

Job Vacancy Description:  
**Civil Engineer**  
*Reference: 20/06*

## 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. TTA's multidisciplinary team has comprehensive experience at both technical and management levels and has been exposed to numerous 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 kind of renewable energy and energy access projects, such as:

- *Consultancy in energy access and renewable energy projects (on-grid and off-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.
- *Product development.* Development of products specific for renewable energy and rural electrification projects.
- *Capacity Building.* Capacity building and specialized trainings.
- *R&D.* Publication of articles, documents, guidelines, case studies, and presentations at international conferences.

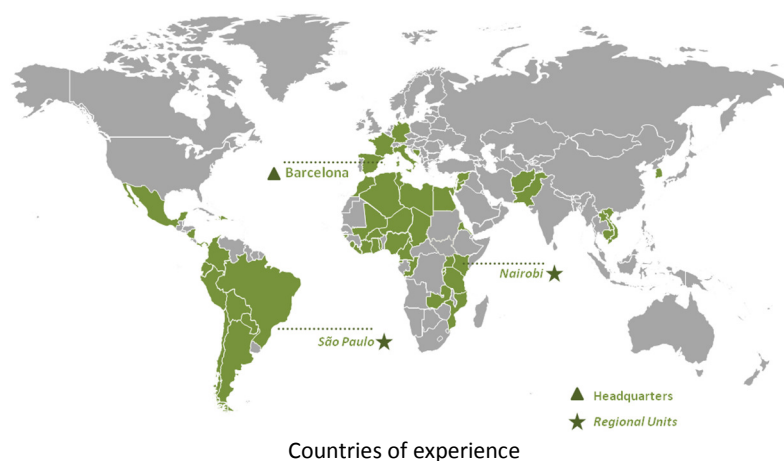
TTA is a **pioneer firm in renewable energy-based generation and solar PV Hybrid mini-grids**. At the forefront, TTA was the driving force for the implementation of the first micro-grid projects in Spain in the early 1990s, and later on applying its expertise in Latin America, Africa and the Mediterranean. 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 Off-Grid 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 track record** in the field of Renewable Energies 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 member and collaborates with the following organizations and Groups. TTA is a founding member of the **Alliance for Rural Electrification (ARE)** and its Director served as Board member for three years until 2015.

Please see some of our Microgrids projects: <https://youtu.be/Z21tenW9YXE>, <https://youtu.be/NibFpRHK8YU>

Further information: [www.tta.com.es/en](http://www.tta.com.es/en)

## 2. Job description

TTA is seeking a **Civil Engineer or equivalent**. He/She will integrate the Technical and Construction Department of TTA. Under the supervision of the Technical Director, the Civil Engineer will support the Department in the development of grid-connected and stand-alone renewable energy electrification projects worldwide. The job within the team will particularly focus on the design and supervision of civil engineering and works implementation of solar hybrid plants from several hundred kW up to the MW range.

The Civil Engineer will work in the following areas, listed according to priority:

1. **Owner's engineering:** Advisory services to Institutional and private Clients on project development and particularly direct works supervision in projects developed by contractors in remote villages in Africa, Latin America, Asia and Pacific.
2. **Building design:** Civil works design and calculation for buildings and solar plants, calculation, layout, bill of quantities, technical specification writing. This includes but not limited to mini grid plants and related construction works (foundation, powerhouse, solar structure and pergola, add-ons to existing roofs and infrastructures, etc.).
3. **Construction management:** Planning of plant construction and supervision, including field work with the supervision of subcontractors for civil and mechanical work. Tight control of quality and timeline, partially management of subcontractors and focal point bridging between TTA head offices and the local partner / client.
4. **Process improvement:** Draw-up of feedback and experience to improve internal procedures.

## 3. Profile

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

1. **Educational Background.** Bachelor or master's degree in civil engineering, Architecture or equivalent. Specific education in renewable energies, mechanical, or similar is desirable.
2. **Previous Work Experience.**
  - Minimum 5 years of technical experience in civil works execution and supervision, ideally in the field of renewable energy technologies or electrical installations, in distributed solar PV, RE mini-grids and/or rural electrification.
  - Experience in project coordination/management is desirable
3. **International Experience.** Despite not required, it is highly desirable.
4. **Languages. REQUIREMENT: Fluency in English or French, both written and verbal.** / Spanish / Portuguese is desirable.
5. **Computer Skills.** Proficiency with Microsoft Office tools, AutoCAD.
6. **Soft skills:**
  - Problem-solver, pro-active and results-oriented
  - Methodical and organized
  - Autonomous

- Motivation to travel internationally often (30-60% of time), in particular to developing countries.
- Cross-cultural communication and interpersonal skills
- Ability to lead and communicate with a team
- Ability to manage multiple projects simultaneously
- Ability and proven experience to think creatively, learn quickly and develop innovative solutions involving electrical and mechanical challenges.

#### 4. Conditions

- **Salary and benefits:** Annual gross salary 25,000 – 35,000 EUR depending on profile.
- **Starting date:** Immediate.
- **Position based in:** Barcelona, Spain.

**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.

Some picture of our projects:



Construction and Commissioning of 3 Solar Photovoltaic microgrids in Chad on a Turn-key Basis, including techno-economic-social feasibility



2017: ENSOL & TTA: Design, Construction, and O&M of 1 Solar PV micro-grids (48 kWp) in Mpale, TZ