



ENERGY EXPERT ROSTER

Terms of Reference

Objective of the Roster

The [Safe Access to Fuel and Energy \(SAFE\) Humanitarian Working Group](#) is a consortium of partners working to facilitate a more coordinated, predictable, timely, and effective response to the fuel and energy needs of crisis-affected populations. As part of this mission, the Working Group seeks to create a public database of deployable humanitarian and technology experts to help strengthen existing capacity and programs for access to energy and clean and efficient energy technologies for **heating, lighting, cooking, and powering** to refugees, internally displaced persons (IDPs), and other crisis-affected people. Energy Advisers can be deployed in the initial stages of sudden-onset emergencies, as well as in protracted or recurring humanitarian situations, to support the Humanitarian Coordinator, Humanitarian Country Teams, UN agencies, cluster leads, NGOs, and governments.

Among other activities, Energy Advisers can:

- Conduct rapid assessments of energy needs and recommend context-appropriate solutions;
- Facilitate the procurement of safe and sustainable fuel and energy technologies, including local producers;
- Provide training on the installation, use, maintenance, and benefits of energy products such as improved cookstoves and solar lighting; and
- Develop energy strategies that incorporate considerations for the health, safety, livelihoods, and well-being of crisis-affected people – especially women and children – and their surrounding environment.

Background of the Need

Well-trained and coordinated staff who provide programmatic and technical support to energy projects is a critical gap in humanitarian assistance. Despite its importance, energy access is often left out of humanitarian strategies for health, protection, food security, shelter, and water, sanitation, and hygiene (WASH). For example, most of the food provided by humanitarian agencies must be cooked before it can be eaten, but efficient cookstoves and fuel are rarely provided, leading women and children to risk their safety to collect wood outside the camp limits. Lack of lighting increases refugees' vulnerability to physical injury or attack when navigating camps after dark, and limits critical livelihood and education activities. Without power to charge mobile phones or supply health centers, crisis-affected people cannot reach their loved ones or call

for help in emergencies, and crucial medications and vaccines cannot be refrigerated. Without adequate heating in shelters, families can suffer in harsh winter conditions.

Consequently, crisis-affected people are forced to resort to desperate strategies to meet their energy needs, such as selling food rations for cooking fuel or taking out loans. Women and children often risk their safety, health, and sometimes their lives, to search for and collect firewood in order to cook food over smoky, polluting open fires. In many cases, displaced women walk for hours to find firewood and have to carry heavy loads back to camp, which puts them at risk for physical and sexual attack, dehydration, and physical injuries. Lack of lighting further increases women's vulnerability when navigating camps to use latrines and other services at night.

The members of the SAFE Humanitarian Working Group envision a world in which all crisis-affected populations are able to satisfy their fuel and energy needs for cooking, heating, lighting, and powering in a safe and sustainable manner, without fear or risk to their health, well-being, and personal security. Safe and sustainable access to energy is increasingly being recognized as a human right – essential for the safety, well-being, and productivity of the people the humanitarian community serves. It is also essential for social and economic development, offering opportunities for improved lives and economic progress; improving health outcomes; and driving gender equality.

Because of the cross-cutting nature of energy use and access, the SAFE Humanitarian Working Group seeks to combine improved technologies, alternative fuels, and livelihood and environmental activities to:

- Provide emergency support for cooking, lighting, heating, and powering needs to ensure the safety and well-being of displaced people, especially women and girls, who are typically the most vulnerable during crises;
- Help to shift communities away from dangerous and destructive dependence on biomass fuel and towards healthier and more sustainable options;
- Reduce exposure to the risk of gender-based violence and other threats faced primarily by women and girls during firewood collection and while navigating communal areas camps at night;
- Reduce the negative health impacts of household air pollution from burning solid fuels in enclosed spaces for cooking, lighting, and/or heating purposes; and
- Mitigate environmental degradation through agroforestry activities and reduced biomass consumption, contributing to disaster risk reduction and long-term food security.

The availability of programmatic and technical staff to support humanitarian actors in implementing energy solutions is vital to achieving these goals. In addition to implementing safe and sustainable energy strategies, these experts can provide crucial training to crisis-affected people and humanitarian actors on the proper use, maintenance, and capabilities of various

technologies, as well as identify opportunities to transform short term solutions into long term income-generating activities, such as locally producing improved cookstoves or firewood alternatives. These activities build the capacity of crisis-affected communities to cope with future disasters and encourage humanitarian actors to consider longer-term strategies.

Job Description

Energy Advisers may be requested to conduct a variety of activities while deployed with partner organizations, including conducting assessments; providing technical assistance; developing energy strategies; leading project design, implementation, and monitoring; or convening technical experts and necessary stakeholders. The context, objectives, and expected deliverables will be identified by the requesting organization in a Terms of Reference (TOR) for each specific deployment. Deployments may be as short as several days or as long as six months depending on the assignment. Advisers will be notified if they have been chosen for an assignment and will be able to accept or decline the offer.

CANDIDATES PLEASE NOTE: Inclusion in the Energy Expert Roster is not a guarantee of employment, and Advisers are not considered employees of the SAFE Humanitarian Working Group or any of its members. By becoming an Adviser, your name will be entered into a database of individuals that the SAFE Humanitarian Working Group will make available to agencies seeking expertise for humanitarian energy projects. Should you be requested for a deployment, the requesting agency or its designated proxy will be responsible for all deployment logistics including contracts, payment, and security.

In general, Energy Advisers will have the following responsibilities in every deployment. (*Note: Technical Experts will be responsible only for items 1 and 3, as they relate to specific products or technologies. See “How to Become an Expert” below).*

- 1) Enable clusters/sectors to take energy access into account in strategic planning, implementation, and monitoring of humanitarian action.
- 2) Facilitate the integration of an energy needs assessment in the overall strategic planning and programming of the humanitarian community, including in funding mechanisms.
- 3) Strengthen the capacity of Humanitarian/Resident Coordinators, clusters/sectors, governments, UN agencies, international and local NGOS on energy access in humanitarian settings.

Energy Advisers fall into two broad categories: *Program Advisers* and *Technical Experts*.

Program Advisers are experts who have energy and humanitarian expertise in program and policy design. They can be called in at the outset of an emergency to assess the immediate energy needs of a population, or at any time in a crisis to re-evaluate and/or scale up interventions. Typically, Program Advisers are experienced in energy project management and design, coordination, strategic planning, research, monitoring and evaluation, and/or community outreach in humanitarian settings. They also possess high-level knowledge of available technology and fuel options for cooking, lighting, heating, and powering; and are aware of the cross-cutting impact energy can have on health, safety, protection, livelihoods, and the environment. In summary, a Program Adviser should be able to rapidly assess situations and advise humanitarian actors on *which* fuels, technologies, approaches, and strategies are most appropriate for the situation.

Technical Experts are specialists in specific energy technologies, systems, and services, such as biogas, solar lighting, cookstoves, or energy project monitoring and evaluation. Unlike Program Advisers, they are not required to have previously worked in humanitarian contexts, though this is preferred. Technical Experts may work in tandem with Program Advisers, consulting on how effectively a particular technology may work in specific crisis contexts. Once an energy solution has been identified, Technical Experts may be called in to oversee the installation, distribution, or maintenance of an energy product or service. A Technical Expert should be able to install, repair, maintain, or develop systems for a *particular* energy product, fuel, technology, or service. Ideally, a Technical Expert would also train agency and implementing partner staff, as well as crisis-affected people if appropriate, in their area of expertise.

Candidates may apply in one or both categories, but must meet all required qualifications (see Qualifications below).

Qualifications

Program Advisers

Requirements:

- At least 5 years of relevant humanitarian experience, including operational field experience.
- Advanced university degree in Humanitarian Affairs, Energy Management, Development Studies, Environmental Policy, Engineering, or a related field, or an equivalent combination of education and experience in a related area.

- Demonstrated knowledge and experience in program planning, capacity building, project management, and coordination of energy access in humanitarian settings.
- Proven ability to negotiate and strategically influence change with a wide range of stakeholders through team/coalition building and advocacy. Experience also working with the private sector is a plus.
- Ability to conduct energy needs assessments.
- Familiarity with the cross-cutting issues that are impacted by energy access: health, protection, livelihoods, gender, and environment.
- Excellent analytical, strategic planning, oral, and written communication skills.
- Ability to work in diverse multi-cultural settings with sensitivity to the local context.
- Ability to work in and guide a variety of teams.
- Ability to quickly adapt to new settings and dynamics.
- Ability to identify innovative and practical ways of influencing and building the capacity of a variety of humanitarian stakeholders. Familiarity with the UN cluster system is preferred.
- Fluency in English. Proficiency in additional languages is preferred.

Technical Experts

Basic Requirements:

- At least 5 years of relevant technical experience.
- Advanced university degree in Engineering, Energy Management, Environmental Policy, Monitoring and Evaluation, or other relevant field, or an equivalent combination of education and experience in a related area.
- Excellent analytical, strategic planning, oral, and written communication skills.
- Ability to work in diverse multi-cultural settings with sensitivity to the local context.
- Ability to work in and guide a variety of teams.
- Ability to quickly adapt to new settings and dynamics.
- Experience working internationally. Familiarity with humanitarian settings strongly preferred, but not required.
- Fluency in English. Proficiency in additional languages is preferred

In addition to the basic requirements, candidates for Technical Expert must demonstrate strong skills in at least one of the areas listed below.

Cooking and Fuel Solutions

- Experience conducting cookstove and/or fuel field testing to measure performance on fuel-efficiency, emissions, safety, durability, and acceptability.
- Ability to assess local context and select the highest-performing, context-appropriate cookstove technologies and/or fuels based on testing information.
- Expertise on production and distribution of cookstoves (household or institutional) and/or alternative fuels, and ability to train employees or end-users on these production and distribution methods.
- Ability to conduct fuel availability assessments and/or fuel feasibility assessments.
- Ability to identify and evaluate design changes that will improve performance of stoves and/or fuels under ideal and less ideal conditions. Experience undertaking research and development (R&D) for cooking technologies.
- Expertise in alternative fuel (briquettes, pellets, biogas, LPG, etc.) production and/or distribution.

Lighting Solutions

- Experience testing and evaluating the performance and durability of off-grid lighting technologies in the field.
- Ability to assess local context and select the highest-performing, context-appropriate lighting technologies based on testing information.
- Experience setting up and running off-grid lighting systems.
- Experience undertaking Research and Development (R&D) for lighting technologies.

Heating Solutions

- Ability to test and compare performance and safety of off-grid heating appliances.
- Ability to assess local context and select the highest-performing, context-appropriate heating technologies based on testing information.
- Knowledge of combined heating and power (CHP) systems.

Power Systems and Electrification

- Ability to test and compare performance and safety of off-grid power systems.
- Ability to assess local context and select the highest-performing, context-appropriate power technologies based on testing information.

- Experience installing, running, and maintaining renewable energy or hybrid power systems, including but not limited to wind, solar, hydro, or biogas.
- Expertise in the installation and use of mini-grids or community power systems.
- Experience with electrification or grid maintenance in developing contexts.

Energy Project Monitoring and Evaluation

- Experience conducting needs assessments and/or process and impact evaluations. Experience conducting these evaluations on energy or environment projects is strongly preferred.
- Expertise in data collection and analysis, particularly in challenging environments.
- Knowledge of statistical software such as R, STATA, SPSS, or SAS.
- Experience teaching data collection and analysis techniques to others.

Private Sector Engagement

- Expertise in value chain and supply management.
- Experience with enterprise development in fragile or crisis settings.

How to Become an Energy Adviser

The SAFE Humanitarian Working Group launches an open call for new Energy Advisers once a year, prior to its annual SAFE training workshop. Candidates may submit applications during this period. Applications will be evaluated by the SAFE Humanitarian Working Group to ensure they meet the minimum criteria. Qualified candidates will be invited to attend a training hosted by the SAFE Humanitarian Working Group to supplement their knowledge and ensure that all experts have the same baseline of knowledge on energy access in humanitarian settings. Upon completion of the training course, candidates will be listed on the public roster and will be eligible for deployment.

To apply during an open call, submit a cover letter and full CV to info@safefuelandenergy.org. **Be sure to specify whether you are applying to become a Program Advisor, a Technical Expert, or both.** If applying to become a Technical Expert, indicate your specific area of expertise in your cover letter, referencing the categories listed in Qualifications above.

Selection Process:

Applications will be reviewed and vetted by members of the SAFE Humanitarian Working Group. Those that meet the qualifications will be contacted, trained, and added to the roster. Selection for the roster does not guarantee hiring. Organizations requesting expert deployment will undertake their own selection from the database based on the specific qualifications for the assignment.