



Smart Villages Research Group Ltd

Job Description - International Technical Field Engineer

Application procedure

In order to apply to this role, we require the following to be sent via email to jobs@e4sv.org

1. CV (no more than 2 pages)
2. A short video telling us why this job interests you, and what you would bring to the role (~2 mins)
3. A short video explaining why you would be a good person to travel and spend a week in a remote village with! (~2 mins)

Salary

To be discussed, dependent on prior experience.

Start Date

Earliest start date – November 2024.

Location

Remote with regular international travel required.

It is a requirement of our funders that we employ people in the UK under PAYE. **The successful candidate must therefore have the right to live and work in the UK by the commencement of employment.**

About Us

Smart Villages Research Group Ltd (SVRG) is a small company which evolved from an extensive research project exploring innovative and sustainable ways to achieve rural development and energy access in off-grid communities around the world. Over the last six years we have developed innovative technologies and business models and implemented these rural development solutions to meet the integrated needs of rural communities around the world, and to validate our approach through collection of impact data from the communities we work with.

SVRG is involved in a number of (industrial) R&D projects implementing and innovating new products, solutions and models in the field of energy access and rural development across multiple Global South countries. These projects support progress towards multiple Sustainable Development Goals, including SDG7: energy access for all, but always maintaining our community-led, bottom-up, holistic "Smart Villages" approach.

Projects include:

- Testing innovative energy system designs to improve financial viability and suitability for the specific contexts
- Adapting tools and methods to enable more successful community engagement and participation in energy access projects



- Developing low-cost, sustainable technologies to support universal energy access and environmental stewardship aims and to integrate access to energy with innovative productive and social uses of energy to help drive social and economic development in those communities.

We also are beginning to capitalise on successful business models and technologies we have developed in implementation projects in a growing number of communities.

We work in multiple countries in Eastern and Southern Africa, as well as Malaysia and Nigeria. Our roles involve working with multiple in-country partners and a multi-disciplinary team, travel for in-country work, and practical application of research, engineering, community engagement, monitoring and evaluation, and project management techniques. Since most of our work is in-country, and we are a small team of 12, we do not have physical premises in the UK. SVRG staff are all home based, though we keep in touch through daily virtual stand-up meetings and will often work together in-person at project sites abroad.

About You

We are keen to recruit a graduated engineer or other practically minded individual with strong technical skills in electrical and mechanical work.

We are seeking a highly skilled and adaptable International Technical Field Engineer to join our team in implementing renewable energy projects across multiple countries. Recent engineering graduates or experienced electrical technicians with strong hands-on abilities and a solid understanding of electrical systems, particularly in the realm of renewable energy, are encouraged to apply. This role requires a passion for international development, cultural sensitivity, and the ability to work effectively both on-site in various countries and remotely from the UK.

The successful applicant will thrive in diverse environments, as the role involves frequent travel to various countries for on-site project implementation. The work is varied - the role may involve wiring inverters in remote Tanzanian fields one week and designing solar energy systems for rural petrol stations the next. Technical expertise will be put to the test daily, whether installing solar panels, configuring battery systems, or troubleshooting complex electrical issues.

When not in the field, the position is based in the UK, working remotely. The ideal candidate should be comfortable with self-directed work, managing their time effectively, and spending significant periods on a laptop. Responsibilities will include conducting desk-based research on topics such as borehole characteristics and water pump specifications, remotely diagnosing technical faults for in-country partners, and assisting with solutions from afar.

As technical as that all sounds, one of the most important aspects of the job is collaborating with and being able to understand and influence people. The role requires a unique blend of technical prowess and soft skills. Cultural sensitivity is paramount, as the successful candidate will be working closely with diverse communities and partners across multiple countries. Humility will allow them to learn from local experts and community members, while curiosity will drive them to continually expand their knowledge and skills.

Self-motivation and strong organisational abilities are essential, as the role often involves working independently both in the field and at home. The ideal candidate should be able to take initiative, solve problems creatively, and adapt to changing circumstances with ease.



Practical skills are the greatest asset for this position. Whether handling sophisticated electrical equipment, reading and interpreting technical drawings, or improvising solutions with limited resources, hands-on capabilities will be crucial to success in this role.

Above all, the ideal candidate should have a genuine commitment to sustainable development and a desire to make a positive impact on communities through their work. Excitement about applying technical skills to real-world challenges in diverse global settings is a must for this position.

The International Technical Field Engineer role:

The role will be a full-time position – in the first instance for two years, but our expectation is that further projects will come on-stream before that time is out, and the possibility for the contract to be extended therefore exists.

There is a probation period of 6 months, during which there will be regular professional development check-in calls. If after 6 months it turns out we are not suitable for each other, the position will not be confirmed.

Working hours are reasonably flexible but should average out to at least 37.5 hours per week. A significant amount of time is likely to be spent on-site in the countries that we work in; for current employees in this role, about 25-50% of the year is spent abroad, for 1-5 weeks at a time on a regular basis, though the exact travel requirements vary depending on the person and project requirements. Depending on our schedule and that of our partners, we often work weekends and sometimes evenings as well when we are in the field. Conversely, when back in the UK, although working during normal daytime hours will be useful (since colleagues and our partners are likely to be working at the same time) we adopt a flexible hours policy, should you occasionally wish to walk the dog, go shopping, or see friends for the afternoon and make up the time outside normal working hours.

Annual leave is 31 days including bank holidays, and should it be necessary to work during weekends when overseas, days off in lieu may be taken.

We operate a statutory employer pension scheme, administered through NEST. The employee contribution is 5% of your salary, the employer's contribution is 3%. You may opt out of this scheme if you wish.

Remote work from your home location takes up a large proportion of the working hours for this role. It is therefore essential that you have the skills and self-discipline necessary to motivate yourself to work outside of an office environment without constant contact with colleagues. This remote work can be done either from your home or – if you wish, and at your own cost – from a co-working location. Hence you will be expected to have access to essential work resources such as a good working laptop and a broadband connection. But don't bother buying a suit or a season ticket to get to the office! While travelling abroad for work, all work-related expenses will be covered by the company (transport, accommodation, food etc.).

Desired qualities & skills

Note on the application process: We are committed to building a diverse and inclusive workforce. Studies have shown that candidates from underrepresented groups, including women, often hesitate to apply unless they meet 100% of the listed criteria. We want to emphasise that we encourage applications



from all qualified individuals who will have the right to work in the UK at the time of employment, regardless of gender or ethnicity. If you're passionate about this field and believe you have relevant skills and experiences to offer, we strongly urge you to apply. Our hiring process values a range of perspectives and experiences, and we're eager to hear from eligible candidates.

- Degree in Engineering or related field, or equivalent technical certification, with strong preference for electrical and mechanical skills
- Hands-on experience with technologies including solar panels, inverter systems, and battery technologies, and in troubleshooting electrical issues
- Strong understanding of electrical systems, technical diagrams, and renewable energy principles
- Willingness to travel frequently to various countries for on-site project implementation
- Ability to work on-the-ground effectively in remote and challenging environments
- Cultural sensitivity, personal gravitas, curiosity, self-motivation, practicality and common sense.
- High self-organisation skills
- Comfort with independent/remote working is essential, confidence to contact remote colleagues with questions or uncertainties
- Willingness to think outside the box and operate, research and innovate outside your comfort zones
- Personal experience of independent travel
- Excellent communication skills, both written and verbal
- Willingness to learn and an interest in international development and cross-cultural working
- Interest and engagement with the communities in which we work
- Experience with 3D modelling is an asset, but not essential
- Experience with and interest in agriculture is an asset, but not essential
- Experience with practical electrical installations is an asset, but not essential
- Experience with construction is an asset, but not essential
- Experience with water engineering is an asset, but not essential

If you have any questions, please contact jobs@e4sv.org

Many thanks for considering joining the Smart Villages team. We look forward to hearing from you!

Visit <https://e4sv.org/> for more information.