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| See the source image | C:\Users\Administrator\Desktop\EESL Office Work\Logo.png | Logo, company name  Description automatically generated |
| **Global Green Growth**  **Institute** | **Energy Efficiency Services Limited** | **Federation of Indian Chambers of Commerce and Industry** |

**Request for Techno- Commercial Proposal from ESCO/Vendor for Implementation of SEET**

**FICCI- EESL- GGGI** are deploying **Standard Energy Efficient Technologies (SEET)** in MSME Industries through innovative financing mechanism which will **Improve Industrial Productivity, Reduce Electricity & Fuel Bills,** **Control Emission of Pollutants, Access to Technologies at Discounted Price, reducing Operating & Maintenance Cost**. The targeted industrial clusters are (a) Rice Mill Cluster, Karnal (b) Textile Cluster, Panipat (c) Mixed Industry Cluster, Kundli, Sonipat.

Under the project, FICCI has executed the baseline energy audits (BEA) in about 20 no. of industries to assess the potential for adoption of SEET. Based on the study and discussion with stakeholders, actual potential for replacement of existing equipment’s with SEET is arrived. The aggregated demand for SEET adoption is provided in below sections.

**FICCI invites techno-commercial proposals from interested ESCOs/Service Providers/Vendors on the aggregated demand.**

**Request ESCO / Service Provider/Vendor to fill the following Information**

|  |  |  |
| --- | --- | --- |
| S No. | Particular | Details |
| 1 | **Name of the Organisation** |  |
| 2 | **Contact Person Name** |  |
| 3 | **Designation** |  |
| 4 | **Address for Communication** |  |
| 5 | **Contact Number/Mobile No.** |  |
| 6 | **Email ID** |  |
| 7 | **Website** |  |

|  |  |  |
| --- | --- | --- |
| S.No. | Organization Information/ Credentials | Information |
|  | Years of commencement of operations, commencement of business |  |
|  | Local Presence in the Cluster (Yes/No) |  |
|  | After Sales Service (Yes/No) |  |
|  | Has the company entered into ESCO contracts till date? (Y/N) |  |
|  | If yes, Model adopted (Shared Savings, Guranteed Saving, Deemed Saving) |  |
|  | Specify no. of ESCO projects completed |  |
|  | Coverage of industrial sector served (MSME/ Large Industry - Private/ PSU) |  |
|  | Number of BEE certified energy auditors. |  |
|  | Number of M&V certified professionals |  |
|  | Total employee strength for the overall business |  |
|  | Inventory of equipment of ESCO/energy audit instruments owned |  |
|  | Number of baseline & M&V audit conducted in last 3 years for estimation of energy savings |  |
|  | Net Positive worth for last 3 years (Yes/No) |  |
|  | Last 3 year’s average turnover, INR Lakhs |  |
|  | Total project cost of ESCO projects during last 3 years, INR Lakhs |  |
|  | Number of Loans taken from Banks/ NBFC during last 3 years for ESCO/ Other project implementation |  |
|  | Total amount of Loans taken from Banks/ NBFC, during last 3 years, INR Lakhs |  |

1. **Replacement of Air Compressor by Screw Compressor with VFD & Permanent Magnet Motor**

|  |  |  |
| --- | --- | --- |
| Particular | Unit | Value |
| Estimated Energy Consumption by equipment’s to be replaced based on baseline energy audits | kWh/year | 1055650 |
| Identified Energy Saving Potential | % | 41.47% |
|  | kWh/year | 437737 |
|  | Rs. Lakhs/year | 29.11 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Capacity of Air Compressor in kW (for 7 bar)** | **Quantity**  **No.** | **For upfront payment mode from client** | | **For EMI mode over 3 years period** | |
| **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** | **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** |
| 1 | 5.5 | 2 |  |  |  |  |
| 2 | 7.5 | 1 |  |  |  |  |
| 3 | 22 | 4 |  |  |  |  |
| 4 | 37 | 2 |  |  |  |  |
| 5 | 45 | 1 |  |  |  |  |
|  | **Total** | **10** |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| S.No. | Particular | Information |
| 1 | Specific Energy Consumption of the equipment (kW/cfm) |  |
| 2 | Equipment Warranty Period (Years) |  |
| 3 | Equipment supply lead time after place of order (Days) |  |
| 4 | Operating life cycle of the Equipment |  |
| 5 | Is the technology is field tested/ Demonstrated (Yes/No) |  |

**Note:** Kindly attach other details, if any

1. **Replacement of 1-75 kW Motors with Energy Efficient (IE-3) Motors**

|  |  |  |
| --- | --- | --- |
| Particular | Unit | Value |
| Estimated Energy Consumption by equipment’s to be replaced based on baseline energy audits | kWh/year | 13577562 |
| Identified Energy Saving Potential | % | 5.00% |
|  | kWh/year | 678878 |
|  | Rs. Lakhs/year | 45.15 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Capacity of IE 3 Motor in kW required**  **( 4 pole))** | **Quantity**  **No.** | **For upfront payment mode from client** | | **For EMI mode over 3 years period** | |
| **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** | **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** |
| 1 | 0.75 | 27 |  |  |  |  |
| 2 | 1.1 | 89 |  |  |  |  |
| 3 | 1.5 | 78 |  |  |  |  |
| 4 | 2.2 | 41 |  |  |  |  |
| 5 | 3.7 | 68 |  |  |  |  |
| 6 | 5.5 | 67 |  |  |  |  |
| 7 | 7.5 | 49 |  |  |  |  |
| 8 | 11 | 44 |  |  |  |  |
| 9 | 15 | 46 |  |  |  |  |
| 10 | 22 | 36 |  |  |  |  |
|  | **Total** | **545** |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| S.No. | Particular | Information |
| 1 | Efficiency of the equipment offered (%) at |  |
|  | Capacity of IE 3 Motor in kW required |  |
|  | 0.75 |  |
|  | 1.1 |  |
|  | 1.5 |  |
|  | 2.2 |  |
|  | 3.7 |  |
|  | 5.5 |  |
|  | 7.5 |  |
|  | 11 |  |
|  | 15 |  |
|  | 22 |  |
| 2 | Equipment Warranty Period (Years) |  |
| 3 | Equipment supply lead time after place of order (Days) |  |
| 4 | Operating life cycle of the Equipment |  |
| 5 | Is the technology is field tested/ Demonstrated (Yes/No) |  |

**Note:** Kindly attach other details, if any

1. **Installation of Automation & Control System in Boiler \***

|  |  |  |
| --- | --- | --- |
| Particular | Unit | Value |
| Present Fuel Consumption by equipment’s to be replaced based on baseline energy audits | tons/year | 28038 |
| Identified Energy Saving Potential | % | 4.33% |
|  | tons/year | 1212.72 |
|  | Rs. Lakhs/year | 90.86 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Boiler Capacity in TPH (Biomass fired)** | **Quantity**  **No.** | **For upfront payment mode from client** | | **For EMI mode over 3 years period** | |
| **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** | **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** |
| 1 | 0.3 | 1 |  |  |  |  |
| 2 | 0.75 | 1 |  |  |  |  |
| 3 | 1 | 1 |  |  |  |  |
| 4 | 2 | 2 |  |  |  |  |
| 5 | 4 | 1 |  |  |  |  |
|  | **Total** | **6** |  |  |  |  |

\* Automation need to be customized as per requirement of individual units. However, for quotation consider full automation on boiler operations.

|  |  |  |
| --- | --- | --- |
| S.No. | Particular | Information |
| 1 | Equipment Warranty Period (Years) |  |
| 2 | Equipment supply lead time after place of order (Days) |  |
| 3 | Operating life cycle of the Equipment |  |
| 4 | Is the technology is field tested/ Demonstrated (Yes/No) |  |

**Note:** Kindly attach other details, if any

1. **Replacement of Existing fans with 32-35 Watt BLDC Fan 1200mm Sweep**

|  |  |  |
| --- | --- | --- |
| Particular | Unit | Value |
| Estimated Energy Consumption by equipment’s to be replaced based on baseline energy audits | kWh/year | 151224 |
| Identified Energy Saving Potential | % | 36.56% |
|  | kWh/year | 55289 |
|  | Rs. Lakhs/year | 6.38 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **32-35 Watt (1200mm Sweep)** | **Quantity**  **No.** | **For upfront payment mode from client** | | **For EMI mode over 3 years period** | |
| **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** | **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** |
| 1 | 32-35 Watt (1200mm Sweep) | 423 |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| S.No. | Particular | Information |
| 1 | Power consumption of Fan proposed (kW) |  |
| 2 | Minimum air Delivery (m3/min) of fan |  |
| 3 | Minimum service Value (m3/min/watt) of fan |  |
| 4 | Equipment Warranty Period (Years) |  |
| 5 | Equipment supply lead time after place of order (Days) |  |
| 6 | Operating life cycle of the Equipment |  |
| 7 | Is the technology is field tested/ Demonstrated (Yes/No) |  |

**Note:** Kindly attach other details, if any

1. **Installation of PLC based Automation & Control System for Jet Dyeing Machine\***

|  |  |  |
| --- | --- | --- |
| Particular | Unit | Value |
| Present Fuel Consumption by equipment’s to be replaced based on baseline energy audits | tons/year | 6698 |
| Identified Energy Saving Potential | % | 1.39% |
|  | tons/year | 93 |
|  | Rs. Lakhs/year | 7.33 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Jet Dyeing Machine Capacity (in kg)** | **Quantity**  **No.** | **For upfront payment mode from client** | | **For EMI mode over 3 years period** | |
| **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** | **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** |
| 1 | 60 | 1 |  |  |  |  |
| 2 | 200 | 2 |  |  |  |  |
| 3 | 300 | 1 |  |  |  |  |
| 4 | 400 | 2 |  |  |  |  |
| 5 | 500 | 1 |  |  |  |  |
| 6 | 800 | 1 |  |  |  |  |
|  | **Total** | **8** |  |  |  |  |

\* Automation need to be customized as per requirement of individual units. However, for quotation consider full automation.

|  |  |  |
| --- | --- | --- |
| S.No. | Particular | Information |
| 1 | Equipment Warranty Period (Years) |  |
| 2 | Equipment supply lead time after place of order (Days) |  |
| 3 | Operating life cycle of the Equipment |  |
| 4 | Is the technology is field tested/ Demonstrated (Yes/No) |  |

**Note:** Kindly attach other details, if any

1. **Installation of 100% Flash Steam and Condensate Recovery System\***

|  |  |  |
| --- | --- | --- |
| Particular | Unit | Value |
| Present Fuel Consumption by equipment’s to be replaced based on baseline energy audits | tons/year | 6450 |
| Identified Energy Saving Potential | % | 5.20% |
|  | tons/year | 335 |
|  | Rs. Lakhs/year | 21.28 |

Condensate recovery system is required for jet dyeing machines and Rice mills (Paddy dryers)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Detail** | **Quantity**  **No.** | **For upfront payment mode from client** | | **For EMI mode over 3 years period** | |
| **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** | **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** |
| 1 | 100% Flash steam and condensate recovery system | 2 |  |  |  |  |

\* Automation need to be customized as per requirement of individual units. However, for quotation consider full automation.

|  |  |  |
| --- | --- | --- |
| S.No. | Particular | Information |
| 1 | Equipment Warranty Period (Years) |  |
| 2 | Equipment supply lead time after place of order (Days) |  |
| 3 | Operating life cycle of the Equipment |  |
| 4 | Is the technology is field tested/ Demonstrated (Yes/No) |  |

**Note:** Kindly attach other details, if any

1. **Low grade Waste Heat Recovery system\***

|  |  |  |
| --- | --- | --- |
| Particular | Unit | Value |
| Present Fuel Consumption by equipment’s to be replaced based on baseline energy audits | tons/year | 6698 |
| Identified Energy Saving Potential | % | 4.60% |
|  | tons/year | 308 |
|  | Rs. Lakhs/year | 23.76 |

Low Grade Waste Heat Recovery System is required to recover the heat from hot effluent (about 70-85 oC) discharged from Jet dyeing machines

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Detail** | **Quantity**  **No.** | **For upfront payment mode from client** | | **For EMI mode over 3 years period** | |
| **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** | **Rate of Supply and Installation per equipment (in ₹)** | **Total Amount (₹)** |
| 1 | Low grade Waste Heat Recovery System | 3 |  |  |  |  |

\* Automation need to be customized as per requirement of individual units. However, for quotation consider full automation.

|  |  |  |
| --- | --- | --- |
| S.No. | Particular | Information |
| 1 | Equipment Warranty Period (Years) |  |
| 2 | Equipment supply lead time after place of order (Days) |  |
| 3 | Operating life cycle of the Equipment |  |
| 4 | Is the technology is field tested/ Demonstrated (Yes/No) |  |

**Note:** Kindly attach other details, if any

***For further information, contact***

**Federation of Indian Chambers of Commerce and Industry (FICCI)**

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