

## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

**GEF-MNRE-UNIDO Project:**

**Promoting Business Models for Increasing Penetration and Scaling Up of Solar Energy**

**Introduction**

The United Nations Industrial Development Organization (UNIDO) in association with the Ministry of New and Renewable Energy (MNRE), Government of India has started the implementation of the project titled “Promoting Business Models for Increasing Penetration and Scaling up of Solar Energy” in India.

To support commercialization of solar technologies, the project plans to facilitate the installation of Concentrating Solar Collector systems for use in heating and cooling applications in the industrial process applications through demonstration and replication projects. The demonstration projects will be enabled through the following steps.

* Selection of demonstration projects
* Finalization of the evaluation criterion
* Generation of Expression of Interest (EoI) from potential bidder
* Selection of bidders for preparation of detailed project reports.
* Evaluation of Detailed Project Reports (DPRs) and selection of bidder for demonstration projects.

The templates of EoI below may be used by industrial enterprises for submission of their applications for availing the promotion benefits for concentrating solar thermal (CST) projects to the Ministry of New and Renewable Energy, India.

The information provided in the EoI and DPR will play a critical role in selection of the industries for the demonstration projects.

# Submission of an Expression of Interest/ Feasibility

The industry/unit is requested to provide the information required in the Expression of Interest (EoI) format below.

|  |  |  |
| --- | --- | --- |
| **EOI Information Template** | | |
| **1.** | Name of establishment with complete postal address, telephone/Mobile, fax number and e-mail address for  correspondence purpose |  |
| **2.** | Type of Industry |  |
| **3.** | Application for which CST technologies are being considered – provide brief description of the process and the related energy flow  arrangement |  |

|  |  |  |
| --- | --- | --- |
| **EOI Information Template** | | |
| **4.** | Present arrangement for meeting that  energy requirement in the application mentioned under “2” |  |
| **5.** | Type of fuel currently in use |  |
| **6.** | Current fuel consumption per year (in standard energy units like tons of oil  equivalent) |  |
| **7.** | Energy related parameter: |  |
| **7 (i)** | Load Requirement: |  |
|  | * Steam application (Process description) : * Requirement of steam (kg/day) or hot water (ltr/day) * Pressure (bar) : * Temperature (°C) : * Condensate temperature (°C), if any: |  |
| **7 (ii)** | Steam Boiler : |  |
|  | * Type (Coal. Diesel etc.) * Total Capacity/ flow rate (TPH) * Operation hours (hrs./day) * Working cycle   (e.g. 10am - 1 pm, 2pm – 5 pm)   * Operation in day & year * Boiler output graph * Seasonal Variation * Fuel Consumption (Ltr/day) * Rate of fuel (Rs/Ltr) |  |
| **7 (iii)** | Feed water Tank: |  |
|  | * Capacity (m3) * Feed water temperature (°C ) * Feed water heating scheme * Feed water heating fuel rate (Rs/unit) |  |
| **8.** | Space required for installation of solar system, and whether the shadow free space (land or roof area) – state the tentative identification of space for CST technology installation |  |
| **9.** | Interest in availing loan from IREDA at subsidized interest rate under MNRE-GEF-  UNIDO Project  (see the attached project factsheet) |  |

|  |  |
| --- | --- |
| **EOI Information Template** | |
| **10.** | **Any other commitments from the industry, including earmarking of capital**  (typical commitments to include the following):   * We will bear the remaining cost apart from the MNRE support as per details given above. * We will not dismantle the solar system at any stage without prior written permission of MNRE. * We will regularly use and properly maintain the system and submit quarterly performance report for a minimum period of one year from the date of installation through an implementing agency. * We will take Annual Maintenance contract for a period of at least 5 years after completion of the warranty period from manufacturers and get our staff trained for successful functioning of the systems after the completion of the Annual   Maintenance period. |

## Signature ……………………………

**Complete designation, address /seal:**