

## Request for Expressions of Interest (REoI)

Date: 03/ 06/ 2020

**Country:** INDIA

**Project:** PARTIAL RISK SHARING FACILITY for ENERGY EFFICIENCY (PRSF) PROJECT

**Grant No.:** TF019308 (GEF Number) and TF019230 (CTF number)

**Project Nos.:** P128921/ P132620

**Assignment Title:** Design & Development of Standard Product under PRSF Project

**Procurement Plan Reference No. :** IN-SIDBI-100763-CS-CDS

Small Industries Development Bank of India (SIDBI) has received financing from the World Bank towards the cost of the **Partial Risk Sharing Facility for Energy Efficiency (PRSF) Project**, and intends to apply part of the proceeds for consulting services.

The consulting services (“the Services”) include identification of ten Energy Efficiency technologies, designing and development of Standard Product viz. Techno-Financial Analysis Tool for evaluation of Energy Efficiency projects implemented by ESCOs and generation of pipeline for issuance of guarantee under PRSF Project.

Request for Expression of Interest (REoI) document along with indicative Terms of Reference (ToR) can be viewed and downloaded from: <https://www.sidbi.in/en/tenders/>, <http://prsf.sidbi.in/>, <https://eprocure.gov.in/epublish/app>.

The duration of assignment will be for 18 months where product development phase is expected to be for 6 months and in subsequent 12 months, the Consultant is expected to work with PFIs for issuance of guarantees apart from carrying out maintenance and training activities. The project duration may be extended based on requirement and performance.

SIDBI now invites eligible consulting firms [“Consultants”] to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services.

The expressions submitted will be evaluated and best qualified and experienced qualified firm shall be selected for submission of combined Technical and Financial proposal based on following criteria:

- a. The firm should be in the business/ registered in India for the last three years.  
[Registration / licenses etc. to be enclosed]
- b. The firm must have developed at least 2 financial appraisal product/ tool for evaluating/ appraising energy sector projects preferably Energy Efficiency projects in last 3 years.  
[Copies of contracts/ completion or acceptance certificate(s) to be enclosed]
- c. The firm should have a minimum average annual turnover of Rs. 50 lakh with positive net worth during last three financial years, i.e., FY 2018-19, FY 2017-18 and FY 2016-17.  
[Certificate from the statutory auditors/ Chartered Accountant to be enclosed]

Expressions of interest (EoI), prepared by firms' shall be containing all relevant information but not limited to:

- i. Introductory letter on letter head (with contact details – name of contact person, address, telephone, fax, email etc.) explaining how the firm is best to deliver the task.
- ii. Organization profile and branches/ offices within the country.
- iii. Information regarding fulfillment of shortlisting criteria listed above.
- iv. Availability of key professionals with desired qualification and experience as per the indicative ToR.
- v. The EoI should contain relevant supporting document to substantiate the claims of the Consultant.

Interested consultants should not have any unsatisfactory track record resulting in adverse action taken by any Government Department (Centre/ State) / CPSU / SPSU / Banks / Autonomous Bodies / Statutory Bodies in India). Further, if selected for the assignment, the firm will need to provide their valid Permanent Account Number (PAN)/ TAN and Goods and Services Tax (GST) Number.

The attention of interested Consultants is drawn to paragraph 1.9 of the World Bank's Guidelines: Selection and Employment of Consultants by World Bank Borrowers [January 2011, Revised 2014] ("Consultant Guidelines")<sup>1</sup>, setting forth the World Bank's policy on conflict of interest.

A Consultant will be selected in accordance with Selection Based on Consultants Qualifications [CQS] method set out in the Consultant Guidelines.

Consultants may associate with other firms in the form of a joint venture [with joint and several liability] or a sub-consultant to enhance their qualifications. Such association must be clearly stated as either Sub-consultant or Joint Venture. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected.

Expression of Interest in written form to the address given below (in person, or by mail, or by e-mail) on or before **25/ 06/ 2020 by 16:00 hrs.**

The sealed envelope containing the submission should include the name and address of the firm and shall be clearly marked "**Expression of Interest – Design and Development of Standard Product under PRSF Project**".

To

General Manager  
Green Climate and Sustainable Development Initiatives (GC&SDI)  
Small Industries Development Bank of India (SIDBI)  
O/o ISTSL, E-1, First Floor, Baluja House  
Jhandewalan Extension, New Delhi 110 055

Phone: 011-43526652

Email: sidbi\_prsf@sidbi.in

---

1

[http://siteresources.worldbank.org/INTPROCUREMENT/Resources/Consultant\\_GLs\\_English\\_Final\\_Jan2011\\_Revised\\_July1\\_2014.pdf](http://siteresources.worldbank.org/INTPROCUREMENT/Resources/Consultant_GLs_English_Final_Jan2011_Revised_July1_2014.pdf)

Further information can be obtained at the above address during office hours [1000 to 1700 hours].

For further details Terms of Reference (ToR) enclosed below may be referred:

## **TERMS OF REFERENCE**

### **Partial Risk Sharing Facility for Energy Efficiency (PRSF) Project**

**SIDBI is seeking services of a Consultant for identification of Ten Energy Efficiency Technologies implemented through Energy Services Companies (ESCOs), Design & Development of Standard Product viz. Techno-Financial Analysis Tool for evaluation of Energy Efficiency projects by Participating Financial Institutions (PFIs) and generation of pipelines for issuance of guarantee under PRSF Project.**

#### **1. Background**

##### **1.1. About SIDBI**

Small Industries Development Bank of India (SIDBI) was established on April 2, 1990 under an Act of Indian Parliament. It is the principal financial institution for the promotion, financing and development of Micro, Small & Medium Enterprises (MSMEs). In order to improve productivity and competitiveness of MSME sector through energy efficiency (EE) measures, SIDBI has undertaken a number of initiatives which include development assistance and line of credits from The World Bank, Japan International Cooperation Agency (JICA), Kreditanstalt für Wiederaufbau (KfW) and Agence Française de Développement (AFD). Further, SIDBI has setup an Energy Efficiency Centre (EEC) at New Delhi which is implementing various developmental projects in close cooperation with the World Bank, Bureau of Energy Efficiency (BEE), Energy Efficiency Services Limited (EESL), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and few others.

##### **1.2. Energy Efficiency Improvements & ESCOs Role**

Various studies estimates the EE investment potential in India is between Rs. 75,000 Crore and Rs. 150,000 Crore. Despite the prevailing Energy Efficiency potential, most end users are unable to implement EE projects, either due to lack of technical capacity or due to lack of sufficient focus and time for EE investments.

Energy Service Companies (ESCOs) can help Clients in overcoming some of the key EE market barriers. ESCOs provide a range of services, including identification of EE opportunities, close association with equipment manufacturers, design and management, construction, maintenance of the EE technology, and structuring transactions that are based on monetized energy savings, and Measurement and Verification (M&V) of the resulting energy and cost savings.

The innovative policies and regulatory regimes, financing mechanism and business models undertaken by India to address key issues of energy security and climate changes are through implementing Energy Conservation Act 2001 and National Mission for Enhanced Energy Efficiency (NMEEE) launched in 2008. Furthermore, stimulation to the ESCO business in the country has successively come from these policy frameworks wherein the main government initiatives for ESCO market development are defined and implemented. Over 150 ESCOs have been empaneled by Bureau of Energy Efficiency.

The increase and the high volatility of energy prices in India is an important driver of ESCO market development. Nevertheless the ESCO market is made of a few big companies and the market competition is consequently quite low. The big/super ESCOs operating can take greater financial and technical risks in their energy efficiency investments compared to smaller

ESCOs which typically have to deal with more challenges in accessing bank financing and in increasing the credibility of their offers to potential clients.

The presence of limited number of active private ESCOs and the absence of competition in the market signals towards various factors and barriers still prevailing and hinder ESCO market development. Apparently, the ESCO market in India is still at a preliminary development stage in terms of total volume of ESCO implemented projects, and important steps need to be undertaken in order to prove the effectiveness of the ESCO concept.

### **1.3. Partial Risk Sharing Facility (PRSF) for Energy Efficiency**

SIDBI as Project Execution Agency (PEA) is implementing a project titled “**Partial Risk Sharing Facility for Energy Efficiency (PRSF)**” with the support of The World Bank, and financed by the Global Environment Facility (GEF) and Clean Technology Fund (CTF)<sup>2</sup>. The objective of the project is to transform the energy efficiency (EE) market in India by promoting increased level of EE investments, through energy service performance contracting (ESPC) modality and implementation delivered through Energy Service Companies (ESCOs). The successful demonstration of ESCO-managed EE subprojects, through PRSF support, is expected to reduce the risk commercial banks perceive in providing credit to EE projects and to help in development of market for the private ESCOs. Energy Efficiency Services Limited (EESL) is the TA partner in PRSF project and Bureau of Energy Efficiency (BEE) provides overall directions as the Co-Chair of the PRSF Advisory Committee.

The PRSF Project is aimed at demonstrating the viability of Energy Service Performance Contract (ESPC) market for scaling up implementation of energy efficiency projects in Micro, Small and Medium Enterprises (MSMEs), large industries, municipalities, and buildings sector in India.

With the efforts made under the PRSF project, significant strides have been made in convincing many Banks / NBFCs / FIs (collectively, Participating Financial Institutions or PFIs under PRSF) to finance ESCO projects. Out of the all empanelled PFIs under PRSF (see Annex), most have already financed ESCO projects, in addition to SIDBI’s own financing, with support from PRSF. A total of 24 ESCO sub-projects have been supported through PRSF partial credit (loan) guarantees as of May, 2020. More information about PRSF is available at <http://prsf.sidbi.in>.

## **2. Objective of the Assignment**

Presently there are no standard tools available with Financial Institutions for carrying out Techno-Financial analysis of Energy Efficiency (EE) projects which leads to varied and discretionary assessment of the projects for lending.

In view of this it is proposed under PRSF Project that a Standard Product to be developed for carrying out technical and financial analysis by integrating selected ten Energy Efficiency technologies. It will standardize the evaluation methods of EE projects and help PFIs in making a better-informed decisions.

The key end-deliverables of this assignment are, (i) identification of ten (10) Energy Efficiency technologies, (ii) design & development of product/ tool for evaluation of EE projects, (iii)

---

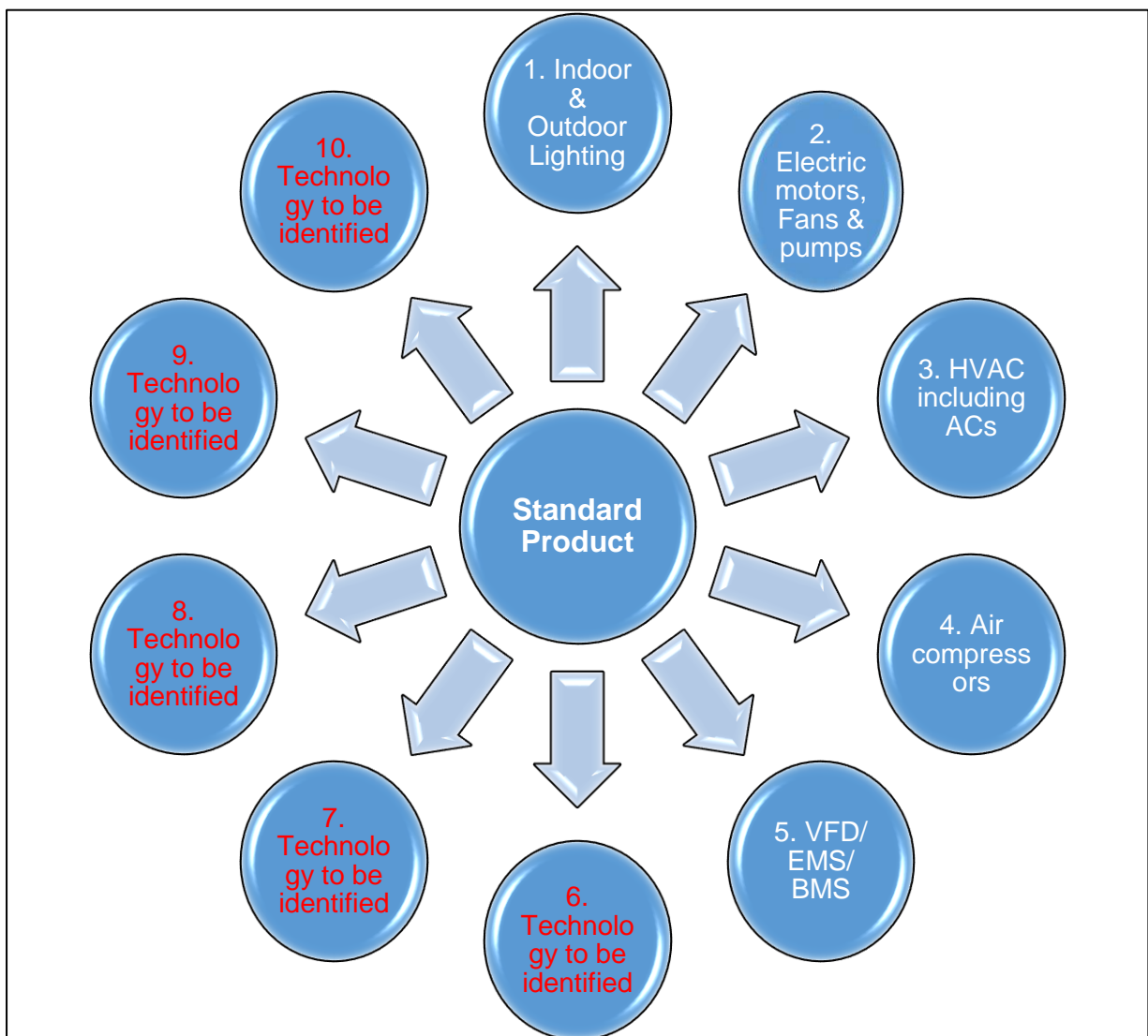
<sup>2</sup> Project Appraisal Document : <http://documents.worldbank.org/curated/en/968091468048913492/pdf/PAD9800P1289210R2015000020100OUO090.pdf> & Operational Guidelines: [http://prsf.sidbi.in/assets\\_user/docs/Operating%20Guidelines\\_PRSF.pdf](http://prsf.sidbi.in/assets_user/docs/Operating%20Guidelines_PRSF.pdf)

issuance of PRSF guarantee by PFIs to 20 EE projects using the standard tool developed, (iv) providing training to PFIs, SIDBI, EESL and other stakeholders on functioning of Standard Product at regional locations, and (v) maintenance and support to the product/ tool developed for 12 months warranty period.

The product to be developed is expected to carry out broad primary level evaluation with respect to technical as well as financial parameters of EE projects and will be simple and easy to operate so that it is acceptable to the PFIs.

The consultant is expected to identify ten (10) different Energy Efficiency technologies by having close interactions with PFIs, SIDBI and EESL. However, to start with five indicative technologies have been identified as:

- i. Indoor & Outdoor Lighting
- ii. Electric motors, Fans and Pumps
- iii. HVAC system including Air Conditioners
- iv. Air Compressors
- v. Industrial Automation like VFD, Building Management System (BMS), Energy Management System (EMS) as energy efficiency interventions



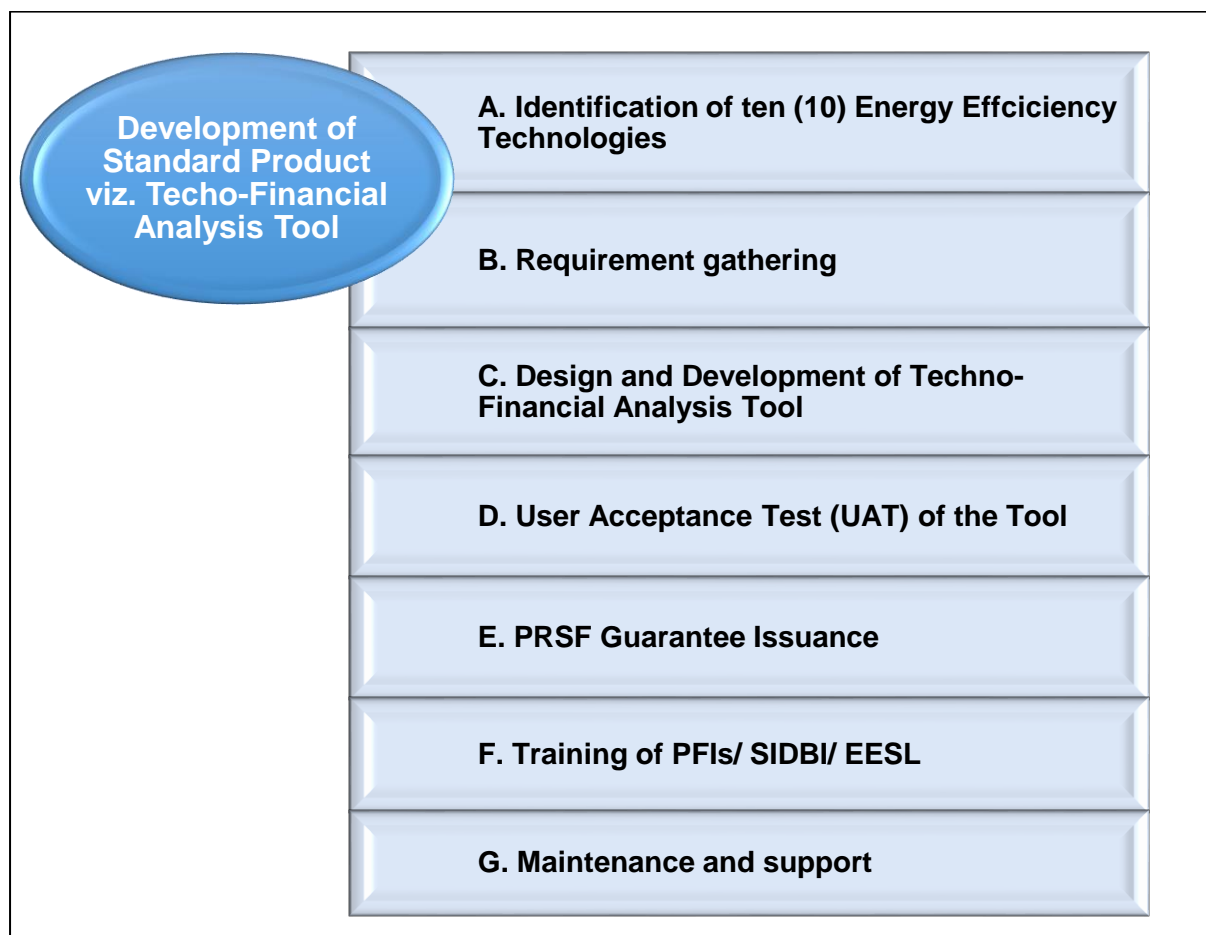
The above listed five technologies are indicative only and may be modified or changed based on feedbacks received during consultative meetings to be held with various project stakeholders by the Consultant.

The consultant is expected identify a total of ten (10) Energy Efficiency (EE) technologies based on its energy saving potential and demand from ESCOs/ PFIs in consultation with SIDBI, EESL, PFIs and ESCOs and through organizing consultative workshops with various stakeholders.

The Energy Efficiency technologies will cover following sectors:

- i. Large industries (excluding thermal power plants), including those notified under the BEE's energy consumption norms and standards (i.e. under Performance Achieve and Trade [PAT]),
- ii. MSMEs,
- iii. Municipalities,
- iv. Commercial buildings, &
- v. DISCOMs

### 3. Scope of Services and Expected Deliverables



## **A. Identifying 10 Energy Efficiency technologies**

- i. The consultant needs to study and understand PRSF project activities and requirements for providing guarantees to PFIs through documents like Operation Manual, Project Appraisal Document (PAD).
- ii. The consultant will be needed to organize consultative workshops and hold consultation meetings with all stakeholders like SIDBI, EESL, PFIs, BEE and ESCOs for identifying the prospective Energy Efficiency technologies. At the end of this exercise prospective technologies will be identified for arriving at ten EE technologies.
- iii. The Consultant will finalise the 10 Energy Efficiency technologies for integration in consultation with SIDBI/ EESL.

## **B. Requirement gathering**

- i. After finalization of technologies, the requirement gathering phase will start where the Consultant is expected to carry out extensive brainstorming sessions primarily with PFIs and ESCOs including other stakeholders.
- ii. During requirement gathering all technical as well financial parameters should be captured which will form the basis for development of the tool.
- iii. The tool shall contain input data for carrying out technical analysis like energy savings, monetary savings, Carbon emission reduction, etc.
- iv. It will also perform financial analysis of Energy Efficiency project and provide outputs for parameters and ratios such as Net Present Value, Internal Rate of Return (IRR), Debt Service Coverage Ratio (DSCR), Debt Equity Ratio, Profit after Tax etc.
- v. The Techno-Financial Analysis Tool should also provide the following indicative inputs for financial analysis such as
  - a. Interest rate,
  - b. Discount rates,
  - c. Loan tenure,
  - d. Repayment schedule with moratorium,

## **C. Design and Development of Standard Product**

- i. The standard product will be developed preferably in Microsoft excel format.
- ii. The design of the product/ tool must be easy to understand and simple to use specially for non-technical users.
- iii. It should be developed in such a way that it can be expanded for inclusion of newer technologies in future and also if need arises the existing technologies can be modified by including more parameters etc. The tool should have provisions for integrating schemes provided by Govt. of India and State Governments, if needed.
- iv. The product is envisaged to carry out the analysis of technical as well as financial parameters of the EE projects received by PFIs for lending. Thus it shall be able to generate requisite sheets separately providing detailed technical and financial analysis of the EE project. These outputs will be used by PFIs for appraising the EE project for lending.
- v. The product should include possible variations of technologies integrated to cater for specific project needs to extend possible.
- vi. The product should also have provisions for integrating outputs of more than one technologies in cases where more than one technology interventions are being adopted in a single EE project.
- vii. The product should establish standard baseline by conducting various technical analysis to prepare baseline of the identified EE technologies, project energy



- consumption over life cycle of the EE technology and estimate energy savings based on standard baseline and projected energy consumption.
- viii. The product should have inputs and outputs to estimate futuristic energy pricing which is required to assess cost shaving achieved due to EE technology
  - ix. The product should have options available to perform sensitivity analysis of the parameters to understand the variations of energy savings.
  - x. The product should have options available for projecting capital costs along with discount rates.
  - xi. Close interactions with all stakeholders during the development process will be key for acceptance of product by the PFIs at later stage. The stakeholders, PFIs, ESCOs including SIDBI/ EESL must be consulted at every major stage of development.

#### **D. User Acceptance Test (UAT) of the Product**

- i. Robust testing of the product developed is the key requirement for better acceptability of the tool among its intended users.
- ii. To achieve this Consultant needs to design user cases for conducting User Acceptance Testing (UAT). The existing twenty four projects covered under PRSF will provide an excellent repository of live cases. So these projects must be used for testing of the tool apart from other specific cases generated for the purpose.
- iii. The Consultant is expected to test the product developed with PFIs empaneled under PRSF and receive their acceptance of the Product.

#### **E. PRSF guarantee issuance**

- i. The Consultant will work with PFIs for issuance of PRSF guarantee to the EE projects implemented through ESCOs.
- ii. The product developed shall be used for evaluation of loan applications by PFIs.
- iii. It is expected that 20 projects, from any of the 10 EE technologies will be covered for guarantee issuance.

#### **F. Training of PFIs/ SIDBI/ EESL**

- i. Training on the functional aspects of Standard Product is an integral part of the assignment and intended users i.e. officials from PFIs are expected to be trained by the Consultant including select officials from SIDBI/ EESL after final acceptance of the product.
- ii. The Consultant will also develop a Manual for training and reference purpose in digital and print form. It should be made available to all participants during training programmes to be conducted.
- iii. The training of officials from PFIs/ SIDBI/ EESL (45-50 per batch) shall be conducted at four different locations after consultation with PFIs/ SIDBI/ EESL. Presently, four training programmes are expected to be completed for the identified officials.
- iv. The trainings are aimed primarily at officials from PFIs however, representative from other stakeholders may also be part of these trainings on demand basis.
- v. Details of all participants of trainings needs to be recorded by Consultant and report it to SIDBI. Each training conducted should have an attendance sheet containing Name, Designation, Firm/organization name, Contact details & signature along with photographs of event. These details must be submitted as part of monthly progress reports and without these documentary proofs trainings will not considered for release of payment.
- vi. SIDBI/ EESL and other authorities may participate during these training programmes.

## **G. Maintenance and support**

- i. The Consultant will maintain and provide requisite support for a period of twelve (12) months under warranty after final acceptance of the product by SIDBI/ EESL.
- ii. During this period Consultant is expected to carry out any modifications required not only for achieving the envisaged outputs from the product but also to enhance the existing capabilities of the product, if necessary.

### **General requirements**

The following are the general requirements to be fulfilled for development of the Standard Product viz. Techno-Financial Analysis Tool:

- i. The product should capture all scheme related parameters like objective, company's profile, Technologies covered, scope of assistance, project model, ESPC, Eligible Borrowers, revenue model, Asset Coverage ratio, rating, financial norms, security, repayment period, rate of interest etc.
- ii. The Consultant should consult EE technology vendors/ manufacturers/ ESCOs/ SIDBI/ EESL and PFIs for requirement gathering as well to test the technical and financial results of the product developed.
- iii. The Consultant should adopt single style of flow of information, simple & reliable navigation and consistency to ensure usability of product.
- iv. The product developed must be acceptable to empaneled PFIs and they should adopt it as the Standard product for carrying out Techno-Financial Analysis of EE projects for lending.

For more information on PFIs/ ESCOs Annexure at the end of ToR may be referred. However this is a dynamic list and may change during the contract period.

## **4. Duration of the Assignment**

The duration of assignment is 18 months where product development phase is likely to be for 6 months followed by maintenance and support under warranty for 12 months. During the warranty period, Consultant is expected to work with PFIs for issuance of guarantees as well as carry out training for various stakeholders apart from providing O&M services.

The assignment period may be extended based on project requirement and performance.

## **5. Team Composition & Qualification Requirements for the Key Experts**

SIDBI/ EESL will assess the demonstrated experience and capacity of Consultants applying and the selected Consultant is expected to deploy sufficient manpower required to successfully deliver the required outputs.

An indicative manpower requirement of key experts with desired qualification and experience is given in the table below:

S. N.	Key Position	No.	Area of Specific Expertise Desired	Minimum Qualification and Professional Experience Desired	Person months
i.	Project Manager	01	Having headed minimum three end-to-end tool/application development projects preferably for technical and financial appraisal by Financial Institutions.	B.E./B. Tech. or equivalent with min. 10 years of experience in handling the projects of similar nature.	10
ii.	Energy Efficiency Expert	01	Having experience in implementation of energy efficiency projects preferable in the five indicative EE technologies.	B.E./B. Tech. or equivalent preferably BEE certified energy auditor with min. 5 years of experience in the fields related to energy efficiency.	4
iii.	Financial Expert	01	Having handled at least two tool/ application development for carrying out financial appraisal for lending by Financial Institutions	CA or equivalent qualification with min. 5 years of experience in financial appraisal of projects for lending by Financial Institutions.	4
iv.	Tool Developer	01	Having developed minimum two analysis tools in Microsoft excel with similar level of intricacies, preferably for carrying out Techno-Financial analysis.	B.E./B. Tech. in Computer Engineering or equivalent with min. 5 years of developing tools in Financial Appraisal Tool.	4
v.	Testing Engineer	01	Having relevant experience of testing and bug fixing for tools developed in Microsoft Excel format preferably for carrying out Techno-Financial analysis.	Graduate or equivalent with min. 5 years of experience in testing of tools.	4
Total					26

## 6. Reporting Requirements and Time Schedule for Deliverables

S. N.	Deliverables	<sup>i</sup> Duration	<sup>ii</sup> Payment Terms
i.	Inception Report with ten identified EE technologies to be integrated, User Requirement Specification (URS) after completing requirement gathering and detailed work plan by consulting PFIs, ESCOs, Hosts, SIDBI, EESL, BEE etc. and acceptance by SIDBI	Within 2 months	10%
ii.	Development of Product by integrating ten EE technologies by consulting PFIs, SIDBI, EESL and acceptance by SIDBI	Within 4 months	10%
iii.	Carrying out User Acceptance Testing (UAT) of the Techno-Financial Analysis Tool and final acceptance by SIDBI	Within 6 months	10%

iv.	PRSF guarantee issuance to twenty (20) EE projects implemented by ESCOs for which evaluation to be carried by PFIs using the Standard Product developed by Consultant. (Payment on pro-rata basis at 3.0% per project)	Within 12 months after acceptance of Tool	60%
v.	Training of PFIs and other stakeholders on functioning of Standard Product at regional locations and acceptance of monthly progress reports with training details by SIDBI	Within 2 months after acceptance of product	<sup>iii</sup> 5%
vi.	Maintenance and Support during warranty period of 12 months and submission and acceptance of final report at the end of warranty period	Upto 12 months after acceptance of product	<sup>iv</sup> 5%
Total			100%

<sup>i</sup> Duration is considered from date of contract signing.

<sup>ii</sup> Payment with respect to total contract value.

<sup>iii</sup> Payment will be made at pro rata rate based on number of trainings performed.

<sup>iv</sup> Payment will be made quarterly in two installment i.e. 2.5% after first 6 months and next 2.5% at the end of warranty period.

## 7. Client's Inputs including Counterpart Personnel, Data and Facilities to be provided by the Client

SIDBI will support the Consultant by sharing relevant documents and information needed for completion of activities as per ToR.

## 8. Composition of review committee and review procedure to monitor Consultancy firm work

- The deliverables will be reviewed and accepted by committee constituted by SIDBI.
- The Consultancy firm should provide regular/monthly updates within first week of following month in reporting formats to be agreed between the consultant and SIDBI.
- The report shall mention gist of all activities under taken, progress made, corrective action taken, if any, during the month and the future plans.
- The Report Writing shall start from the first month of Commencement of the contract.
- The Consultancy firm work may be reviewed from time to time by Executive Committee and Advisory Committee members.
- The World Bank may also review the reports/ deliverables on a selective basis.

## Annexure

### PRSF Project Stakeholders

Empaneled PFIs	ESCOs	The Client	Executing Agencies	Implementing Agency	Funding Agencies	Monitoring/ Advisory Agencies
1. SIDBI 2. Andhra Bank Corporation Bank 4. Yes Bank 5. HDFC Bank 6. IndusInd Bank 7. Tata Cleantech Capital Ltd. 8. Electronica Finance Ltd. 9. SREI Infrastructure Finance Ltd. 10. ECL Finance Ltd.  <b><u>Under process</u></b> 11. SBI 12. BoI 13. IREDA 14. PFS 15. Bank of Baroda 16. Punjab National Bank 17. Axis Bank 18. Kotak Mahindra Bank 19. Canara Bank	1. Smart Joules 2. eSmart 3. Yajna Fuels 4. Yantra 5. Energized Solutions 6. G A Infra 7. EIPL 8. Briller 9. Suveg 10. Alien 11. Katyani 12. Geostat 13. Cosmoright	1. Large industries (excl thermal power plants) 2. MSMEs, 3. Municipalities, 4. Commercial Buildings (Hotels, Hospitals, Malls, Office Complexes, etc) , & 5. DISCOMs	1. SIDBI 2. EESL	The World Bank	1. Global Environment Facility (GEF) 2. Clean Technology Fund (CTF)	1. Bureau of Energy Efficiency (BEE) 2. Department of Economic Affairs (DEA)

**Note:** The above mentioned stakeholders like NBFCs/ Banks/ ESCOs/ Hosts are as of May, 2020 and are subject to change.

\*\*\*\*\*