15 March 2021

Project Title: UNIDO/GEF PROJECT – Sustainable Energy Initiative for Industries in Pakistan (SAP ID 100045)

TERMS OF REFERENCE (TOR) FOR ENERGY MANAGEMENT INVESTMENT PROJECTS SUPPORT FOR SME’S IN THE INDUSTRIAL SECTOR

1. Organizational Context:

United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations with a mission to promote and accelerate inclusive and sustainable industrial development (ISID) in developing countries and economies in transition. The Organization’s programmatic focus is structured in the thematic priorities, each of which represents different aspects of ISID:

- Creating shared prosperity
- Advancing economic competitiveness
- Safeguarding the environment
- Strengthening knowledge and institutions

UNIDO is one of the implementing agencies of the Global Environment Facility (GEF). Through the continued cooperation between GEF and UNIDO, the latter is implementing various GEF-funded projects in Pakistan and across the globe.

2. Project Background

The United Nations Industrial Development Organization (UNIDO) is implementing a Global Environment Facility (GEF) funded project entitled; “Sustainable Energy Initiative for Industries in Pakistan”. The ultimate goal of this UNIDO/GEF Project is to avoid greenhouse gas (GHG) emissions by developing and promoting a market environment that will stimulate investments in renewable energy and energy efficiency project in industry which, in turn, will support industrial development in Pakistan.

This UNIDO/GEF project seeks to promote the adoption of renewable energy and energy efficiency technologies and services in industries. This will be achieved through demonstrating the technical feasibility and commercial viability of the renewable energy and energy efficiency projects, strengthening the institutional capacity and establishing a conducive policy and legal
environment that enables and supports renewable energy and energy efficiency investment projects.

Under Component 2 of this project, UNIDO provides support to Energy Efficiency Investments projects in the industrial sector, especially Small and Medium Enterprises of Pakistan. The support includes technical assistance and grant support to realise demonstration projects that have high scalability and replication potential.

3. Objectives

The project aims at helping industries in investing in Energy Efficient (EE) technologies and Energy Management System Certification, by contributing a portion of investments through grants especially in those partner industrial units where implementation of Energy Management System (EnMS) is already underway and where the UNIDO consultants are guiding the management through identifying recommended EE interventions in their premises. Since historically industries are more inclined towards investments in increasing productive capacity, they ignore investment in resource efficiency related intervention and through a management system approach. These grants aim to help promoting investments on energy efficiency through supporting industries on systematic improvement of their Energy Performance. This will only be possible through EnMS implementation, to modify the culture to invest more in EE related technologies and systems to achieve cost cuttings in their energy bills. Certification support by UNIDO will further enhance the motivation of the industry, to seriously consider the EnMS implementation, as well as taking advantage of certification for their business promotion. It is envisaged that such investments along with efforts to implement EnMS, will boost conviction and confidence of the industrial sector in the cost reduction and environmental/business promotion benefits related with such investments.

For this purpose, UNIDO is seeking companies for implementation of investment projects that involves the integration of energy efficiency technologies and energy management system certification.

4. Category for proposed projects:

The interested applicant can provide the project proposals on any one or both of the categories separately:

**Category A:** Energy Efficiency technology Project(s) for GHG reduction (maximum grant available up to 50,000 USD)

**Category B:** ISO 50001-2018 Certification for 3 years compliance (maximum grant available up to 4000 USD)
The above mentioned maximum grant available for Category A project shall be utilised in proposed EE saving solution (any technology intervention with minimum 5-10 % savings) including procurement/installation of energy metering and monitoring equipment/system, that shall commensurate with a sizable portion of the grant amount. The proof of readiness for EE optimization can be in the form of ready proposal along with quotation from supplier/service providers and any document showing commitment of top management to fully participate in the project, once grant agreement is signed between UNIDO and the proponent organization. Additionally, only those proposals will be considered for maximum grant, which would provide clear value additions on GHG impact and improved efficiency of overall EE solutions.

For Category B projects, the grant will be provided to only those certification projects proposals that will show evidence and justifications for their satisfactory compliance to EnMS- ISO 50001 through a successful internal audit report showing their readiness and competency to successfully acquiring certification by a reputed accredited certifying body. Those organizations that will have at least one certified lead auditor on ISO 50001-2018, can also show it as a readiness evidence to support their proposal.

In case the proponent is interested in more than one category of projects under the above scheme, separate proposals for each categories will be required. UNIDO has allocated a multiple number of available slots accordingly, considering that more and more SME’s could utilize the available grants. UNIDO will provide grants to around 8-10 such projects under category A and at least 10 selected projects under Category B.

5. Conditions for accessing the Grant support

This Request for Proposal (RFP) is issued to receive proposals from interested potential energy efficiency and energy management system investment projects in small to medium scale industries where the applicant will provide or arrange counterpart funding to realize the project. Proposal to be submitted must comply with the following overall criteria:

1. Those enterprises that are already engaged with UNIDO under the Energy Management System Program and are showing progressive performance are highly encouraged to apply, as being the project partner of UNIDO REEE project. However, any other small to medium enterprise from any industrial sector including but not limited to Textiles, Paper and Pulp, Foundry, Ceramics, Food, that can provide evidence of intention on improving energy performance can also apply for this grant.

2. The UNIDO/GEF grant support is directed to catalyse early implementation of the investment projects in EE. Therefore, those projects that have already completed the technical and financial feasibility studies, but are in need of financial support to advance further will be preferred.

3. Incremental costs to be supported by the UNIDO/GEF project through investment grant could be a combination of services and equipment supply depending on the needs of the project. The potential beneficiary will have to provide a reasonable justification of the incremental costs and the utilization of UNIDO/GEF grant to add value to project.

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4. The grant support is specifically directed towards promoting those technology and system elements of EE investments that do not trigger direct energy savings, but strengthen energy management within organizations, based on PDCA approach, such as energy monitoring, metering, measuring and analytical equipment, energy audit gadgets and any other system optimization tools/software. However, these elements shall be the integrated part of the proposed larger EE investments that could justify the energy savings in calculated terms.

5. For Category A project of EE investments, the organization shall contribute at least in the ratio of 1:5 of the requested grant, to show co-financing on the part of organization as project proponent. However the total investment cost shall not be less than 50,000 USD and would include cost related with procurement of the technical equipment/machinery only.

6. The proposals for Category A investments shall justify sizeable energy saving of the current energy consumption (in the range of minimum 5-10 %) as per the claim by the equipment/system supplier and/or by through detailed calculations conducted by a third party consultant. Those proposals will be preferred that will have high GHG emission reduction potential for each percentage of saving. The proposal shall provide a cost and benefit analysis including paybacks etc, to clarify these above requirements.

7. For Category B investments, the proposal shall cover 3 years certification of ISO 50001-2018, including Stage I and II Audits and two surveillance audits. The certification requested grant shall be not more than 30% of the total certification cost and shall not exceed the maximum limit of 4000 USD. The certification body that shall be selected for the certification must be accredited by renowned body for delivering EnMS certification services and have global existence & proven track record, with competency and experience of conducting audits in the local industry.

8. The proposals under Category B shall also include evidence for having at least one person from energy teams as a certified lead auditor of ISO 50001-2018 from a reputed IRCA approved international body at the time of submitting the proposal. This will help the organization for conducting successful internal audit.

9. The duration for project implementation/ certification should be not more than 6 months from the date of signing the grant agreement with UNIDO.

10. The applicant has to prove that the proposed investment project for Category A is commercially viable and must have high replication potential in Pakistan.

11. The proposed project shall also highlight adequate provisions in placed for gender mainstreaming into the project management, design and implementation process.

6. Submission of Proposals

Interested parties should submit a detail proposal in compliance with the provisions and scope of work mentioned in sections 4 and 5 of this TOR, on the template as provided in the Annex 1A (For Category A) and Annex 1B (For Category B). The Proposal shall clearly mark the category under which the proposal is submitted.

Interested parties should submit their proposal through the following dedicated e-mail address:
Appendix 1

**RFP 7000004728@unido.org**
Display name of tender: RFP 7000004728
Closing date for this tender is **23 April 2021**

### 7. Guarantee Requirements

For Category A proposals, the potential beneficiary guarantees that engineering design, specifications, technical documentation and other documents, which are the basis of the proposed EE system, are in accordance with the project objective. The applicant must also guarantee that the machinery, equipment and all other technological components will be new, of recent conception, without any defect or malfunction, and that the time for the performance guarantee will be at least 12 months, starting from the date of the commissioning. The quality of equipment, construction or installation and the operation (maintenance) of the system must ensure a life time of equipment of at least 10 years. Low quality, refurbished and second hand equipment and machinery are not entitled for the grant. The supplier shall be a highly reputed local or international organization with time tested history of services in industrial sector.

For Category B Proposal, the potential beneficiary guarantees that all efforts will be in place to comply with certification requirements during the certification validity period.

### 8. Delivery Period

Within Six (6) months period after signing of grant contract with UNIDO.

### 9. Deliverables and Payment Milestones:

Upon signing of the grant contract, the payments shall be released by UNIDO upon completion of deliverable as listed below and submission of the progress reports by the potential beneficiary:

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>FIRST PROGRESS REPORT:</td>
<td>The First Progress report shall be submitted to UNIDO within 4 month after signing of the grant contract</td>
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<tr>
<td>For Category A</td>
<td>The First Progress report shall be submitted to UNIDO within 4 month after signing of the grant contract</td>
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<tr>
<td>The first progress report pertains to progress and evidence on completion of procurement and installation of the project equipment. It shall include</td>
<td>The First Progress report shall be submitted to UNIDO within 4 month after signing of the grant contract</td>
</tr>
<tr>
<td>• Documented proof of all necessary approvals from relevant regulatory bodies for installation of EE project.</td>
<td>The First Progress report shall be submitted to UNIDO within 4 month after signing of the grant contract</td>
</tr>
<tr>
<td>• Copy of the contractual agreement/Work order with the Supplier/Vendor and Engineering-Procurement-</td>
<td>The First Progress report shall be submitted to UNIDO within 4 month after signing of the grant contract</td>
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<tr>
<th>Construction (EPC) Contractor (if applicable),</th>
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<tr>
<td>• Technical designs/drawings, specifications of the equipment (including origin, make, manufacturers and capacity of the EE Project).</td>
</tr>
<tr>
<td>• In case of bank financing, documental proof of contractual arrangement with the bank/lending institution.</td>
</tr>
<tr>
<td>• Detailed information, pictures and a video copy of all activities undertaken from site preparation, arrival of equipment at site, completion of all civil works, mechanical and electrical, <strong>including installation of the plant at the Work Site.</strong></td>
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<tr>
<td>• Energy profile of area/department/section where EE equipment to be installed, and expected cost and benefit analysis. This shall be consistence with proposed details in proposal. Justification shall be provided in case of deviations.</td>
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* Upon completion UNIDO team shall physically verify the project fully installed at site and may request for any additional information if deemed necessary.

**For Category B:**

The first progress report pertains to progress and evidence on successful certification. It shall include

• Document Review conducted by Certifying agency to evaluate the status and technical complexity of your organization to determine that it adequately addresses the requirements of ISO 50001:2018

• The Stage I & II Audits findings during an on-site evaluation of organization implemented Energy management system against ISO 50001:2018 requirements.

• Recommendation by certifying agency for issuing Certification of the Organization, after compliance audit is completed.
| **Final Report:**  
**For Category A** |
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The Final Report pertains to progress/update with evidence of successful commissioning of EE equipment. The final report will be submitted to UNIDO which shall include:

- Completion certificate signed by the grant beneficiary and contractor on commissioning.
- Technical details on completed work such as carrying out all necessary tests and procedures required by industry standards to show that the plant is able to deliver for the purpose for which it was installed.
- Forecasted annual GHG Emissions reduction data based on capacity and working hours of running equipment.
- Annual O&M Contract signed with the EPC or any third party and performance guarantees of plant provided by the EPC Contractor
- Lessons learned and potential for scaling up.

* Upon completion UNIDO team shall physically verify the project fully operational at site and may request for any additional information if deemed necessary.

**For Category B:**

- Copy of original ISO 50001 -2018 Compliance Certificate issued by certifying body.
- Successful project implementation brief, with lesson learnt, impact and future plans for sustainability.

The Final Progress report shall be submitted to UNIDO within 6 month after signing of the grant contract