



Terms of Reference (TOR)

Onboarding of an Agency / Organization/ Company to conduct Solar Technical Training Programs across Karnataka

Title	Onboarding of an Agency/Organization/ Company to conduct various Solar Technical Training Programs across Karnataka State
Timeline	01 Year - (Duration in Month and Days)
Expected area of expertise	Experience of Imparting Solar Technical Training / Organization have the necessary pool of Master trainers & Trainers for imparting training
Email and website	https://forms.gle/MAVixzad1Rnj6GE46 (Contact Procurement for Form Link)

About SELCO Foundation:

SELCO Foundation's mission is to create a platform of solutions that uses sustainable energy as a catalyst to bridge environmental sustainability and poverty alleviation. With holistic development as the primary focus, the organization strives to create equitable societies, where services are accessed by all communities. The interventions of SELCO lead to a sustainable delivery model of essential services like livelihoods, education, and health till the last mile. (Read more about SELCO here: <http://www.selcofoundation.org/>)

1. Summary of the project:

The solar Decentralized Renewable Energy (DRE) sector is undergoing a massive technological transformation that is set to shift the boundaries of conventional energy supply chains. There is an estimate of 370,000 jobs in the off-grid lighting sector in Asia alone. By 2030, the entire Decentralized Renewable Energy (DRE) value chain, including sales, installation, service, appliances, and operations and maintenance—is projected to create 4.5 million jobs globally. The International Labour Organization (ILO) has estimated that India alone could add 3 million new jobs for the renewable energy sector. The dearth of skilled workers exists across the DRE value chain, including manufacturing and assembly, sales, marketing, quality installation, operation & maintenance and financing. It's an especially big problem in remote, rural areas where lack of energy access gaps and joblessness are most severe.

The skilled individuals are needed at all level- Supply side: "Local Solar Energy Enterprises, Technicians, Designers, Service Providers , Energy Associates, NGOs" for meeting the DRE needs, Demand side: "End Users" for strong maintenance and servicing networks and

Enablers: "Informed financiers", for making the solutions affordable for the poor and vulnerable community to address climate change challenges globally.

2. Goals and Objectives

SELCO Foundation has designed a Solar Decentralized Renewable Energy Skilling program to provide three categories of services:

- Benchmarking of the training module / content for hands on training
- Create a pool of trained master trainers and trainers and industry for the training having the grassroots experience and well versed with regional and vernacular language
- Build partnership with multiple stakeholders for training delivery (both online & offline) in regional and vernacular languages and getting feedback about the training for the periodic updating of the training module / content

Objective

- To onboard an agency/Organization/Company to conduct solar technical training for a targeted audience using the solar technical training packages benchmarked by SELCO Skill Team
- To establish a pool of trained and certified trainers for delivering different Solar technical training programs

3. Scope of Work

SELCO Skills program intends to onboard Agencies/Organizations/Companies for conducting solar training programs for specified categories of audience across different parts of Karnataka. The roster is open to trainers (agencies) with various levels of thematic and training experience in the solar energy sector.

- The Agency/Organization/Company need to train and certify their In-house trainers by their Master trainers for imparting training as per SELCO Skill Team training package and guidelines.
- Master Trainers of the Onboarded Agency/Organization/Company will be trained by SELCO Skill Team.
- The organizations / agencies / companies are supposed to maintain a pool of trained Master trainers and Trainers for different categories of solar technical training (Pre, During and Post Installation training).
- The agency /organization must have necessary Infrastructure and Laboratory facilities to facilitate the training program at their facility.
- The onboarded Agency/Organization/Company is tasked with ensuring their readiness and availability to travel as required, to deliver training programs as per the program's needs and specifications.
- The organizations/Agency must conduct Training of Trainer program for their trainers in different phases for the below-mentioned training packages as per the

norms of SELCO Skill Program and shall also be responsible for the Assessment and Certification of Trainers along with SELCO Skill team as per SELCO Skill Program Guidelines. Annexure A (Guidelines)

The solar technical training includes:

Solar Technical Training Category	Training Details	Target Audience
Pre-Installation	Site Assessment	Assessors - ITI / Diploma, Polytechnic, CEEs, Students, Technicians
	Installation of Solar System	Installers, Technicians, CEEs
	Load Wiring Installations	Solar system installers with electrical knowledge, Electricians
	Solar System Design	System Designers, Engineering Students, Senior Technicians
During Installation	Installation Quality Verification	Experienced Solar Installers / Senior Technicians
Post Installation	Operation & Maintenance – Routine	End Users – Health Staff, Individual Farmers, Self Help Groups, Farmer Producer Organization etc.
	Operation & Maintenance – Scheduled	CEEs, Service Associates, Technicians
	Operation & Maintenance – Non – Scheduled	Sr. Technicians, CEEs

Tentative Number of Training Programs (Planned Annually.)

Training Program	Tentative Training Numbers	Target Audience	Districts
Site Assessment	2	Assessors - ITI / Diploma, Polytechnic, CEEs, Students, Technicians	Across all districts of Karnataka
Solar PV Installation & Quality Evaluation	2	Installers, Technicians, CEEs	Across all districts of Karnataka
Load Wiring	2	Solar system installers with electrical knowledge, Electricians	Across all districts of Karnataka
Service & Maintenance	2	Sr. Technicians, CEEs	Across all districts of Karnataka
Routine Maintenance	55	End Users – Health Staff, Individual Farmers, Self Help Groups, Farmer	Belgavi, Yadgir, Sirsi, Bagalkote, Kalburgi, Vijayapura,

		Producer Organization etc.	Dharwad, Gadag Haveri, Chitradurga Bellary, Bidar, Vijayanagara, Koppal.
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Note: The following figures represent tentative counts of training programs to be conducted. These numbers are subject to change, with the possibility of both Increase or Decrease.

Minimum Eligibility Criteria of Master Trainers and Trainers for the following training Packages-

SL NO	Training Package	Trainer Category	Minimum Qualification	Experience/Eligibility	Required Number of Master Trainers & Trainers
01	Category - I Site assessor for Solar PV System & Routine Maintenance of Solar PV system	Master Trainer	M.E/M-tech, B.E/B.Tech/ preferably in (Renewable Energy/Electrical/Electronics/Civil/Mechanical). Skill Council for Green Jobs Certified domain expert Preferred. (The education qualification can be relaxed in case of extraordinary relevant Field Experience.	Experience: Minimum 7 years of relevant industry experience. Must have experience of conducting site survey for installation of Ground/Roof mounted solar PV power plant. Solar professionals and faculties from Industries and academics having training experience in renewable energy/ solar energy also to be considered. The candidate should have effective communication	2

				skill, Perception building skills and the ability to empower and motivate Individual.	
		Trainer	Diploma/B.E. /B.Tech preferably in Renewable Energy/ Electrical/Electronics/ Civil Engineering/Mechanical Engineering.	Experience: Minimum 5 years of relevant industry experience. Should have experience of conducting site survey for installation of ground/roof mount solar PV power plant. Solar professionals and faculties from Industries and academics with training experience in solar PV also to be considered.	5
02	Category-II Solar PV Installation & Quality Evaluation	Master Trainer	M.E/M-tech, B.E/B.Tech/ preferably in (Renewable Energy/Electrical/Electronics/Civil/Mechanical). Skill Council for Green Jobs Certified domain expert Preferred. (The education qualification can be relaxed in case of extraordinary relevant Field Experience.	Minimum 7 years of relevant Industry experience Must have relevant industry experience on installation of ground/roof mount solar PV power plant Have experience on service, maintenance & troubleshooting Solar PV systems Must have 2 years of training experience in	2

				renewable energy/ solar energy.	
		Trainer	Diploma/B.E. /B.Tech preferably in Renewable Energy/ Electrical/Electronics/ Civil Engineering/Mechanical Engineering.	Minimum 5 years of relevant Industry experience. Must have field experience of Solar PV Installation and Quality Evaluation. Academic Experience plus relevant Field experience also to be considered.	4
03	Category-III Load Wiring	Master Trainer	M.E/M.tech/B. E/BTech, preferably in Electrical. Certified Electrical Wireman License Preferred. The education qualification can be relaxed in case of extraordinary relevant field experience	Minimum 7 years of relevant industry experience Must have relevant industry experience on Load Wiring Have experience of wiring Solar Components, AC/DC Loads. Faculties from reputed colleges and universities in related areas with Prior Field level experience.	2
		Trainer	Diploma/B.E. /B.Tech preferably in Electrical domain. Certified Electrical Wireman License Preferred.	Minimum 5 years of relevant industry experience Must have relevant industry experience on Load Wiring Have experience of wiring Solar Components, AC/DC Loads.	3

04	Category-IV Service & Maintenance	Master Trainer	M.E/M-Tech,B.E/B.Tech preferably in (Renewable Energy/Electrical/Electronics) Skill Council for Green Jobs Certified domain expert Preferred. (The education qualification can be relaxed in case of extraordinary relevant field experience)	Experience: Minimum 7 years of relevant industry experience. Must have experience on service, maintenance & troubleshooting of Solar PV systems	2
		Trainer	Diploma/B.E/B.Tech. B.Tech. preferably in Electrical/Electronics/ Renewable Energy The education qualification can be relaxed in case of extraordinary relevant field experience	Experience: Minimum 5 years of relevant industry experience. Must have experience on service, maintenance & troubleshooting of Solar PV systems	3

Note: All the Master trainers & Trainers should have Proficiency in English & Regional Languages.

4. Deliverables

Agencies/ Companies/ Organizations are supposed to maintain a certain number trained and certified Master Trainers and Trainers with the above-mentioned Eligibility Criteria and Numbers for each of the training categories.

Deliverable 1

- Detailed profile of all the Master trainers and Trainers for all the above-mentioned categories of training to be submitted.
- The Agency/Organization/Company is required to outline the approach for conducting hands-on training, which may include arrangements for industry connections for site visits or access to laboratory facilities.

- On-Boarded Agency/Organization must conduct Training of Training (TOT) for the trainers for each category of training (Category I-Category IV) as per the guidelines specified by the SELCO Skill Institute.
- Separate TOTs are to be Organized in phases for each of these categories of training.
- Agency/Organization/Company shall be responsible for the Assessment and Certification along with SELCO Skill Team of Trainers & Master trainers as per SELCO Skill Program Guidelines

Deliverable 2

- Agency/Organization must ensure the availability of trained and certified Master trainers and trainers as and when and readiness to travel to deliver training programs on and as needed as per SELCO team's requirement.
- Agency/Organization must submit a detailed report of the training program conducted; trainers utilized, and Pre & Post Feedback post each training.

Expected Output:

- The Agency/Organization/Company will work closely with the SELCO Skill Team for delivering effective Solar Technical training programs across Karnataka.
- A total of 8 master trainers and 15 trainers will undergo training and certification for various categories of training programs outlined previously.
- Around 55 routine maintenance trainings and 8 additional trainings on other training categories to be conducted as outlined.
- The Remuneration for the trainers and Master trainers to be by SELCO Foundation.

5. Requirement:

- Agency / Company / Organization with experience of conducting solar technical training for specified target audience
- Agency/ Company / Organization should have the required Infrastructure for hands-on training. The required infrastructure means accessibility of installation sites or solar labs etc.
- Agency/ Company/Organization have the necessary pool of Master trainers & Trainers for imparting training in regional language and at different locations across Karnataka.

6. Timelines:

The agency / company/ organization will be onboarded for a Period of 12 Months from the date of Agreement.

7. Selection Criteria:

The technical proposal will be evaluated based on the following general areas:

1. Agency/ Organization/ Company has the experience of implementing similar type of projects previously
2. Agency/ Organization/ Company has resources (include infrastructure + HR) to manage the deliverable
3. Agency / Organization / Company should have Master Trainers (at least 2) who can train the Trainers. Master Trainers will be responsible for providing training to Trainers and will work closely with SELCO Skill Team in facilitating delivery of training contents as per requirement. The detailed eligibility conditions to be a Master Trainer are specified under Category I, Category II, Category III & IV. Preference to be given to trainers having Skill Council for Green Jobs domain Certification.
4. Agency/ Company/ Organization should have the industry connects to give hands on training (Solar System Installation sites visit for hands on training, solar lab etc).
5. Agency / Organization/ Company must have offices in Karnataka
6. SELCO team can onboard more than one agency/Organization/Company

8. Payment Terms:

The payment will be released as per the following terms & conditions -

Completion each package of ToTs

Training Package 1: Site Assessment & Routine Maintenance

Training Package 2: Solar PV Installation & Quality Evaluation

Training Package 3: Load Wiring

Training Package: Service & Maintenance

9. To apply

Interested consultants / organisations, with relevant experience (please include samples and/or references of the previous similar work as proof of experience) and based out of India are requested to reach out with a detailed proposal giving a brief on the methodology and the process they will uptake for this project, including budgets (with break-ups and explanation), timelines and milestones and submit the same to google form <https://forms.gle/MAVixzad1Rnj6GE46> on before 14th June, 2024.

Any further queries please write to procurement@selcofoundation.org with a subject line: **“Onboarding of an Agency / Organization/ Company to conduct Solar Technical Training Programs across Karnataka”** (Name of Project)

Refer Terms and Condition:

- 1. Sub-contracting:** In the event that the Consultant requires the services of subcontractors to perform any obligations under the Contract, the Consultant shall obtain the prior written approval of the Foundation. Any rejection or non-performance of the subcontractor shall not, in and of itself, entitle the Consultant to claim any delays in the performance, or to assert any excuses for the non-performance, of any of its obligations under the Contract, and the Consultant shall be solely responsible for all services, obligations and deliverables performed by its subcontractors
- 2. Quality Assurance**
The data submitted to Selco Foundation should be accurate, complete, reliable and relevant. Consulting agency shall establish additional layers for data cleaning and submission.
- 3. Financials & Reporting**
TDS will be deducted on the fixed amount as per Income Tax Act and Rate of Percentage. In accordance with the Central Board of Direct Taxes circular No. 7 of 2022 dated 30th March, 2022 in relation to the clarifications with respect to Section 114AAA of the Income-tax Rules, 1962, failure to link Aadhar number to the PAN card and/or failure by any person, who falls within the income tax bracket or otherwise, to file tax returns in relation to payment of TDS for any service (in accordance with Section 206AB and 206AA) and/or an inoperative PAN card will result in a 20% tax deduction.
- 4. Indemnification**
Both parties shall indemnify and hold its Trustees, Directors and representative officers, employees, agents harmless from and against any and all claims, demands, actions, losses, liabilities, charges, damages, costs and expenses (including but not limited to reasonable attorney's fees) arising out of or resulting from (1) any claims arising in connection with activities undertaken by both parties in connection with the project or (2) Consultant's gross negligence or willful misconduct or breach of any undertaking, covenant, representation or warranty contained in this agreement and/ or the actual infringement of any patent, trademark, copyrights, trade secret or any other intellectual property right of the third party.
- 5. Patent, Copyright and other Proprietary Rights**
 - (i) Except as is otherwise expressly provided in writing in the Contract, the Foundation shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Consultant has developed for the Foundation under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the Contract. The Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for the Foundation.
 - (ii) Subject to the foregoing provisions, all documents, reports, recommendations, documents, and all other data compiled by or received by the Consultant under the Contract shall be the property of the Foundation, shall be made available for use or inspection by the Foundation

at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to the Foundation's authorized officials on completion of work under the Contract

- (iii) The Consultant will treat all information given to him/her as information with proprietary value and will not disclose the same to competitors or any outsiders. The Consultant will not at any time, except under legal process, divulge any trade or business secret relating to the Foundation or any customer or agent of the Foundation, which may become known to him by virtue of his position as consultant, save in so far as such disclosure shall be necessary in the interest and for the benefit of the said Foundation and will be true and faithful to the Foundation in all dealings and transactions whatsoever relating to the said Foundation.
- (iv) Reports or other data that are developed specifically for the performance of this Contract shall be the property of the Foundation and the Consultant shall deliver reports and data to the Foundation as per the milestones. Dissemination of the reports and any information from the said contracts shall be done with written approval from the Foundation.

6. Publicity, use of name & Logo of the Foundation: The Consultant shall not advertise or otherwise make public for purposes of commercial advantage or goodwill that it has a contractual relationship with the Foundation, nor shall the Consultant, in any manner whatsoever use the name, emblem, logo or official seal of the Foundation or that of SELCO in connection with its business or otherwise without the written permission of the Foundation.

7. Observance of Law:

- (i) The Consultant shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the Contract.
- (ii) The Consultant represents and warrants that neither it, its parent entities, partners or subcontractors nor any of its subsidiary or affiliated entities (if any) is engaged in any practice inconsistent with the rights set forth in the *Child Labour (Prohibition and Regulation) Act of 1986*, which, *inter alia*, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.
- (iii) The Consultant represents and warrants that it shall adhere to the mandates prescribed under the *Sexual Harassment of Women (Prevention, Prohibition & Redressal) Act, 2013*, which requires all workplaces to have a Policy and Internal Committee to address complaints of sexual harassment that women may face at the workplace

8. Termination:

Either party may terminate this contract by giving a notice in writing to the other party stating their intention to terminate the same on the expiration of Seven (7) days from the date of such notice. In addition, the Foundation may also terminate this contract forthwith in the event of any fraud, misconduct or neglect of duties on the part of the Consultant. Any notice to be given hereunder shall be sufficiently given to the Consultant if forwarded by registered post or by Courier Service to the last known postal address of the Consultant and shall be sufficiently given to the Foundation if similarly forwarded to the registered office. Upon the termination of this contract and payment of the said fees due up to such termination, and payment of all disbursements and out-of-pocket expenses incurred up to the date

thereof (provided the same have been incurred after obtaining prior approval), the Consultant shall deliver all deeds, documents and paper in his possession relating to the business of the Foundation or as the Foundation shall direct, and shall continue to afford him all reasonable assistance for concluding pending matters at the date of such termination without making any charge thereof.

9. Force Majeure:

- (i) *Force majeure* as used herein means any unforeseeable and irresistible act of nature, any act of war (whether declared or not), invasion, revolution, insurrection, terrorism, or any other acts of a similar nature or force, *provided that* such acts arise from causes beyond the control and without the fault or negligence of the Consultant
- (ii) In the event of and as soon as possible after the occurrence of any cause constituting *force majeure*, the affected Party shall give notice and full particulars in writing to the other Party, of such occurrence or cause if the affected Party is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract. The affected Party shall also notify the other Party of any other changes in condition or the occurrence of any event which interferes or threatens to interfere with its performance of the Contract. Not more than fifteen (15) days following the provision of such notice of *force majeure* or other changes in condition or occurrence, the affected Party shall also submit a statement to the other Party of estimated expenditures that will likely be incurred for the duration of the change in condition or the event of *force majeure*.
- (iii) On receipt of the notice or notices required hereunder, the Party not affected by the occurrence of a cause constituting *force majeure* shall take such action as it reasonably considers to be appropriate or necessary in the circumstances, including the granting to the affected Party of a reasonable extension of time in which to perform any obligations under the Contract.
- (iv) If the Consultant is rendered unable, wholly or in part, by reason of *force majeure* to perform its obligations and meet its responsibilities under the Contract, the Foundation shall have the right to suspend or terminate the Contract on the same terms and conditions as are provided for in this Contract.

10. Both the Foundation and the Consultant fully and freely intend to create an independent Contractor relationship under this Contract. Nothing herein shall be deemed to establish a partnership, joint venture, association or employment relationship between the parties. Both parties agree that the consultant has the right to sole and exclusive control over the manner and means employed in performing their activities under this Contract.

11. Settlement of disputes:

- (i) The Parties shall use their best efforts to amicably settle any dispute, controversy, or claim arising out of the Contract or the breach, termination, or invalidity thereof.

Any dispute, controversy, or claim between the Parties arising out of the Contract or the breach, termination, or invalidity thereof, unless settled amicably, within sixty (60) days after receipt by one Party of the other Party's written request for such amicable settlement, the matter shall be referred by either

Party to arbitration in accordance with the Arbitration and Conciliation Act, 1996. The venue of the arbitration shall be at Bangalore. Likewise, the jurisdiction will vest with courts in Bangalore.