Notice Inviting Bid (NIB)

For

"Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand"

Tender Reference No.: 11/JREDA/EE/26-27

Jharkhand Renewable Energy Development Agency (JREDA)

3rd Floor, S.L.D.C. Building, Kusai Colony, Doranda, Ranchi-834002.

Ph.: 0651-2491161, Fax: 0651-2491165,

E-mail: info@jreda.com; Website: www.jreda.com

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Govt. of Jharkhand
Energy Department
Jharkhand Renewable Energy Development Agency (JREDA)
3rd Floor, S.L.D.C. Building, Kusai Colony, Doranda, Ranchi-834002.
Ph.: 0651-2491161, Fax: 0651-2491165,
E-mail: info@jreda.com; Website: www.jreda.com

e-Procurement Notice

Tender reference no.: 11/JREDA/EE/26-27
Dated: 27.05.2026

Online bids are invited for Notice Inviting Bid (NIB) for "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand" The details are as follows:

1	Name of the work	"Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand"
2	Estimated cost (in Rs.)	**₹ 2,33,58,020/- (Two Crore Thirty-Three Lakh Fifty-Eight Thousand Twenty Rupees Only/-) Inclusive of GST.**
3	Completion period	**12 (Twelve) Months**
4	Date of publication of NIT on website: http:// jharkhandtenders.gov.in	**01.06.2026 (Monday)**
5	Date & time of pre-bid queries only via email, i.e., on info@jreda.com	**08.06.2026 (Monday) up to 02:00 P.M.**
6	Last date & time for receipt of online bids	**29.06.2026 (Monday) up to 05:00 P.M.**
7	Submission of Bid fee & EMD (Online via SBI Payment Gateway of Jharkhand Tenders)	**29.06.2026 (Monday) up to 05:00 P.M.**
8	Technical Bid Opening Date	**01.07.2026 (Wednesday) at 02:00 P.M.**
9	Name & address of office inviting tender	Director, Jharkhand Renewable Energy Development Agency (JREDA) 3rd Floor, SLDC Building, Kusai, Doranda, Ranchi- 834002 (Jharkhand)
10	Contact no. of the procurement officer	0651-2491163/67/61/7903935514
11	Helpline no. of e-procurement	0651-2491163/67/61

Any corrigendum/addendum can be seen on the website: http://jharkhandtenders.gov.in & www.jreda.com.
Further details can be seen on the website: http://jharkhandtenders.gov.in & www.jreda.com.

Sd/-
Director,
JREDA, Ranchi

SECTION-I: INVITATION FOR BIDS (IFB)

Tender Reference No.: 11/JREDA/EE/26-27

Subject: "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand"

Jharkhand Renewable Energy Development Agency (JREDA) is the State Designated Agency under the administrative control of the Energy Department, Government of Jharkhand. JREDA invites bids for "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for the implementation of various DSM activities in the State of Jharkhand."
The NIB includes the following documents:

- Section I: List of Important dates and details of Bid
- Section II: Invitation for Bids (IFB)
- Section III: Instructions to Bidders (ITB)

The Notice Inviting Bid for "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand" is available on the https://jharkhandtenders.gov.in/ and www.jreda.com for downloading.

Submission of Bid Fees & EMD:

For General Bidder: The bidder shall submit the amount of **₹ 4,77,160/- (Four Lakhs Seventy-Seven Thousand One Hundred Sixty Rupees Only)** online mode via the SBI payment gateway on https://jharkhandtenders.gov.in, which consists of the cost of the NIB document (non-refundable), is **₹ 10,000/- (Ten Thousand Rupees Only)** and Earnest Money Deposit (EMD) of **₹ 467,160/-** (Refundable).

For MSME/New MSME Bidder: Nil for MSME/New MSME of Jharkhand Only.

Submission of Security Deposit:

For General Bidder: The shortlisted Bidder has to submit a Security Deposit @10% of the work order value, in the form of DD/BG/FDR in favour of The Director, JREDA Payable at Ranchi.

For MSME/ New MSME of Jharkhand: Security Deposit should be @1% of the work order value in favour of The Director, JREDA Payable at Ranchi.

If the security deposit is not submitted within the stipulated period from the date of issue of the work order, then JREDA shall cancel the work order.

Note Performance Guarantee applicable for Category-10 only:

- The successful bidder has to submit a Performance Guarantee equivalent to 20% of the total Work Order value, inclusive of GST and all applicable taxes, in the form of a DD/BG/FDR in favor of the Director, JREDA payable at Ranchi.

  This payment shall be released against submission of Bank Guarantee of equivalent value i.e. 20% of total work order value against valid till CMC period of complete system. For this bidder has to submit a total of 5(five) nos. of Bank Guarantees of 2% value to the work order each having validity respectively for 1 year, 2 years, 3 years, 4 years and 5 years & 3 months.

  The Bank Guarantee shall revoke by JREDA in case the Contractor fails to perform CMC & submit the CMC report in JREDA within one month after respective quarters.

- The additional 5% Performance Guarantee has to be submit and shall be retained for the entire 05-year Comprehensive Maintenance Contract (CMC) period and shall be released/refunded 60 days after the successful completion of the CMC period, subject to satisfactory fulfillment of all CMC obligations, timely maintenance, prompt resolution of defects and complaints, submission of requisite service reports, and certification by JREDA and/or the concerned authority, in accordance with the tender conditions.

SECTION – II: List of Important Dates & Details of Bids

Tender Reference No.: 11/JREDA/EE/26-27

List of important dates & details of Bids		
1.	Name of work	"Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand"
2.	Estimated Cost of NIB	**₹ 2,33,58,020/- inclusive of GST.**
3.	Engagement period	**12 (Twelve) Months**
4.	Tender Fee / Bid Fee (Non-Refundable) and Earnest Money Deposit (Refundable) should be deposited in the online mode via the SBI payment gateway.	**For General Bidder:** The bidder shall submit the amount of **₹ 4,77,160/- (Four Lakhs Seventy-Seven Thousand One Hundred Sixty Rupees Only)** in online mode via SBI payment gateway on https://jharkhandtenders.gov.in, which consists of the cost of the NIB document (non-refundable), is **₹ 10,000/-** and Earnest Money Deposit (EMD) of **₹ 4,67,160/-** (Refundable). **For MSME/New MSME Bidder:** Nil for MSME/New MSME of Jharkhand Only.
5.	Mode of submission of tender	Online through https://jharkhandtenders.gov.in/ up to **29.06.2026 (Monday)** till **05:00 P.M.**
6.	**Publishing on the website**	**Date: 01.06.2026 (Monday)**
7.	Tender Documents can be filled from the Jharkhand tender https://jharkhandtenders.gov.in on all working days.	**Start date: 01.06.2026 (Monday) Time: 03:00 P.M.** **End date: 29.06.2026 (Monday) Time: 05:00 P.M.**
8.	Date of Pre-bid Meeting	**Till 08.06.2026 (Monday) Time: 02:00 P.M in the Conference Hall of JREDA.**
9.	Last Date & time for Submission of Pre-Bid Queries	The pre-bid queries also sent via email, i.e., on info@jreda.com **Till 10.06.2026 (Wednesday) Time: 05:00 P.M**
10.	Technical Bid Opening Date	**01.07.2026 (Wednesday) Time: 02:00 P.M**
11.	Authority inviting bids	Director, Jharkhand Renewable Energy Development Agency (JREDA)
12.	Address	Jharkhand Renewable Energy Development Agency (JREDA) 3rd Floor, SLDC Building, Kusai Colony, Doranda, Ranchi- 834002. Ph. No: **0651-2491161/63/67** **Mob. No: +91-7903935514** **Website: www.jreda.com | E-mail: info@jreda.com**

SECTION-III: INSTRUCTIONS TO BIDDERS (ITB)

Tender Reference No.: 11/JREDA/EE/26-27

Subject: "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand".

Definitions

Unless the context otherwise requires, the following terms, whenever used in this NIB and Agreement, have the following meanings:

a. "Applicable Law" means the laws and any other instruments having the force of law in India as they may be issued and in force from time to time.

b. "Bids" means bids submitted by Bidders in response to the NIB issued by Jharkhand Renewable Energy Development Agency (JREDA), on behalf of the Government of Jharkhand, for the engagement of Bidders.

c. "Competent Authority" means the Director or the Management committee headed by Chairman-cum- Principal Secretary, Energy Department, and Government of Jharkhand, as the case may be.

d. "Committee" means a committee constituted for the evaluation of the NIB.

e. "Consultant" means a Bidder that was doing said work under the mentioned category, which will provide services to JREDA.

f. "Agreement" means the Agreement signed by the parties for engagement, along with the entire documentation specified in the NIB.

g. "Day" means Calendar Day.

h. "Effective date" means the date on which the agreement comes into force and effect.

i. "ITB" means Instructions to Bidders, specified in Section III of NIB.

j. "IFB" means Invitation for Bids, specified in Section II of NIB.

k. "Government" means the Jharkhand State Government.

l. "JREDA" means Jharkhand Renewable Energy Development Agency.

m. "Personnel" means professional and support staff provided by the Consultant, detailed to perform services to execute an assignment and any part thereof.

n. "SOW" means Scope of Work for the Bidders, specified in Section IV of NIB.

o. "Services" means the work to be performed by the Consultant pursuant to the engagement by JREDA and to the agreement to be signed by the parties in pursuance of any specific assignment awarded to them by JREDA.

p. "BEE" means Bureau of Energy Efficiency.

Introduction Jharkhand Renewable Energy Development Agency (JREDA)

Jharkhand Renewable Energy Development Agency (JREDA) is a State Nodal Agency (SNA) under the administrative control of the Energy Dept., Govt. of Jharkhand, established for the execution of programmes and promotion of schemes on non-conventional energy sources. JREDA shoulders responsibility as a State Nodal Agency for the Ministry of New & Renewable Energy Sources and has also been appointed as a State Designated Agency for Bureau of Energy Efficiency (BEE).

1. Conflict of Interest

JREDA requires that the Consultants provide professional, objective, and impartial advice purely based on standard and accepted technical norms and at all times hold JREDA's interests paramount, strictly avoid conflicts with other assignments/jobs or their own corporate interests and act without any consideration for future work. The norms should be based on sound engineering principles guided by all connected codes and guidelines issued from time to time by central and state authorities.

2. Validity of Bids

Bids shall remain valid for the period of engagement as prescribed in NIB. A Bid valid for a shorter period may be rejected as non-responsive.

3. Process for Engagement of Bidders for NIB

JREDA intends to engage agencies to conduct implementation, execution, and Capacity-Building Activities and prepare detailed project reports for various demand-side management schemes in the state of Jharkhand. The scope of work is indicated in Section IV.

4. Eligibility Criteria:

The Bidder must meet the following eligibility criteria:

1. The Bidder should be a registered Company/Firm/Corporation/Proprietor/Society/NGO/Partnership firm/Private Limited/LLP in India.
2. Consortium, associations and subcontracting are not allowed for this tender
3. **Turnover Requirement:**

A) For General Bidder: The bidder shall submit the minimum average annual turnover during the last three Financial Years (i.e., FY 2022-23, 2023-24, 2024-25). **The average Annual turnover** during the last three years should be **30% of the estimated cost** of the minimum lot size of the sum of all applied categories (i.e. Category No.1-13) filled by Agencies in the last three Financial Years (i.e., FY 2022-23, 2023-24, 2024-25). (**The certificate should be issued by a CA who has performed an audit of accounts with UDIN no**. as per the Proforma given at **Annexure-T5**).

B) For MSME Bidder of Jharkhand: The Minimum Average Annual Turnover during the last three years should be at least 10% of the estimated cost of the minimum lot size of the sum of all applied categories (i.e. Category No.1-13) filled by Agencies in the last three Financial Years (i.e., FY 2022-23, 2023-24, 2024-25).

C) For New MSME Bidder of Jharkhand: New-MSME is defined as an MSME that has not completed 3 financial years from the date of establishment **(Date mentioned in certificate issued by GMDIC)**.

A. Unit has not completed 1 Year - A Financial Soundness Certificate issued by a bank is required, not less than 10% of the cost of the minimum lot size.
B. Unit has not completed 2 years - should have an annual turnover of at least 10% of the estimated cost of the minimum lot size.
C. Unit has not completed 3 years, should have Average Annual Turnover at least 10% of the estimated cost of the minimum lot size.

(The certificate should be issued by a CA who has performed an audit of accounts with UDIN no. and Membership No. as per the Performa given at Annexure-T5)

4. **Income Tax Return:** Bidder needs to submit ITR of at least the last 3 Assessment years (i.e. AY 2023-24, 2024-25, 2025-26).
5. **Net worth Requirement:** Bidder should have a Positive Net worth.

(The certificate should be issued by a CA who has performed an audit of accounts with UDIN no. and Membership No. as per the Performa given at Annexure-T9).

6. Experience Requirement:

Sl. No.	Category no.	Essential Requirements
1	Category-1	**Agriculture Demand Side Management (AgDSM)**
		1. Estimated Cost of 01 (One) Nos. of Training: ₹ 65,000 /- (Sixty-Five Thousand Rupees Only) 2. Minimum Lot Size of Training: 5 (Five) Nos. (Estimated Cost ₹ 3,25,000/-)
2	Category-2	**Capacity Building through Animated, 3D, and Technical Short Films on Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development.**
		1. Estimated Cost of 1 Nos. Film: **₹ 9,00,000 /- (Nine Lakh Rupees only/-)** 2. Theme for Short film: Finalization after the work allotment for the duration of 10 minutes in Hindi/English, and/or relevant regional/local languages, along with a minimum of ten (10) thematic short films/ad films of approximately 30 seconds each derived from the primary film content for targeted promotional and awareness campaigns. 3. Minimum Lot Size of Short film: **01 (One) Nos.**
3	Category-3	**Municipal Demand Side Management (MuDSM)**
		1. Estimated Cost of **01 (One) Nos. Training:** ₹ 2,50,000 /- (Two Lakh Fifty Thousand Rupees Only /-) 2. Minimum Lot Size of Training: 03 (Three) Nos.
4	Category-4	**Engaging an Agency for Conducting Market Surveillance for the Standards and Labelling (S&L) program of BEE for the state of Jharkhand**
		1. Estimated **Cost for Market Surveillance per District:** ₹ 65,000 /- (Sixty Five Thousand Rupees only/-) 2. Minimum Lot Size of Market Surveillance: 03 (Three) Nos. of Districts.
5	Category-5	**Retailers Training Programme under the Provision of Standards and Labelling**
		1. Estimated Cost of **01 (One) Nos. of Training:** ₹ 2,50,000 /- (Two Lakh Fifty Thousand Rupees Only /-) 2. Minimum Lot Size of Training: 02 (Two) Nos.
6	Category-6	**Investment Bazaar to Promote Energy Efficiency for the State of Jharkhand**
		1. Estimated Cost of **01 (One) Nos. of Training:** ₹ 5,00,000 /- (Five Lakh Rupees Only) 2. Minimum Lot Size of Training: 01 (One) Nos.
7	Category-7	**Conducting Various Sustainability, Decarbonization, Climate Change and other Demand Side Management (DSM) capacity building programmes in Jharkhand**
		1. Estimated Cost of **01 (One) Nos. of Training:** ₹ 3,50,000 /- (Three Lakh Fifty Thousand Rupees Only /-) 2. Minimum Lot Size of Training: 01 (One) Nos.

8	**Category-8**	**Engagement of Agencies for Conducting Investment Grade Energy Audits (IGEA) and Detailed Energy & Sustainability Assessments for Government Buildings, Pumping Stations, Colleges, and Other Facilities across Jharkhand.**
		1. Estimated Cost of **01 (One) Nos. of IGEA:** ₹ 2,00,000 /- (Two Lakh Rupees Only /-) 2. Minimum Lot Size of IGEA: 02 (Two) Nos.
9	**Category-9**	**Establishing Demand Side Management (DSM) Clubs in Government Schools/Colleges and Conducting various DSM Awareness Programs in Jharkhand under the School/College Capacity Building Program**
		1. Estimated Cost of **01 (One) Nos. in Government Schools, Primary/Secondary /Higher Secondary Schools**: ₹ 50,000/- (Fifty Thousand Rupees Only) 2. Estimated Cost of **01 (One) Nos. in Government Colleges / Institutions /ITI/ Engineering / and other government establishments, etc**.: ₹ 65,000/- (Sixty-Five Thousand Rupees Only/-) 3. Minimum lot size of Training: **02 (Two) Nos. of Each type**
10	**Category-10**	**Engagement of Agencies for Supply, Installation and 05 Years Comprehensive Maintenance Contract (CMC) of Star-rated energy-efficient appliances, including Air conditioning (A.C), BLDC Ceiling Fan (with Safety wire/rope), Induction Cookstoves and LED Light Lighting Fixtures (Bulbs & Tube Lights) across all Government Schools/Colleges/Institutions/Buildings and other Energy-intensive government premises in the state of Jharkhand.**
		1. Estimated Cost of Project: ₹ 1,00,00,000 /- (One Crore Rupees Only /-) 2. The bidder must possess a valid ESCO certificate issued by the Bureau of Energy Efficiency (BEE), Government of India. 3. The bidder must have a valid Electrical Contractor License issued by the competent authority of the State of Jharkhand. 4. The bidder must have prior experience in supply, installation, testing, commissioning and maintenance of energy-efficient appliances such as LED lighting, BLDC fans, star-rated air conditioners, induction cookstoves or similar electrical energy-efficiency equipment in State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU/ Commercial projects. 5. The bidder must submit valid **OEM authorization certificates** for the offered products, including ACs, BLDC fans, induction cookstoves and LED lighting fixtures. 6. All supplied appliances shall conform to applicable **BEE star-rating, BIS standards, safety standards, energy-efficiency norms and relevant Government of India guidelines**. 7. **CMC Capability**: The bidder must have adequate technical manpower, tools, service network and spare-part availability to provide **05 years Comprehensive Maintenance Contract support** across the State of Jharkhand. 8. The bidder should have or establish a **local service/support office in Jharkhand** for timely installation, complaint resolution and maintenance during the CMC period.
11	**Category-11**	**Engagement of Agencies for capacity building on Energy Conservation Week and preparation of Detailed Project Report**
		1. Estimated Project Cost**:** ₹ 10,00,000 /- (Ten Lakh Rupees only) 2. Time period of Project: 1 Week (7days) programme 3. Energy Conservation Day: **14 December**

12	**Category-12**	**Engagement of Agencies for performing a Comprehensive Cool Roof Feasibility Study, Demonstration Project Implementation, and Urban Heat Island Mitigation Planning in Jharkhand**
		Estimated Cost for study for 01 Nos. (One) City for **Part A & B Study**: ₹ 7,00,000 /- (Seven Lakh Rupees Only) Minimum Lot Size of City Study under **Part A&B**: 01 (One) Nos.
13	**Category-13**	**Engagement of Agencies for performing Theory Cum Practical Energy Conservation Awareness Workshops for Diploma / Degree Engineering Colleges/Other Government Institutions in Jharkhand**
		1. Estimated Cost of **01 (One) Nos. of Training:** ₹ 1,00,000 /- (One Lakh Rupees Only) 2. Minimum Lot Size of Training: 03 (Three) Nos.

JREDA reserves the right to increase and decrease the number of training/events against Category-1 to Category- 13 with reference availability of funds and budgetary allocations received from the State Government and the Bureau of Energy Efficiency (BEE).

Note: Agencies need to refer the Annexure-A for the detailed scope of work for under aforementioned categories. Accordingly, the agencies need to quote the price for the same.

Work Experience:

For General Bidder: Experience of having successfully completed similar works as defined in the table mentioned below in any **State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU** during last 7 years ending last day of the month previous to the one in which applications are invited should be either of the following: -

a. Three similar completed works each costing not less than the amount equal to 40% of the estimated Project cost/ Minimum lot size cost of each Category.

Or

b. Two similar completed works each costing not less than the amount equal to 50% of the Estimated Project cost/ Minimum lot size cost of each Category.

Or

c. One similar completed work each costing not less than the amount equal to 80% of the estimated Project cost/ Minimum lot size cost of each Category.

For MSMEs of Jharkhand: One similar completed work costing not less than 10% of the estimated Project Cost/Cost of the minimum lot size cost of each Category.

For New- MSME of Jharkhand: The MSME of Jharkhand shall be exempted from the Experience requirement.

Table :1 Similar Works Defined as the works mentioned in the Scope of Work of each category as mentioned below:

Category Sequence	Similar Works Defined as
Category – 1	Experience in similar Capacity building under Agriculture Demand Side Management (AgDSM)/Agriculture-related/ Agriculture stakeholders-related works for Energy Efficiency in any State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 2	Experience in similar Capacity Building through Animated, 3D, and Technical Short Films on Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development in State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 3	Experience in similar Capacity building in Municipal Demand Side Management (MuDSM)/ Municipal Stakeholders/ in any State/Central/SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 4	Experience in similar Conducting Market Surveillance for the Standards and Labelling (S&L) program of BEE for the state / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU
Category – 5	Experience in similar Retailers Training Programme under the Provision of Standards and Labelling/Capacity Building of Retailers/ and other retailers-based capacity building activities in any State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 6	Experience in a similar Investment Bazaar to Promote Energy Efficiency/ Energy Efficiency Financing/ ESCO Financing/ any other Energy Efficiency Project financing in ESCO Mode for the state of Jharkhand in any State/Central/SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU/ ESCO Company Notified by BEE in State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 7	Experience in similar Conducting Various Sustainability, Decarbonization, Climate Change and other Demand Side Management (DSM) Capacity Building Programme in State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU
Category – 8	Experience in similar conducting investment-grade energy audits (IGEA) and Detailed Energy & Sustainability Assessments for Government Buildings, Pumping Stations, Colleges, and Other Facilities across State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 9	Experience in similar Establishing Demand Side Management (DSM) Clubs in Government Schools/Colleges and conducting various DSM Awareness Programs in Jharkhand under the School/College Capacity Building Program in State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 10	Experience in Supply, Installation and 05 Years Comprehensive Maintenance Contract (CMC) of 5 Star rated energy-efficient appliances including Air conditioning (A.C), BLDC Ceiling Fan(with Safety wire/rope), Induction Cookstoves and LED Light Lighting Fixtures (Bulbs & Tube Lights), BLDC Ceiling Fans (with Safety Rods) across all Government Schools/Colleges/Institutions/Buildings and other Energy intensive government premises in State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 11	Experience in a similar type of capacity building on Energy Conservation Week and preparation of Detailed Project Report at State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 12	Experience in a similar type of performing a Comprehensive Cool Roof Feasibility Study, Demonstration Project Implementation, and Urban Heat Island Mitigation Planning in State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.
Category – 13	Experience in similar types of performing Theory Cum Practical Energy Conservation Awareness Workshops for Diploma / Degree Engineering Colleges/Other Government Institutions in State / Central/ SNA/SDA/Govt. Autonomous Body/ Govt. Organization / PSU.

Note: -The Copy of the Work Order/Purchase Order/Letter of Award/LOA/LOI with Work Completion Certificate/Performance Certificate/Payment against the Work Order/Payment advice of Award supporting the claim of work experience is a must to be enclosed by the Bidder as per the **Annexure – T7 and T10**. The 3rd Party Assignments/Subletting carried out by a Bidder, if submitted against this NIB, shall not be counted towards proof of work experience.

- **The bidder must have the experience to meet the Minimum lot size of individual category training mentioned in NIB for qualifying.**
- The Bidder should be registered in India with the appropriate statutory authorities as required under law. Copies of related registration papers, including PAN, GST, and ITR, must be enclosed.
- The work as detailed in this tender shall be executed and completed in all respects in accordance with the tender document and to the complete satisfaction of JREDA. Meanwhile, JREDA reserves the right to extend the timeline for completion.
- The tender other than the prescribed form shall not be accepted by JREDA, and each page of the tender document is sequenced to be duly signed by the Bidder.
- JREDA reserves the right to increase or decrease the number of Programmes/Trainings/Tasks/Events under category 1-13, subject to the availability of funds issued to JREDA by BEE and the State as per the requirement of JREDA for the capacity building of the stakeholders for the state of Jharkhand under the demand side management program. The NIB is the rate contract to execute the said Programme/Trainings/Task/Event in multiple locations in Jharkhand.

7. Disqualifications

JREDA may, at its sole discretion and at any time during the evaluation of the Bid, disqualify any bidder if the bidder has:

- Submitted the Bid documents after the response deadline; or
- Made misleading or false representations in the forms, statements and attachments submittedin proof of the eligibility requirements; or
- Exhibited a record of poor performance such as abandoning work, not properly completing the contractual obligations, inordinately delaying completion or financial failures, etc., in any project in the preceding two years; or
- Submitted a Bid that is not accompanied by the required documentation or is non-responsive; or
- Failed to provide clarifications related to, when sought; or
- Submitted more than one Bid; or
- Declared ineligible by the Government of India/State/UT Government for corrupt and fraudulentpractices or blacklisted; or
- Submitted a Bid with price adjustment/variation provision.

8. Request for Bid

The Bidder is expected to examine all the instructions, guidelines, terms and conditions and formats in the NIB. Failure to furnish all the necessary information as required by the NIB on submission of a Bid not substantially responsive to all the aspects of the NIB shall be at the Bidder's own risk and may be liable for rejection. The entire set of NIB is available at the Jharkhand tenders/website of JREDA. The bidder can apply for the NIB from the Jharkhand tenders during the mentioned Date and time in the NIB.

9. Preparation of Bid

The Bidders shall comply with the following related information during preparation of the Bid-

a) The Bid and all associated correspondence shall **confirm to prescribe formats**. Any interlineations, erasures or overwriting shall be valid only if they are initialled by the authorized person signing the Bid.
b) The Bid shall be typed or written in indelible ink (if required) and shall be signed by the Bidder or duly authorized person(s) to bind the Bidder. **The letter of authorization** shall be indicated by an authenticated Power of Attorney and shall accompany the Bid.
c) In addition to the identification, the covering letter (Form 1) shall indicate the **name and address** of **the Bidder** to enable the Bid to be returned in the case it is declared late, and for other purposes.
d) Bids received by **facsimile shall be treated as defective, invalid and rejected**. Only detailed, complete Bids in the form indicated above received before the closing time and date of the Bids shall be taken as valid.
e) Bidders are not permitted to modify, substitute, or withdraw Bids after their submission.

10. Submission of Bids

For General Bidder: The bidder shall submit the proposal through online mode only, and The bidder shall submit the amount of **₹ 4,77,160/- (Four Lakhs Seventy-Seven Thousand One Hundred Sixty Rupees Only)** online mode via SBI payment gateway on https://jharkhandtenders.gov.in, which consists of the cost of the NIB document (non-refundable), is **₹ 10,000/- (Ten Thousand Rupees Only/-)** and Earnest Money Deposit (EMD) of **₹ 4,67,160/-** (Refundable) for the participation in the NIB. However, during the course of evaluation of the proposal, the competent authority has the right to carry out due diligence in a fashion relevant to understanding the facts.

For MSME/New MSME Bidder: Nil for MSME/New MSME of Jharkhand Only.

Timeline for Submission of Bid:

- Bids from Bidders, complete in all respects, must be received by JREDA on or before the date mentioned in the Notice for Inviting Bid.
- JREDA may extend the deadline for submission of bids by issuing an addendum/corrigendum, in which case all rights and obligations of JREDA and the bidders previously subject to the original deadline will be subject to the new deadline.
- Detailed Instructions & Documents to be furnished for Bidding.

11. Cancellation of Tender: JREDA's Right to accept any Bid and to reject any or all Bids

JREDA reserves the right to accept or reject any Bid, and to cancel the bidding process and reject all bids, at any time before the award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for JREDA's action without any reason.

12. Instructions to Bidders

Detailed instructions & documents to be furnished for bidding:

1. The guidelines to submit a bid online can be downloaded from the website http://jharkhandtenders.gov.in.
2. The interested bidders can download the bid from the website "http://jharkhandtenders.gov.in".
3. To participate in the bidding process, bidders have to get a 'Digital Signature Certificate (DSC)' as per the Information Technology Act-2000 to participate in online bidding. This certificate will be required for digitally signing the bid. Bidders can get above mention digital signature certificate from any approved vendor (CCA). Bidders who already possess valid Digital Certificates need not procure a new Digital Certificate.
4. The bidders have to submit their bids online in electronic format with a digital Signature. The bids without a digital signature will not be accepted. No proposal will be accepted in physical form.
5. Bids will be opened online as per the time schedule mentioned in section 1.
6. The General Bidder needs to submit the amount of **₹ 4,77,160/- (Four Lakhs Seventy-Seven Thousand One Hundred Sixty Rupees Only)** in online mode via SBI payment gateway on https://jharkhandtenders.gov.in, which consists of the cost of the NIB document (non-refundable), is **₹ 10,000/- (Ten Thousand Rupees Only)** and Earnest Money Deposit (EMD) of **₹ 4,67,160/-** (Refundable) for the participation in the NIB. The MSME/New MSME bidder shall be exempted from bid fees and EMD Submission.
7. Uploaded documents of valid successful bidders will be verified with the original before signing the agreement. The valid successful bidder has to provide the originals to the concerned authority. The department will not be responsible for any delay in online submission for any reason.
8. All the required information for the bid must be filled out and submitted online. If the bid is not found to be uploaded online on the website (http://Jharkhandtenders.gov.in), the bid shall be rejected.
9. Other details can be seen in the bidding documents.
10. The NIB is available at Jharkhand tenders, and the website of JREDA bidders can apply for the NIB from the Jharkhand tenders during the time period mentioned in the NIB by submitting the non-refundable Bid fees.
11. Bids will be opened as per the time schedule mentioned in the Short Notice Inviting Bid notice.
12. The department will not be responsible for delays in submission for any reason.

13. Details of documents to be furnished for bidding

Online Submission of scanned copies of the following documents to be uploaded in PDF format on the website http://Jharkhandtenders.gov.in. Annexure as per the enclosed formats should be submitted online at Jharkhand Tenders while applying for the same.

I. Tender fee (Non- Refundable) and Earnest Money Deposit (EMD) (Refundable) for the Bidder, which should be submitted in online mode via SBI payment gateway for General Bidder and for MSME/New MSME of Jharkhand only have exemption against submission of MSME and GMDIC Certificate.
II. GST Registration Certificate.
III. PAN Card.
IV. Audited Balance sheet of the last three years (FY 2022-23, FY 2023-24, FY 2024-25) issued by a Chartered Accountant.
V. Income Tax Return (ITR): At least the last 3 Assessment years (i.e. AY 2023-24, 2024-25, 2025-26).
VI. Annexure-T1: Covering letter.
VII. Annexure-T2: Authorization letter.
VIII. Annexure-T3: Checklist for technical bid.
IX. Annexure-T4: Information about the bidding firm.
X. Annexure-T5: Format for Financial Requirement - Average Annual Turnover.
XI. Annexure-T6: Contact Person for the NIB.
XII. Annexure-T7: Assignments of Similar Nature.
XIII. Annexure-T8: Declaration by the bidder.
XIV. Annexure-T9: Declaration of Net Worth certificate.
XV. Annexure-T10: Technical Summary Bid Check List for NIB.

- Duly filled in & digitally signed Price Bid (.xls and .pdf). (Only online accepted)
- Uploaded documents of valid successful bidders will be verified with the original before signing the agreement. The valid successful bidder has to provide the originals to the concerned authority on receipt of such a letter, which will be sent through registered post and email.
- **The Tender Document is not to be uploaded by the bidder**. The bidder has to give an **undertaking stating agree/ disagree on the conditions in the NIB in Annexure – T8**. The bidders, who disagree on the conditions of NIB, cannot participate in the tender.
- Bidders must provide audited balance sheets and statements of profit and loss of the last three Financial Years to support their claim of Average Annual Turnover in Annexure- T5.
- Clarification on Bid Documents and Pre-bid Queries. A prospective Bidder requiring any clarification of the bid documents may inform the JREDA in writing at the JREDA's address indicated in the Notice Inviting Tenders. JREDA's response will be uploaded in the form of a corrigendum on our website www.jreda.com & Jharkhand Tenders.

14. Amendment of Bidding Documents:

- Before the deadline for submission of bids, the JREDA may modify the bidding documents by issuing an addendum/corrigendum.
- To give prospective bidders a reasonable time in which to take an addendum into account in preparing their bids, the JREDA shall extend, if necessary, the deadline for submission of bids.
- Amendment of RfP.
- At any time prior to the last date for receipt of bids, JREDA may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder/firm, modify the RfP Document by an amendment.
- In order to provide prospective agencies/firms a reasonable time in which to take the amendment into account in preparing their bids, JREDA 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.

15. Deadline for Submission of Bids:

- Complete Bids (including Technical and Financial) must be submitted only as Jharkhand tenders as specified in the Notice Inviting Bid, not later than the date and time indicated in the Notice Inviting Bid.
- The JREDA may extend the deadline for submission of bids by issuing an amendment, in which case all rights and obligations of the JREDA and the bidders previously subject to the original deadline will then be subject to the new deadline.

16. Submission of Bids:

The general bidder needs to submit the amount of **₹ 4,77,160/- (Four Lakhs Seventy-Seven Thousand One Hundred Sixty Rupees Only)** in online mode via SBI payment gateway on https://jharkhandtenders.gov.in, which consists of the cost of the NIB document (non-refundable), is **₹ 10,000/- (Ten Thousand Rupees Only)** and Earnest Money Deposit (EMD) of **₹ 4,67,160/-** (Refundable) for the participation in the NIB. For MSME/New MSME is Nil.

- **Technical Bid:** To be opened on (date and time of Technical Bid opening The JREDA will open the bids received (except those received late). In the event of the specified date for the submission of bids being declared a holiday for JREDA, the Bids will be opened at the appointed time and location on the next working day.
- **Financial Bid:** The contents of the Technical Bid and Financial Bid shall be as specified in the tender document. All documents must be duly signed by the bidder and uploaded only on the Jharkhand e-Tender portal. The bidder shall submit the financial bid/price bid strictly in the prescribed format as per the NIB/tender document. In case any financial bid, price details, BOQ, or price-related information is submitted or disclosed as part of the Technical Bid/technical submission, the bid shall be summarily rejected, and the bidder shall be disqualified.

17. Technical Bid – details

Form I: Technical Bid – details

Bidders shall submit the technical Bid in the formats (T-1 to T-10) of Section V (the "Technical Bid"). While submitting the Technical Bid, the Bidder shall, in particular, ensure that:

JREDA reserves the right to verify all Statements, information, and documents submitted by the Bidder in response to the NIB. Failure of JREDA to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder, nor will it affect any rights of JREDA thereunder. In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made a material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Consultant either by issue of the Work Order or entering into of the Agreement, and if the Bidder has already been issued the Work Order or has entered into the Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this NIB, be liable to be terminated, by a communication in writing by JREDA without JREDA being liable in any manner whatsoever to the Bidder or Consultant, as the case may be.

In such an event, JREDA shall forfeit and appropriate the Bid Security as mutually agreed pre-estimated compensation and damages payable to JREDA for, inter alia, time, cost, and effort of JREDA, without prejudice to any other right or remedy that may be available to JREDA.

18. Form II: Financial Bid – details

Bidders shall submit the Financial Bid in the prescribed BOQ (Excel sheet) online only, clearly indicating the cost of Consultant's service charges for "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand". "**In both figures and words, in Indian Rupees, and signed by the Bidder's authorized signatory.**

Note: - Maximum Bid Price allowed for conducting Capacity Building of the Individual category in Jharkhand was mentioned in Clause 7 (Table). Meanwhile, JREDA reserves the right to increase and decrease the number of training sessions, subject to the availability of funds, and also change the location of the training for the capacity building of the demand side management scheme.

Financial Bid shall be submitted online only. In case the financial Bid is not submitted online, the said bidder shall be disqualified from the NIB.

While submitting the Financial Bid, the Bidder shall ensure the following:

i. All the costs associated with the assignment shall be included in the Financial Bid, including taxes. The total amount indicated in the Financial Bid shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Bid, it shall be considered non-responsive and liable to be rejected.

ii. The Financial Bid shall take into account all expenses and tax liabilities, including the GST / Service Tax. For the avoidance of doubt, it is clarified that all taxes that are applicable or may become applicable shall be deemed to be included in the costs shown under different items of the Financial Bid. Further, all payments shall be subject to the deduction of taxes at source as per applicable laws.

iii. Costs (including breakdown of costs) shall be expressed in INR.

iv. Duly quoted & digitally signed Bill of Quantity (BOQ) in the file supplied by JREDA in. xls.

v. Declaration by Bidder in the format Annexure T3 form of Bid in .pdf format.

NOTE: - All the documents should be digitally signed by the Bidder.

19. Pre-BID Meeting & Query

The prospective bidders, requiring any clarification on the RFP, may notify the same in the form of a query to JREDA in line with the e-procurement notice in pre-bid meeting bidder also send their queries online via through e-mail (info@jreda.com). The JREDA response, if any, will be uploaded to the website for all the prospective bidders interested in submitting the proposal.

- A prospective Bidder requiring any clarification of the bid documents may inform to JREDA in writing at the JREDA's address indicated in the Notice Inviting Tenders. JREDA's response will be uploaded in the form of corrigendum on our website www.jreda.com.
- Pre-bid meeting will be held on **08.06.2026 (Monday)** at 02:00 P.M. in the Conference Hall of JREDA. The bidder or his authorized representative may attend the meeting.
- The purpose of such a meeting will be to clarify issues on any matter that is raised at that stage.
- Pre-BID queries are accepted by e-mail till dated **10.06.2026 (Wednesday)** up to 05:00 P.M. at info@jreda.com within two working days after the Pre-BID meeting.
- Any modifications of the bid document listed in JREDA NIB, which may become necessary as a result of the pre-bid meeting shall be made by the JREDA exclusively through the issue of an Addendum/Corrigendum on the website.

20. Bid Opening

Bids will be opened in the presence of the Bidders, who choose to be present, in front of the JREDA Purchase Committee at 02.00 P.M. on **01.07.2026** (Wednesday) at the address indicated in the Short Notice Inviting Bid notice.

21. Evaluation of Bids

JREDA will evaluate the Bid receipt through the JREDA purchase committee for a detailed scrutiny. During the evaluation of Bids, JREDA may, at its discretion, ask the Bidders for clarification of their Bids. A committee will evaluate the above proposals (technical and financial) based on the qualifications specified below:

- Past experience of carrying out a similar assignment in line with the detailed scope of work.
- No consortium is allowed.

22. Award of Contract after opening of Financial Bid

- The unit price of each training is the rate contract for the training as per NIB.
- JREDA reserves the right to increase or decrease the scope and number of works as per their requirement of JREDA or instruction, along with guidelines received from BEE and the State.
- JREDA reserves the right to increase or decrease the number of training sessions, subject to the availability of funds.
- **JREDA reserves the right to allocate the work mentioned in NIB to multiple agencies at the L1 price by taking their consent on the L1 quoted price.**

23. Notification of Award and Signing of Agreement

- The bidders whose Bids have been accepted will be notified of the award by the JREDA prior to expiration of the Bid validity period by email and by registered letter. This letter, called the "Letter of Award / Work Order", will state the sum that the JREDA will pay to the Consultants in consideration of the execution and completion of the Works (hereinafter and in the Contract called the "Contract Price").
- The notification of award will constitute the formation of the Contract, subject only to the furnishing of the Security Deposit by the successful bidders in accordance with the provisions.
- The Agreement will incorporate the NIB document, Work order & subsequent amendments between JREDA and the successful Bidders. It will be signed by the JREDA and the successful Bidders after the security deposit is submitted.
- Upon the furnishing of the Security Deposit by the successful Bidders, JREDA will promptly notify the other Bidders that their Bids have been unsuccessful.

24. Confidentiality

Information relating to the examination, clarification and comparison of the Bids shall not be disclosed to any Bidders or any other persons not officially concerned with such process until the Tender process is over. The undue use by any Bidder of confidential information related to the process may result in the rejection of its Bid.

25. Earnest Money Deposit (EMD)

The General bidder needs to submit the amount of **₹ 4,77,160/- (Four Lakhs Seventy-Seven Thousand One Hundred Sixty Rupees Only)** in online mode via SBI payment gateway on https://jharkhandtenders.gov.in, which consists of the cost of the NIB document (non-refundable), is **₹ 10,000/- (Inclusive of GST@ 18%)** and Earnest Money Deposit (EMD) of **₹ 4,67,160/-** (Refundable) for the participation in the NIB and Nil for MSME/New MSME of Jharkhand Bidders only. For the unsuccessful Bidders, the EMD shall be refunded after finalization of the Tender. For the successful Bidder, EMD shall be released on the submission of the Security Deposit.

The following shall cause the forfeiture of EMD:

- If the Bidder modifies/ withdraws its Bid except as per the provisions specified in the Tender document; or
- If the Bidder withdraws its Bid before the expiry of the validity period of the Bid; or
- if any information or document furnished by the Bidder turns out to be misleading or untrue in any material respect; or
- If the selected Bidder does not accept the Letter of Award / Work Order unconditionally within fifteen (15) days of issue of the Letter of Award / Work Order or the period as extended by JREDA.

26. Security Deposit

For General Bidder: The shortlisted Bidder has to submit a Security Deposit @10% of the work order value, in the form of DD/BG/FDR in favour of The Director, JREDA Payable at Ranchi.

For MSME/ New MSME of Jharkhand: Security Deposit should be 1% of the work order value in favour of the Director, JREDA Payable at Ranchi.

The Security Deposit shall be refunded/released to the bidder after the expiry of 60 days from the actual date of successful completion of work.

The Security Deposit will have to be maintained by the bidder with JREDA till the satisfactory completion of the work. If the work extends beyond the expiry date of the Bank Guarantee, bidders shall submit a fresh Bank Guarantee or extend the period of validity of the Bank Guarantee as per the direction of JREDA; otherwise, JREDA may terminate the work order and blacklist the contractor.

Note Performance Guarantee applicable for Category-10 only:
JREDA shall release 100% payment of the total quoted value to the successful bidder after successful supply, installation, testing, commissioning, submission of required documents, and verification/approval by JREDA along with the Bank Guarantee submission as mentioned below:

1. The Performance Bank Guarantee of 05(Five)% shall be submitted and retained for the entire 05-year Comprehensive Maintenance Contract (CMC) period and shall be released/refunded 60 days after the successful completion of the CMC period, subject to satisfactory fulfillment of all CMC obligations, timely maintenance, prompt resolution of defects and complaints, submission of requisite service reports, and certification by JREDA and/or the concerned authority, in accordance with the tender conditions

2. The Bank Guarantee for CMC for 5 Years equivalent to the 20(Twenty)% of the total Work Order value, inclusive of GST and all applicable taxes, in the form of a DD/BG/FDR in favor of the Director, JREDA payable at Ranchi against valid till CMC period of complete system. For this bidder has to submit a total of 05(five) nos. of Bank Guarantees of each 04(Four)% value of the work order (i.e. total 20% of work order value) each having validity respectively for 1 year, 2 years, 3 years, 4 years and 5 years 3 months respectively.

   If the Contractor fails to perform CMC & submit the CMC report in JREDA within one month after respective quarters, JREDA may reserve the rights to revoke the bank guarantee and take other necessary action against the bidder as per JREDA NIB terms and conditions.

27. Agreement

The Shortlisted Bidder / Consultant shall enter into an agreement within 15 days from the issue of the work order in the office of Director JREDA, Ranchi, on non-judicial stamp paper of appropriate value after deposit of the security money, failing which the Work Order may be cancelled. Uploaded documents by the shortlisted Consultant in NIB will be verified with the original before signing the agreement.

28. Engineer-in-Charge

The Concerned Electrical Executive Engineer of JREDA will be the Engineer-In-Charge of the work. The shortlisted Consultant shall have to be in regular contact with the Engineer-In-Charge for the successful execution of the work.

29. Process to be Confidential

Information relating to the examination, clarification, evaluation, and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any attempt by a Bidder to influence the JREDA's process of bidding or award decisions may result in the rejection of his Bid.

30. Income Tax / GST

Without prejudice to the obligation of the shortlisted Consultant under law, any income tax and GST which JREDA may be required to deduct by Law/Statute, shall be deducted at source and shall be paid to the concerned government departments on account of the Consultant. JREDA shall provide the Consultant with documents or information for such deduction of tax.

31. Force Majeure Conditions

In the event of either party being rendered unable by force majeure to perform any obligation required to be performed by them under this agreement, the relative obligation of the party affected by such force majeure shall be treated as suspended during which force majeure condition lasts.
The term force majeure shall have herein mean riots (other than among the Consultant's employee), civil commotion, war (whether declared or not), invasion, act of foreign enemies' hostilities, rebellion, insurrection, military coup to usurp power, act of god such as earthquake, lightning, floods, fires not caused by Consultant's negligence and other cause which the Consultant has no control and accepted as such by The Director, JREDA, whose decision shall be final and binding. If the work is suspended by force majeure conditions lasting for more than 45 days, the JREDA shall have the option of cancelling this contract in whole or in part thereof, at its discretion. The Consultant shall not claim compensation for force majeure conditions.

32. Compliance with Regulations

The shortlisted Consultant has to comply with all applicable laws or ordinances, codes, approved standards, rules and regulations and shall arrange all necessary municipal and/or other statutory bodies and government permits & licenses, etc., wherever applicable, at its own cost.

33. Risk and Cost

If the Shortlisted Consultant fail to complete the awarded work or any part thereof as per the terms of the order, then JREDA will be at liberty to cancel the said work order and will get the full or part of the left-over work completed by way of engaging an alternate bidder at its risk & cost. Also, JREDA may not take care of accidents/damage to manpower that occurs, then the Consultant will only be responsible for that & in no case shall JREDA be accountable in such a case.

34. Cancellation of Contract

JREDA will be at liberty to terminate in part or in full the awarded contract without prejudicing its rights and affecting the obligations of the Consultant by giving 15 (Fifteen) days' notice in writing in the following events:

a) The term of the Agreement expires; other appropriate action for non-compliance with the order. During the contract period, if any type, or
b) Termination of Agreement by JREDA due to non-performance during the execution of Work; or
c) Performance is below the expected level; or
d) Non-adherence to the timelines of the project; or
e) Quality of work is not satisfactory.

Other terms & condition enumerated in the said **JREDA NIB No. 11/JREDA/EE/26-27** will be the integral part of this contract.

35. ARBITRATION

All disputes arising out of or in connection with the present contract shall be finally settled under the Arbitration and Conciliation Act'1996.

36. Sub-Letting

In no case will subletting of the contract be allowed. If the Consultant contravenes this condition, JREDA reserves the right to cancel the work contract.

37. Penalty terms

Delay any stage in execution of the contract due to reasons solely attributed to the successful bidder beyond the time schedule as agreed or any extension thereof granted by the JREDA shall attract a penalty at the rate of 1% of the total contract value per week of delay, subject to a maximum of 10% of the total contract value.

38. Jurisdiction of Court

All legal disputes between the parties shall be subject to the jurisdiction of the Jharkhand High Court, Ranchi only.

SECTION IV: Scope Of Work (SOW)

Tender Reference No.: 11/JREDA/EE/26-27

Subject: "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand"

The scope of work for "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for the category sequence and description of work will be mentioned below:

Category Sequence	Description of Work
Category - 1	Agriculture Demand Side Management (AgDSM)
Category - 2	Capacity Building through Animated, 3D, and Technical Short Films on Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development.
Category - 3	Municipal Demand Side Management (MuDSM)
Category - 4	Engaging an Agency for Conducting Market Surveillance for the Standards and Labelling (S&L) program of BEE for the state of Jharkhand.
Category - 5	Retailers Training Programme under the Provision of Standards and Labelling.
Category - 6	Investment Bazaar to Promote Energy Efficiency for the state of Jharkhand
Category - 7	Engagement of Agencies for Conducting Various Sustainability, Decarbonization, Climate Change and other Demand Side Management (DSM) Capacity Building Programme in Jharkhand.
Category - 8	Engagement of Agencies for Conducting Investment Grade Energy Audits (IGEA) and Detailed Energy & Sustainability Assessments for Government Buildings, Pumping Stations, Colleges, and Other Facilities across Jharkhand.
Category - 9	Establishing Demand Side Management (DSM) Clubs in Government Schools/Colleges and Conducting various DSM Awareness Programs in Jharkhand under the School/College Capacity Building Program
Category - 10	Engagement of Agencies for Supply, Installation and 05 Years Comprehensive Maintenance Contract (CMC) of 5 Star rated energy-efficient appliances including Air conditioning (A.C), BLDC Ceiling Fan(with Safety wire/rope), Induction Cookstoves and LED Light Lighting Fixtures (Bulbs & Tube Lights), BLDC Ceiling Fans (with Safety Rods) across all Government Schools/Colleges/Institutions/Buildings and other Energy intensive government premises in state of Jharkhand.
Category - 11	Engagement of Agencies for capacity building on Energy Conservation Week and preparation of Detailed Project Report
Category - 12	Engagement of Agency for Comprehensive Cool Roof Feasibility Study, Demonstration Project Implementation, and Urban Heat Island Mitigation Planning in Jharkhand
Category - 13	Engagement of the Agency for Theory Cum Practical Energy Conservation Awareness Workshops for Diploma / Degree Engineering Colleges/Other Government Institutions in Jharkhand

Note: Detailed Scope of Work mentioned under Annexure-A

The bidder needs to refer to **Annexure A** regarding the detailed scope of work mentioned under the aforementioned category

Deliverables

- The training module, approach and methodology, all the printed materials shall be shared by the bidder with JREDA and BEE in soft copies before commencement of the training programme. Any amendment required by JREDA/BEE shall be done by the bidder.
- The Boarding, Lodging and local travels may be provided for the two officials from BEE and JREDA
- Informing the participants about the programme & continuous follow-up to ensure good participation for the workshops.
- A good quality training kit, which shall include a pen drive, printed training material, a notebook, a pen and other necessary stationery items, shall be provided to the participants during the workshops
- Two times tea/coffee with snacks and lunch, etc., to all the participants.
- Photography with HD quality of the event.
- Event posters, banners, standees, etc., if any. And collecting feedback from participants.
- Bidder shall conduct a post-training quiz (simple multiple-choice questions, maximum 20 minutes duration) after the conclusion of each training programme. The set of questionnaires for the quiz should be developed and approved by the JREDA/BEE. 5-10 prizes may be awarded to the participants whoever gives the correct answer.
- Informing the participants regarding the training programs through email or social media platforms, i.e., Facebook, Twitter, WhatsApp, LinkedIn, & ensure participation of stakeholders.
- Bidder shall design and develop an interactive training module, approach and methodology, training material, pamphlets/leaflets (in English and Hindi), attendance sheets, feedback forms, quizzes, certificate of participation, posters for display at outlets, etc.
- The schedule of the program should be finalized in consultation with JREDA. The Submission of the report of each program includes proceedings, a list of participants, a performance report of the webinar, interaction from participants, locations of participants, & press clippings attached to each event in the prescribed format, along with all event-related documents to JREDA.
- Submission of a summary report after completion of all training programs, including the success factor of trainings, challenges faced, and areas of improvement for future JREDA workshops.
- Photography of the event and publicity on social media must be done.
- Any other requirement for the successful completion of the function should be met by the bidder.
- Finalization of the agenda for the training programs in consultation with SDA.
- Basic facilities on the stage to be organized.
- Bidder should ensure availability of a sound system with one fixed mike and 01 cordless mike (with spare battery), a projector for the presentation, etc. The bidder or its team members should have laptops for the PowerPoint presentation during the training workshop. A banner to be placed on the wall of the hall.
- A small banner/standee may also be placed outside the event location to guide the participants. It will be more appropriate for the Bidder to arrange for a lamp with 4-5 wicks so that the Chief Guest may light the lamp during the inauguration of the training workshop.
- Arrangements to facilitate the guest with the shawl and mementoes shall be arranged wherever required, and must include the aforementioned categories.
- The agenda, venue and dates would be approved by JREDA/BEE before commencement of the workshop. All these details would be shared by Bidder via mail to JREDA for prior approval.
- Bidder should have an arrangement of expert speakers for the individual category.

Submission of Report to JREDA applicable for all Categories aforementioned:

- Bidder should submit a brief report to JREDA/BEE, on completion of each training programme, along with the feedback forms, attendance sheets, etc., in original.
- On completion of each Training Programme in the major cities of Jharkhand, Bidder should submit three (3) hard-bound copies of the detailed final report in hard copy to JREDA, covering the entire training programme.
- The detailed final report shall contain the list of the participants & their contact details, a copy of training materials, pamphlets/leaflets (in English and Hindi), an assessment report, photographs, feedback report, attendance sheets, etc.
- Bidder should submit a brief report to JREDA/BEE, on completion of each training programme, along with the feedback forms, attendance sheets, etc., in original.
- The detailed final report shall contain the list of the participants & their contact details, a copy of training materials, pamphlets/leaflets (in English and Hindi), an assessment report, photographs, feedback report, attendance sheets, etc.
- Bidder needs to submit the editable format of all training material, Reports, Pamphlets, note pads, brochures, etc.

- Photography of the event, Photography of the event will include a photograph of the participant's photograph of trainers (while delivering the lecture during the workshop). Photograph for the inauguration of the workshop.

Period of Engagement

Bidder shall be engaged for 365 Days with JREDA from the date of the Agreement signing, which may be extended as per the requirement of JREDA. However, the projects in hand at the time of completion of the 365-day period would have to be completed by the bidder within the time period, as may be mutually agreed, without any extra cost. It is suggested to complete the said work as mentioned in the SOW under the categories mentioned in NIB, for the further payment process. The period of engagement to complete said work under the NIB is mentioned below:

S. No.	Event	Timeline
1.	Date of Work order between JREDA and the Selected Bidder through the tendering process**.**	X Day
2.	Date of Agreement between JREDA and the Selected Bidder through the tendering process**.**	X+15 Days
3.	Submission of planning for Organizing and conducting/implementation of "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand" **under Category 1-13 Nos. mentioned in NIB.**	X+30 Days
4.	Submission of three (3) copies of the detailed final report in hard copy, covering the entire training programme on completion of all "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand" (The report shall contain the list of the participants and their contact details, a copy of training materials, assessment report, photographs, a feedback report, etc., in a storage device **under Category 1-13 Nos. mentioned in NIB**.)	X+365 Days

Terms of Payment:

- The following terms of payment in applicable for the overall project under this contract after successful completion of activities to be carried out as mentioned below, and against verifying bill by Engineer-In-Charge.
- As defined in the Scope of Work the minimum number of participants defined by each category the mentioned number of persons in scope of work should attend in each training programme. JREDA may deduct the amount if the participants are less the mentioned participants. The total payment made to the bidder may vary on bases of actual number of participants attended to the program as mentioned in NIB.
- The following terms of payment in applicable for the overall project under this contract after successful completion of activities to be carried out as mentioned below, and against verifying the bill by the Engineer-In-Charge.

Sl.No	Milestone	% of the total fees
1.	Payment shall be made after successful completion **Each/Individual training** as mentioned in the scope of work under the categories as per the scope of **NIB** and submission of a brief Hard & Soft Copy detailed final report to JREDA. (The report shall contain the list of the participants and their contact details, a copy of the training materials, assessment report, photographs, feedback report, etc., on a storage device as mentioned in NIB) for **Categories 1-9 & 11-13**	100%
2.	**For Category 10:** **Engagement of Agencies for Supply, Installation and 05 Years Comprehensive Maintenance Contract (CMC) of 5 Star rated energy-efficient appliances including Air conditioning (A.C), BLDC Ceiling Fan (with Safety wire/rope), Induction Cookstoves and LED Light Lighting Fixtures (Bulbs & Tube Lights), BLDC Ceiling Fans (with Safety Rods) across all Government Schools/Colleges/Institutions/Buildings and other Energy intensive government premises in state of Jharkhand.** JREDA shall release 100% payment of the total quoted value to the successful bidder after successful supply, installation, testing, commissioning, submission of required documents, and verification/approval by JREDA along with the Bank Guarantee submission as mentioned below: 1. The Performance Bank Guarantee of 05(Five)% shall be submitted and retained for the entire 05-year Comprehensive Maintenance Contract (CMC) period and shall be released/refunded 60 days after the successful completion of the CMC period, subject to satisfactory fulfillment of all CMC obligations, timely maintenance, prompt resolution of defects and complaints, submission of requisite service reports, and certification by JREDA and/or the concerned authority, in accordance with the tender conditions. 2. The Bank Guarantee for CMC for 5 Years equivalent to the 20(Twenty)% of the total Work Order value, inclusive of GST and all applicable taxes, in the form of a DD/BG/FDR in favor of the Director, JREDA payable at Ranchi against valid till CMC period of complete system. For this bidder has to submit a total of 05(five) nos. of Bank Guarantees of each 04(Four)% value of the work order (i.e. total 20% of work order value) each having validity respectively for 1 year, 2 years, 3 years, 4 years and 5 years 3 months respectively. If the Contractor fails to perform CMC & submit the CMC report in JREDA within one month after respective quarters, JREDA may reserve the rights to revoke the bank guarantee and take other necessary action against the bidder as per JREDA NIB terms and conditions.	100%

- The following terms of payment in applicable for the overall project under this contract after successful completion of activities to be carried out as mentioned below, and against verifying bill by Engineer-In-Charge.

SECTION V: TECHNICAL PROPOSAL (TP) – FORMATS

Tender Reference No. 11/JREDA/EE/26-27

Sub: "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand".

The following are the response formats to be used by Bidders for the Engagement of Empanelled Agencies for Implementation, Execution, and Capacity Building for Demand Side Management Schemes of the Bureau of Energy Efficiency (BEE) in the State of Jharkhand and prepare a Comprehensive Project Report.

S. No	FORM	DETAILS
A.	Form I	Proposal Form – Covering Letter for the Engagement of Bidders
B.	Form II	Technical Proposal formats (T1-T10)

A. PROPOSAL FORM

The Bidders are required to submit the covering letter in the Form I. This Form should be in the letter head of the Bidders, who are submitting the proposal.

FORM I: Covering Letter (on Bidder's letterhead)

Tender Reference No.: 11/JREDA/EE/26-27

Date:

To,
The Director,
Jharkhand Renewable Energy Development Agency (JREDA)
3rd Floor, SLDC Building, Kusai Colony, Doranda, Ranchi,Jharkhand.

Sub: "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand".

Dear Sir,

1. Having examined the NIB, we, the undersigned, offer to propose for the Engagement of Agency with JREDA, in full conformity with the said NIB.
2. We have read the provisions of NIB and confirm that these are acceptable to us. We further declare that additional conditions, variations, deviations, if any, found in our proposal shall not be given effect to.
3. We agree to abide by this Proposal, consisting of this letter, the Pre-qualification and Technical Proposal, the duly notarized written power of attorney, and all attachments, including thepresentation to be made to the evaluation Committee, if required, it shall remain binding uponus and at any time before the expiration of the period of engagement.
4. Until the formal final Contract is prepared and executed between us, this Proposal, together with your written acceptance of the Proposal and your notification of award, shall constitute a binding contract between us.
5. We hereby declare that all the information and statements made in this proposal are true & correct. We accept that any misinterpretation contained in it may lead to our disqualification.
6. We understand you are not bound to accept any proposal you receive.

Signature…… In the capacity of..... Duly authorized to sign Proposal for and on behalf of……..

Date……...
Place…….

B. Technical Proposal Formats

The Bidders are required to submit their Technical Proposals in the formats given as Annexure T1 to T10.

Annexure-T1: Covering Letter

Tender Reference No.: 11/JREDA/EE/26-27

(On bidder's letterhead)

From:

To:

The Director,
Jharkhand Renewable Energy Development Agency
(JREDA),3rd Floor, S.L.D.C. Building,
Kusai Colony, Doranda,
Ranchi –834002.

Sub: "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand".

The hiring of a consultant for _____regarding, I/we_consultancy/ firm herewith enclose Technical Proposal for the **Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand.**

Yours faithfully,

Signature & Seal

Full Name & Address:

Annexure-T2: Format of Power of Attorney for Signing Bid Authorization letter

Tender Reference No. 11/JREDA/EE/26-27

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of Execution)

Know all men by these presents, we .....(name and address of the registered office) do hereby constitute, appoint and authorize Mr. / Ms…… (name and residential address) who is presently employed with us and holding the position of…….
as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for **"Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand"**. Including signing and submission of all documents and providing information / Bids to Jharkhand Renewable Energy Development Agency, representing us in all matters before [Insert Name], and generally dealing with Jharkhand Renewable Energy Development Agency in all matters in connection with our bid for the said Project.
We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.
For

Signature
Accepted by
……..
(Signature)(Name, Title and Address of the Attorney)

Note: The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, lay down by the applicable law and the charter documents of the executants (s) and when itis so required the same should be under common seal affixed in accordance with the required procedure.

Annexure-T3: Check List of Technical bid

Tender Reference No.: 11/JREDA/EE/26-27

S. No	Particulars	Uploaded or not	Page No. in the Technical Bid
1	**For General Bidder:** Receipt of online payment for participation in NIB of **₹ 4,77,160/- (Four Lakhs Seventy-Seven Thousand One Hundred Sixty Rupees Only)**, which consists of the cost of the NIB document (non-refundable), is **₹ 10,000/- (Ten Thousand Rupees Only)** and Earnest Money Deposit (EMD) of **₹ 4,67,160/-** (Refundable) for participation in the NIB.		
	For MSME/New MSME Bidder- Nil		
2	Audited balance sheet of the last three Financial Years (FY) (2022-23, 2023-24, 2024-25)		
	ITR: At least the last 3 Assessment years (i.e. AY 2023-24, 2024-25, 2025-26).		
3	PAN Card		
4	Service Tax/ GST Certificate		
5	Covering letter (Annexure-T1)		
6	Authorization Letter (Annexure-T2)		
7	Checklist for technical bid (Annexure-T3)		
8	Information about the Bidding Firm (Annexure-T4)		
9	Average Annual turnover (Annexure-T5)		
10	Contact person for the NIB (Annexure-T6)		
11	Assignment of similar nature of work during the last 7years (Annexure-T7)		
12	Declaration by the bidder (Annexure-T8)		
13	Net worth Certificate (Annexure- T9)		
14	Technical Summary Bid Checklist for NIB (Annexure – T10)		

*** Please write the page number as in the box.**

Please ensure:

I. That all information is provided strictly in the order mentioned in the checklist mentioned above.

II. Bidders are advised to strictly confirm compliance with bid conditions and not to stipulate any

deviation/conditions in their offer. Subsequent to bid submission, JREDA may or may not request confirmations/clarifications and any offer(s) not in line with the bid conditions shall be liable for rejection.

III. Any clarification/confirmation bidder may require shall be obtained from JREDA before submission of the bid. Bidder shall submit a complete bidding document, including subsequent amendments, modifications, and revisions, duly signed and stamped as a token of having read, understood and accepted all the terms and conditions mentioned therein.

(Signature of Authorized Signatory)

Name:
Designation:
Company seal:

Annexure-T4: Information about the Bidding Firm

Tender Reference No.: 11/JREDA/EE/26-27

(To be submitted in the official letterhead of the company)

SL. No.	Particulars	
1.	Name of the Bidder	
2.	Address of Bidder with Telephone, Fax and email	
3.	Address of the Registered Office	
4.	Other details and remarks, if any	

Yours faithfully,

Name:
Designation:
Company seal:

Annexure-T5: Format for Financial Requirement – Annual Turnover

Tender Reference No.: 11/JREDA/EE/26-27

[On the letterhead of Bidding Company]

To,

The Director,
Jharkhand Renewable Energy Development Agency
3rd Floor, S.L.D.C. Building,
Kusai Colony, Doranda,Ranchi – 834002.

Sir,

Sub: Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for the implementation of various DSM activities in the State of Jharkhand.

We certifythat the Bidding Company had an average Annual Turnover of ₹._____Based on audited annual accounts of the last three years ending 31.03.2025.

Sl. No.	Financial Year	Turnover (in ₹ .)
1	2022-23	
2	2023-24	
3	2024-25	

Authorized Signatory (Power of Attorney holder) **Statutory Auditor**

(Stamp & Signature) **(Stamp & Signature)**

Date:

Membership No.-
UDIN No.-

Note: **a. Average Annual Turnover will be calculated on the basis of the annual Turnover of the three consecutive years.**
b. This Certificate should be issued by the Chartered Accountant (CA) who has issuedthe Audited Account with UID no.

Annexure-T6: Contact Person for the NIB

Tender Reference No.: 11/JREDA/EE/26-27

[On the letterhead of Bidding Company]

1	Contact Person name for the NIB	
2	Designation	
3	Contact No. (phone & mobile)	
4	Fax No.	
5	E-mail ID	
6	Corresponding address with pin code	
7	Remarks	

(Signature of Authorized Signatory)
Name:
Designation:
Company Seal:

Annexure-T7: Assignments of Similar Nature During the Last 7 Years

Tender Reference No.: 11/JREDA/EE/26-27

Sub: "Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for implementation of various DSM activities in the State of Jharkhand".

S. No	Category	Scope of work	Name of the assignment and a brief document	Work Order/Purchase Order No./LoA/LOI with Work Completion Certificate/Performance Certificate/Payment against the Work Order/Payment advice .	Completion Certificate	Assignment Awarded by	Cost of the Assignment	Date of completion
				Page No.	Page No.			
1	Category-1							
2	Category-2							
3	Category-3							
4	Category-4							
5	Category-5							

6	**Category-6**							
7	**Category-7**							
8	**Category-8**							
9	**Category-9**							
10	**Category-10**							
11	**Category-11**							
12	**Category-12**							
13	**Category-13**							

Full Name & Address

Signature & Seal

Note: Please attach documentary proof.

Annexure-T8: Declaration by the Bidder

Tender Reference No. 11/JREDA/EE/26-27

(To be submitted on the official letterhead of the company)

I/We (hereinafter referred to as the Bidder) being desirous of tendering for the rate contract for work under the above-mentioned tender and having fully understood the nature of the work and having carefully noted all the terms and conditions, specifications, etc., as mentioned in the tender document, Do Hereby Declare That

1. The Bidder is fully aware of all the requirements of the tender document and agrees with all provisions of the tender document.
2. The Bidder is capable of executing and completing the work as required in the tender.
3. The Bidder accepts all risks and responsibilities directly or indirectly connected with the performance of the tender.
4. The Bidder has no collusion with any employee of JREDA or with any other person or firm in the preparation of the bid.
5. The Bidder has not been influenced by any statement or promises of JREDA or any of its employees, but only by the tender document.
6. The Bidder is financially solvent and sound to execute the work.
7. The Bidder is sufficiently experienced and competent to perform the contract to the satisfactionof JREDA.
8. The information and the statements submitted with the tender are true and correct.
9. The Bidder is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.
10. The Bidder has not been debarred from a similar type of work by any SDA/ Government Dept. /PSU.
11. This offer shall remain valid for six months from the date of opening of the tender.
12. The Bidder gives the assurance to execute the tendered work as per the specifications, terms and conditions.
13. The Bidder confirms the capability to supply and install the required no. of systems per month.
14. The Bidder accepts that the earnest money be absolutely forfeited by JREDA if the Bidder fails to undertake the work or sign the contract within the stipulated period.

(Signature of Authorized Signatory)

Name:
Designation:
Company:
Seal:

Annexure-T9: Format for Financial Requirement - Net Worth Certificate

Tender Reference No. 11/JREDA/EE/26-27

[On the letterhead of Bidding Company]

To,

The Director,
Jharkhand Renewable Energy Development Agency
3rd Floor, S.L.D.C. Building,
Kusai Colony, Doranda, Ranchi - 834002

Dear Sir,

Sub: Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for the implementation of various DSM activities in the State of Jharkhand.

This is to certify that the net worth of _____{Insert the name of Bidding Company}, as of 31st March 2025, is ₹._____The details are appended below.

Particulars Amount	Amount (In ₹)
Equity Share Capital	
Add: Reserves	
Subtract: Revaluation Reserve	
Subtract: Intangible Assets	
Subtract: Miscellaneous Expenditure to the extent not written off and carried forward losses	
Net Worth as on 31st March 2025	

Membership No.-

UDIN No.-

Authorized Signatory/Statutory Auditor

(Power of Attorney holder) **(Stamp & Signature)**

Annexure-T10: Technical Summary Bid Checklist for NIB

Tender Reference No. 11/JREDA/EE/26-27

Sl. No.	Documents Name	Details of Documents	Submitted Document Page No.
1	Name of the firm		
2	Office address of the firm		
3	Telephone No. of the firm		
4	Mobile phone No. of the firm		
5	E-mail address of the firm		
6	Name of Contact Person		
7	Mobile No. of Contact Person		
8	E-mail ID of the contact Person		
9	GST/TIN/TAN no. of the Firm		
10	PAN No		
11	Valid ESCO Certificate issued by Bureau of Energy Efficiency (BEE) applicable only for Category-10		
12	Valid Electrical Contractor License of Jharkhand applicable only for Category-10		
13	Valid OEM authorization certificate applicable only for Category-10		
14	Address of local service/support office in Jharkhand applicable only for Category-10		
15	Whether the firm/ Company/Firm/Corporation/Proprietor/Society/NGO/Partnership firm/Private Limited/LLP in India.		
16	Date of establishment of the firm		
17	Contact Details and Address of the Firm/ Company's Office in Jharkhand.		
18	Receipt of the Tender fee (Non-refundable) and the Earnest Money Deposit (Refundable) should be made online via the SBI payment gateway.		
19	Name & Address of partner, in case of a partnership firm, please enclose a copy of the partnership deed/power of attorney		
20	CIN No.-Check & Verify CIN No. in this website and attach the Screenshot: - **https://www.mca.gov.in/mcafoportal/findCIN.do**		

21	Annual turnover for financial years. (ITR & Balance Sheet) (Audited financial statements, accounts and balance sheets of the latest 3 years, i.e., FY-2022-23, 2023-24, 2024-25.) Check UDIN No. on this website: **https://udin.icai.org/search-udin** Check & Verify UDIN No. on this website and attached the screenshot	UDIN No.: - CA Membership No.: -	
22	Net Worth Certificate Check UDIN No. on this website: - **https://udin.icai.org/search-udin** Check & Verify UDIN No. on this website and attach the Screenshot	UDIN No.: - CA Membership No.: -	
Mentioned the Category Applied for NIB		**Status of Application**	**Enclosed Experience Certificate Page No.**
23	**Category 1:** Agriculture Demand Side Management (AgDSM)	Yes/No	
24	**Category-2:** Capacity Building through Animated, 3D, and Technical Short Films on Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development.	Yes/No	
25	**Category-3:** Municipal Demand Side Manageme (MuDSM)	Yes/No	
26	**Category-4:** Engaging an Agency for Conducting Market Surveillance for the Standards and Labelling (S&L) program of BEE for the state of Jharkhand	Yes/No	
27	**Category-5:** Retailers Training Programme under the Provision of Standards and Labelling	Yes/No	
28	**Category-6:** Investment Bazaar to Promote Energy Efficiency for the state of Jharkhand	Yes/No	
29	**Category-7:** Engagement of Agencies for Conducting Various Sustainability, Decarbonization, Climate Change and other Demand Side Management (DSM) Capacity Building Programme in Jharkhand	Yes/No	
30	**Category-8:** Engagement of Agencies for Conducting Investment Grade Energy Audits (IGEA) and Detailed Energy & Sustainability Assessments for Government Buildings, Pumping Stations, Colleges, and Other Facilities across Jharkhand.	Yes/No	
31	**Category-9:** Establishing Demand Side Management (DSM) Clubs in Government Schools/Colleges and Conducting various DSM Awareness Programs in Jharkhand under the School/College Capacity Building Program	Yes/No	
32	**Category-10:** Engagement of Agencies for Supply, Installation and 05 Years Comprehensive Maintenance Contract (CMC) of 5 Star rated energy-efficient appliances including Air conditioning (A.C), BLDC Ceiling Fan(with Safety wire/rope), Induction Cookstoves and LED Light Lighting Fixtures (Bulbs	Yes/No	

	& Tube Lights), BLDC Ceiling Fans (with Safety Rods) across all Government schools/Colleges/Institutions/Buildings and other Energy intensive government premises in state of Jharkhand.		
33	**Category-11:** Engagement of Agencies for capacity building on Energy Conservation Week and preparation of Detailed Project Report	Yes/No	
34	**Category-12:** Engagement of Agency for Comprehensive Cool Roof Feasibility Study, Demonstration Project Implementation, and Urban Heat Island Mitigation Planning in Jharkhand	Yes/No	
35	**Category-13:** Engagement of the Agency for Theory Cum Practical Energy Conservation Awareness Workshops for Diploma / Degree Engineering Colleges/Other Government Institutions in Jharkhand	Yes/No	

Annexure-A:
Scope of work for Category No. 1-13

Common Scope of Work – Sustainability, Circular Economy & Green Event Management

(Applicable to All Categories of Work / Events / IEC Activities / Workshops / Trainings / Awareness Programs undertaken for JREDA)

1. Objective

The objective of this Scope of Work (SoW) is to ensure that all agencies engaged by Jharkhand Renewable Energy Development Agency (JREDA) mandatorily adopt sustainable, energy-efficient, climate-responsive, and circular-economy practices in planning, execution, documentation, reporting, and post-event activities.

The agency shall align all deliverables with JREDA's vision of promoting:

- Energy Efficiency
- Renewable Energy Adoption
- Climate Change Mitigation
- Sustainable Development
- Circular Economy Principles
- Resource Conservation
- Green Procurement Practices
- "Efficiency First" Approach in all operations and outreach activities

The provisions mentioned herein shall be treated as mandatory compliance requirements and shall apply across all project categories unless otherwise specified by JREDA.

2. Mandatory Sustainability Compliance Requirements

The selected agency shall ensure the incorporation of sustainable and eco-friendly materials and practices in all events, campaigns, trainings, workshops, seminars, exhibitions, consultations, awareness drives, stakeholder meetings, and related assignments.

2.1 Use of Sustainable & Eco-Friendly Materials

The agency shall mandatorily use environmentally sustainable, recyclable, reusable, biodegradable, or eco-certified materials, including but not limited to:

- Recyclable paper-based notepads
- Eco-friendly pens/pencils made from recycled or biodegradable material
- Sustainable folders and document kits
- Cloth/jute/canvas/reusable bags instead of plastic bags
- Recyclable brochures, flyers, standees, and posters
- Recycled paper for all printing work
- Reusable branding materials and flex alternatives
- Digital communication and QR-code based information dissemination to minimize paper usage
- LED-based energy-efficient display and lighting systems

- Sustainable gifting solutions
- Zero-waste event concepts
- Community participation in plantation and awareness drives
- Digital invitations and registrations
- Certificates need to be printed in recycled sustainable paper
- Soft copy submission of reports and presentations
- Digital archival of photographs and event records

3. Circular Economy & Waste Management Requirements

The agency shall adopt circular economy principles during event execution and ensure optimum utilization of resources with minimum waste generation.

The agency shall:

- Minimize material wastage during event setup and dismantling
- Ensure segregation of waste into biodegradable and non-biodegradable categories
- Promote reuse and recycling of event materials
- Avoid unnecessary printing and encourage digital documentation
- Ensure responsible disposal of waste through authorized recyclers/agencies
- Use refillable water dispensers instead of single-use water bottles wherever feasible
- Encourage low-carbon and low-waste event management practices

A brief sustainability compliance note with photographic evidence shall be included in the final report.

4. Mandatory Plantation Activity

As part of JREDA's sustainability and climate resilience initiative, the agency shall mandatorily undertake plantation activities during or immediately after the event.

Plantation Requirements:

- Minimum 03 (Three) saplings/plants shall be planted within the same campus/premises/location of the event or nearby approved area.
- Preference shall be given to native, climate-resilient, and locally suitable species.
- The agency shall ensure initial protection and watering arrangement of planted saplings.
- Geo-tagged photographs and location coordinates of each plantation shall be submitted in the final report.
- Before-and-after photographs of plantation activity shall also be included.
- Plantation details shall include:
    - Species Name
    - Location
    - GPS Coordinates
    - Date of Plantation
    - Photographic Evidence

JREDA reserves the right to physically verify the plantation undertaken by the agency.

5. Sustainability Promotion & Awareness Integration

The agency shall ensure that every event also promotes sustainability awareness in alignment with JREDA's mission and the broader climate action agenda.

The agency shall integrate awareness components related to:

- Energy Efficiency
- Renewable Energy Technologies
- Climate Change Mitigation
- Sustainable Lifestyle Practices
- Resource Conservation
- Net-Zero and Low Carbon Development
- Circular Economy Concepts
- Green Building Practices
- Water Conservation
- Waste Reduction & Recycling
- Sustainable Mobility and Clean Energy

Wherever feasible, sustainability messages, energy conservation tips, and climate awareness visuals shall be displayed at the venue.

6. Energy Efficiency First Principle

The agency shall adopt the "Energy Efficiency First" principle during the execution of all assignments.

The agency shall:

- Use energy-efficient electrical equipment and appliances
- Prefer LED lighting systems
- Minimize diesel generator usage wherever feasible
- Promote natural lighting and ventilation
- Ensure efficient power management during events
- Encourage low-energy operational practices

Preference shall be given to low-carbon and environmentally responsible operational methodologies.

7. Reporting & Compliance Submission

The agency shall submit a Sustainability Compliance Report along with the final event report containing:

- Details of sustainable materials used
- Waste minimization measures adopted
- Photographic evidence of eco-friendly practices
- Plantation activity report with geo-tagged images
- Energy-saving initiatives undertaken
- Quantity estimation of materials recycled/reused
- Details of digital initiatives adopted for reducing paper consumption
- Sustainability declaration/certification by the agency

All sustainability measures undertaken shall support JREDA's long-term vision of developing a sustainable, energy-efficient, climate-resilient, and circular ecosystem in the State of Jharkhand.

Professional for providing training in Workshops:

The training shall be conducted by qualified domain experts such as Master Trainers, Certified Energy Auditors, Accredited Energy Auditors, GHG Lead Auditors/Lead Verifiers, IGBC Accredited Professionals (IGBC-AP), GEM Certified Professionals (GEM-CP), GRIHA Certified Professionals (GRIHA-CP), Chartered Engineers, sector experts, or other technically competent professionals having relevant experience in energy efficiency, sustainability, decarbonization, green buildings, and climate-related sectors only.

Awareness & Visibility
The Agency shall install awareness boards of size **6 ft × 4 ft** at each project site, prominently displaying the benefits of energy efficiency, energy conservation messages, and approved branding of **JREDA, Government of Jharkhand, and BEE**.

Submission of Reports to Jharkhand Renewable Energy Development Agency:

1. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms, Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.
2. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:

- Programme agenda and schedule;
- Details of participants and resource persons;
- Session-wise proceedings and outcomes;
- Photographic documentation;
- Media coverage, if any;
- Summary of quiz/competition results and prize distribution details;
- Feedback analysis and assessment outcomes;
- Key observations, recommendations, and impact assessment.

3. The Bidder shall submit three (03) copies of the Final Completion Report comprising:

- Two (02) Hard Bound Copies;
- One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

4. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:
    - Full-length video recording of the event proceedings;
    - Geo-tagged and time-stamped high-resolution photographs;
    - Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
    - Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.
5. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external Hard Disk Drive (HDD) of a minimum 2/5 TB storage capacity as applicable, as mentioned under the individual SOW of Annexure A. ***(Please refer to the Scope of work)***
6. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category Sequence	Description of Work
Category - 1	Agriculture Demand Side Management (AgDSM)
Category - 2	Capacity Building through Animated, 3D, and Technical Short Films on Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development.
Category - 3	Municipal Demand Side Management (MuDSM)
Category - 4	Engaging an Agency for Conducting Market Surveillance for the Standards and Labelling (S&L) program of BEE for the state of Jharkhand
Category - 5	Retailers Training Programme under the Provision of Standards and Labelling
Category - 6	Investment Bazaar to Promote Energy Efficiency for the State of Jharkhand
Category - 7	Capacity- Building of Notified Designated Consumers (DCs) by BEE and prepare a detailed project report for the State of Jharkhand
Category - 8	Investment Grade Energy Audits (IGEA) and Detailed Energy & Sustainability Assessments for Government Buildings, Pumping Stations, Colleges, and Other Facilities across Jharkhand.
Category - 9	Establishment of Demand Side Management (DSM) Clubs in Government Schools/Colleges and Conducting various DSM Awareness Programs in Jharkhand under the School/College Capacity Building Program
Category - 10	Supply, Installation and 05 Years Comprehensive Maintenance Contract (CMC) of 5 Star rated energy-efficient appliances including Air conditioning (A.C), BLDC Ceiling Fan(with Safety wire/rope), Induction Cookstoves and LED Light Lighting Fixtures (Bulbs & Tube Lights), BLDC Ceiling Fans (with Safety Rods) across all Government Schools/Colleges/Institutions/Buildings and other Energy intensive government premises in state of Jharkhand.
Category - 11	Engagement of Agencies for capacity building on Energy Conservation Week and preparation of Detailed Project Report
Category - 12	Comprehensive Cool Roof Feasibility Study, Demonstration Project Implementation, and Urban Heat Island Mitigation Planning in Jharkhand
Category - 13	Theory Cum Practical Energy Conservation Awareness Workshops for Diploma / Degree Engineering Colleges/Other Government Institutions in Jharkhand

Annexure – A

Category 1

Agriculture Demand Side Management (AgDSM)

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The agencies shortlisted under the Agriculture Demand Side Management (AgDSM) Program shall conduct One-Day Capacity Building and Awareness Programs for farmers and relevant stakeholders below mentioned prime focused on Energy Efficiency, Energy Conservation, IoT-based smart agriculture, and sustainable/model farming practices. The program shall also include training on Forest and Field Fire Prevention, Preparedness, Mitigation, and Emergency Response during the summer season to enhance climate resilience and community safety and also include Capacity Building and Awareness Program on Sustainable Agricultural Waste Management. The AgDSM initiative aims to promote energy-efficient and climate-responsive agricultural practices through awareness generation, technology adoption, efficient water and energy utilization, and capacity building of farming communities. The selected agencies shall undertake training, demonstrations, stakeholder engagement, dissemination of IEC materials, and awareness activities aligned with sustainability, environmental protection, and rural development objectives in Jharkhand.

The agencies shortlisted under the AgDSM Program for Conducting of One-Day capacity building and awareness program to farmers and relevant stakeholders for the implementation of energy efficiency, Energy conservation and the implementation of IoT and Model farming practices in the farming community. The training program also includes the below mentioned topics as well for the overall understanding of DSM in the agriculture sector.

1. Solar-Powered Agricultural Applications and Farm Electrification and Renewable Energy Integration in Farming Systems
2. Energy-Efficient Irrigation Systems, Groundwater Conservation and Rainwater Harvesting
3. IoT-Based Smart Agriculture and Precision Farming Technologies
4. Climate-Smart and Climate-Resilient Agricultural Practices
5. Energy Efficiency and Demand Side Management (DSM) in Agriculture
6. Efficient Agricultural Pumps, Motors, and Load Management
7. Sustainable Agricultural Waste Management and Biomass Utilization
8. Prevention of Stubble Burning (Parali) and Waste-to-Wealth Solutions
9. Biomass-Based Circular Economy and Green Business Models
10. Composting, Biochar, Briquetting, and Bio-Energy Applications
11. Heatwave Management and Climate Risk Mitigation in Agriculture
12. Organic Farming, Natural Farming, and Soil Health Management
13. Carbon Reduction, Low-Carbon Farming, and Carbon Credit Awareness
14. Agroforestry, Biodiversity Conservation, and Ecological Restoration
15. Agri-Entrepreneurship and Green Rural Enterprise Development and Rural Livelihood Enhancement
16. Digital Agriculture, GIS, Drones, and Smart Monitoring Systems
17. Post-Harvest Management and Energy-Efficient Storage Solutions
18. Sustainable Supply Chain and Circular Economy Practices in Agriculture
19. Community-Based Resource Management and Participatory Approaches
20. Health, Safety, and Environmental (HSE) Practices in Agriculture
21. Sustainable Rural Infrastructure and Smart Village Development
22. Showcase and case study for Demonstration Projects and Model Farming Practices
23. Efficient Use of Fertilizers, Inputs, and Resource Optimization Practices
24. Awareness on Sustainable Agricultural Waste Management, Prevention of Stubble Burning (Parali).
25. Biomass-Based Circular Economy Business Models
26. Capacity Building and Training Program on Forest and Field Fire Prevention, Preparedness, Mitigation, and Emergency Response during Summer Season

The Agriculture Demand Side Management (AgDSM) aims to enhance energy efficiency and water use in agricultural practices, often by promoting efficient technologies and best practices among farmers. When creating a scope of work for training in AgDSM for farmers, several key components should be included to ensure comprehensive and effective training.

The said program shall be applicable across all districts, blocks, Gram Panchayats, Krishi Vigyan Kendras (KVKs), Adarsh Gram, Model Villages, Swachh Panchayats, climate-responsive villages, agricultural clusters, rural institutions, and other relevant rural development and agricultural intervention areas across the State of Jharkhand. The program shall cover and benefit farmers, Farmer Producer Organizations (FPOs), Self-Help Groups (SHGs), rural entrepreneurs, Panchayati Raj Institutions (PRIs), agricultural cooperatives, local community organizations, village-level institutions, line departments, extension workers, and all agriculture and allied sector stakeholders associated with farming, irrigation, renewable energy, rural livelihoods, climate resilience, natural resource management, and sustainable agricultural development in the state.

1. The bidder shall constitute and deploy a qualified advisory and technical expert panel comprising domain experts, ESCOs, agricultural professionals, technology specialists, and relevant stakeholders having proven experience in energy efficiency, energy conservation, sustainable agriculture, climate-responsive farming, and advanced agricultural technologies. The panel shall support the project through technical guidance, statistical and technological data enrichment, assessment of emerging technologies, and promotion of innovative energy-efficient agricultural solutions aligned with future agricultural transition requirements.
2. The bidder shall submit complete details of the proposed advisory panel, including name, designation, organization/department/firm, area of expertise, email address, and contact number, along with documentary credentials and relevant experience for review and approval.
3. The selected agency shall organize one-day workshop on “Training and awareness program to farmers on Energy Efficiency in the farming community under Agriculture Demand Side Management (AgDSM) with the following scope of work duly approved by JREDA.
4. The bidder shall submit the detailed classroom training presentation which cover all aforementioned scope and any other value add suggestion/topics in editable format in Hindi/ English along with the provision to include the multiple aspects related to agriculture field with various case studies and new agricultural practices, etc. along with consultation of JREDA.

Detailed Scope of Work: The detailed scope of work against the agencies shortlisted under AgDSM Program for Conducting of One-Day capacity building and awareness program to farmers and relevant stakeholders for the implementation of Energy Efficiency, Energy conservation and Implementation of IoT and Model farming practices in the farming community under the provision of Agriculture Demand Side Management (AgDSM)must follow the **Common Scope of Work – Sustainability, Circular Economy & Green Event Management”** guidelines and associated sustainability protocols prescribed by JREDA and SOW mentioned below:

1. Jharkhand Renewable Energy Development Agency (JREDA) shall provide the list of identified districts, blocks, Panchayats, villages, and training locations/venues for conducting the AgDSM Capacity Building and Awareness Programs
2. The bidder/agency shall be responsible for end-to-end planning, coordination, management, and successful execution of the training programs in consultation with JREDA and concerned stakeholders.
3. The agency shall arrange suitable venues such as Community Halls, Convention Centres, Agricultural Market Yards, KVK premises, Panchayat Bhawans, or other appropriate locations with adequate seating capacity, accessibility, sanitation, and participant facilitation arrangements.
4. The finalization of training location, venue, date, and agenda shall be carried out in consultation with JREDA, SDA, KVKs, and local stakeholders.
5. The agency shall arrange all logistics, including stage setup, podium, sound systems, projectors, projection screens, laptops, fixed and cordless microphones, lighting, banners, standees, registration desks, seating arrangements, and related event infrastructure.
6. The agency shall provide working lunch, tea, snacks, refreshments, and hospitality arrangements for participants, dignitaries, officials, speakers, and subject matter experts during the training program.
7. Boarding, lodging, and local transportation arrangements for speakers, technical experts, officials, and resource persons shall be arranged by the bidder.

8. The agency shall design, print, and install backdrop banners, standees, pamphlets, training kits, IEC materials, feedback forms, attendance sheets, certificates, and awareness materials in consultation with JREDA. The backdrop/banner design, branding elements, agenda note, publicity materials, and communication content shall be finalized with prior approval of JREDA/SDA.
9. The working lunch, snacks and High tea during the training shall be provided by the bidder.
10. Arranging boarding and lodging and local conveyance for all the eminent speaker / Subject matter experts engaged should be done by the bidder.
11. The agency shall be responsible for printing and installation of backdrop banners of approximately 10 ft × 6 ft or other appropriate dimensions, mounted frame structure instead of wall hanging/pasting, along with arrangement of podium stands and distribution of informational pamphlets/IEC materials for farmers and stakeholders. The design, content, branding, and layout of the backdrop and related materials shall be finalized in consultation with Jharkhand Renewable Energy Development Agency (JREDA).
12. Arrangement of projector, projector screen of appropriate size for professional display and laptops at the Venue for delivering presentations.
13. Printing of feedback forms in simple Hindi/English language, background note, final agenda, invitation of Agricultural/DISCOM officials, and nomination of participants not less than 50 Nos. and a maximum of 100 Nos. on the day of the workshop.
14. Arrangement of good quality training kits which shall include a folder/bag printed training material, and necessary stationary items for the participants in consultation with SDA and along with hard and soft copy of all relevant details and background of training should be provided to delegates and other higher officials.
15. Invitation of Officials from concerned stakeholders of Agriculture sector respective at program location and other officials for inaugural and Training sessions.
16. Registration, Feedback form and comparing during the training workshop. The same will required to submit in excel file as well for JREDA record purpose followed by the Outcome of the workshop and Feedback from farmers and delegates and on topics covered. Important points of the feedback received from the participants should be included in the report. Other relevant information and conclusion etc
17. Copy of attendance sheet comprise of name, village, contact details (mobile no. and email id), and Signature for farmers. For other participants, the sheet should also include designation and organization.
18. Photographs must be Geotagged (Photographs should include 2 photographs of participants, one or 2 photographs for inauguration of workshop by Chief Guest and photographs of trainer along with geo tagged location of plantation).
19. Bidder should ensure availability of sound system with one fix mike and 01 cordless mike (with spare battery), a projector for the presentation etc. bidder or its team members should have laptops for the Power point presentation during the training workshop.
20. Banner to be placed on wall of the hall. A small banner/standee may also be placed outside the event location to guide the participants. It will be more appropriate that the bidder arrange for a lamp with 4-5 wicks so as Chief Guest may light the lamp during inauguration of training workshop.
21. The bidder shall submit three (03 Nos.) sets of color reports to JREDA within 15 days of completion of training program along with the original feedback forms, attendance sheets. The report shall contain the list of the participants and their contact details, assessment report, photographs, FAQ, etc. in both soft and hard copy format. In order to engage the targeted audience throughout the training sessions, video contents finalized in consultation with the SDA to be included in the training programmes.

Major Stakeholders:

- Farmers / State Farmers Association/Sarpanch/Panch/Village official/Mukhiya

- Senior / Mid-Level DISCOM Officials of the State.
- Officials of the State Agriculture Department.
- State origin pump set manufacturers
- Local Service Providers / Pump sets Dealers
- Horticulture Department
- State Electricity Regulatory Officials, etc.
- JREDA Official, Jharkhand DISCOMs Official, Rural Development Department.
- Pump manufacturers, State origin pump sets manufacturers/ Local Service Providers (LSPs), Technology suppliers
- Indian Council of Agricultural Research (ICAR)
- Public Representatives like Gram Pradhan, etc., Agricultural Technology Application Research Institute (ATARI), Krishi Vigyan Kendras (KVKs), etc.
- all districts, blocks, Gram Panchayats, Krishi Vigyan Kendras (KVKs), Adarsh Gram, Model Villages, Swachh Panchayats, climate-responsive villages, agricultural clusters, rural institutions, and other relevant rural development and agricultural intervention areas across the State of Jharkhand. The program shall cover and benefit farmers, Farmer Producer Organizations (FPOs), Self-Help Groups (SHGs), rural entrepreneurs, Panchayati Raj Institutions (PRIs), agricultural cooperatives, local community organizations, village-level institutions, line departments, extension workers, and all agriculture and allied sector stakeholders associated with farming, irrigation, renewable energy, rural livelihoods, climate resilience, natural resource management, and sustainable agricultural development in the state.

Major Participants (About 70%) among the target audience will be Farmers. The total number of participants will not be less than 50 Nos. approx. Not more than 100 Nos. in any case, the bidder has to contact the head/ contact person of the concern Krishi Vigyan Kendra (KVK) and stakeholders, for seeking assistance for the invitation of farmers for the program, venue and other logistics for the successful organization of training workshops.

Submission of Reports to Jharkhand Renewable Energy Development Agency:

1. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms, Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.
2. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:

- Programme agenda and schedule;
- Details of participants and resource persons;
- Session-wise proceedings and outcomes;
- Photographic documentation;
- Media coverage, if any;
- Summary of quiz/competition results and prize distribution details;
- Feedback analysis and assessment outcomes;
- Key observations, recommendations, and impact assessment.

4. The Bidder shall submit three (03) copies of the Final Completion Report comprising:

- Two (02) Hard Bound Copies;
- One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

5. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:

- Full-length video recording of the event proceedings;
- Geo-tagged and time-stamped high-resolution photographs;

- Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
- Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.

6. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external Hard Disk Drive (HDD) of appropriate storage capacity.
7. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category 2

Capacity Building through Animated, 3D, and Technical Short Films on Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development.

Scope of work for under Capacity Building through Animated, 3D, and Technical Short Films on Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development in Jharkhand State

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The agencies shortlisted under Engagement of Agencies to Conduct Capacity Building by Technical Short film under Agriculture and Municipal Stakeholders under Demand Side Management (DSM) in the state of Jharkhand and preparation of the Detailed Project Report:

1. The bidder must put together a panel of experts and stakeholders to supply and enrich the statistical and technological data related to Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development to proceed with the advancements and technology changes.
2. The expert panel, ESCO and concerned stakeholders must have a strong background in energy conservation and efficiency in the Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development, which is a growing, efficient transition and a future growing requirement under climate change. The bidder shall submit details of the advisory panel, including their name, designation, email address, phone number, and department/Firm, must be submitted by the bidder.
3. The bidder shall submit the detailed final and raw editable formats and finalized the film and data in Hindi & English along with the provision to include the multiple aspects related to Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development and it is suggested to include the new technology and updates currently happening in climate change etc. along with consultation of JREDA.
4. The task for which the bidder is bidding. The bidder must emphasize the advantages of energy conservation techniques and promote sustainable habits; the project seeks to inform and increase public knowledge of them. The videos can be screened at local gatherings, on the internet, and through outreach initiatives for the community.

The primary objectives of the video awareness/animation film are as follows:

- Educate residents about energy efficiency and conservation practices in the field of Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development.
- Raise awareness about the environmental and economic benefits of Demand Side Management and encourage the adoption of energy-saving behaviours and technologies.
- Empower individuals to make informed decisions regarding their energy usage to make wise choices about how much energy the people must use.
- Promote the local community's commitment to sustainability and environmental responsibility.

Scope of Work: Producing Video Awareness Film for Demand Side Management, followed by Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development.

Overview of the Project:

Jharkhand Renewable Energy Development Agency (JREDA) intends to engage a professional filmmaker/production agency for conceptualization, scripting, production, editing, and delivery of high-quality awareness and outreach films focusing on sustainability, renewable energy, energy efficiency, decarbonization, climate change, Demand Side Management (DSM), and other best practices related to energy conservation and sustainable development.

The agency shall develop cinematic-quality audio-visual content in high-definition/4K resolution to ensure superior visual and communication standards suitable for broadcast and digital dissemination across television channels, PVR cinemas, YouTube, social media platforms, digital campaigns, public awareness drives, and other advertising and outreach platforms.

The scope shall include the production of one comprehensive awareness film 1 Nos. (One) 10 minutes duration in Hindi, English, and/or relevant regional/local languages, along with a minimum of 10 Nos. (10) Thematic short films/ad films/Reels of approximately 30 seconds each derived from the primary film content for targeted promotional and awareness campaigns.

The films shall include professional scripting, storyboarding, voice-over, subtitles, animation/3D visualization, motion graphics, drone videography (wherever required), stakeholder interviews, field demonstrations, and impact-oriented messaging to maximize public engagement and awareness generation. The final content shall align with the sustainability, climate-resilient, and energy transition objectives of JREDA and shall be suitable for large-scale public outreach, behavioural change communication, and awareness campaigns across the State of Jharkhand.

Objective and Topics identification: The primary goal of the video awareness film is to educate and raise awareness about various topics, promoting positive social change and engagement. The film should be captivating, informative, and visually appealing to effectively engage the target audience and promote Energy Efficiency activities and other awareness capacity building under various heads of the Bureau of Energy Efficiency for the state of Jharkhand. Simultaneously, the bidder is tasked with conducting the necessary research and studies for technical aspects, as well as background preparation work to ensure a comprehensive and well-informed approach.

Jharkhand Renewable Energy Development Agency (JREDA) shall provide the indicative themes/topics related to Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, Renewable Energy, and other best practices for sustainable development. The shortlisted agency shall undertake topic shortlisting, conceptualization, scripting, storyboarding, and finalization of the film content in close consultation with JREDA to ensure alignment with project objectives, emerging technologies, public awareness requirements, and state-specific sustainability priorities in consultation with JREDA as well.

Deliverables: The following deliverables are expected as part of the short film project:

1. A professionally produced video awareness film in 4K resolution.
2. **1 Nos. (One) 10 minutes duration in Hindi/English, and/or relevant regional/local languages, along with a minimum of 10 Nos. (10) thematic short films/ad films/Reels of approximately 30 seconds**
3. Edited film versions suitable for different platforms and advertising sources, including YouTube, TV, and PVR.
4. Final video files in multiple formats compatible with different devices and playback systems.
5. Licensing or copyright permissions for any external content used in the film, if applicable.
6. Script development, including concept creation, research, and content writing.
7. Storyboarding and visualization of the film.
8. Casting and selection of on-screen talent, if required.
9. Location scouting and securing necessary permits.
10. Planning and scheduling of the production process.
11. On-location or studio filming, as per the script requirements. Set design, lighting, and sound setup.
12. Filming interviews, dramatizations, demonstrations, or any other required footage.
13. Capturing additional B-roll footage to enhance the visual storytelling.
14. Video editing, including colour grading, audio mixing, and special effects.

15. Selection and integration of appropriate background music and sound effects.
16. Creation of title sequences, lower thirds, and other graphic elements.
17. Finalizing different versions of the film for various platforms and advertising sources.
18. Review and approval process, incorporating feedback from the stakeholders.
19. An animation series consisting of short videos that visually illustrate energy-saving tips, techniques, and technologies.
20. Edited versions of the films and animations suitable for online platforms, local events, and community outreach programs.
21. Research local energy efficiency initiatives, success stories, and best practices.
22. Planning and scheduling the production process, including location scouting and securing necessary permits.
23. High-quality animation videos and video clips that effectively convey the awareness messages.
24. Engaging scripts and storyboards for each video, ensuring a clear and compelling narrative.
25. Professionally executed animations, including characters, objects, backgrounds, and visual effects.
26. Voiceover or narration recordings, synchronized with the animations.
27. Animation production, including creating character movements, visual effects, and scene transitions.
28. Recording voiceover or narration, ensuring clear and professional audio quality.
29. Incorporating sound effects and background music to enhance the overall production value.
30. Regular progress updates and reviews to ensure alignment with the desired visual style and quality.
31. The bidder needs to take the interview bits of the official of JREDA to include the same in the media awareness clip without adding any extra cost.

Submission of the completed video awareness film along with all related deliverables:

1. Handover of the master, dubby file, language version, HD format, and project files, including raw footage, soundtracks, and design assets to the JREDA on a reputed Hard disk of 5TB or above.
2. Colour grading and correction to improve and enhance consistency and visual appeal.
3. Film including text overlays, captions (includes English, Hindi, and other local languages as per JREDA required), and other visual components to help emphasize and provide clarity for important points to deliver the key message of the awareness film.
4. The bidder created scripts and developed inventive concepts before executing exact recording and photography for awareness, ending in video completeness via post-production and proper editing.
5. Offering support for content creation and research, based on Agriculture Demand Side Management provisions.
6. Contributing to the script for the awareness film production of Agriculture Demand Side Management and approving important artistic choices.

Category 3
Municipal Demand Side Management (MuDSM)

Scope of work for Municipal Demand Side Management (MuDSM) Programme in Jharkhand

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainability, energy efficiency, decarbonization, climate resilience, resource optimization, and circular economy principles throughout the entire project lifecycle, including planning, design, execution, implementation, documentation, reporting, monitoring, capacity building, and post-project activities.

All engaged agencies shall comply with applicable national/state sustainability frameworks, Energy Conservation Building Codes (ECBC), Bureau of Energy Efficiency (BEE) guidelines, climate-responsive urban development principles, green procurement practices, and Municipal Demand Side Management (MuDSM) provisions to support low-carbon, energy-efficient, and environmentally sustainable urban infrastructure development in the State of Jharkhand.

The agencies shall also ensure the adoption of environmentally responsible practices such as:

- Energy-efficient technologies and smart automation systems
- Reduction of greenhouse gas (GHG) emissions and carbon footprint
- Promotion of renewable energy integration and electrification
- Resource-efficient water and waste management systems
- Sustainable mobility and electric vehicle ecosystem promotion
- Digital energy monitoring, smart metering, and IoT-based systems
- Green procurement and sustainable material usage
- Climate adaptation and urban heat island mitigation measures
- Circular economy approaches, including reuse, recycling, and waste-to-resource initiatives
- Capacity building, awareness generation, and stakeholder engagement for sustainable urban governance

The Engagement of Agencies to Conduct Capacity Building Training and awareness program on Energy Conservation and Efficiency in the Municipal Sector under Municipal Demand Side Management (MuDSM) to cater for all Jharkhand ULBs in 24 Nos. districts in the state of Jharkhand and the preparation of a Detailed Project Report.

Location for training programme:

Sl. No.	District	No. of ULBs	Name of Department / ULB
1	Ranchi	10	i)Urban Development & Housing Dept.
			ii)Directorate of Municipal Administration
			iii)State Urban Development Agency
			iv)Jharkhand State Housing Board
			v)JUIDCO
			vi)JUTCOL
			vii)Bundu Nagar Panchayat
			viii)Ranchi Municipal Corporation
			ix)RRDA

			x)Ranchi Smart City Corporation Limited
2	Bokaro	2	i)Chas Municipal Corporation
			ii)Phusro Nagar Parishad
3	Chatra	2	i)Bachra Nagar Panchayat
			ii)Chatra Nagar Parishad
4	Deoghar	2	i)Deoghar Municipal Corporation
			ii)Madhupur Nagar Parishad
5	Dhanbad	2	i)Chirkunda Nagar Parishad
			ii)MADA
			iii)Dhanbad Municipal Corporation
6	Dumka	2	i)Basukinath Nagar Panchayat
			ii)Dumka Nagar Parishad
7	East Singhbhum	5	i)Adityapur Municipal Corporation
			ii)Chakulia Nagar panchayat
			iii)Jamshedpur NAC
			iv)Jugsalai Nagar Parishad
			v)Mango Municipal Corporation
8	Garhwa	3	i)Garhwa Nagar Parishad
			ii)Manjhiaon Nagar Panchayat
			iii)Nagar Uttari Nagar Panchayat
9	Giridih	3	i)Badaki Saraiya Nagar Panchayat
			ii)Dhanvar Nagar Panchayat
			iii)Giridih Municipal Corporation
10	Godda	1	i)Godda Nagar Parishad
11	Gumla	1	i)Gumla Nagar Parishad
12	Hazaribag	1	i)Hazaribagh Municipal Corporation
13	Jamtara	2	i)Jamtara Nagar Panchayat
			ii)Mihijham Nagar Parishad
14	Khunti	1	i)Khunti Nagar Panchayat
15	Koderma	3	i)Domchanch Nagar Panchayat
			ii)Jhumritilaiya Nagar Parishad
			iii)Koderma Nagar Panchayat
16	Latehar	1	i)Latehar Nagar Panchayat
17	Lohardaga	1	i)Lohardaga Nagar Parishad
18	Pakur	1	ii)Pakur Nagar Parishad
19	Palamu	4	i)Bishrampur Nagar Parishad
			ii)Chhatarpur Nagar Panchayat
			iii)Hussainabad Nagar Panchayat
			iv)Medininagar Municipal Corporation
20	Ramgarh	1	i)Ramgarh Nagar Parishad
21	Sahibganj	3	i)Barharwa Nagar Panchayat
			ii)Rajmahal Nagar Panchayat

			iii)Sahibganj Nagar Parishad
22	Saraikela	2	i)Kapali Nagar Parishad
			ii)Saraikela Nagar Panchayat
23	Simdega	1	i)Simdega Nagar Parishad
24	West Singhbhum	2	i)Chaibasa Nagar Parishad
			ii)Chakradharpur Nagar Parishad

Target Audience

The Bidder shall coordinate with the concerned Nagar Nigam for invitations, venue arrangements, participant coordination, and other logistics for the successful organization of the training workshops. The Bidder shall also coordinate with all Nagar Palikas and Nagar Panchayats under the respective district to ensure participation of relevant officials. The workshop participants shall include Officers, Engineers, Junior Engineers, and other technical officials from Nagar Nigam, Nagar Palikas, Nagar Panchayats, Jal Nigam, and Jal Sansthan, along with technology providers, consultants, sector experts, and other relevant stakeholders associated with urban infrastructure, sustainability, and energy efficiency initiatives.

Chief Guest

The workshops may be inaugurated by Hon'ble public representatives such as MLA, MLC, MP, Mayor, or Zila Panchayat Adhyaksh. In their absence, the inauguration may be conducted by the District Magistrate, Chief Development Officer, Municipal Commissioner, or other senior officials of the concerned department/ULB.
The Bidder shall coordinate all protocol, invitation, and logistical arrangements for the dignitaries and ensure proper documentation and smooth conduct of the workshop.

Professional for providing training in Workshops:

The training shall be conducted by qualified domain experts such as Master Trainers, Certified Energy Auditors, Accredited Energy Auditors, GHG Lead Auditors/Lead Verifiers, IGBC Accredited Professionals (IGBC-AP), GEM Certified Professionals (GEM-CP), GRIHA Certified Professionals (GRIHA-CP), sector experts, or other technically competent professionals having relevant experience in energy efficiency, sustainability, decarbonization, green buildings, and climate-related sectors only.

Topics to be Covered under Municipal Demand Side Management (MuDSM)

The training, awareness, and capacity-building programs under MuDSM shall broadly cover, but not be limited to, the following areas:

1. **Energy-Efficient Municipal Infrastructure**
   - Energy-efficient street lighting systems with CCMS, adaptive lighting controls, and smart poles
   - Energy-efficient motors, pumping systems, sewage pumping systems, and water supply infrastructure
   - Selection and procurement of BEE Star Rated motors, pumps, and electrical equipment
2. **Demand Side Management (DSM) Fundamentals**
   - Introduction, objectives, and importance of DSM
   - Municipal energy optimization strategies and load management
   - National and international best practices and case studies of successful MuDSM implementations
3. **Energy Efficiency and Conservation**
   - Energy conservation techniques in municipal operations
   - Energy-efficient public buildings, offices, water systems, and urban utilities
   - Retrofitting and modernization of existing infrastructure
4. **Energy Auditing & Digital Energy Management**
   - Conducting energy audits and benchmarking
   - Identification of energy-saving opportunities and retrofits
   - Smart meters, AMI systems, EMS platforms, SCADA, IoT, and AI-based monitoring systems
5. **Renewable Energy & Decarbonization**
   - Solar rooftop systems, solar water pumping, and decentralized renewable energy systems
   - Integration of renewable energy in municipal infrastructure

- Net-zero and low-carbon municipal infrastructure planning

6. **Sustainable Buildings & Climate-Responsive Infrastructure**
   - Green building concepts, ECBC compliance, and sustainable construction materials
   - Smart building technologies and automation systems
   - Urban heat island mitigation, cool roofs, passive cooling, and climate-resilient infrastructure
7. **Water-Energy Nexus**
   - Efficient water supply and wastewater management systems
   - Reduction of NRW (Non-Revenue Water) and energy losses
   - Water conservation and energy-saving measures in municipal services
8. **Waste Management & Circular Economy**
   - Waste-to-energy technologies and biomethanation systems
   - Scientific waste segregation, recycling, composting, and resource recovery
   - Circular economy approaches for urban local bodies
9. **Efficient Lighting & HVAC Systems**
   - LED and smart lighting systems
   - Energy-efficient HVAC optimization and maintenance practices
   - Sensor-based automation and occupancy controls
10. **Sustainable Mobility & Electric Vehicles**
    - Electric vehicles (EVs), e-buses, and charging infrastructure
    - Sustainable urban transport systems and fleet electrification
    - Battery management and EV ecosystem planning
11. **Smart Grids & Smart Cities**
    - Smart grid technologies and advanced metering infrastructure
    - Integration of DSM with Smart City initiatives
    - Data analytics and digital governance for urban utilities
12. **Policy, Financing & Regulatory Framework**
    - BEE guidelines, DSM regulations, and national/state energy policies
    - Financing models, ESCO mechanisms, PPP models, and carbon financing opportunities
    - Subsidies, incentives, and climate finance mechanisms
13. **Monitoring, Verification & Reporting**
    - Energy performance indicators and benchmarking
    - Monitoring, verification, and reporting (M&V) protocols
    - Sustainability reporting and carbon accounting mechanisms
14. **Stakeholder Engagement & Capacity Building**
    - Public awareness campaigns and behavioral change initiatives
    - Community participation and institutional coordination
    - Training modules for municipal officials and technical staff
15. **Emerging Technologies & Innovation**
    - IoT, AI, digital twins, GIS mapping, and predictive energy analytics
    - Smart sensors and integrated command-and-control systems
    - Future trends in sustainable urban infrastructure and climate-smart cities
16. **Project Planning & Risk Management**
    - Planning, implementation, and management of MuDSM projects
    - Risk assessment, resilience planning, and mitigation strategies
    - Performance-based implementation and lifecycle cost analysis.
17. **Energy Conservation and Sustainable Building Code (ECSBC) for commercial and residential**
18. **Case studies for the best practices and real time implementation model implemented to promote sustainability and climate change**
19. **Energy Efficiency and Conservation Techniques**
    - Overview of energy efficiency principles.
    - Methods for reducing energy consumption in municipal operations.
    - Best practices for energy conservation in public buildings and facilities.
20. **Carbon Credit and CCST schemes of carbon credit and its trading**
21. **Any other scheme and topics for Municipal other demand side management**

Detailed Scope of Work:

- Finalization of agenda for the workshops in consultation with SDA.

- The venue for the Training shall be preferring only 3/4-star hotel available in said location which should be finalized along with consultation with JREDA. Organizing all logistics related to workshop like Venue 3 / 4-star hotel, Food (lunch, tea snacks, high tea for chief guest etc.), press release, etc. duly approved by SDA.
- The Bidder needs to arrange the venue, Logistics, and Mementos, and facilitate Guest.
- Arrangement of minimum 02 speakers (well versed in subjects to be covered) for each workshop the trainer must Master Trainer/ Energy Auditor and Sector expert having vast experience in same field.
- Informing the participants about the workshop and continuous follow up with them.
- Seating arrangement for about Maximum 50 Nos. personnel shall be required in each workshop.
- The Bidder shall provide Certificates of Participation with certificate holders and mementos to all participants.
- The Bidder shall provide customized training kits to participants in consultation with SDA, including a laptop bag, hardcopy and softcopy training materials (customized pen drive), writing pad, pen, and other required stationery items. High-quality banners, standees, English and Hindi printed training materials, and customized training folders shall also be arranged during the workshop.
- The Bidder shall arrange mementoes, bouquets, and felicitation shawls for the Chief Guest, SDA Officials, and BEE Officials.
- The Bidder shall arrange an inaugural ceremonial lamp with 4–5 wicks for lamp lighting by the Chief Guest during the workshop inauguration.
- The Bidder shall ensure stakeholder engagement activities, including quizzes and prizes for five winners (such as pen drives, power banks, portable lamps, etc.), subject to SDA approval.
- The Bidder shall arrange accommodation, travel, and logistics support for two JREDA Officials and two BEE Officials during the event.
- The Bidder shall arrange nameplates/name boards for all speakers and dignitaries.
- The Bidder shall coordinate and invite potential speakers from large-scale industries, industry associations, empanelled financial institutions, SIDBI, IREDA, multilateral organizations (World Bank, KfW, JICA, ADB), public sector banks, public financial institutions, NPC, AEEE, NPTI, EESL, and other relevant organizations.
- The Bidder shall invite delegates from financial institutions, funding agencies, and other relevant stakeholders for participation in the programme.
- Registration and compering during the workshop.
- The agency shall be responsible for printing and installation of backdrop banners of approximately 10 ft × 6 ft or other appropriate dimensions, mounted frame structure instead of wall hanging/pasting, along with arrangement of podium stands and distribution of informational pamphlets/IEC materials for farmers and stakeholders. The design, content, branding, and layout of the backdrop and related materials shall be finalized in consultation with Jharkhand Renewable Energy Development Agency (JREDA).
- Arrangement of projector, projector screen of appropriate size for professional display and laptops at the Venue for delivering presentations.
- Printing of feedback forms in simple Hindi/English language, background note, final agenda, invitation of Agricultural/DISCOM officials, and nomination of participants 50 Nos. on the day of workshop.
- Arrangement of good quality training kits which shall include a Laptop folder/bag printed training material, and necessary stationary items for the participants in consultation with SDA and along with hard and soft copy of all relevant details and background of training should be provided to delegates and other higher officials.
- Invitation of Officials from concerned stakeholders of Municipal sector respective at program location and other officials for inaugural and Training sessions.
- **Registration, Feedback form and comparing during the training workshop. The same will required to submit in excel file as well for JREDA record purpose followed by the Outcome of the workshop and Feedback from farmers and delegates and on topics covered. Important points of the feedback received from the participants should be included in the report. Other relevant information and conclusion etc.**
- Copy of attendance sheet comprise of name, contact details (mobile no. and email id), and Signature for delegates.
- Photographs must be Geotagged (Photographs should include 2 photographs of participants, one or 2 photographs for inauguration of workshop by Chief Guest and photographs of trainer along with geo tagged location of plantation).
- Bidder should ensure availability of sound system with one fix mike and 01 cordless mike (with spare battery), a projector for the presentation etc. bidder or its team members should have laptops for the Power point presentation during the training workshop.

- Banner to be placed on wall of the hall. A small banner/standee may also be placed outside the event location to guide the participants. It will be more appropriate that the bidder arrange for a lamp with 4-5 wicks so as Chief uest may light the lamp during inauguration of training workshop.
- The Content for the workshop/Training program shall be properly designed as PPT and could be explained in the language preferred by the participants as the participants like pump operators, Equipment operators to Supervisory cadre and the officials of Municipal corporation/Municipalities will be involved in the workshop.
- Hardcopies of training material is to be submitted to all participants including JREDA.
- Arrangement of good quality training kits which shall include a Good Quality Laptop folder/bag, training material, and necessary stationary items for the participants in consultation with SDA.
- Possible Energy Efficiency projects and funding opportunities for implementation of Energy Efficiency projects in the segments of Water supply, Sewage Treatment and Buildings.
- Basic facilities on the stage to be organized. Bidder should ensure availability of sound system with one fix mike and 01 cordless mikes (with spare battery), a projector for the presentation etc. Bidder or its team members should have laptops for the Power point presentation during the training workshop. A banner/backdrop to be placed on wall of the hall. A small banner/standee may also be placed outside the venue to guide the participants. It will be more appropriate that the bidder arrange for a lamp with 4-5 wicks so as Chief Guest may light the lamp during inauguration of training workshop.
- Photography of the event.
- To engage the targeted audience throughout the training sessions, video contents finalized in consultation with the SDA will be included in the workshops.
- Submission of a report on the proceedings of each workshop in hard and soft format at the end of each event, covering the following related documents to SDA.

Submission of Reports to Jharkhand Renewable Energy Development Agency:

3. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms, Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.
4. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:
    - Programme agenda and schedule;
    - Details of participants and resource persons;
    - Session-wise proceedings and outcomes;
    - Photographic documentation;
    - Media coverage, if any;
    - Summary of quiz/competition results and prize distribution details;
    - Feedback analysis and assessment outcomes;
    - Key observations, recommendations, and impact assessment.
5. The Bidder shall submit three (03) copies of the Final Completion Report comprising:
    - Two (02) Hard Bound Copies;
    - One (01) Spiral Bound Original Copy.

   The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.
6. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:
    - Full-length video recording of the event proceedings;
    - Geo-tagged and time-stamped high-resolution photographs;
    - Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
    - Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.

7. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external Hard Disk Drive (HDD) of a minimum 2 TB storage capacity.
8. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category 4

Engaging an Agency for Conducting Market Surveillance for the Standards and Labelling (S&L) program of BEE for the state of Jharkhand

Scope of work for the Engagement of the Agency for Conducting Market Surveillance for Standards and Labelling (S&L) program for the state of Jharkhand

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Engagement of Agencies for Conducting Market Surveillance for **a target sample of 2500 Nos. Approx distributed among 24 Districts of Jharkhand** for BEE star-rated appliances for Standards and Labelling (S&L) program of Bureau of Energy Efficiency (BEE) for the state of Jharkhand. The bidder shall submit the approach and methodology against the execution of Conducting Market Surveillance for Standards and Labelling (S&L) program of BEE for the state of Jharkhand.

Note: The bidder must need to follow the updated guidelines provided by the Bureau of Energy Efficiency (BEE) regarding the Sample Distribution, Approach for the Survey, Quantitative survey, Preparation for Conducting the Market Surveillance, Questionnaire for conducting Market Surveillance, Survey procedure at a Retail Store, Compliance requirement, Label Verification Questionnaire, Market Surveillance report template, Checklist for Inspection under S&L Programme, Format for Inspection Report, Operational Status of Market Surveillance. The aforementioned approach and methodology shall be finalized with shortlisted agencies in coordination with SDA and BEE directions.

Background:

The Government of India set up the Bureau of Energy Efficiency (BEE) in March 2002 under the provisions of the Energy Conservation Act (EC Act), 2001, with the primary objective of promoting efficient use of energy and energy conservation. Under the provisions of this Act, Standards and Labelling (S&L) is one of the major thrust areas for improving the energy efficiency of appliances and equipment. Launched in May 2006, the key objective of the S&L program is to provide consumers with an informed choice about energy saving and thereby the cost-saving potential of appliances and equipment. The program currently includes 38 products, of which 16 are under the mandatory labelling program. A key requirement of the S&L program is that the products registered under the program should display the correct label and be distinctly visible at the point of sale.

Robust Monitoring, Verification and Enforcement (MVE) is an integral part of S&L programs as it minimizes the risk of false and inaccurate declarations of energy performance on the product, thereby ensuring the integrity of the labelled products, but also builds consumer confidence in the program. Market surveillance and check testing, the key components of the MVE process, are critical to ensure that all the labelled products comply with the requirements set out in the relevant product schedule for voluntary products and notification for mandatory products. It encompasses several steps; some of the salient steps are mentioned below-

- The products in the market covered by mandatory labelling are registered and display the BEE star label.
- Fake/spurious labels are not being used on products.
- BEE star labels are displayed correctly on appliances as specified in the relevant product regulation.
- Energy efficiency levels and other product characteristics mentioned on the label are consistent with the registered model in the BEE's registration database; and
- Products with expired labels are not available for sale
- Level of understanding of retailers about labelled appliances

A holistic compliance framework bolsters the credibility of government energy efficiency programs, protects consumers, and creates a level playing field for suppliers of energy- efficient and quality products. Therefore, it is planned to engage a bidder to conduct label verification and check testing for the mandatory appliances covered in the S&L program in collaboration with the relevant state-designated agencies (SDAs).

Objective of Market Surveillance:

The key objectives of the proposed activity include:

- To assess the level of compliance with the display of labels on the products under the S&L program,
- Establish the methodology and framework for conducting label verification in the states, and
- Capacity building of State Designated Agencies (SDA) personnel to implement MV&E activities on a continual basis.

- The activities need to be taken care of by the Mobile application prescribed by the BEE and other provisions and measures suggested by BEE accordingly

Professional for providing training in Workshops:

The training shall be conducted by qualified domain experts such as Master Trainers, Certified Energy Auditors, Accredited Energy Auditors, GHG Lead Auditors/Lead Verifiers, IGBC Accredited Professionals (IGBC-AP), GEM Certified Professionals (GEM-CP), GRIHA Certified Professionals (GRIHA-CP), sector experts, or other technically competent professionals having relevant experience in energy efficiency, sustainability, decarbonization, green buildings, and climate-related sectors only.

Market Surveillance Scope of Work:

The bidder will be responsible for successfully executing the following activities and tasks as part of the study. Execution of all activities and tasks must be conducted in close consultation with BEE/SDA.

In-store surveillance will be conducted through physical verification of labels on the products available in various sales outlets/stores/retailers in the states in India. The verification shall include checking proper display of the label on the product, packaging and promotional material, manufacturers' catalogue, etc., available at the sales outlets and analyzing awareness levels of the retailer/supplier/dealers about the purpose, accurate presence of labels and correct placement of the label on the product. Physical verification of the products in store to ensure proper display of label and promotional materials, and verification team should be carried out along with the concerned SDA officials. An interview of sales staff/store owner to assess their awareness levels, perception towards the labelling program shall be conducted using a structured questionnaire, if possible.

The surveillance will be conducted in the following types of retailers: department stores, specialist retailers, electrical stores, chains of stores, and franchise stores:

a. Single and multi-brand (chain) stores
b. Smaller independent stores

The label verification will focus on **mandatory list products** that are sold directly at the consumer end **(Ceiling Fans, Direct Cool Refrigerator, Frost Free Refrigerator, Room Air Conditioner-Fixed Speed, Room Air Conditioner - Variable Speed, Water Heater, Colour TV, UHD TV, Washing Machine, TFL and LED Lamp). The final and updated list will be provided after shortlisting the bidder, along with the consultation of BEE.**

Task I: Develop a label verification plan

- Develop a district-wise sampling plan required to cover 11 products.
- Preparation of questionnaire and checklist for retailers with parameters to be checked to facilitate data collection in the identified stores.
- Field visits to be planned in consultation with SDAs.
- Coordinate with identified retailers/stores/dealers in all cities for smooth implementation of the market surveillance.

Task 2: Verification of labelled products

- Fair understanding of national standard and labelling program, scope of products covered, mandatory regulations, established policies and inspecting rules for label verifications, large- and small-scale manufacturers registered, including model details of each appliance.

- Collect the label details of 11 appliances in the prescribed questionnaire -capturing all relevant data in the online tools related to the label that includes star level, energy performance data, label period, appliance type, product name/description, model number, brand, year of manufacturing and other technical details along with a snapshot of the product along with the star label.

- Hired bidder needs to visit retailers or stores in each district for label verifications and shall try to cover all mandatory products in each retailer/store/dealer. Efforts shall be made to ensure that the label verification is not conducted on the same model while carrying out the label verification process across the states.
- Shall also identify any models covered in 11 mandatory products that are sold without star labels, fake labels, improper representation of labels, expired labels and any discrepancies as specified in mandatory regulations.
- Assess the role of manufacturers and retailers/stores/dealers in affixing the labels on the mandatory products and the procedure adopted while replacing labels during the upgradation of energy efficiency policies.

Task 3: Developing a report and analysis of label verifications

- The verified samples shall be cross-checked with the BEE registration and database to identify the level of compliance, labelling issues identified, including damaged labels, no labels, obscured labels, and wrong labels on products.
- Provide a comprehensive analysis of overall compliance levels for each verified label in accordance with product type, national, state, and city-wise.
- Develop a report by reviewing the data based on compliance and non-compliance levels against the existing regulation and any scope of revising or amending the regulation to bridge the gap, and analysis of market findings.

Submission of Reports to Jharkhand Renewable Energy Development Agency:

1. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms, Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.
2. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:
    - Programme agenda and schedule;
    - Details of participants and resource persons;
    - Session-wise proceedings and outcomes;
    - Photographic documentation;
    - Media coverage, if any;
    - Summary of quiz/competition results and prize distribution details;
    - Feedback analysis and assessment outcomes;
    - Key observations, recommendations, and impact assessment.
3. The Bidder shall submit three (03) copies of the Final Completion Report comprising:
    - Two (02) Hard Bound Copies;
    - One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

4. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:
    - Full-length video recording of the event proceedings;
    - Geo-tagged and time-stamped high-resolution photographs;
    - Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
    - Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.
5. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external Hard Disk Drive (HDD) of a minimum 2 TB storage capacity.
6. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category 5

Retailers Training Programme under the Provision of Standards and Labelling

Scope of work for Retailers Training Programme under the Provision of Standards and Labelling

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Engagement of Agencies for Conducting Retailers Training Programme under the Provision of Standards and Labelling for the state of Jharkhand.

Background

The advent of the Energy Conservation Act in 2001 and the establishment of the Bureau of Energy Efficiency (BEE) as a statutory body at the central level to facilitate the act have led to the genesis of the state development agencies (SDA). These agencies are set up to facilitate the implementation of the Act and the promotion of energy efficiency in the states. The emphasized efforts to involve the stakeholders to ensure an accelerated and sustained adoption of energy efficiency measures in all sectors.

Professional for providing training in Workshops:

The training shall be conducted by qualified domain experts such as Master Trainers, Certified Energy Auditors, Accredited Energy Auditors, GHG Lead Auditors/Lead Verifiers, IGBC Accredited Professionals (IGBC-AP), GEM Certified Professionals (GEM-CP), GRIHA Certified Professionals (GRIHA-CP), sector experts, or other technically competent professionals having relevant experience in energy efficiency, sustainability, decarbonization, , green buildings, and climate-related sectors only.

Objective of Retailer Training Programme

JREDA has intended to conduct a retailer training programme in Jharkhand State to reach out to a large consumer audience to spread awareness on the savings from star-rated appliances. The main objective of this programme is to organize workshops and impart training to the authorized trader/seller. A comprehensive awareness programme will support and reinforce the salesperson to briefly explain and convince customers about the benefits of Star Rated Appliances. It will also increase the penetration of star-rated products in the market.

S&L is thus a critical cornerstone for India's energy efficiency initiatives. S&L, along with other related policies and programmes, will allow India to reduce the energy required to grow its economy over a period, resulting in enhanced social welfare for its citizens, less local and regional pollution, and lower carbon emissions. In the long run, it will lower the energy bills of consumers. The objective of these training programmes is to reach out to associations and other users for spreading information Nos. about BEE's Star label programme and create demand for Star-rated appliances.

Scope of Work

1. Bidder shall organize and conduct/implementation "Standards and Labelling Retailers Training Programme" in Jharkhand.
2. The agency shall be responsible for printing and installation of backdrop banners of approximately 10 ft × 6 ft or other appropriate dimensions, mounted on a frame structure instead of wall hanging/pasting, along with the arrangement of podium stands and distribution of informational pamphlets/IEC materials for farmers and stakeholders. The design, content, branding, and layout of the backdrop and related materials shall be finalized in consultation with Jharkhand Renewable Energy Development Agency (JREDA).
3. Arrangement of the projector, a projector screen of appropriate size for professional display and laptops at the Venue for delivering presentations.
4. Bidder would arrange the venue for conducting the training programme, and the venue should be at only a 3/4-star hotel or above (in case of non-availability of starred hotels, the best available venue in the city may

be considered with approval of JREDA). Working lunch, snack and tea 2 Times during the training shall be done by Bidder.

5. The agenda, venue and dates would be approved by JREDA/BEE before the commencement of the workshop. All these details would be shared by Bidder via mail to JREDA for prior approval.

6. The Bidder shall provide Certificates of Participation with certificate holders and mementoes to all participants.
7. The Bidder shall provide customized training kits to participants in consultation with SDA, including a laptop bag, hardcopy and softcopy training materials (32 GB customized pen drive), writing pad, pen, and other required stationery items. High-quality banners, standees, English and Hindi printed training materials, and customized training folders shall also be arranged during the workshop.
8. The Bidder shall arrange mementoes, bouquets, and felicitation shawls for the Chief Guest, SDA Officials, and BEE Officials.
9. The Bidder shall arrange an inaugural ceremonial lamp with 4–5 wicks for lamp lighting by the Chief Guest during the workshop inauguration.
10. The Bidder shall ensure stakeholder engagement activities, including quizzes and prizes for five winners (such as pen drives, power banks, portable lamps, etc.), subject to SDA approval.
11. The Bidder shall arrange accommodation, travel, and logistics support for two JREDA Officials and two BEE Officials during the event.
12. The Bidder shall arrange nameplates/name boards for all speakers and dignitaries.
13. The Bidder shall coordinate and invite potential speakers from large-scale industries, industry associations, empanelled financial institutions, SIDBI, IREDA, multilateral organizations (World Bank, KfW, JICA, ADB), public sector banks, public financial institutions, NPC, AEEE, NPTI, EESL, and other relevant organizations.
14. The Bidder shall invite delegates from financial institutions, funding agencies, and other relevant stakeholders for participation in the programme.
15. Printing of feedback forms in simple Hindi/English language, background note, final agenda, invitation of stakeholders and nomination of participants not less than 50 Nos. and a maximum of 100 Nos. on the day of the workshop.
16. Arrangement of good quality training kits, which shall include a Laptop folder/bag printed with training material, and necessary stationery items for the participants in consultation with SDA and Along with hard and soft copies of all relevant details and background of training should be provided to delegates and other higher officials.
17. Invitation of Officials from concerned stakeholders at the program location and other officials for the inaugural and Training sessions.
18. Registration, Feedback form and comparing during the training workshop. The same will be required to submit in an Excel file as well for JREDA record purposes, followed by the Outcome of the workshop and Feedback from farmers and delegates and on topics covered. Important points of the feedback received from the participants should be included in the report. Other relevant information and conclusion, etc
19. A copy of the attendance sheet comprises name, village, contact details (mobile no. and email id), and Signature for stakeholders, also includes designation and organization.
20. Additionally, a proposal is also sought to organize training programmes for Resident Welfare Societies (RWAs), Government educational institutions such as NITs, IITs, Government Engineering Colleges (GECs), and government institutes/offices.
21. The preferred location for organizing and conducting the “Standards and Labelling Retailers Training Programme” shall be finalized after work allotment and may vary depending on the requirements of JREDA.
22. Bidder shall coordinate with reputed authorized retailers of Jharkhand for their participation in the Retailer Training Programme. Bidder shall take prior approval of JREDA on the selection of invites/participants before finalization.
23. Bidder shall ensure that a minimum of 50 participants attend each training programme. The officials from JREDA, BEE and Bidder Expert shall not be considered in the headcount for the participants. The training should cover complete retailers from the state of Jharkhand, which
24. Bidder needs to cover the provisions of the Appliances in the Mandatory Scheme and the Appliances in the Voluntary Scheme.
25. Bidder shall design and develop an interactive training module, Approach and Methodology, Training material in Hindi/English, Pamphlet/leaflets (in English and Hindi), attendance sheets, feedback forms, quizzes, certificate of participation, posters for display at outlets, etc.
26. The interactive training module which should covers the following areas: (Format of interactive training module may be provided to the Bidder by JREDA/BEE) which includes About Training Programme, Star

Label & Appliances, Public Domain & Mobile App, Enforcement of S&L, Slide for MSME/SME and other manufacturers (both mandatory and voluntary schemes) of electrical appliances to educate them how that enrolled their product under S&L scheme.

27. Awareness about the BEE star label website, mobile application and S&L in print media.
28. The training module, approach and methodology, all the printed materials shall be shared by Bidder with JREDA and BEE in soft copies (Editable and PDF must be required) before commencement of the training programme. Any amendment required by JREDA/BEE shall be done by the Bidder.
29. The Boarding- Lodging and local travels may be provided for the two officials from BEE Bidder shall arrange the mementoes, boarding, lodging and local travels of the 2 officials from BEE, 2 officials.
30. Informing the participants about the programme & continuous follow-up to ensure good participation for the workshops.
31. The agency shall be responsible for printing and installation of backdrop **banners of approximately 10 ft × 6 ft** or other appropriate dimensions, mounted on a frame structure instead of wall hanging/pasting, along with the arrangement of podium stands and distribution of informational pamphlets/IEC materials for farmers and stakeholders. The design, content, branding, and layout of the backdrop and related materials shall be finalized in consultation with Jharkhand Renewable Energy Development Agency (JREDA).
32. Bidder shall prepare a training kit containing Banner, Standee, printed training material in English and Hindi, Good Quality Customized Training Laptop Folder kit, which shall include pen drive/ printed training material, notebook, pen and other necessary stationery items shall be provided to the participants during the workshops.
33. Bidder shall conduct a post-training quiz (simple multiple-choice questions, maximum 20 minutes duration) after the conclusion of each training programme. The set of questionnaires for the quiz should be developed and approved by the JREDA/BEE. 5-10 prizes may be awarded to the participants whoever gives the correct answer. Prizes shall be provided by Bidder to the winning participants. Prizes may include pen-drive (or) portable LED lamps (or) Power Banks, etc.
34. The Bidder needs to do Videography & Photography with HD quality of the complete event. Bidder needs to submit the Complete Video recording of the event to SDA – JREDA of a reputed make on a hard disk (2TB).
35. Collecting feedback from participants. Bidder shall analyze the stakeholder feedback received. The feedback will be taken from each participant through suitable forms for further improvement of the Retailer Training Programme.
36. All the original copies of feedback forms and attendance sheets would be submitted by the Bidder to JREDA after completion of each training programme. JREDA may revise the training programme as per the requirements/feedback.
37. The Bidder also needs to invite MSME/SME and other manufacturers (both mandatory and voluntary schemes), along with the retailers of electrical appliances, as notified under the Standards and Labelling program, to participate in capacity-building initiatives. This includes engaging with SME/MSME and other appliance manufacturers (both mandatory and voluntary schemes) in Jharkhand to encourage and guide them on how to enrol their products in the Star Rating Scheme. Additionally, the Bidder should provide training on how to apply for the star rating program under both the mandatory and voluntary schemes.

Submission of Reports to Jharkhand Renewable Energy Development Agency:

3. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms, Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.
4. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:
    - Programme agenda and schedule;
    - Details of participants and resource persons;
    - Session-wise proceedings and outcomes;
    - Photographic documentation;
    - Media coverage, if any;
    - Summary of quiz/competition results and prize distribution details;
    - Feedback analysis and assessment outcomes;

- Key observations, recommendations, and impact assessment.

4. The Bidder shall submit three (03) copies of the Final Completion Report comprising:
    - Two (02) Hard Bound Copies;
    - One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

7. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:
    - Full-length video recording of the event proceedings;
    - Geo-tagged and time-stamped high-resolution photographs;
    - Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
    - Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.
8. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external Hard Disk Drive (HDD) of a minimum 2 TB storage capacity.
9. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category 6

Investment Bazaar to Promote Energy Efficiency for the State of Jharkhand

Scope of work for Investment Bazaar to Promote Energy Efficiency for the state of Jharkhand

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

Professional for providing training in Workshops:

The training shall be conducted by qualified domain experts such as Master Trainers, Certified Energy Auditors, Accredited Energy Auditors, GHG Lead Auditors/Lead Verifiers, IGBC Accredited Professionals (IGBC-AP), GEM Certified Professionals (GEM-CP), GRIHA Certified Professionals (GRIHA-CP), sector experts, or other technically competent professionals having relevant experience in energy efficiency, sustainability, decarbonization, , green buildings, and climate-related sectors only.

The Engagement of Agencies for Conducting Investment Bazaar programme for the promotion of Energy Efficiency for the state of Jharkhand, and provide a detailed project report. The Bidder must carry out the following activities:

1. Bidder would arrange the venue for conducting the training programme, and the venue should be at only a 4/5-star hotel or above (in case of non-availability of starred hotels, the best available venue in the city may be considered with approval of JREDA). Working lunch, snack and tea 2 Times during the training shall be done by Bidder.
2. To keep the sitting arrangement (in round tables) for at least 50 participants during the events.
3. To organize the conference, which includes arrangements for the venue, projector and backdrop, and food. The venue should also cover the exhibition area and stalls. However, the cost of putting up material in stalls shall be borne by banks/NBFCs/OEMs.
4. The Bidder needs to coordinate with JREDA and also invite the financial committee (FI) of JREDA as well during the event.
5. The agency shall comply with all guidelines, notifications, amendments, and directives issued by the Bureau of Energy Efficiency (BEE) from time to time concerning amendments and provisions related to the Investment Bazaar initiative.
6. Integration with the existing schemes for Assistance in Deploying Energy Efficient Technologies in Industries & Establishments (ADEETIE) scheme.
7. The agency must have at least 1 financial expert and 1 Technical expert who will assist SDA in identifying the required bankable EE projects to be showcased during the investment bazaar event.
8. The Bidder shall provide Certificates of Participation with certificate holders and mementos to all participants.
9. The Bidder shall provide customized training kits to participants in consultation with SDA, including a laptop bag, hardcopy and softcopy training materials (32 GB customized pen drive), writing pad, pen, and other required stationery items. High-quality banners, standees, English and Hindi printed training materials, and customized training folders shall also be arranged during the workshop.
10. The Bidder shall arrange mementoes, bouquets, and felicitation shawls for the Chief Guest, SDA Officials, and BEE Officials.
11. The Bidder shall arrange an inaugural ceremonial lamp with 4–5 wicks for lamp lighting by the Chief Guest during the workshop inauguration.
12. The Bidder shall ensure stakeholder engagement activities, including quizzes and prizes for five winners (such as pen drives, power banks, portable lamps, etc.), subject to SDA approval.
13. The Bidder shall arrange accommodation, travel, and logistics support for two JREDA Officials and two BEE Officials during the event.
14. The Bidder shall arrange nameplates/name boards for all speakers and dignitaries.
15. The Bidder shall coordinate and invite potential speakers from large-scale industries, industry associations, empanelled financial institutions, SIDBI, IREDA, multilateral organizations (World Bank, KfW, JICA, ADB), public sector banks, public financial institutions, NPC, AEEE, NPTI, EESL, and other relevant organizations.
16. The Bidder shall invite delegates from financial institutions, funding agencies, and other relevant stakeholders for participation in the programme.
17. Bidder shall prepare a training kit containing Banner, Standee, printed training material in English and Hindi, Good Quality Customized Good Quality Leather Bag kit, which shall include pen drive/ printed training material, notebook, pen and other necessary stationery items, shall be provided to the participants during the workshops.

18. The agenda, venue and dates would be approved by JREDA/BEE before the commencement of the workshop. All these details would be shared by Bidder via mail to JREDA for prior approval.
19. **Deliverable Against Investment Bazar:** Bidder **must submit 07 Nos. of Project pitch decks for EE financing and approximately 5 Nos. project with Willingness forms and with technical details forms to be submitted to BEE's Facilitation Centre before organizing mandatorily (the deliverable may be revised/updated as per the revised guideline received from the Bureau of Energy Efficiency)**
20. The agency shall be responsible for printing and installation of backdrop banners of approximately 10 ft × 6 ft or other appropriate dimensions, mounted on a frame structure instead of wall hanging/pasting, along with the arrangement of podium stands and distribution of informational pamphlets/IEC materials for farmers and stakeholders. The design, content, branding, and layout of the backdrop and related materials shall be finalized in consultation with Jharkhand Renewable Energy Development Agency (JREDA).
21. Registration, Feedback form and comparing during the training workshop. The same will be required to submit in an Excel file as well for JREDA record purposes, followed by the Outcome of the workshop and Feedback from farmers and delegates and on topics covered. Important points of the feedback received from the participants should be included in the report. Other relevant information and conclusion, etc.
22. A copy of the attendance sheet comprises name, contact details (mobile no and email ID), and Signature for delegates.
23. Photographs must be geotagged (Photographs should include 2 photographs of participants, one or 2 photographs for the inauguration of the workshop by the Chief Guest and photographs of the trainer along with the geo-tagged location of the plantation).
24. Bidder shall conduct a post-training quiz (simple multiple-choice questions, maximum 20 minutes duration) after the conclusion of each training programme. The set of questionnaires for the quiz should be developed and approved by the JREDA/BEE. 5-10 prizes may be awarded to the participants whoever gives the correct answer. Prizes shall be provided by Bidder to the winning participants. Prizes may include pen-drive (or) portable LED lamps (or) Power Banks, etc.
25. The Bidder needs to do Videography & Photography with HD quality of the complete event. Bidder needs to submit the Complete Video recording of the event to SDA – JREDA of a reputed make on a hard disk (2TB)
26. To give an invitation to potential speakers from Large Scale Industries, Industry Associations, OEMs, MSMEs, ESCOS, SIDBI, IREDA, PFC, Funding Agency/MNCs such as World Bank, KFW, JICA, Schedule Commercial banks and NBFCs.
27. Collecting feedback from participants. Bidder shall analyze the stakeholder feedback received. The feedback will be taken from each participant through suitable forms for further improvement of the Retailer Training Programme.
28. All the original copies of feedback forms and attendance sheets would be submitted by the Bidder to JREDA after completion of each training programme. JREDA may revise the training programme as per the requirements/feedback.
29. Bidder needs to design the background note, Agenda and Proceedings, design of backdrop, podium stand, outside standee and name tags for printing.
30. To arrange for boarding and lodging, which will also cover local conveyance for all the eminent speakers/experts and 2 Nos. JREDA official, as well as the local travel arrangements of the same.
31. Bidders need to arrange the mementoes and facilitation with the shawl for speakers.
32. To arrange for the Name Board for speakers (including dignitaries).
33. Printing of conference material: feedback forms, background note, final agenda, and Guidelines for Energy Efficiency financing.
34. Bidders need to send the invitation letters to speakers, industries and banks/NBFCs for participation.
35. Bidder needs to invite the Industry Association, PAT industries, and showcase investment potential in their respective units/sectors. These speakers can also present successful case studies of implementing Energy Efficiency projects where financing was sought from Banks/NBFCs.
36. To hire a knowledge partner for the preparation of background papers, bringing industries as well as industry associations and Financial Institutions on EE for this conference, identify at least 5 bankable EE projects in industries that could be showcased in this conference. At least 5 Willingness forms with technical details forms to be submitted to BEE's Facilitation Centre before organizing this event.
37. Bidder needs to submit the Complete Video recording of the event to SDA – JREDA of a reputed make in Hard Disk (2TB)

Submission of Reports to Jharkhand Renewable Energy Development Agency:

1. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms,

Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.

2. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:
    - Programme agenda and schedule;
    - Details of participants and resource persons;
    - Session-wise proceedings and outcomes;
    - Photographic documentation;
    - Media coverage, if any;
    - Summary of quiz/competition results and prize distribution details;
    - Feedback analysis and assessment outcomes;
    - Key observations, recommendations, and impact assessment.

3. The Bidder shall submit three (03) copies of the Final Completion Report comprising:
    - Two (02) Hard Bound Copies;
    - One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

4. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:
    - Full-length video recording of the event proceedings;
    - Geo-tagged and time-stamped high-resolution photographs;
    - Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
    - Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.

5. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external Hard Disk Drive (HDD) of a minimum 2 TB storage capacity.

6. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category 7

Engagement of Agencies for Conducting Various Sustainability, Decarbonization, Climate Change and other Demand Side Management (DSM) Capacity Building Programme in Jharkhand

Scope of work for Engagement of Agencies for Conducting Various Sustainability, Decarbonization, Climate Change and other Demand Side Management (DSM) Capacity Building Programme in Jharkhand

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainability, energy efficiency, decarbonization, climate resilience, resource optimization, and circular economy principles throughout the entire project lifecycle, including planning, design, execution, implementation, documentation, reporting, monitoring, capacity building, and post-project activities.

All engaged agencies shall comply with applicable national/state sustainability frameworks, Energy Conservation Building Codes (ECBC), Bureau of Energy Efficiency (BEE) guidelines, climate-responsive urban development principles, green procurement practices, and Municipal Demand Side Management (MuDSM) provisions to support low-carbon, energy-efficient, and environmentally sustainable urban infrastructure development in the State of Jharkhand.

The agencies shall also ensure the adoption of environmentally responsible practices such as:

- Energy-efficient technologies and smart automation systems
- Reduction of greenhouse gas (GHG) emissions and carbon footprint
- Promotion of renewable energy integration and electrification
- Resource-efficient water and waste management systems
- Sustainable mobility and electric vehicle ecosystem promotion
- Digital energy monitoring, smart metering, and IoT-based systems
- Green procurement and sustainable material usage
- Climate adaptation and urban heat island mitigation measures
- Circular economy approaches, including reuse, recycling, and waste-to-resource initiatives
- Capacity building, awareness generation, and stakeholder engagement for sustainable urban governance

Sustainability, Decarbonization, Climate Change and other Demand Side Management (DSM) Capacity Building Programme in Jharkhand

The training, awareness, and capacity-building programs under said categories, as per requirement, but not limited to, the following areas:

1. Assistance in Deploying Energy Efficient Technologies in Industries & Establishments (ADEETIE) scheme.
2. Capacity Building of DISCOMs under Demand Side Management (DSM) for DISCOM
3. Energy-Efficient Municipal Infrastructure
4. Capacity- Building of Notified Designated Consumers (DCs) by BEE
5. Capacity Building Training Workshops in MSMEs Cluster, Industries Association and Other Chambers of Commerce and Industries to promote the theme of Energy Conservation, Energy Efficiency and ESCO model
6. Carbon Credit and CCST schemes of carbon credit and its trading
7. Energy Conservation and Sustainable Building Code (ECSBC) for commercial and residential
8. Sustainability and Climate Change
9. Decarbonization & Demand Side Management (DSM)
10. Sustainable Buildings & Climate-Responsive Infrastructure
11. Policy, Financing & Regulatory Framework

12. Monitoring, Verification & Reporting
13. Stakeholder Engagement & Capacity Building
14. Emerging Technologies & Innovation
15. Any other scheme and topics for demand side management. Any other workshop, training programme, consultation, or capacity building initiative as suggested by the Bureau of Energy Efficiency, Government of Jharkhand, or other relevant stakeholders pertaining to energy efficiency, sustainability, environment, climate change, decarbonization, and allied sectors,
16. Any other Capacity building activities under demand side management, etc.

Location for training programme:

The venue/location of the programme shall be finalized by Jharkhand Renewable Energy Development Agency based on feasibility, thematic relevance, priority intervention zones, stakeholder outreach requirements, and strategic directions received from the competent authorities. The selection of the location shall also align with the objectives, scope of work (SoW), sustainability priorities, and implementation requirements defined by the Authority for the successful execution of the event/programme

Target Audience

- Urban Local Bodies (ULBs), Municipal Corporations, Smart City SPVs, and Government Departments
- Industries, Designated Consumers (DCs), MSMEs, ESCOS, Financial Institutes (Banks & NBFC), OEMS, Industry Associations, etc.
- DISCOMs, State Designated Agencies (SDAs), Energy & Urban Development Departments
- MSMEs, industries, commercial buildings, and industrial clusters, DCs notified by BEE
- ESCOs, energy auditors, consultants, EPC contractors, and technology providers
- Architects, planners, builders, HVAC professionals, and green building stakeholders
- Stakeholders of ECBC, ENS, PAT, DSM, MuDSM, MSME, Green Building, Renewable Energy, and other schemes of the Bureau of Energy Efficiency and State Government initiatives
- Renewable energy, EV, smart metering, IoT, and automation solution providers
- Industries/MSME/SME Association in Jharkhand
- Industries Cluster in Jharkhand
- Chamber of Commerce in Jharkhand
- Educational institutions, research organizations, and skill development agencies
- Financial institutions, CSR agencies, and climate finance organizations
- RWAs, NGOs, community organizations, transport operators, and civil society groups
- Waste management, water utility, circular economy, and sustainability agencies
- Media and outreach agencies for awareness generation and stakeholder engagement.

Chief Guest

The programme/workshops may be inaugurated by Hon'ble Ministers, MPs, MLAs, Mayors, Municipal Representatives, or other public representatives. In their absence, senior government officials such as the Chief Secretary, Principal Secretary, District Magistrate, Municipal Commissioner, Managing Director of DISCOMs, senior officials from the Bureau of Energy Efficiency, Ministry of Power, Ministry of New and Renewable Energy, and the Jharkhand Renewable Energy Development Agency may inaugurate or attend the programme as Chief Guest/Guest of Honour.

The bidder/agency shall coordinate all protocol, invitation, hospitality, logistics, branding, and documentation arrangements for the dignitaries and ensure smooth conduct of the programme.

Professional for providing training in Workshops:

The training shall be conducted by qualified domain experts such as Master Trainers, Certified Energy Auditors, Accredited Energy Auditors, GHG Lead Auditors/Lead Verifiers, IGBC Accredited Professionals (IGBC-AP), GEM Certified Professionals (GEM-CP), GRIHA Certified Professionals (GRIHA-CP), sector experts, or other technically competent professionals having relevant experience in energy efficiency, sustainability, decarbonization, green buildings, and climate-related sectors only.

Detailed Scope of Work:

- Finalization of the agenda for the workshops in consultation with SDA.
- The venue for the Training shall be a preferred only 3/4/5-star hotel available in said location, which should be finalized along with consultation with JREDA. Organizing all logistics related to the workshop, like Venue 4/5-star hotel, Food (lunch, tea, snacks, high tea for the chief guest, etc.), press release, etc., duly approved by SDA.
- Arrangement of a minimum of 02 speakers (well versed in subjects to be covered) for each workshop, the trainer must be a Master Trainer/ Energy Auditor and Sector expert having vast experience in the same field.
- Informing the participants about the workshop and providing continuous follow-up with them.
- Seating arrangement for about a maximum of 50 Nos. Personnel shall be required in each workshop.
- Registration and compering during the workshop.
- The agency shall be responsible for printing and installation of backdrop banners of approximately 10 ft × 6 ft or other appropriate dimensions, mounted on a frame structure instead of wall hanging/pasting, along with the arrangement of podium stands and distribution of informational pamphlets/IEC materials for farmers and stakeholders. The design, content, branding, and layout of the backdrop and related materials shall be finalized in consultation with Jharkhand Renewable Energy Development Agency (JREDA).
- Arrangement of the projector, projector screen of appropriate size for professional display and laptops at the Venue for delivering presentations.
- Printing of feedback forms in simple Hindi/English language, background note, final agenda, invitation of Agricultural/DISCOM officials, and nomination of participants 50 Nos. on the day of workshop.
- Arrangement of good quality training kits which shall include a Laptop folder/bag printed training material, and necessary stationary items for the participants in consultation with SDA and along with hard and soft copy of all relevant details and background of training should be provided to delegates and other higher officials.
- Invitation of Officials from concerned stakeholders of Municipal sector respective at program location and other officials for inaugural and Training sessions.
- **Registration, Feedback form and comparing during the training workshop. The same will required to submit in excel file as well for JREDA record purpose followed by the Outcome of the workshop and Feedback from farmers and delegates and on topics covered. Important points of the feedback received from the participants should be included in the report. Other relevant information and conclusion etc.**
- Copy of attendance sheet comprise of name, contact details (mobile no. and email id), and Signature for delegates.
- Photographs must be Geotagged (Photographs should include 2 photographs of participants, one or 2 photographs for inauguration of workshop by Chief Guest and photographs of trainer along with geo tagged location of plantation).
- Bidder should ensure availability of sound system with one fix mike and 01 cordless mike (with spare battery), a projector for the presentation etc. bidder or its team members should have laptops for the Power point presentation during the training workshop.
- Banner to be placed on wall of the hall. A small banner/standee may also be placed outside the event location to guide the participants. It will be more appropriate that the bidder arrange for a lamp with 4-5 wicks so as Chief guest may light the lamp during inauguration of training workshop.
- The Content for the workshop/Training program shall be properly designed as PPT and could be explained in the language preferred by the participants as the participants like pump operators, Equipment operators to Supervisory cadre and the officials of Municipal corporation/Municipalities will be involved in the workshop.
- Hardcopies of training material is to be submitted to all participants including JREDA.
- Arrangement of good quality training kits which shall include a Good Quality Laptop folder/bag, training material, and necessary stationary items for the participants in consultation with SDA.
- Possible Energy Efficiency projects and funding opportunities for implementation of Energy Efficiency projects in the segments of Water supply, Sewage Treatment and Buildings.
- Basic facilities on the stage to be organized. Bidder should ensure availability of sound system with one fix mike and 01 cordless mikes (with spare battery), a projector for the presentation etc. Bidder or its team members should have laptops for the Power point presentation during the training workshop. A banner/backdrop to be placed on wall of the hall. A small banner/standee may also be placed outside the venue to guide the participants. It will be more appropriate that the bidder arrange for a lamp with 4-5 wicks so as Chief Guest may light the lamp during inauguration of training workshop.

- Photography of the event.
- In order to engage the targeted audience throughout the training sessions, video contents finalized in consultation with the SDA to be included in the workshops.
- Submission of report on proceedings of each workshop in hard and soft format at the end of each event covering with following related documents to SDA.

Note: JREDA reserves the right to update the scope of work/targeted audience/focused groups as per their requirement and guidelines received from authorities.

Submission of Reports to Jharkhand Renewable Energy Development Agency:

1. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms, Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.
2. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:
    - Programme agenda and schedule;
    - Details of participants and resource persons;
    - Session-wise proceedings and outcomes;
    - Photographic documentation;
    - Media coverage, if any;
    - Summary of quiz/competition results and prize distribution details;
    - Feedback analysis and assessment outcomes;
    - Key observations, recommendations, and impact assessment.
3. The Bidder shall submit three (03) copies of the Final Completion Report comprising:
    - Two (02) Hard Bound Copies;
    - One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

4. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:
    - Full-length video recording of the event proceedings;
    - Geo-tagged and time-stamped high-resolution photographs;
    - Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
    - Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.
5. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external Hard Disk Drive (HDD) of a minimum 2 TB storage capacity.
6. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category - 8

Engagement of Agencies for Conducting Investment Grade Energy Audits (IGEA) and Detailed Energy & Sustainability Assessments for Government Buildings, Pumping Stations, Colleges, and Other Facilities across Jharkhand.

Scope of Engagement of Agencies for Conducting Investment Grade Energy Audits (IGEA) and Detailed Energy & Sustainability Assessments for Government Buildings, Pumping Stations, Schools/Colleges/Institutions, and Other Facilities across Jharkhand.

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainability, energy efficiency, decarbonization, climate resilience, resource optimization, and circular economy principles throughout the entire project lifecycle, including planning, design, execution, implementation, documentation, reporting, monitoring, capacity building, and post-project activities.

Engagement of Agencies for Conducting Investment Grade Energy Audits (IGEA) and Detailed Energy & Sustainability Assessments for Government Buildings, Pumping Stations, Colleges, and Other Facilities across Jharkhand. The scope of work for the Engagement of Agencies for Conduction Investment Grade Energy Audit (IGEA) **Govt. Facilities** in Jharkhand and prepare and detailed project report of buildings will be as below:

Data to be collected: Can include, but not be 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 (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.
- Development of an inventory of electrical accessories of the **Government Buildings, Pumping Stations, Schools/Colleges/Institutions, and Other Government Owned Facilities**.
- Relevant cost details for the operation and maintenance of the present energy-consuming equipment installed.
- Operation hours of the individual equipment daily, seasonal (as may be applicable) for the past 12 months
- Operational details including flow, head, temperature, power and other relevant parameters of the equipment.
- Electrical inventory documentation along with detailed data of the same (i.e. Rating, Star Rating, Type, Etc.)
- Electricity loads of the individual equipment at different operating loads.
- Air quality index, CO2, Humidity Level and Thermal comfort of the same.
- Any other suggestions and analysis complementing the above-mentioned data.

Preparatory work for Audit:

- Evaluate HVAC system performance
- Evaluate the pumping system performance
- Evaluate Electrical system performance
- Evaluate the lighting system performance
- Evaluate all other energy-consuming equipment performance
- Evaluate building envelope and air infiltration
- Prepare data sheets to capture operational details of the appliances in more detail, as may be 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:

- Analyse design parameters and actual operating parameters of the different equipment with a view to identifying problems in achieving efficiencies.
- Evaluate the performance of all major energy-consuming equipment. Historical data analysis to establish the power consumption trends.

- Evaluate building equipment operations and maintenance to identify operational measures for achieving efficiencies.
- Analyse electrical systems such as transformers, DG sets, LT panels, APFC panel for the harmonics, power factor, etc.
- Analyse heat transfer through the 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 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) includes the following information:

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

Develop 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. The prevailing market rate will be considered for the estimation of the cost of equipment. 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.

Benchmarking:

- Determine annual electricity consumption per square meter of the building's built-up area (kWh/sqm/year). Built-up area includes car parking, garden, corridor and floor areas.
- Determine the benchmarking standard along with the comparison with similar types of buildings. Also required is the benchmark EPI for the same in comparison.
- Determine annual energy consumption in terms of kWh/m^2/Year.
- Study of Power Quality issues like Harmonics study and analysis, current imbalance, Voltage imbalance, etc. Also suggest the power loss and saving potential with the same.
- Water Audit: The bidder shall submit the ECM for water-saving potential in the building, along with the effective optimization and utilization practices.
- Bidder needs to submit and draft a detailed tender regarding retrofitting/New Implementation of the above-said ECM work for execution with concern to SDA.
- Bidder also needs to submit the feasibility of the implementation of solar generation potential for the same.

ECBC/ECBC +/Super ECBC /ENS/Net Zero and Net Positive: Bidder need to suggest and provide the analysis of the building to provide a separate measure for ECBC/ECBC +/Super ECBC /ENS/Net Zero and Net Positive, and suggest the Energy efficiency measures for the same.

Electrical Supply and Distribution Network: Detailed examination of the existing energy use of the facility, with break up. Measurement and analysis of demand and power factor, Earth Pit resistance measurement, and suggestions to reduce the demand and improve the power factor. Performance evaluation of motors, to identify under/over loading analysis, along with efficiency optimization of motors available in buildings. Study on V, I kW fluctuation and profiling, V & I imbalances in the network.

Air – Conditioning System and Ceiling Fans:

- Evaluation of operating Coefficients of performances of ACs.
- Evaluation of specific energy consumption of ACs.
- Estimation of actual tonnage and comparison of actual parameters with the design values, and corrective actions required, along with respect to the heat load analysis of the system, if any.
- Documentation of no. of Ceiling Fans installed in the building and allied buildings, with their rated power consumption. Along with the existing and suggestive measures for the building's ventilation and thermal comfort.
- Suggest measures for minimizing energy consumption of the installed AC's and Ceiling Fans or any other provisions which was using in the building.

Kitchen Appliances and Equipment: To suggest inexpensive efficiency measures towards minimizing the energy consumption of Kitchen Equipment/ Appliances (e.g., Refrigerator, Hot Water System, etc.)

Water Supply Pumps: Determine hydraulic pressure, efficiency of motor-driven pump, including the study of the pumping and allied systems to evaluate their operational efficiencies and feasibility of reduction in the energy consumption, wherever possible. And suggest measures for reducing energy consumption, incorporating energy-efficient equipment.

Additional Scope of Work under Government Buildings, Pumping Stations, Schools/Colleges/Institutions, and Other Facilities:

- Assessment of the building/facility, including building usage, occupancy profile, connected load, existing infrastructure, and operational characteristics for establishing the baseline condition of the facility.
- Analysis of the operational schedule of the building, including working hours, occupancy variation, seasonal operation, and equipment usage patterns to identify opportunities for operational optimization and energy savings.
- Analysis of historical and current consumption patterns related to energy, water, waste generation, and renewable energy usage for identifying inefficiencies, abnormal trends, and optimization opportunities.
- Evaluation of Building Envelope Performance Assessment, including evaluation of building orientation, façade, roof characteristics, glazing, insulation, and thermal comfort conditions to identify measures for reducing heat gain and improving building energy performance.
- Assessment of indoor air quality parameters, including CO_2 concentration, ventilation adequacy, thermal comfort, and occupant well-being conditions within the building premises.
- Evaluation of the feasibility of cool roof technologies and passive cooling measures for reducing roof heat gain and mitigating Urban Heat Island (UHI) impacts in and around the facility.
- Assessment of the technical and financial feasibility for integration of rooftop solar PV systems and other renewable energy technologies based on available area, load profile, and shadow analysis.
- Review of existing waste management and disposal practices, including waste segregation, handling, recycling, and disposal mechanisms, along with recommendations for sustainable waste management measures.
- Identification and evaluation of suitable low-carbon and energy-efficient technologies, including efficient HVAC systems, lighting systems, renewable energy integration, and smart technologies.
- Assessment of existing Building Management System (BMS) infrastructure and recommendation of provisions for automation, centralized monitoring, smart controls, metering, and energy management systems.
- Benchmarking and mapping of national and international best practices related to energy-efficient and sustainable buildings for identification of replicable interventions.
- Development of a technology integration framework, including implementation strategy, interoperability requirements, monitoring mechanisms, and operational considerations for phased implementation.
- Preparation of a phased Energy Transition and Investment Roadmap indicating recommended interventions, estimated investments, implementation timelines, energy savings potential, and carbon reduction benefits.

Lighting:

- Examination of the lighting system in all the areas, measurement of illumination level, etc., to improve lighting efficiency and optimizing lighting level as per the latest ECBC standard (ECBC 2017) published by BEE, GoI/ National Building Code 2016.
- To look for possibilities to reduce energy use by incorporating energy-efficient lighting systems, equipment, and layout charges.

- Study of operating electrical parameters in the lighting circuit.
- To suggest measures for minimizing the energy consumption in the lighting system, incorporating advanced technology.
- Required the existing and proposed Lux level of the building with their benchmarking standard.

Transformer: Study the loading / % impedance of the installed transformers. And suggest measures for possible reduction in energy consumption.

Diesel Generator:

- Determine the ratio of fuel consumption of Diesel Engines.
- Measurement of fuel consumption & efficiency of individual engines is to be undertaken. And suggest measures for possible reduction in fuel consumption.
- Analysis of power backup provision (i.e. UPS, Inverter, etc.) available along with the V, I and efficiency study to capture the energy loss and suggest measures for possible reduction of energy consumption.

Renewable Energy System: Use of RE Systems: whether using a Rooftop Solar Water Heating System/ Solar PV Power plant. Collect and Report details – available shadow-free roof area, capacity of hot water (in LPD) or size of solar PV power system.

Further, the consultant has to suggest the capacity of the Solar PV Power System/ Solar Hot Water system which may be installed at each Building, after discussion with the concerned Govt officials of Government buildings.

- Identifying and evaluating Energy Conservation Measures (ECMs) that can improve the building's energy efficiency and sustainability.
- Providing recommendations for implementing ECMs, including cost estimates, payback periods, and potential environmental benefits.
- Developing a comprehensive report that outlines the analysis findings, recommended ECMs, and their potential impact on the building's sustainability consists of below mentioned points as well:
    - Site-wise energy baseline.
    - Load inventory.
    - Energy-saving calculations.
    - Cost-benefit analysis.
    - Payback period.
    - GHG emission reduction estimate.
    - Implementation roadmap.
    - DPR-ready recommendations.
    - Measurement & Verification plan.

Detailed Project Report/ Investment Grade Energy Audit Report Submission at JREDA:

- Executive Summary
- Background: More extensive background about the building and the concerned department.
- Facility Description: Details of existing facilities at the building.
- Energy Consumption Scenario: Energy Consumption details and energy sources.
- Baseline Parameters and Adjustments: Methodology followed in establishing the baseline parameters and criteria. Provide the baseline parameters and calculation procedure in the form of an annexure.
- Data Collection: List the various types of data collected and their sources. Include the data in the Annexure.
- Systems Mapping: Describe the methodology followed for system mapping and include the layouts and process flow Diagrams / Single Line Diagrams.
- Prepare and submit a detailed Investment Grade Energy Audit Report/ Detailed Project Report giving suggestions/recommendations for energy savings Building Wise/Block Wise in lighting, HVAC (Fans and AC's), Water Pumping, Water Heaters, Air Compressors, Motors, Plug loads (Computers, Kitchen Equipment/ Appliances, etc.) and any other Energy Consumption device used by the buildings, along with Overall Energy Performance Index (kWh/m^2/Year), estimated energy savings and investment.
- Segregate the No Cost/ Low Cost/ Medium Cost and High-Cost measures and estimated energy saving potential in terms of kWh/m^2/Year and Simple Payback period.
- Further, prepare the list of energy-efficient device manufacturers/vendors for retrofitting of existing inefficient Electrical Appliance.
- Credential submission of the audit team who do the Energy audit.

- Submission of the instrument list used during the Energy audit, along with its calibration certificate.
- Copies (Hard Binding) of the IGEA Report / Detailed Project Report and presentation with soft copies shall be submitted to JREDA, and 3 Copies of the final approved IGEA Report / Detailed Project Report to concern department Head.
- 2 Nos. of MOM with the concerned official 1st during data collection and 2nd during the final discussion and compiling time.
- Determine annual electricity consumption per square meter of the building's built-up area (kWh/sqm/year). Built-up area includes car parking, garden, corridor and floor areas.
- Determine the benchmarking standard along with the comparison with similar types of buildings. Also required is the benchmark EPI of the same in comparison, and determine annual energy consumption in terms of kWh/m^2/Year.
- Study of Power Quality issues like Harmonics study and analysis, current imbalance, Voltage imbalance, etc. Also suggest the power loss and saving potential with the same.
- Bidder needs to submit and draft a detailed tender regarding retrofitting/New Implementation of the above-said ECM work for execution with concern to SDA.
- Bidder also needs to submit the feasibility of the implementation of solar generation potential for the same.
- ECBC/ECBC +/Super ECBC /ENS/Net Zero and Net Positive: Bidder need to suggest and provide the analysis of the building to provide a separate measure for ECBC/ECBC +/Super ECBC /ENS/Net Zero and Net Positive, and suggest the Energy efficiency measures for the same.
- Detailed presentation of Energy audit Findings reports.
- The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms, Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.
- The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:
    - Programme agenda and schedule;
    - Details of participants and resource persons;
    - Session-wise proceedings and outcomes;
    - Photographic documentation;
    - Media coverage, if any;
    - Summary of quiz/competition results and prize distribution details;
    - Feedback analysis and assessment outcomes;
    - Key observations, recommendations, and impact assessment.

5. The Bidder shall submit three (03) copies of the Final Completion Report comprising:
    - Two (02) Hard Bound Copies;
    - One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

- Geo-tagged and time-stamped high-resolution photographs;
- Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremony and group photographs.

Category 9

Engagement of Agencies for Establishing Demand Side Management (DSM) Clubs in Government Schools/Colleges and Conducting various DSM Awareness Programs in Jharkhand under the School/College Capacity Building Program

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainability, energy efficiency, decarbonization, climate resilience, resource optimization, and circular economy principles throughout the entire project lifecycle, including planning, design, execution, implementation, documentation, reporting, monitoring, capacity building, and post-project activities.

The scope of work for "Engagement of Agencies for Establishing Demand Side Management (DSM) Clubs in Government Schools/Colleges and Conducting various DSM Awareness Programs in Jharkhand under the School/College Capacity Building Program. The category sequence and description of work are mentioned below:

Structure of DSM Club

The DSM Club shall consist of four sub-clubs:

1. Energy Conservation Club
2. Water Conservation Club
3. Swachhta Club (Waste Management Club)
4. Eco Club (Sustainable Management Club)

A designated teacher and student representatives will coordinate each club, and the orientation program will be performed under the above-mentioned four (04) clubs, whose description per club is mentioned below:

Club Name	Description of Work
Energy Conservation Club	**Objective: Encourage energy efficiency, energy conservation, and the use of renewable energy sources.** **Scope of Work:** • Conduct awareness programs for understanding the importance of energy conservation and efficiency. • Educate on energy-efficient lighting (LED), energy-star rated electrical appliances, and solar energy systems. • Implement awareness campaigns in schools and colleges on **"Switch Off"** practices and peak load reduction to promote energy conservation. • Awareness about **National Energy Conservation Day (14th December).**
Water Conservation Club	**Objective: Achieving sustainable utilization and conservation of water resources.** **Scope of Work:** • Detection of water leakage and provide remedy solutions and awareness about the same. • Guide and facilitate rainwater harvesting and groundwater recharge techniques. • Creating awareness amongst students/staff regarding water saving methods. • Advocating for the reuse of water from the washing machine. • Awareness about **World Water Day (22nd March).** • Modelling various water conservation techniques.
Swachhta Club (Waste Management Club)	**Objective: To ensure hygiene, sanitation, and cleanliness in the school/College and surroundings.** **Scope of Work:** • Ensuring that cleanliness drives are held regularly inside the school campus. • Encouraging segregation of waste (wet/dry) at source. • Conducting awareness about health and hygiene on **2nd October.**

	• Participation in Swachh Bharat (Abhiyaan) campaign initiatives. • Create awareness and a guide for conducting cleanliness drives on the school/college campus. • Importance of dustbin arrangements in and around the school campus. • **Awareness about Swachhta Pakhwada celebrations (1st – 15th February)**
Eco Club (Sustainable Management Club)	**Objective: Encouragement towards environmental protection and biodiversity conservation.** **Scope of Work:** • Organizing plantation campaigns and maintaining green cover at the school/college level. • Developing and maintaining gardens in schools/colleges. • Promoting efforts towards reducing the consumption of plastic products. • Organizing awareness programmes on climate change and environmental conservation. • Celebrating occasions such as **World Environment Day (5th June).**
Common Activities (All Clubs)	• The setting up of student committees under teacher coordination. • Monthly meetings and reporting on activities. • Keeping records of activities through pictures, reports, and registers. • Outreach programs are conducted in the adjacent villages. • Taking part in competitions at the district/state level. • Direct training through workshops and visits. • Promotion of composting activities. • Encouraging students to participate in environmental activities/competitions.
Outcomes after Implementation of Clubs	• Reduced energy and water usage. • Better sanitation and hygiene conditions. • Greater consciousness about the environment among students. • Fostering sustainable behaviour in students. • Emergence of green school models.

Monitoring & Evaluation	• Feedback/Suggestion along with reports submitted by schools/colleges
	• District-level quarterly analysis
	• Yearly performance analysis
	• **Indicators:**
	  • Less electricity usage
	  • Less water waste
	  • The cleanliness status of the school/colleges
	  • Total plantations done and their survival rate

Other Miscellaneous Activities Conducted by The Bidder	
A. Activity to be done by the Bidder under the Scope of Work for Establishing Energy Clubs at 50 Government Schools: - I. Provide the list of schools from Jharkhand State at JREDA by taking permission from the head Authority of the respective Schools before the start of the work. II. Setting up the Energy club at the school by taking permission from the head Authority of the School. III. Conduct **a one-day** orientation training program for the school teacher on the following topics: - • The importance of energy conservation and the country's dependence on electrical power. • Increasing demand for energy and the gap between demand and supply. • Impact on the environment, due to Thermal Power Generation and ways to decrease that impact. • Renewable Energy. • Safeguards to prevent wastage of power in everyday life. • Understanding of Electricity Bills, and conservation through energy-efficient use of domestic appliances. • Focus on Energy Star Labelling, and an introduction to the system of energy rating.	

IV. The following events have to be carried out by the bidder at each school (The Theme of competitions is Energy Efficiency / Energy Conservation):

- **Elocution competitions** (The contests should be held in two different groups)
  a. Students from the first group & second group will get 3 minutes respectively.
  b. Winners from both the groups will be selected based on their communication skills, subject layout, way of presenting the subject, etc., and prizes should be given to students (* Prizes to be given must be relevant to Energy Efficiency and Conservation)
- **Essay Competition** (The contests should be held in two different groups)
  a. For the first group & second group, the word limit for essay writing is up to 300.
  b. For the essay competition, 1 hour should be given to students.
  c. Winners from both the groups will be selected based on writing skill, subject layout, spelling, and way of presenting the subject, etc., and prizes should be given to students (Prizes to be given must be relevant to Energy Efficiency and Conservation)

a) Painting Competition

i. Size of drawing sheet to be used for painting competition should be 15 X 11 inches.
ii. For the painting competition, 1 hour should be given to students.
iii. Winners from both the groups will be selected based on colour combinations used in the picture, neatness & cleanliness of picture, Picture layout, picture presentation & effectiveness, etc., and prizes should be given to students (Prizes to be given must be relevant to Energy Efficiency and Conservation)

b) Slogan Competition: Each class of students should prepare at least 2 slogans. Out of these good & rhyming matching slogans should be selected and prizes should be given to students (Prizes to be given must be relevant to Energy Efficiency and Conservation).

c) Awareness Programme

i. The importance of energy conservation and the country's dependence on electrical power.
ii. Increasing demand for energy and the gap between demand and supply.
iii. Impact on the environment.
iv. Renewable Energy
v. Safeguards to prevent wastage of power in everyday life.
vi. Understanding of Electricity Bills, and conservation through energy-efficient use of domestic appliances.
vii. Explains and emphasises the role of awareness in the individual, the family and the community.
viii. Involves students in an exercise to monitor and reduce energy bills in their homes by adopting the energy conservation methods suggested.
ix. Focus on Energy Star Labelling, and an introduction to the system of energy rating.
x. After Completion of 2-day event at each school, the agency has to take a Work Completion certificate signed and stamped by the Head Authority of the school.
xi. Agency shall submit the photographs of the 2-day event at JREDA, having a time-date stamp and GPS coordinate, after completion of the event at each school as proof of work completion.

V. After Completion of the 01-day event at each school, the agency has to take a Work Completion certificate signed and stamped by the Head Authority of the school.
VI. Agency shall submit the photographs of the 2-day event at JREDA, having a time-date stamp and GPS coordinate, after completion of the event at each school as proof of work completion.

B. Activity to be done by Agency under Scope of Work for Energy Efficiency and Energy Conservation Programmes at Engineering / ITI Colleges/ Other educational institutions in the State of Jharkhand: -

I. Provide the list of Colleges from Jharkhand state at JREDA by taking permission from the head Authority of the respective College before the start of the work.
II. The following events have to be carried out by the Agency at each College (The Theme of competitions is Energy Efficiency / Energy Conservation):

a. Awareness Programme

I. The importance of energy conservation and the country's dependence on electrical power.

II. Increasing demand for energy and the gap between demand and supply.
III. Impact on the environment.
IV. Renewable Energy
V. Safeguards to prevent wastage of power in everyday life.
VI. Understanding of Electricity Bills, and conservation through energy-efficient use of domestic appliances.
VII. Explains and emphasizes the role of awareness in the individual, the family and the community.
VIII. Involves students in an exercise to monitor and reduce energy bills in their homes by adopting the energy conservation methods suggested.
IX. Focus on Energy Star Labelling, and an introduction to the system of energy rating.

b. Drama Competition

I. First group & second group students will get 10 minutes respectively.
II. Drama competition should be presented in a group only.
III. Winners from both the groups will be selected based on their facial expression, way of presenting the subject, costumes and delivery of social message through drama, etc.

c. Quiz Contest

I. For both groups, 50 questions should be prepared for the competition.
II. Prizes should be given to the winners.

d. Innovative Project Competition

I. Each class should form a group which includes 4 students for this competition.
II. Each group should be given a 4 X 2.5 feet space for project presentation.
III. The exhibition of this competition should be held in the school premises.
IV. Winners from both the groups will be selected based on the imagination of their project, scientific basis of the project, technical expertise, usefulness of the project to society, cost-effectiveness & durability of the project and project presentation, etc.
V. After Completion of the 2-day event at each College, the agency has to take a Work Completion certificate signed and stamped by the Head Authority of the College.
VI. Agency shall submit the photographs of the event at JREDA, having a time-date stamp and GPS coordinate, after completion of the event at each College as proof of work completion.

III. After Completion of the 01-day event at each College, the agency has to take a Work Completion certificate signed and stamped by the JREDA/Head Authority of the College.
IV. The agency shall submit the photographs of the event at JREDA, having a time-date stamp and GPS coordinate, after completion of the event at each College as proof of work completion.

The formation of DSM clubs in government schools will form a grassroots-level initiative to help achieve sustainable behaviour within the student community. With assistance from JREDA and synergy with national and state programs, this project will play a huge role in achieving energy efficiency and sustainability in Jharkhand.

Deliverables

- The Bidder is responsible for executing activities as per the Scope of Work (SOW) related to the establishment and execution of Demand Side Management (DSM) Clubs in designated Government Schools/Colleges. This includes planning, implementation, monitoring, documentation, and reporting, ensuring all deliverables are completed on time to the satisfaction of the Jharkhand Renewable Energy Development Agency (JREDA).

- The Bidder is required to prepare and submit a comprehensive implementation plan detailing timelines and milestones for all DSM Club activities. Additionally, the Bidder must create a school/college-specific activity calendar that covers various clubs, including the Energy Conservation Club, Water Conservation Club, Swachhta Club, and Eco Club. Furthermore, the Bidder will organize and execute awareness programs, workshops, and competitions involving students, parents, and village officials according to the approved plan.

- The Bidder is responsible for creating training modules and IEC materials in both Hindi and English, subject to approval from JREDA. They will conduct DSM training programs for educators and students across selected schools/colleges, deploy qualified personnel for implementation, and supply basic training kits with printed materials and stationery to participants.

- The Bidder is responsible for the proper utilization and demonstration of energy-efficient appliances, renewable energy systems, and necessary audio-visual and training equipment, including a projector, sound system, microphones, and laptops.

- The Bidder will facilitate case study demonstrations related to energy conservation, water conservation, and environmental sustainability.

- The bidder shall complete a comprehensive Energy Analysis and Technical Assessment for schools and colleges, which includes four main components:
    I. **Energy Audit:** Evaluation of lighting systems and appliances, identification of energy-saving opportunities, and monthly energy consumption documentation.
    II. **Water Audit:** Review of water use, detection of leaks, conservation recommendations, along with water consumption tracking.
    III. **Infrastructure and Accessibility Audit:** Assessment of accessibility from main roads, i.e., distance and geotag photographs, street lighting, sanitation facilities, and biodiversity mapping on campus.
    IV. **Renewable Energy Feasibility Assessment:** Exploration of potential for solar (roof area) and biomass system installations.

- The bidder is responsible for conducting a technical assessment for each school or college, focusing on replacing inefficient systems and evaluating the feasibility of retrofitting with energy-efficient technologies. The bidder must provide recommendations for new energy-efficient and renewable energy systems, accompanied by a cost-benefit analysis.

- The Bidder is responsible for maintaining proper documentation and record keeping, which includes attendance registers, activity registers for each club, and training and participation records.

- The Bidder must develop standard formats for attendance sheets, feedback forms, audit formats, and reporting templates.

- Bidder is responsible for providing geo-tagged documentation, which includes photographs of all program activities, audit processes, demonstrations, and installations. Participation from students, teachers, parents, and the community must be included in the documentation. Additionally, the bidder shall provide video recordings of key events and activities.

- The bidder is required to create Information, Education, and Communication (IEC) materials such as banners, posters, standees, and pamphlets.

- The bidder needs to conduct awareness programs in schools, colleges, and local communities, including outreach in nearby villages. Digital and social media platforms like WhatsApp will be leveraged to disseminate program activities and generate awareness.

- The Bidder is responsible for conducting community-level awareness programs targeting students, parents, and residents, which include **cleanliness drives, plantation programs, and environmental awareness initiatives.**

- The bidder is responsible for all logistical and administrative arrangements for programs, which include finalizing and setting up the venue, providing audio-visual equipment, **i.e., projector, laptops, sound system with microphones, managing event branding, i.e., banners, posters, standees, directional signage,** facilitating guest ceremonial **(lamp, shawls, mementos)** needs, and arranging boarding, lodging, and local travel for two officials from JREDA. Catering for tea/coffee sessions and meals for all participants must also be ensured.

- Bidder shall take post-training assessments along with structured MCQ-based quizzes approved by JREDA to evaluate learning outcomes, with incentives for top performers. Feedback will be gathered to assess the program's effectiveness, and the bidder will monitor key performance indicators (KPIs) such as energy consumption reduction, water conservation, sanitation practice improvements, and plantation survival rates.

- Bidder must ensure thorough documentation of all activities, including attendance and activity records, training documents, along with audit reports, Renewable energy, i.e., solar system installation feasibility report, geo-tagged photographs.

- High-definition photography and videography shall capture key events, including training sessions, participant engagement, and inauguration ceremonies. Standardized documentation formats shall be maintained for consistency and transparency.

- Bidder is required to submit several reports: brief programme-wise reports after each training, institution-wise progress reports, detailed programme reports with participant data, feedback, and outcomes, and quarterly and annual performance analysis reports to evaluate overall progress and impact.

- Upon completion of all activities, the bidder is required to submit a comprehensive final report in both hard and soft copies, three hard-bound copies for major city programmes, all training materials in editable formats, complete photographic and video documentation on a minimum 2 TB hard disk, and signed completion certificates from participating institutions. The final report must include success stories, challenges faced, lessons learned, and recommendations for future scalability and improvement.

- Final Consolidated Report & Closure: A summary report will be submitted, which includes key outcomes and impact assessment, best practices and success factors, challenges and mitigation measures, and strategic recommendations for future programmes. Additionally, all records and documentation will be provided on a storage device to ensure proper project closure and compliance with JREDA requirements.

Submission of Reports to Jharkhand Renewable Energy Development Agency:

5. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms, Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.
6. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:
    - Programme agenda and schedule;
    - Details of participants and resource persons;
    - Session-wise proceedings and outcomes;
    - Photographic documentation;
    - Media coverage, if any;
    - Summary of quiz/competition results and prize distribution details;
    - Feedback analysis and assessment outcomes;
    - Key observations, recommendations, and impact assessment.
6. The Bidder shall submit three (03) copies of the Final Completion Report comprising:
    - Two (02) Hard Bound Copies;
    - One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

10. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:
    - Short video recording of the event proceedings
    - Geo-tagged and time-stamped high-resolution photographs;
    - Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
    - Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.

11. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external storage device as per the appropriate data.
12. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category 10

Engagement of Agencies for Supply, Installation and 05 Years Comprehensive Maintenance Contract (CMC) of 5 Star rated energy-efficient appliances including Air conditioning (A.C), BLDC Ceiling Fan (with Safety wire/rope), Induction Cookstoves and LED Light Lighting Fixtures (Bulbs & Tube Lights), BLDC Ceiling Fans (with Safety Rods) across all Government Schools/Colleges/Institutions/Buildings and other Energy intensive government premises in state of Jharkhand.

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainability, energy efficiency, decarbonization, climate resilience, resource optimization, and circular economy principles throughout the entire project lifecycle, including planning, design, execution, implementation, documentation, reporting, monitoring, capacity building, and post-project activities.

The scope of work for "Engagement of Empanelled Agencies for Supply, Installation, Testing and Commissioning (SITC) of energy-efficient appliances, including LED Lighting Fixtures (Bulbs & Tube Lights), BLDC Ceiling Fans (with Safety Rods), and Induction Cookstoves across Government Schools/Colleges in Jharkhand on a turnkey basis, along with Comprehensive Maintenance Contract (CMC) for a period of 05 years. The category sequence and description of work are mentioned below:

1. Scope of Work

1.1 Survey & Inventory Assessment
The Agency shall conduct site-wise assessment of existing appliances, including **Air conditioning (A.C), BLDC Ceiling Fan (with Safety wire/rope), Induction Cookstoves and LED Light Lighting Fixtures (Bulbs & Tube Lights** units. The quantities shall be jointly validated with the institution authorities and JREDA. A baseline inventory and condition assessment report shall be prepared and submitted.

1.2 Dismantling of Existing Fixtures
The Agency shall safely dismantle existing appliances without causing damage to infrastructure. All dismantled items shall be transported and handed over to the designated storage location within the premises. A Dismantling Report shall be submitted indicating type, quantity, location and date, duly certified by the Agency, JREDA and the institution.

1.3 Supply & Installation
The Agency shall supply and install **Air conditioning (A.C), BLDC Ceiling Fan (with Safety wire/rope), Induction Cookstoves, and LED Light Lighting Fixtures (Bulbs & Tube Lights)**. Installation shall ensure proper alignment, aesthetics and compliance with Indian Electricity Rules, National Electrical Code (NEC) and relevant BIS standards. All required consumables such as wires, connectors, fasteners and accessories shall be arranged by the Agency.

1.4 Testing & Commissioning
The Agency shall conduct functional testing of all installed systems and rectify defects immediately. An Installation and Commissioning Report shall be submitted, including serial numbers, location details, functionality confirmation and joint certification.

2. Energy Baseline & Monitoring
The Agency shall collect pre-installation energy consumption data for the last 12 months or establish baseline through measurement where data is unavailable. Post-installation monitoring shall include monthly performance reporting and annual energy consumption comparison. An energy savings analysis report shall be submitted.

3. Operation & Maintenance (CMC – 5 Years)
The Agency shall provide free replacement or repair of defective components during the CMC period of 5 years. The Agency shall ensure system uptime and performance, undertake regular maintenance and breakdown support, and maintain service records with periodic reporting.

4. Safety & Compliance
The Agency shall comply with applicable safety regulations, including CEA Safety Regulations, 2023 and relevant IS standards such as IS 374:2019 and IS 5216. Necessary PPE, including insulated gloves, mats, helmets, safety shoes and goggles shall be provided. The Agency shall ensure deployment of trained and certified manpower and shall be fully responsible for worksite safety, third-party liability and worker compensation.

5. Logistics & Execution
The Agency shall arrange all tools, equipment and manpower required for execution. Transportation, loading, unloading and storage shall be managed by the Agency. The work shall be carried out with minimal disruption to institutional activities. Proper housekeeping and waste disposal shall be ensured.

6. Reporting & Documentation
The Agency shall submit Dismantling Reports, Installation & Commissioning Reports, Energy Baseline & Savings Reports and Monthly Progress Reports along with geotagged photographs. Reports shall be submitted in both hard copy (duly signed) and soft copy in Excel format.

7. Technical Standards
All equipment supplied shall comply with BEE standards and the latest BIS/IS specifications. Equipment shall be new, not older than one year from the manufacturing date, and sourced from reputed manufacturers.

8. Inspection & Quality Assurance
JREDA reserves the right to inspect the work at any stage. Any deviation from specifications shall be rectified by the Agency at its own cost. Third-party testing may be conducted if required.

9. Insurance & Liability
The Agency shall provide transit-cum-installation insurance, third-party liability insurance and project insurance covering the CMC period, including risks such as natural calamities and theft.

10. Variation & Flexibility
The quantity of work may vary based on site conditions. Payment shall be made based on the actual installed quantity. JREDA reserves the right to add or remove institutions and modify the scope as required.

11. Cost of Appliances and 05 Years Comprehensive Maintenance Contract (CMC) Release Mechanism:

JREDA shall release 100% payment of the total quoted value to the successful bidder after successful supply, installation, testing, commissioning, submission of required documents, and verification/approval by JREDA along with the Bank Guarantee submission as mentioned below:

3. The Performance Bank Guarantee of 05(Five)% shall be submitted and retained for the entire 05-year Comprehensive Maintenance Contract (CMC) period and shall be released/refunded 60 days after the successful completion of the CMC period, subject to satisfactory fulfillment of all CMC obligations, timely maintenance, prompt resolution of defects and complaints, submission of requisite service reports, and certification by JREDA and/or the concerned authority, in accordance with the tender conditions

4. The Bank Guarantee for CMC for 5 Years equivalent to the 20(Twenty)% of the total Work Order value, inclusive of GST and all applicable taxes, in the form of a DD/BG/FDR in favor of the Director, JREDA payable at Ranchi against valid till CMC period of complete system. For this bidder has to submit a total of 05(five) nos. of Bank Guarantees of each 04(Four)% value of the work order (i.e. total 20% of work order value) each having validity respectively for 1 year, 2 years, 3 years, 4 years and 5 years 3 months respectively.

   If the Contractor fails to perform CMC & submit the CMC report in JREDA within one month after respective quarters, JREDA may reserve the rights to revoke the bank guarantee and take other necessary action against the bidder as per JREDA NIB terms and conditions

12. Awareness & Visibility
The Agency shall install awareness boards of size **6 ft × 4 ft** at each project site, prominently displaying the benefits of energy efficiency, energy conservation messages, and approved branding of **JREDA, Government of Jharkhand, and BEE**.

Further, all supplied appliances shall mandatorily carry **GoJ, JREDA, and BEE branding** through durable, high-quality stickers/labels affixed at clearly visible locations on each appliance. The branding material shall be weather-resistant, tamper-resistant, and of good print quality, as per the design and approval of JREDA.

- Complaint resolution SLA.
- Preventive maintenance schedule.
- Installation safety checklist.
- User training after installation.
- Energy-saving monitoring after installation.

13. Handover & Closure

The Agency shall hand over installed systems and dismantled equipment to the institution. Completion report and energy savings assessment shall be submitted. Basic training on operation and maintenance shall be provided to the institution's staff, followed by the detailed project report, detailed documents and geotagged images for the same.

14. Technical Specification

The following technical specifications are proposed for the supply, installation, testing, commissioning, and maintenance of energy-efficient appliances under the project. The specifications are intended to ensure quality, safety, durability, energy savings, and reliable performance across Government schools, colleges, institutions, buildings, and other Government premises in the State of Jharkhand.

All appliances supplied under this project shall be new, unused, factory-tested, and of reputed/established brands only. Wherever BEE Star Labelling is applicable, only BEE 5-Star rated appliances shall be accepted. The products shall conform to applicable BIS/ISI standards, BEE norms, safety standards, and relevant Government of India guidelines. The make and model of each appliance shall be submitted by the Agency for prior approval of JREDA before supply and installation.

1. Technical Specification of Integral Type 12 W LED Bulb (5 Star Rating):

Sr. No.	Parameters	Technical Specifications for 12 W LED Bulb (5 Star Rating)
1	Light Source	SMD LED Chip
2	LED Chip Efficacy	Minimum 120 lm/W
3	Lamp Life Hrs	Minimum 25,000
4	Luminous Efficacy	> 100 lm/w
5	Ingress Protection	IP 20 Class 1
6	Rated Luminous Flux	1200 Lumens
7	CRI (Typical)	Minimum 80
8	Total Harmonic Distortion	Maximum 20%
9	Driver Efficiency	>85%
10	PF	Minimum 0.9
11	Operating Voltage Range	100 V-300 V
12	Surge Protection	4 kV
13	Working Temp	-10 to 45 deg C
14	Star Rating	5 Star

2. Technical Specification of 20 W Energy Efficient LED Tube Light (5 Star Rating)

Sr.	Parameters	Technical Specifications for 20 W Energy Efficient LED Tube

No.		Light
1	Light Source	SMD/COB LED
2	Certification	Energy Efficient LED Tube Light
3	LED Lamp Hours	50000 Hrs.
4	Luminous Efficacy	> 100 lm/w
5	Lighting Wattage/Type	20 W LED Tube Light
6	Ingress Protection	IP20 Class 1
7	Minimum Luminous Flux	Min. 2000 Lm + 5% tolerance
8	CRI (Typical)	>80
9	Power Factor	0.95 at full load / 230V ac
10	Life	50000 Burning hour
11	THD	<=20%
12	Star Rating	5 Star

3. Technical Specification of BLDC Fans (fitted with Safety Rod) – (5 Star Rating)

Sr. No.	Parameters	Technical Specifications for 30 W BEE Star Rated Energy Efficient Ceiling Fans
1	Certification	BEE Star Rated Energy Efficient regulator based (BLDC) Ceiling fan
2	Sweep	1200 mm
3	Air Delivery (m3/min.)	≥ 210
4	Service Value	≥ 6
5	Power Factor	0.90
6	Nominal Wattage at maximum speed and at rated Voltage	30 watts at 24 V DC by SMPS (input voltage 230-Volt AC)
7	Tolerance Limits	As per clause of 15.2 of IS 374:2019
8	Safety Rod	Safety rod to be provided and fitted along with BLDC ceiling fan; the rod shall be designed to prevent load bearing beyond a safe threshold and ensure safety compliance
9	Star Rating	5 Star

4. Technical Specification of Induction Single and Double Burner Cookstoves

Sl.No.	Parameter	Double Burner Induction	Single Burner Induction Cookstove
1	Type	Induction Cooktop	Basic Induction Cookstove
2	Rated Power	2000 – 3500 W	1200 – 2000 W
3	Voltage	220–240 V, 50 Hz	220–240 V, 50 Hz
4	Heating Zones	2	1
5	Power Distribution	Independent / Shared	Single Load
6	Efficiency	85% – 90%	80% – 85%
7	Control Type	Touch (Dual Control)	Push Button (Basic)
8	Temperature Range	60°C – 240°C	80°C – 220°C
9	Power Levels	6 – 9	5 – 6
10	Timer	Yes (per burner)	Limited
11	Preset Modes	6 – 10	3 – 5
12	Display	Dual LED	Basic LED
13	Pan Detection	Yes (per zone)	Yes
14	Auto Shut-off	Yes	Yes

15	Overheat Protection	Yes	Yes
16	Child Lock	Yes	Not Available
17	Body Material	Full Glass Surface	Ceramic + Plastic
18	Cooling System	Dual Fan	Single Fan
19	Noise Level	Low	Moderate
20	Compatibility	Same	Same
21	Portability	Moderate	High
22	Dimensions	Wide	Compact

5. Technical Specification of BEE 5-Star Rated Inverter Air Conditioner (5 Star Rating).

Sl.No.	Capacity	Type	Star Rating	Voltage Range	Refrigerant	Condenser	Warranty Compressor
1	1 Ton	Inverter	5 Star	140-290V	R32	Copper	10 Years
2	1.5 Ton	Inverter	5 Star	140-290V	R32	Copper	10 Years
3	2 Ton	Inverter	5 Star	140-290V	R32	Copper	10 Years

Note: The bidder shall supply only 5-star-rated appliances from reputed manufacturers. The model and make of the appliances shall be subject to prior approval from the Jharkhand Renewable Energy Development Agency before supplying.

Report Submission:

The Agency shall submit a comprehensive report after completion of the supply, installation, testing, and commissioning of the appliances at each site. The report shall include site-wise details of installed appliances, make and model, technical specifications, BEE star rating details, warranty documents, photographs before and after installation, commissioning certificates, beneficiary/site acknowledgement, and compliance with approved branding requirements.

The report shall also include details of awareness boards installed at each site, quality checks carried out, safety compliance, energy-saving potential, and any observations or recommendations for effective operation and maintenance. The final report shall be submitted in both hard copy and soft copy formats as per the timeline and format prescribed by JREDA.

Category 11

Engagement of Agencies for capacity building on Energy Conservation Week and preparation of Detailed Project Report

SCOPE OF WORK (SOW)

Engagement of Agencies for capacity building on Energy Conservation Week and preparation of Detailed Project Report.

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainability, energy efficiency, decarbonization, climate resilience, resource optimization, and circular economy principles throughout the entire project lifecycle, including planning, design, execution, implementation, documentation, reporting, monitoring, capacity building, and post-project activities.

The scope of work for Agencies Shortlisted under "**Proposal for capacity building on Energy Conservation Week and preparation of Detailed Project Report"** will be as below:

Scope of work: The Agency submitting bids for this assignment should fulfil the following criteria in scope of work consist Finalization of agenda for the training programs in consultation with SDA.

Activity 1st of Energy Conservation Week

1. The agency will arrange the workshop on Energy Conservation model making based on the Energy Conservation theme in 03 Government Schools/Colleges in Jharkhand (Model Raw material for model making and other consumables used in the same (i.e., Colour, Paints, etc. required for the model shall be provided by the Agency.

Activity 2nd of Energy Conservation Week

2. The agency needs to arrange the Drawing/Sketch Competition based on Energy Conservation in 03 Nos. Remote Rural area government schools/College (All the consumables utilized during the event shall be provided by the agency).

Activity 3rd of Energy Conservation Week

3. Agency needs to arrange the Essay Writing / Article Writing based on Energy Conservation in 03 Nos. Government Women's Colleges/Schools in the state of Jharkhand.

Activity 4th of Energy Conservation Week

4. The agency needs to arrange the Debate & Quiz Competition based on Energy Conservation in 03 Nos. Schools/Colleges followed by the Quiz competition in Jharkhand.

Activity 5th of Energy Conservation Week

5. The agency needs to plan an event on the 03 Nos. of Welfare/Residential Society, Social gathering places like park, clubs etc;/campus and Ladies Club Campus with proper seating and lighting arrangements in the garden, followed by the High Tea, basically focused on the wives of Government officers' club in the state of Jharkhand, based on Energy Conservation, followed by the quiz competition.

Activity 6th of Energy Conservation Week

6. The agency needs to do an awareness program in 03 village (Subject to JREDA Approval) based on Energy Conservation, and raise awareness among them of the effective utilization of Energy and its optimization and conservation and tell them how they can support the state by saving energy in Chapals and other assembly areas available in the villages.

Activity 7th of Energy Conservation Week

7. On the occasion of the National Energy Conservation Agency need to arrange a big event based on Energy Conservation in which the 3 Nos. Winners of each event shall be available in the event, and different delegates and VVIPS shall be available in the event along with the provisions of snacks packets and stage, etc. required for the same need to be arranged by the Agency, which also includes the To & Fro changes for all winners from their base location to the event location by Car.
8. The agency needs to arrange the Facilitation of the Chief Guest, JREDA Official, 3 Nos. winners from each event.

Note: -

1. The agency needs to install a banner and hoarding in each event referring to Energy Conservation Week, and a standee for the event.
2. The agency needs to arrange the snack packets and sitting arrangement along with all essential arrangements during the event.
3. Agency needs to shortlist 3 Nos. winners in each event, and who need to bring in the last EC Day event for prize distribution.
4. The agency needs to arrange the venue, Logistics, and Mementos, and facilitation of the guest
5. The agency needs to arrange the cultural event on the last day on the occasion of EC Week.
6. The agency needs to submit the complete recording of each event to the JREDA in a storage device which consists of the complete recording, photographs, and other publication material.
7. The agency needs to provide the certificate to the winners in the Folio folder and kit.
8. The agency needs to provide the hardcopy of the Individual photograph/ and the Winners' group photographs to all the winners' participants

On Energy Conservation Week Event Equipment List

1. A stage will be made 60/40ft with the necessary arrangements.
2. Banner on the stage of the 7-day Energy Efficiency Week Awareness Day program. Size 20ft/5ft
3. The agency needs to arrange the team for cultural events
4. Sound system arrangement
5. The Sitting arrangement of approx. 50-60 people in the events.
6. Flower Bouquet for all delegates
7. Mementoes for winners of Energy Efficiency Activities.
8. 5 mementoes for the cultural day program done on Energy Conservation Day.
9. 4 Chief Guest Memento
10. Chief Guest targeted according to the availability of MP, Mayor, MLA, Deputy Collector, etc. and other public delegates as a chief guest.
11. High tea arrangements with Snacks/Lunch packets.
12. The agency needs to submit the individual attendance sheet of all events to the JREDA along with the details of the project report

Professional for providing training in Workshops

The agency will have to provide services needed to have a Team of -Team Director, Program Coordinator, Script Writer, Male and female anchor Video and Photographer, Assistant cameraman, Still Photographer, Sound operator to execute and plan the event. The Team director will not be replaced without prior approval of JREDA. In case the Team director needs to be replaced, the proposed Team director should be sent to JREDA for approval.

Logo

Use the JREDA & BEE logo on the banners or any other documents prepared for the training workshop.

Extra Topics to be covered & focused areas during Energy Conservation Week

1. Energy Efficient Pumping System BEE 5-star rating and Energy Efficiency measures, etc.
2. Energy Efficiency tips for domestic (LED lights, 5-star fans including BLDC fans, energy efficient operation of fridge, etc.) and agriculture.
3. Jharkhand Govt. Scheme.
4. About the JREDA Website
5. Any other topic suggested by BEE/JREDA.
6. Financial benefits to stakeholders by adopting EE & water conservation techniques.

Other Points for Scope of Work

1. Registration and comparing during the training workshop.
2. Basic facilities on the stage to be organized.
3. A banner and a standee to be placed on the wall of the hall. The agency arranged for a lamp with 4-5 wicks so that the Chief Guest may light the lamp during the inauguration of the training workshop.
4. Organizing all logistics related to the programme, like Venue, Food Provider, morning tea and snacks, lunch, and evening tea and snacks during the training with the consultation of JREDA (lunch packet, tea, high tea for chief guest, etc.), Stationery, Banners, Standees, Advertisements, press release, etc., duly approved by SDA.

Photography of the event

Photography must include the following, as given below:

1. Photographs of participants.
2. Photographs of the trainer (while delivering the lecture during the training workshop)
3. Photographs for the inauguration of the training workshop. Some good photographs should be placed in the report. The agency should also submit all photographs in soft copy (in the original format of photos) to JREDA immediately after the event, along with details of the Chief Guest & number of participants.
4. Collection of feedback from the participants and collection of feedback from the coordinator.
5. A copy of the attendance sheet comprises name, village, contact details (mobile no. and email id), and Signature for farmers. For other participants, the sheet should also include the designation and organization.
6. Some photographs (Photographs should include 2 photographs of participants, one or 2 photographs for the inauguration of the workshop by the Chief Guest and photographs of the trainer)
7. Outcome of the workshop
8. Feedback from the capacity building program and suggestions.
9. Important points of the feedback received from the participants should be included in the report. Other relevant information and conclusion, etc.

Press Note published in Newspapers

Press note (In Hindi & English) is to be prepared by the agency with 02-03 photographs highlighting the main event, including the visibility of the Chief Guest, and the agency has to ensure its publicity through JREDA. This press note should also be shared with the JREDA head office through email **(info@jreda.com, eejharkhand@gmail.com)** at the same time. A template for the press note will be provided to JREDA Head Office for publication.

Submission of Reports to Jharkhand Renewable Energy Development Agency:

1. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms, Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes.

2. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:
    - Programme agenda and schedule;
    - Details of participants and resource persons;
    - Session-wise proceedings and outcomes;
    - Photographic documentation;
    - Media coverage, if any;
    - Summary of quiz/competition results and prize distribution details;
    - Feedback analysis and assessment outcomes;
    - Key observations, recommendations, and impact assessment.
4. The Bidder shall submit three (03) copies of the Final Completion Report comprising:
    - Two (02) Hard Bound Copies;
    - One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

5. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:
    - Full-length video recording of the event proceedings;
    - Geo-tagged and time-stamped high-resolution photographs;
    - Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
    - Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.
6. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external Hard Disk Drive (HDD) of a minimum 2 TB storage capacity.
7. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category 12

Engagement of Agency for Comprehensive Cool Roof Feasibility Study, Demonstration Project Implementation, and Urban Heat Island Mitigation Planning in Jharkhand

Engagement of Agency for Comprehensive Cool Roof Feasibility Study, Demonstration Project Implementation, and Urban Heat Island Mitigation Planning in Jharkhand

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainability, energy efficiency, decarbonization, climate resilience, resource optimization, and circular economy principles throughout the entire project lifecycle, including planning, design, execution, implementation, documentation, reporting, monitoring, capacity building, and post-project activities mentioned under the SOW at part A and B. Meanwhile, the agency needs to submit the detailed approach and methodology regarding the same as well for the execution and implementation strategy, along with the detailed action plan and roadmap, which must be duly approved by JREDA before proceeding with the work order and other necessary procurements

PART – A

COOL ROOF FEASIBILITY STUDY, DEMONSTRATION PROJECT IDENTIFICATION & IMPLEMENTATION

1. Background:

Rapid urbanization, climate variability, increasing ambient temperatures, and high heat absorption by conventional roofing materials have significantly intensified thermal stress across urban areas of Jharkhand, particularly in Ranchi and other emerging municipal regions. Elevated roof surface temperatures directly contribute to increased cooling energy demand, higher peak electricity loads, reduced indoor thermal comfort, deterioration of public health conditions, and increased greenhouse gas emissions.

In alignment with Energy Efficiency First principles, climate adaptation strategies, decarbonization goals, sustainable urban infrastructure development, and Net-Zero transition pathways, Jharkhand Renewable Energy Development Agency (JREDA) intends to undertake a comprehensive scientific and techno-commercial feasibility assessment for the deployment of Cool Roof technologies across urban clusters in Jharkhand.

The assignment shall include scientific thermal profiling, roof temperature analytics, energy saving assessment, technology selection, demonstration project implementation, validation of cooling performance, and development of scalable deployment frameworks for future state-wide implementation.

The project is envisioned not merely as a pilot intervention but as a foundational roadmap for integrating climate-responsive building envelopes into future urban planning and energy efficiency initiatives of the State.

2. Objective of the Assignment:

The objective of this assignment is to scientifically assess, design, implement, validate, and demonstrate the technical, economic, environmental, and sustainability benefits of Cool Roof technologies suitable for the climatic conditions of Jharkhand.

The study shall establish a measurable reduction in roof surface temperature, cooling energy demand, peak load requirement, and carbon emissions while improving indoor thermal comfort and urban climate resilience.

The selected agency shall also identify scalable implementation opportunities for integration into:

- Government buildings,
- Urban housing schemes,
- Smart City infrastructure,
- Public institutions,
- Commercial clusters,
- Industrial rooftops,
- Schools and healthcare facilities.

3. Detailed Scope of Work:

3.1 Baseline Assessment & Scientific Feasibility Analysis

The agency shall conduct a detailed baseline assessment of urban thermal conditions and roof heat absorption characteristics using satellite-based thermal analytics, GIS mapping, drone-assisted assessments, and field investigations.

The study shall include:

- Roof typology mapping,
- Identification of high heat-absorbing surfaces,
- Building material assessment,
- Roof emissivity and reflectivity analysis,
- Thermal stress assessment,
- Climate vulnerability analysis,
- Heat exposure mapping for dense urban areas.

The agency shall prepare a city-specific thermal vulnerability framework identifying:

- Heat stress hotspots,
- Vulnerable population clusters,
- Public infrastructure under thermal stress,
- High cooling demand zones,
- High electricity consumption areas.

The study shall integrate:

- Landsat,
- MODIS,
- Sentinel imagery,
- Infrared thermal datasets,
- GIS-based urban analytics.

The assessment shall also evaluate the correlation between:

- Roof surface temperature,
- Cooling energy demand,
- Urban density,
- Vegetation loss,
- Peak load demand,
- Heat wave intensity.

3.2 Cool Roof Technology Assessment & Material Benchmarking:

The agency shall undertake a comparative technical evaluation of available Cool Roof technologies suitable for Jharkhand climatic conditions.

The assessment shall include:

- High Albedo Reflective Coatings,
- Elastomeric reflective systems,
- Ceramic thermal coatings,
- Passive reflective lime technologies,
- Hybrid insulation systems,
- Green roof systems,
- Modular cool roofing materials,
- Nano-technology-based reflective materials.

The assessment shall analyze:

- Solar Reflectance Index (SRI),
- Thermal emittance,
- Durability under Indian weather conditions,
- Dust and moisture resistance,
- Maintenance requirements,
- Application methodology,
- Lifecycle cost,

- Thermal degradation profile,
- Local availability of materials,
- Environmental sustainability.

The selected agency shall recommend:

- Most suitable technology for Jharkhand,
- Climate-zone-wise recommendations,
- Cost-effective deployment strategy,
- Long-term scalability potential,
- Integration potential with rooftop solar systems.

3.3 Energy Efficiency, Demand Side Management & Decarbonization Analysis

The agency shall conduct detailed energy modelling and cooling load analysis to quantify:

- Reduction in indoor temperature,
- Reduction in HVAC energy consumption,
- Annual electricity savings,
- Reduction in cooling degree days,
- Peak demand reduction,
- Carbon emission reduction potential.

The analysis shall include:

- Building Energy Simulation,
- Cooling load modelling,
- Demand Side Management (DSM) integration,
- Seasonal energy performance assessment,
- Thermal comfort benchmarking.

The agency shall establish:

- Energy Efficiency Quotient (EEQ),
- Carbon Reduction Index,
- Roof Thermal Performance Index.

Detailed calculations shall include:

- kWh savings,
- Peak load shaving,
- CO_2 emission reduction,
- Lifecycle emission reduction,
- Payback period,
- Cost-benefit analysis,
- Internal Rate of Return (IRR),
- Return on Investment (ROI).

The study shall additionally explore:

- Carbon financing opportunities,
- ESG integration potential,
- Climate adaptation funding opportunities,
- Green building compliance pathways.

4. Demonstration Project Identification & Pilot Implementation

4.1 Demonstration Site Identification

The agency shall identify high-visibility demonstration sites within selected urban areas in consultation with JREDA. Priority shall be given to:

- Government offices,
- Schools,
- Hospitals,
- Municipal buildings,
- Smart City infrastructure,
- Urban housing clusters,
- Commercial complexes,
- Bus terminals,
- Public utility buildings.

Selection criteria shall include:

- High thermal stress exposure,
- Large roof surface area,
- High public visibility,
- Replication potential,
- High cooling energy demand,
- Ease of monitoring and validation.

The agency shall prepare:

- Site suitability matrix,
- Technical feasibility report,
- Structural compatibility assessment,
- Roof condition survey,
- Energy consumption baseline.

4.2 Pilot Project Design & Execution

The agency shall implement Cool Roof systems over a **minimum of 10,000 sq. ft.** area or as directed by JREDA.
The implementation scope shall include:

- Surface preparation,
- Material procurement,
- Application and execution,
- Quality assurance,
- Safety compliance,
- Thermal instrumentation installation,
- Monitoring systems deployment.

The agency shall ensure:

- Compliance with national standards,
- Proper curing and finishing,
- Uniform application quality,
- Durability testing,
- Thermal performance validation.

The pilot implementation must demonstrate:

- Measurable roof temperature reduction,
- Indoor thermal comfort improvement,
- Reduction in energy consumption,
- Peak demand reduction,
- Improvement in occupant comfort.

4.3 Performance Validation & Impact Assessment

The agency shall undertake pre- and post-implementation monitoring through:

- Thermal imaging,
- IoT sensors,
- Smart energy meters,
- Infrared thermography,
- Indoor-outdoor temperature monitoring,
- Weather data correlation.

The validation study shall quantify:

- Roof surface temperature reduction,
- Indoor temperature reduction,
- HVAC load reduction,
- Energy savings,
- Carbon emission reduction,
- Improvement in thermal comfort index.

The agency shall develop:

- Scalability roadmap,
- Replication framework,
- State-wide implementation strategy,

- Technical standards for future adoption.
- Development of Jharkhand Cool Roof Technical Standards,

PART – B
URBAN HEAT ISLAND (UHI) ASSESSMENT & CITY HEAT MITIGATION STRATEGY

1. Background
Urban Heat Island (UHI) effect has emerged as one of the most significant climate risks affecting rapidly urbanizing cities. Increasing built-up density, reduction in urban vegetation, extensive use of heat-retaining construction materials, traffic congestion, industrial emissions, and changing land-use patterns have accelerated urban warming across cities of Jharkhand.
The rising intensity of urban heat has severe implications on:
- Public health,
- Urban livability,
- Energy infrastructure,
- Water demand,
- Air quality,
- Climate resilience,
- Labour productivity,
- Economic sustainability.

JREDA intends to undertake a scientific city-level Urban Heat Island assessment to establish long-term climate adaptation strategies and integrated urban heat mitigation frameworks.

2. Scope of Work – Urban Heat Island Study
The agency shall undertake advanced scientific assessment of Urban Heat Island intensity and climate vulnerability for selected cities.
The study shall include:
- Decadal thermal mapping,
- Surface temperature analytics,
- Land Use Land Cover (LULC) analysis,
- Urban density mapping,
- Heat vulnerability indexing,
- Climate risk projections.

The agency shall prepare:
- Ward-wise heat maps,
- Urban heat intensity atlas,
- Seasonal thermal stress maps,
- Population heat vulnerability assessment.

The study shall establish relationship between:
- Urban morphology,
- Surface materials,
- Green cover loss,
- Traffic density,
- Water body reduction,
- Energy consumption patterns,
- Urban heat accumulation.

Advanced modeling techniques using:
- Regional Climate Models (RCMs),
- Integrated Assessment Models (IAMs),
- Downscaled climate simulations,
- GIS-based predictive modeling, shall be utilized for projecting future urban heat scenarios over 20 years.

3. Urban Heat Mitigation Strategy & Recommendations
The agency shall prepare an integrated City Heat Mitigation Framework including:
- Cool roof integration strategy,

- Urban greening interventions,
- Reflective pavement technologies,
- Heat-resilient urban planning,
- Blue-green infrastructure recommendations,
- Climate-responsive urban design,
- Sustainable building envelope strategy.

The strategy shall include:

- Ward-wise mitigation priorities,
- Heat action planning,
- Public cooling infrastructure recommendations,
- Heat-resilient transport corridors,
- Thermal comfort enhancement measures.

The agency shall also recommend:

- Policy and regulatory framework,
- Municipal implementation roadmap,
- Integration with Smart City Mission,
- Climate financing opportunities,
- ESG-linked urban sustainability framework.

4. Expected Deliverables under the scope of Part A&B

The agency shall submit:

- Inception Report
- Action plan and execution road map
- Thermal Profiling Report
- Urban Heat Island Atlas
- Climate Projection Report
- Cool Roof Technology Assessment Report
- Energy Saving & Carbon Reduction Assessment
- Pilot Implementation Report
- Integration with Smart City command centres
- ESG and SDG-aligned implementation frameworks
- Integration of Cool Roof + Rooftop Solar hybrid systems
- Development of Jharkhand Cool Roof Technical Standards
- Carbon credit and green finance assessment
- Performance Monitoring & Validation Report
- City Heat Mitigation Strategy
- Climate-resilient urban planning tools
- State-wide Replication Framework
- Final DPR and Executive Presentation
- The study report (In the form of a book in good quality glossy paper) derived from the aforementioned work need to circulate among all relevant stakeholders by the bidder, and also the copies to JREDA as well for distribution and capacity building purposes.

Note applicable for Part A and B:

- Meanwhile, the Agency shall submit a detailed **Approach and Methodology** for execution and implementation of the project, along with a comprehensive **Action Plan and Roadmap** covering timelines, deployment strategy, quality assurance, monitoring mechanism, and maintenance plan.
- The submitted methodology, action plan, and roadmap shall be duly reviewed and approved by JREDA prior to issuance of the Work Order and before initiating any further necessary proceedings related to project execution.

Submission of Reports to Jharkhand Renewable Energy Development Agency, if applicable:

1. The Successful Bidder shall prepare and submit all event-related documentation in formats duly approved by JREDA/ BEE. The Bidder shall ensure submission of duly filled Attendance Sheets, Registration Forms,

Feedback Forms, Pre/Post Assessment Sheets, Quiz/Competition Evaluation Sheets, and any other formats prescribed by JREDA/BEE. All such documents shall be submitted in original hard copy as well as in editable digital format (MS Excel/MS Word) for record and verification purposes if applicable.

2. The Successful Bidder shall submit comprehensive Event Completion Reports for each programme/activity conducted under the assignment. The report shall include, but not be limited to:
    - Programme agenda and schedule;
    - Details of participants and resource persons;
    - Session-wise proceedings and outcomes;
    - Photographic documentation;
    - Media coverage, if any;
    - Summary of quiz/competition results and prize distribution details;
    - Feedback analysis and assessment outcomes;
    - Key observations, recommendations, and impact assessment.
3. The Bidder shall submit three (03) copies of the Final Completion Report comprising:
    - Two (02) Hard Bound Copies;
    - One (01) Spiral Bound Original Copy.

The Bidder shall also submit soft copies in PDF and editable formats (MS Word/Excel/PowerPoint) containing all reports, training materials, presentations, pamphlets/leaflets/brochures (in both English and Hindi), IEC materials, assessment reports, participant database, and any other documents generated during execution of the assignment.

4. The Successful Bidder shall submit complete audio-visual documentation of all programmes/events conducted under the project, including:
    - Full-length video recording of the event proceedings;
    - Geo-tagged and time-stamped high-resolution photographs;
    - Photographs of inauguration sessions, technical sessions, competitions, exhibitions, prize/felicitation ceremonies, and group photographs;
    - Short video clips/interviews of participants, officials, and stakeholders, wherever applicable.
5. All digital records, photographs, videos, presentations, reports, and related documents shall be submitted to JREDA in a reputable branded external Hard Disk Drive (HDD) of a minimum 2 TB storage capacity.
6. All reports, IEC materials, training content, photographs, videos, and related outputs prepared under this assignment shall remain the sole property of Jharkhand Renewable Energy Development Agency. The Bidder shall not use or publish the same without prior written approval of JREDA.

Category 13

Engagement of the Agency for Theory Cum Practical Energy Conservation Awareness Workshops For Diploma / Degree Engineering Colleges/Other Government Institutions in Jharkhand

Engagement of Agency for Theory-cum-Practical Energy Conservation Awareness Workshops in Diploma/ Degree Engineering Colleges and Other Government Institutions/Departments and Premises across the State of Jharkhand.

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainable, energy-efficient, climate-responsive, and circular economy principles throughout the entire project lifecycle, including planning, execution, documentation, reporting, and post-event activities. All engaged agencies shall be required to comply with the **"Common Scope of Work – Sustainability, Circular Economy & Green Event Management" guidelines and associated sustainability protocols prescribed by JREDA.**

The Scope of Work (SoW) aims to ensure that all agencies engaged by the Jharkhand Renewable Energy Development Agency (JREDA) mandatorily integrate sustainability, energy efficiency, decarbonization, climate resilience, resource optimization, and circular economy principles throughout the entire project lifecycle, including planning, design, execution, implementation, documentation, reporting, monitoring, capacity building, and post-project activities mentioned under the SOW at part A and B

Jharkhand Renewable Energy Development Agency (JREDA), being the State Designated Agency (SDA) of the Bureau of Energy Efficiency (BEE), Government of India, proposes to organize Theory-cum-Practical Energy Conservation Awareness Workshops in selected Diploma and Degree Engineering Colleges across the State of Jharkhand. The programme aims to bridge the gap between academic learning and practical field-level energy management by exposing engineering students and faculty members to real-time energy conservation practices, energy audit methodologies, efficient technologies, renewable energy applications, and climate-responsive solutions.

1. Background

JREDA has been actively implementing awareness, capacity building, and promotional activities in the areas of Energy Efficiency, Demand Side Management (DSM), Renewable Energy, Sustainable Buildings, Electric Mobility, Clean Cooking, and Climate Responsive Development across Jharkhand.
Engineering students are future professionals, designers, planners, auditors, entrepreneurs, and decision-makers. Therefore, sensitizing them at the academic stage will help create a skilled and informed workforce capable of supporting the State's energy transition, decarbonization goals, and sustainable development initiatives.
The proposed workshops will provide both theoretical knowledge and hands-on practical exposure on energy conservation, efficient equipment, renewable energy systems, energy audit instruments, measurement techniques, and BEE-led national programmes.

2. Objectives of the Programme

- Classroom capacity building and awareness presentation on said subject.
- To create awareness among engineering students and faculty members regarding Energy Conservation, Energy Efficiency, Renewable Energy, and Sustainability.
- To provide practical exposure on energy audit instruments, measurement procedures, and field-level energy performance assessment.
- To familiarize participants with key BEE programmes such as PAT, Standards & Labelling, ECBC/ECSBC, DSM, and Mission LiFE.
- To promote understanding of energy-efficient technologies in pumps, fans, motors, compressors, HVAC, lighting, appliances, and building systems.
- To sensitize students on emerging areas such as electric mobility, EV charging infrastructure, electric cooking, solar rooftop systems, and climate-responsive technologies.
- To encourage innovation, research, internships, entrepreneurship, and career opportunities in the energy efficiency and renewable energy sector.
- To develop a culture of energy-conscious behaviour and sustainable engineering practices among future professionals.

3. Scope of Work

1. The selected Energy Audit Consultant/Agency shall organize Theory-cum-Practical Energy Conservation Awareness Workshops in approved Diploma/Degree Engineering Colleges across Jharkhand.
2. Each workshop shall include classroom-based technical sessions, practical demonstrations, interactive exercises, and exposure to real-life energy conservation opportunities.
3. The duration of each workshop shall be approximately 05–06 hours, excluding lunch/refreshment break.
4. Facilitation of guests and delegates shall be done by the agency.
5. The agency will provide a live demonstration as well and show the tools used in the energy audit activity as well
6. The Agency shall coordinate with the concerned institution for necessary arrangements, including auditorium/classroom, audio-visual system, laboratory support, electricity points, and student mobilization.
7. The Agency shall ensure participation of approximately 75–100 final-year students and faculty members in each workshop.
8. The Agency shall deploy qualified experts such as Certified Energy Auditors/Energy Managers, sector experts, renewable energy professionals, or experienced trainers.
9. The Agency shall demonstrate the use of energy audit instruments such as a power analyser, lux meter, thermal imaging camera, clamp meter, anemometer, tachometer, temperature/humidity meter, and other relevant tools.
10. The Agency shall conduct practical exercises on measurement of voltage, current, power factor, load profile, illumination level, temperature, airflow, and basic energy saving calculations.
11. The Agency shall include case studies from buildings, industries, institutions, pumping systems, lighting systems, HVAC systems, and renewable energy installations.
12. The Agency shall conduct a quiz/interactive assessment, feedback collection, and provide participation certificates to students/faculty members.
13. The Agency shall submit a workshop completion report to JREDA, including photographs, an attendance sheet, a feedback summary, topics covered, resource persons, and key outcomes.
14. The Agency shall promote JREDA/BEE initiatives and motivate institutions to form Energy Clubs or Energy Conservation Cells for continued awareness activities.
15. The Agency shall provide detailed training on various tools, instruments, software, and equipment used in energy audits, including their purpose, operating procedure, safety precautions, calibration requirements, data recording formats, and interpretation of measured results.
16. The Agency shall conduct live demonstrations of energy audit instruments such as power analyser, clamp meter, lux meter, thermal imaging camera, anemometer, tachometer, temperature/humidity meter, flue gas analyser, ultrasonic flow meter, and other relevant instruments used for building and industrial energy audits.
17. The Agency shall provide project-based practical exposure to participants by demonstrating how an energy audit is planned, executed, documented, and reported, including preliminary data collection, site survey, measurement plan, baseline assessment, identification of energy saving opportunities, cost-benefit analysis, and preparation of audit recommendations.
18. The Agency shall conduct hands-on exercises for students on the measurement of electrical parameters, lighting levels, motor loading, pump/fan performance, HVAC performance indicators, thermal losses, and basic renewable energy system performance assessment.
19. The Agency shall demonstrate the use of audit data for estimating energy saving potential, demand reduction, monetary savings, simple payback period, carbon emission reduction, and sustainability benefits.
20. The Agency shall include mini case studies/project examples from buildings, institutions, pumping systems, HVAC systems, lighting systems, solar rooftop systems, and other relevant facilities to help participants understand real-world applications.
21. The Agency shall guide students on the preparation of a sample energy audit report, including executive summary, facility details, energy consumption analysis, measurement observations, energy conservation measures, financial analysis, implementation roadmap, and monitoring mechanism.
22. The Agency shall expose participants to project-based execution methodology, including identification of energy efficiency projects, technical feasibility assessment, vendor/technology evaluation, implementation planning, measurement & verification, and post-implementation performance monitoring.
23. The Agency shall encourage students to undertake campus-level energy conservation projects, energy walk-through audits, green campus initiatives, and innovation-based assignments under the guidance of faculty members and JREDA/Agency experts.
24. The Agency shall provide awareness on digital tools, mobile applications, simulation tools, benchmarking methods, and data analysis techniques used for energy performance assessment, energy monitoring, and sustainability reporting.

4. Topics to be Covered During Workshop

- Need for Energy Conservation, Energy Efficiency and Environmental Sustainability
- India's Energy Scenario, Panchamrit Goals, Net Zero Vision and Mission LiFE
- Role of BEE, SDA and JREDA in promoting Energy Efficiency
- Energy Conservation Act and major BEE schemes
- PAT Scheme, Standards & Labelling Programme, ECBC/ECSBC and DSM initiatives
- Energy Efficiency opportunities in pumps, motors, fans, compressors, HVAC and lighting systems
- Energy-efficient appliances and BEE star-rated equipment
- Solar rooftop systems, renewable energy technologies and hybrid energy solutions
- Electric vehicles, EV charging infrastructure and electric cooking solutions
- Basics of Energy Audit, Investment Grade Energy Audit and energy performance assessment
- Demonstration of energy audit instruments and measurement techniques
- Measurement of energy parameters and practical hands-on exercises
- Energy saving calculations, payback analysis and carbon emission reduction potential
- Sustainable buildings, green campus initiatives and climate-responsive engineering practices
- Career opportunities in Energy Audit, Energy Management, Renewable Energy and Sustainability
- Interactive session, quiz, feedback and discussion

5. Expected Outcomes

- Enhanced awareness among engineering students and faculty members on energy conservation and sustainable technologies.
- Practical understanding of energy audit tools, measurement techniques and energy saving opportunities.
- Development of technically skilled youth to support Jharkhand's energy efficiency and renewable energy initiatives.
- Promotion of behavioural change towards responsible energy use.
- Strengthening of academic-industry-government linkage in the field of energy efficiency.
- Creation of future-ready professionals for green jobs, clean energy transition and climate-responsive development.

Professional for providing training in Workshops:

The training shall be conducted by qualified domain experts such as Master Trainers, Certified Energy Auditors, Accredited Energy Auditors, GHG Lead Auditors/Lead Verifiers, IGBC Accredited Professionals (IGBC-AP), GEM Certified Professionals (GEM-CP), GRIHA Certified Professionals (GRIHA-CP), Chartered Engineers, sector experts, or other technically competent professionals having relevant experience in energy efficiency, sustainability, decarbonization, green buildings, and climate-related sectors only.

Submission of Reports to Jharkhand Renewable Energy Development Agency, if applicable:

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(SCHEDULE OF PRICE BID)

Tender Reference No.: 11/JREDA/EE/26-27

Subject: Engagement of Agencies for Rate Contract for Implementation, Execution, Capacity Building, and Preparation of Comprehensive Project Reports (CPRs) under the Energy Efficiency First Principle, Sustainable Demand Side Management (DSM), and Climate-Responsive Initiatives for the implementation of various DSM activities in the State of Jharkhand

Sl. No.	Description of Category	Quoted Rate for Per unit of Training Programme / Material Supply / Electrical Appliance Supply under the categories specified in the Notice Inviting Bid (NIB), inclusive of GST and all applicable taxes (₹).	
		In figures	In words
1	**Category 1:** Agriculture Demand Side Management (AgDSM)		
2	**Category-2:** Capacity Building through Animated, 3D, and Technical Short Films on Sustainability, Decarbonization, Demand Side Management (DSM), Climate Change, Energy Efficiency, Energy Conservation, and Other Best Practices for Sustainable Development.		
3	**Category-3:** Municipal Demand Side Management (MuDSM)		
4	**Category-4:** Engaging an Agency for Conducting Market Surveillance for the Standards and Labelling (S&L) program of BEE for the state of Jharkhand		
5	**Category-5:** Retailers Training Programme under the Provision of Standards and Labelling		
6	**Category-6:** Investment Bazaar to Promote Energy Efficiency for the State of Jharkhand		
7	**Category-7:** Engagement of Agencies for Conducting Various Sustainability, Decarbonization, Climate Change and other Demand Side Management (DSM) Capacity Building Programme in Jharkhand		
8	**Category-8:** Engagement of Agencies for Conducting Investment Grade Energy Audits (IGEA) and Detailed Energy & Sustainability Assessments for Government Buildings, Pumping Stations, Colleges, and Other Facilities across Jharkhand.		
9	**Category-9:** Establishing Demand Side Management (DSM) Clubs in Government Schools/Colleges and Conducting various DSM Awareness Programs in Jharkhand under the School/College Capacity Building Program		
9.1	**Government Primary/Secondary /Higher Secondary Schools**		
9.2	**Government Colleges / Institutions /ITI/ Engineering / and other government establishment, etc**.		

10	**Category-10:** Engagement of Agencies for Supply, Installation and 05 Years Comprehensive Maintenance Contract (CMC) of 5 Star rated energy-efficient appliances including Air conditioning (A.C), BLDC Ceiling Fan(with Safety wire/rope), Induction Cookstoves and LED Light Lighting Fixtures (Bulbs & Tube Lights), BLDC Ceiling Fans (with Safety Rods) across all Government Schools/Colleges/Institutions/Buildings and other Energy intensive government premises in state of Jharkhand.		
10.1	**Integral Type 12 W LED Bulb (5-Star Rating)**		
10.2	**20 W Energy Efficient LED Tube Light (5-Star Rating)**		
10.3	**BLDC Fans (fitted with Safety Rod) – (5-Star Rating)**		
10.4	**Induction Single Burner Cookstoves**		
10.5	**Induction Double Burner Cookstoves**		
10.6	**BEE 5-Star Rated Inverter Air Conditioner (5-Star Rating)**		
11	**Category-11:** Engagement of Agencies for capacity building on Energy Conservation Week and preparation of Detailed Project Report		
12	**Category-12:** Engagement of Agency for Comprehensive Cool Roof Feasibility Study, Demonstration Project Implementation, and Urban Heat Island Mitigation Planning in Jharkhand		
12.1	**PART – A: COOL ROOF FEASIBILITY STUDY, DEMONSTRATION PROJECT IDENTIFICATION & IMPLEMENTATION**		
12.2	**PART – B: URBAN HEAT ISLAND (UHI) ASSESSMENT & CITY HEAT MITIGATION STRATEGY**		
13	**Category-13:** Engagement of the Agency for Theory Cum Practical Energy Conservation Awareness Workshops for Diploma / Degree Engineering Colleges/Other Government Institutions in Jharkhand		

Note:

1. The price should include overhead /out-of-pocket expenses, travel, boarding, lodging, visits to site, all Taxes /Duties including Service Tax.
2. Bidder need to submit the Price bid separately in .XLS & .PDF format with digital signature.
3. The prices shall remain FIRM till completion of the Assignment.

Note: Do not submit the Price bid (SCHEDULE OF PRICE BID) along with technical submission else the bidder was disqualifying for participation of the bid

Signature & Seal
Full Name & Address

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