Job Vacancy Description:
Engineering and Construction Supervisor
Reference: 22.13

1. The company

Trama TecnoAmbiental (TTA), with headquarters in Barcelona (Spain), is an international engineering and consulting firm in business since 1986 in the field of renewable energies and specialized in distributed generation and energy access for development. TTA's multidisciplinary team has comprehensive experience at both technical and management levels and has been exposed to many international projects all over the world.

With its more than 30 years of experience, **TTA offers a full range of cross-cutting engineering & consulting services** for all kinds of renewable energy and energy access projects, such as:

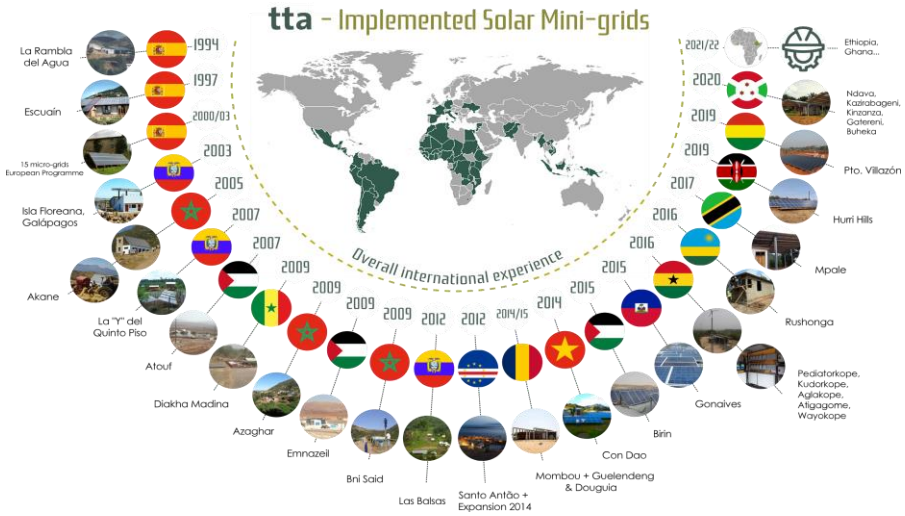
- *Consultancy in energy access and renewable energy projects (off-grid and on-grid)*. Project identification and evaluation; Technical and Economic feasibility studies; Assessment of renewable energy sources, Engineering studies; Social and environmental impact assessments; Owners Engineering services; Preparation of technical specifications and bidding documents; Support during procurement; Construction supervision; Monitoring services; Operation and Management services; Project promotion and dissemination.
- *Engineering Procurement & Construction (EPC) of micro-grids*. Design, supply, installation and commissioning of micro-grid projects.
- *Energy efficiency and green buildings***.** Evaluation, design and monitoring of energy efficiency projects; Energy auditing; Integration of renewable energies into buildings and green building practices.
- *Institutional, Policy and Regulatory Support.* Design of rural electrification policies, programmes, strategies and action plans; Policy development and planning; Development of business models and tariff schemes; Market potential assessments.
- *Capacity Building***.** Capacity building and specialized trainings.
- *R&D.* Publication of articles, documents, guidelines, case studies, and presentations at international conferences.

TTA is a **pioneer firm in renewable energy-based generation and solar PV Hybrid mini-grids**. At the forefront, TTA was the driving force for the implementation of the first micro-grid projects in Spain in the early 1990s, and later on applying its expertise in Latin America, Africa and the Mediterranean. TTA has implemented mini-grids as EPC contractor in Ghana, Chad, Cape Verde, Ecuador, Palestine, Morocco, etc. some of which have been operated and maintained by TTA. Having collaborated in various tasks of the International Energy Agency (IEA), TTA was awarded with the EUREC Technology Prize 2001 "for developing excellent system technology for rural electrification based on renewable energy sources, combined with an innovative, user-oriented approach for its implementation". Furthermore, in September 2015, TTA was awarded with the Prize "Off-Grid Experts Awards" by the company Phaesun together with ARE (Alliance of Rural Electrification), for excellence in the performance in the field of Off-Grid power supply, in the Category A "product" for TTA's "Electricity Dispenser", an advanced meter for mini-grids.

In terms of **publications**, TTA has been the main contributor of the IRENA's Innovation Outlook: Renewable Mini-grids (2016) and is author of the World Bank's ESMAP Benchmarking study of Solar PV mini grids investment costs (2017 & 2018). TTA's first hand field experience in the Operations and Maintenance of Mini-grids has been used by IRENA's Policy Toolkit. These are just some of the latest references in which TTA has participated.

Another significant milestone in the sector is TTA's lead organization of the ***International Conference on Solar Technologies & Hybrid Mini Grids to improve energy access***, a relevant sector event conducted on October 2018 in Mallorca (Spain) and which was supported by renowned organizations such as the ESMAP, World Bank, EnDev, the GIZ or SNV.

TTA's track record in the field of Renewable Energy and Rural Electrification is demonstrated by the extensive list of projects carried out around the globe for project developers, contractors, power utilities, governments as well as all major International Organizations such as the World Bank, IFC, UNDP, UNOPS, UNIDO, UNICEF, GEF, UNESCO, IDB, OAS, European Commission, AECID, GIZ, KfW, and other cooperation and development agencies, NGOs, local communities and individuals.



TTA is also a member of and collaborates with the following organizations and Groups. TTA is a founding member of the **Alliance for Rural Electrification (ARE)**.

Further detailed information at: www.tta.com.es/en

Here are some videos of our minigrid projects: https://youtu.be/Z21tenW9YXE, https://youtu.be/NIbFpRHK8YU, https://youtu.be/Pd3NCphnOs0

2. Job description

TTA is seeking **Engineering and Construction Supervisors (specialized on renewable mini grid projects)** to join the **Technical and Construction Department of TTA**. Under the supervision of the Technical Director, the **Engineering and Construction Supervisors (ECS)** will support the development of mini-grid renewable energy electrification projects in different regions and countries (mainly Latin America: Haiti and Suriname, but also in Africa and the Pacific). The job within the team will particularly focus on the supervision of the construction of solar hybrid plants, small and medium-sized, from tens of kWp up to a few MWp range as well as on low and medium voltage distribution line layout.

TTA is seeking engineers with at least 12 years of experience in the energy sector and at least 8 years of specific experience in technical design and supervising the construction and interconnection of solar energy generators with battery energy storage systems on decentralized networks. The ECSs should also have experience in monitoring and control of solar power plants, battery energy storage, and distribution networks. The engineers should be willing to travel to project locations and potentially be open to be on-site during extended periods to ensure a smooth implementation of works.

3. Responsibilities

An **Engineering and Construction Supervisor** will work in the following areas, with particular emphasis in the owner's engineer and supervision tasks:

1. **Plant design:** Work in technical designs, particularly in the above-mentioned capacity range and in distribution grids, network stability and performance calculations, layout, bill of quantities, technical specification writing of renewable energy-based solutions, with a strong focus on mini grids, small and medium sized (up to a few MWp). This includes but not limited to mini grid plants, energy storage, control and monitoring systems, transformation and distribution lines layout.
2. **Owner's engineering:** Advisory services to institutional and private clients on project development, operation, and tender preparation and construction of mini grid and renewable energy projects. Review and evaluation of technical and financial proposals by contractors including provision of support in the negotiations with winning bidders, coordination of grant disbursements, and provision of technical assistance to the winning bidders.
3. **Supervision and Construction management:** Planning of plant construction and supervision of works and interconnection, including eventual field work with the supervision of subcontractors for electrical, civil, mechanical work. Tight control of quality and timeline of small and medium sized projects up to a few MWp.
4. **Project proposal preparation:** Support to the Business Development department in preparing proposals, in particular preparing technical methodologies, bill of materials, budgets and technical drawings for proposals.

4. Profile

The ideal candidate for this position will have the following competences:

1. **Educational Background.** A Master's degree in electric engineering or similar is required. Specific education in renewable energies, sustainable energy and/or energy access will be an advantage.
2. **Previous Work Experience**. Minimum 12 years of experience in electrical engineering is required. Minimum 8 years of experience in solar PV and other sustainable energy sources is required. Experience in the MW range clean-energy generation and low and medium voltage distribution lines is desirable.
3. **International Experience**. Experience in developing countries is not required but highly desirable, but the candidate should be interested in working with and travel to developing countries.
4. **Languages.** Fluency in **English and Spanish** is mandatory. Fluency in **French** is mandatory if the assigned project is based in a French-speaking country (e.g. Haiti). Other languages like Portuguese or Dutch (in the case of Suriname) will be an added value.
5. **Computer Skills.** Excellent command in Microsoft Word, Excel and AutoCAD are required. Experience with simulation software such as HOMER Pro®, PVsyst, Helioscope, or other similar is highly desirable, as well as network stability analysis software like DIgSILENT, etap, or similar.
6. **Interests**. Passionate about sustainable energy; Motivation to travel internationally; Interest in development cooperation is an added value.
7. **Skills.**
   - Ability to work autonomously, with minimum supervision.
   - Ability to manage multiple projects simultaneously.
   - Analytical skills, efficient designing and implementing of processes.
   - Methodical and well organized.
   - Ability to manage work-teams in project execution.
   - Ability and proven experience to think creatively, learn quickly and develop innovative solutions involving electrical and mechanical challenges.
   - Cross-cultural communication and interpersonal skills.

5. Conditions

- **Salary and benefits**: TTA offers a multicultural and flexible working environment with remote work possibilities and flexible working hours, teamwork and constant learning. Salary to be defined, depending on qualifications of the candidate.
- **Starting date**: September 2022
- **Position based in:** TTA's headquarters in Barcelona, Spain, or remote work, preferably located close to the project sites.

Apply >> If you are interested in applying for this position, please click on the following link where you will find the procedure to follow (upload CV and fill-in form): https://goo.gl/forms/i05SOg847G7bsybE3

Only shortlisted candidates will be contacted.