

Renewable Energy Access Intern

Reference: 23.10

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.

TTA offers a full range of cross-cutting engineering & consulting services for all kinds of renewable energy and energy access projects, such as:

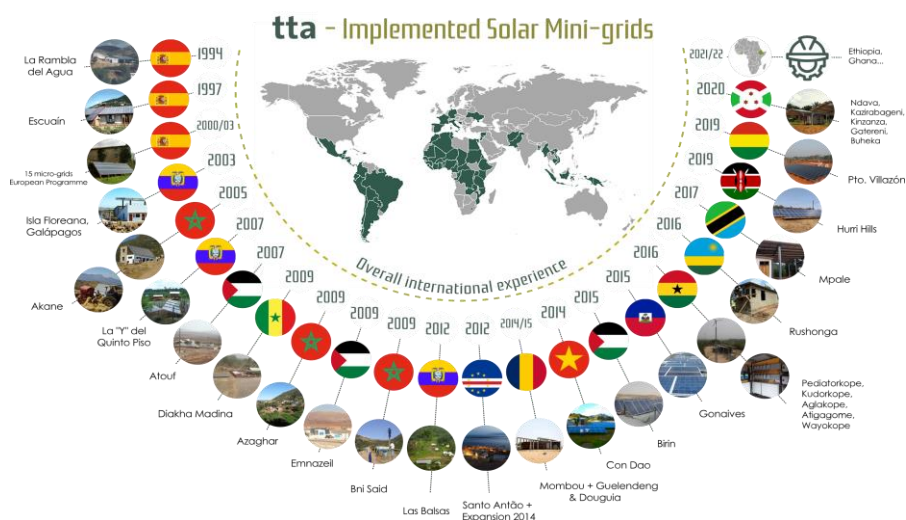
- *Consultancy in energy access and renewable energy projects (off-grid and on-grid).* Project identification and evaluation; Technical and Economic feasibility studies; Assessment of renewable energy sources, Engineering studies; Social and environmental impact assessments; Owners Engineering services; 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.
- *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 applying its expertise in Latin America, Africa and the Mediterranean. 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).

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 being held in Mallorca (Spain).

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



In Latin America, TTA has established itself as a pioneer and reference in the design of energy access projects in isolated and rural areas with renewable energies to meet the energy needs of communities. TTA has more than ten years of specialization in rural electrification projects with mini-grids and individual solar systems. Under a holistic and integrated approach, communities are served as a whole regardless of the technical solution (i.e. seeking that the technology adapts and is appropriate to meet the needs of the communities served and not the other way around). Technical assistance for mini-grid development: creation and

implementation of a new mini-grid program, definition of a strategy for the sector; supervision of works. TTA currently has projects in the following countries: Haiti, Suriname, Panama, Colombia, Bolivia, Brazil.

2. Job description

TTA seeks a Renewable Energy Access Intern to join the Latin America and Caribbean Unit of TTA. He/she/they will support the team in projects mainly related to energy access through solar-distributed PV or mini-grids. These tasks include on-grid and off-grid solar PV as well as hybrid technologies.

He/she/they will report mainly to the Project Managers of the Latin America and Caribbean Regional Team.

3. Responsibilities

The Renewable Energy Access Intern could work and support the regional Project Managers in the following areas, depending on their interests and their background:

Project Management

1. Meeting support: Participation in meetings and support in taking notes and preparing presentations.
2. Procedures: Develop, maintain, and automatize several project management procedures using our Project Management Platform (Wrike)

Technical

3. HOMER: Learn how to use the software and support with modelling and simulations of on-grid and off-grid solar PV as well as hybrid systems for different projects.
4. Community Mapping: Using GIS tools, develop maps of the communities that are visited by the teams in Panama, Suriname, and/or Haiti.
5. Costs: With the support of the team, clean, update and develop a database (Excel) and a simple visualization tool to do a cost analysis of several equipment and different technologies such as: diesel gensets, batteries and PV systems.
6. Kobo: Learn how to use the software and support the team to process and analyse the data of some interviews from Panama, Colombia, and Suriname.

4. Profile

1) Background.

- a) **Education.** Last year of studies of a Technology or Engineering degree in a 4-year university is required. Specific education in renewable energies, energy efficiency, energy management, and/or energy access will be an advantage. Background in energy policy or energy economics will also be considered.
- b) **Previous Work Experience.** Having worked during their studies in research or academic projects related to any of the specific knowledge areas stated below.
- c) **Specific knowledge.** Knowledge in any of the following will be valued:
 - Renewable Energies (specifically solar PV)
 - Basic Data Management and Processing (using Excel)

- Large Solar PV plants / Rooftop PV plants
 - PV or other RE source mini-grids / Solar Home Systems, PicoPV
 - Energy access or rural development.
- 2) **Languages.** Fluency in Spanish and English with advanced writing skills is mandatory. French is desired.
- 3) **Computer Skills.**
- a) **Required:** Excellent command in Microsoft Word, PowerPoint and Excel
- b) **Knowledge in one or more** of the following is an asset:
- Experience with solar PV design software (HOMER, PV SYST or Helioscope)
 - Electrical Power System Analysis Software (e.g. Open DSS, DigSilent Power Factory, Matlab)
 - Computer programming language Python
 - Relevant GIS software (QGIS)
 - Microsoft Project, Wrike, Trello, Monday, Asana or other project management tools
- 4) **Interests.** Passionate about renewable energies, energy equitable access, rural development, and a just energy transition.
- 5) **Skills.**
- Ability to work with minimum supervision and under pressure.
 - Problem-solver, proactive and results-oriented
 - Ability to positively engage with other team members.
 - Analytical skills, efficient design, and implementation of processes
 - Research-oriented, able to conduct research and develop solutions based on their research results.
 - Willing to adapt to a flexible working environment, methodical and well-organized.
 - Creative thinker, quick learner, and innovative mindset
 - Cross-cultural communication and interpersonal skills
 - Ability to communicate/switch between languages easily, both verbally and in writing.

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 and the conditions stated by the student's university.
- **Starting date:** August 2023
- **Contract duration:** 3-6 months (to be confirmed with candidates)
- **Location:** Preferably in the Latin America & Caribbean Region

Interested? >> Apply by clicking on the following link to upload CV and fill-in form: <https://goo.gl/forms/i05SOg847G7bsybE3>

Only shortlisted candidates will be contacted.