming equipments	

Type and Category wise Building Connected Load					
Category	Type of fittings	Watts	No of Fittings	Total Loads (KW)	Total Load (KW)
Lighting	LED Batten	20 W	650	13000	17880
	False ceiling	36 W	80	2880	
	LED Tube light	40W	50	2000	
Fans	Ceiling Fan	60 Watt	200	12000	17,400
	Wall Fan	60 W	90	5400	

= 35280

Table-2 : Details of Major Lighting Inventory



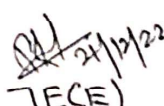
S.No.	Items	Value
1	DG set rating (KVA)	160 KVA
2	Total Units generated (kWh)	18000 kWh / month.
3	Diesel Consumption (ltrs.)	150 Ltr / month
4	No. of hours used	
5	Avg. load	
6	Percentage Loading	
7	Cost of diesel (RS.)/ltr.	

Table-4: Details of AC Plants

S.no.	Items	Nos. of Installed	Individual Capacity (TR/KW/hp)	Total Capacity
1	Chiller	/	NA	/
2	AHU's			
3	CS AHU's			
4	Cooling Tower			
5	Primary Chilled water pump			
6	Secondary Chilled water pump			
7	Condenser Water pump			
8	CT Fan			
9	Heat Pump			

Table-5 : Contact Details of the Organisation and the Contact Person

S.No.	Organisation	Details
a)	Name of the Organisation	DDA
b)	Postal Address	DDA OFFICE MANGLAPURI NEW DELHI
c)	Phone No.	
	Contact Person	
a)	Name & Designation	
b)	E-mail Address	
c)	Phone Nos.	

 21/11/22
 EE/ELD-10
 21/12/22
 ACE-II
 21/11/22
 JECE

Annexure
Building Information & Energy Data

S.No.	Item	Value	
1	Connected Load (KW) or Contract Demand (kVA)	78 KVA	
2	Installed Capacity: DG/GG Sets (KVA or KW)	60 KVA	
	a) Annual Electricity Consumption, purchased from Grid (kWh)	67650 kWh	
	b) Annual Electricity Consumption, through Diesel Generating (DG)/Gas Generating (GG) Set(s) (kWh)	150 kWh (only for power cut)	
3	c) 120 kwp Solar Plant On-Grid Ground mounted	—	
	d) Total Amount Electricity Consumption, Utilities + DG/GG Sets (kWh)	67800	
4	a) Annual Cost of Electricity from Grid	946000	
	b) Annual Cost of Electricity generated through DG/GG Sets (Rs.)	13000	
	c) Total Amount Electricity Cost, Utilities + DG/GG Sets (Rs.)	959000	
5	Area of the building; (excluded parking, lawn, roads, etc.)	Built up area floor wise (sqm) with nos. of rooms Conditioned Area (in sqm) Conditioned Area (as % of built up area)	
6	Working Hours (e.g., day working / 24 hour working)	8 hrs	
7	Working days/week (e.g., 5/6/7 days per week)	6 days	
	Total no. of Employees	—	
8	Office	Average no. of Persons at any time in office during working hours	
9	a) Installed Capacity of Air Conditioning System (TR)	30 TR	
	b) No. of window and Split Acs with capacity (TR)	20 nos. x 1.5 TR	
	c) No. of Water coolers and Air heaters	—	
10	Installed Lighting load (kW) (if available)	13 kW	
11	HSD (or any other fuel oil used, specify)/Gas consumption in DG/GG Sets (litres/cu. Meters) in the year	—	
12	Fuel (e.g., FO, LDO, LPG, NG) used for generating steam/water heating in the year (In appropriate units)	—	
13	Water Requirement (litres or cu meters/day) if available	—	
	Major Loads in Building e.g., lighting, cooling tower pump, water pumping motors, Transformers details, present power factor, Boilers, etc. (Insert additional rows if required)	—	
	S.No.	Name	kW Load/kVA/Ton
	1	Lighting Load	13 kW
	2	Transformer	—
	3	HVAC System / Pumping system	30 TR
	4	STP	—
	5	Water Body/Mountain	—
	6	Booster Pump/ Borewell Pump	—
	7	Fire Pump	—
	8	Lift & Escalators	—
	9	Water Treatment Plant	—
15	EPI (Energy Performance Index) in kWh/sqm/year (Energy includes electricity purchased and generated (excluding electricity generated from on site renewable resources))	—	
16	Details of any other energy consuming equipments	—	

Category	Type of fittings	Type and Category wise Building Connected Load			Total Load (KW)
		Watts	No of Fittings	Total Loads (KW)	
Lighting	LED (4H)	20W	38	0.76	1.3 kW
	LED (2"x2")	28W	27	0.54	
Fans	Ceiling fan	60W	48	2.88	2.88 kW

Table 3: Details of Major Lighting Inventory

S.No	Items	Value
1	DG set rating (KVA)	(1) 40 KVA (2) 20 KVA → 60 KVA
2	Total Units generated (kWh)	1500 unit (app.)
3	Diesel Consumption (ltrs.)	150 lbs.
4	No. of hours used	only on power cut.
5	Avg. load	
6	Percentage loading	70%
7	Cost of diesel (RS.)/ltr.	6.90/- (app.)

Table-4: Details of AC Plants

S.no	Items	Nos. of Installed	Individual Capacity (TR/KW/hp)	Total Capacity
1	Chiller	—		
2	AHU's	—		
3	CS AHU's	—		
4	Cooling Tower	—		
5	Primary Chilled water pump	—		
6	Secondary Chilled water pump	—		
7	Condenser Water pump	—		
8	CF fan	—		
9	Heat Pump	—		

Table-5: Contact Details of the Organisation and the Contact Person

S.No.	Organisation	Details
a)	Name of the Organisation	Delhi Development Authority
b)	Postal Address	Press bldg., INA, Vikas Sadan.
c)	Phone No.	
	Contact Person	
a)	Name & Designation	EE (E) ELD-11, DDA.
b)	E-mail Address	Executive Engineer (E) edzidda@gmail.com.
c)	Phone Nos.	011-24661904

Executive Engineer (E)
Electrical Division No. 11
D.D.A., Vikas Sadan
New Delhi-110023