UNHCR The UN Refugee Agency | EMERGENCY HANDBOOK

Energy needs

24 January 2024

Key points

- Ensure potential energy needs are addressed during the emergency preparedness planning and response phase, particularly related to household level needs for lighting and cooking, and for community facilities (water, education, health)
- Ensure that funding proposals and response plans address the energy needs of affected people as well as the facilities serving them
- Always consider the provision of renewable energy (e.g., solar energy and sustainably procured biomass) over fossil fuel and unsustainable natural sources such as firewood
- Seek the support of and complementarity with agencies specialized in the energy sector, including development actors, which can support emergency responses and beyond, to mitigate potential negative impacts on the environment associated with the unsustainable use of firewood and fossil fuel during a sudden influx of forcibly displaced people

1. Overview

Meeting the energy needs of forcibly displaced people and their host communities while protecting the natural resources they depend on (particularly firewood) are critical cross-cutting issues for UNHCR, including during emergency responses. Uncontrolled use of firewood can lead to deforestation and environmental degradation, increasing risks of flooding and landslides, and soil erosion among others. Competition over scarce biomass between forcibly displaced and their hosting communities also creates protection risks, notably Gender Based Violence (GBV) and threatened peaceful coexistence. Furthermore, the use of fossil fuel to operate generators leads to air pollution, carbon dioxide emissions and on the long run it has high operational costs. Once the environment has been damaged, its rehabilitation and the repair of long-term negative consequences are difficult and expensive, so precautionary measures even in emergencies, to avoid or limit damage, are critical.

Please read this entry together with the entry on environment.

2. Relevance for emergency operations

Energy needs should be considered cross-cutting sectoral concerns and addressed from the onset of an emergency, preferably beforehand by emergency preparedness planning. The emergency phase is a critical moment when energy needs can be considered and addressed, enhancing safety and self-reliance, and environmental degradation avoided or managed. The emergency phase should also be in line with the UNHCR Strategic Framework for Climate Action, with the aim of limiting environmental degradation and enhancing climate resilience.

3. Main guidance

Protection objectives

- To provide safe, timely and reliable access to energy for household needs such as cooking, lighting, heating, cooling, phone charging, etc.
- To provide safe, timely and reliable access to energy for community level infrastructures, such as motorized water systems, health facilities, schools and streetlights.
- To protect forcibly displaced people and their hosting communities from gender-based violence (GBV), that often occur at night in unlighted areas (toilets, washing zones, playgrounds, workshops) or while searching for firewood.
- To protect forcibly displaced people and their hosting communities from physical risks such as landslides and floods, when uncontrolled collection of firewood for cooking purposes causes severe land degradation.
- To reduce tension between forcibly displaced and local communities over scarce natural resources such as firewood.

Risks related to unmet energy needs

- If they lack fuel or access to other forms of energy, forcibly displaced people may adopt unsafe and harmful coping strategies. For example, they may sell part of their food ration to purchase cooking fuel, increasing the risk of malnutrition; searching for firewood that is not sustainable; or burn plastics or other waste as cooking/heating fuel or as a fire starter, exposing them to toxic chemicals. Similarly, if services depend on fossil fuels instead of renewable energy, the lack, or high cost, of fossil fuels can lead to service interruptions, resulting in, for example, the use of unsafe water sources or lack of necessary health care.
- Forcibly displaced people may acquire pneumonia, cardiovascular diseases, or lung cancer or put their health at risk in other ways by cooking or heating their shelter with bad fuels or equipment.
- Beyond exposing forcibly displaced people to GBV risks, searching for firewood takes time that could be used for educational or livelihood activities.
- In the absence of light and electricity, students cannot study at night, and livelihood activities can only be undertaken during the day.
- Erosion after removing vegetation for cooking needs often creates large gullies that may

cause deadly and damaging landslides.
- Unsustainable use of natural resources, particularly wood, causes biodiversity loss and desertification.
- Greenhouse gas emissions contribute to global warming and climate change.

Key decision points

At the start of an emergency response, integrate energy needs in rapid and/or multisectoral needs assessment such as Needs Assessment for Refugee Emergency (NARE) or Multi-cluster / sector Initial Rapid Needs Assessment (MIRA), so that the response can take informed decisions. Include considerations around energy needs, existing energy access, and technologies that are locally available. As part of emergency response, consider including emergency stoves, fuel (ideally for at least 4-6 months), a solar lantern and where appropriate heating stoves and fuel. Choose preferably local options wherever possible, including use of Cash-Based Interventions, based on the "why not cash approach" over in-kind. Fuel should come from sustainable sources, such as sustainably procured biomass, and be clean, such as Liquified Petroleum Gas (LPG), electricity, or solar energy. As early as possible, identify renewable energy options, such as solar energy, to respond to energy needs at both household and communal level.

Conduct a market survey to determine locally available cooking fuel, lighting and heating technologies. The survey should assess the degree to which supplies can be obtained for the duration of the response. Evaluate if the proposed response will interfere with the local economy.

Environmental protection measures should be put in place to mitigate the impact of energy needs through the search and collection of biomass:

- Mark trees in and outside the camp that should not be cut.
- Depending on local context and vegetation coverage, establish a buffer zone (e.g. 5 metres, or more if required) around all surface waters (streams, rivers, lakes…) within which vegetation should be left intact. The extension of the area needs to be contextualized based on local vegetation, climatic conditions, etc.
- Prepare and run an environmental awareness campaign using various appropriate forms of communication, to sensitize communities on the importance of preserving scarce natural resources, especially for cooking needs.
- Consider training and sensibilization activities for energy-saving practices, energy-efficient use, and maintenance and repairs of basic energy equipment (solar lanterns, cooking stoves, etc.).

Key cross-sectorial considerations

Relevant sectors should address energy concerns from the outset of an emergency. Through adequate financing, enhance protection and self-reliance, prevent degradation, implement identified mitigation measures, and train staff and partners on using renewable energy sources to the extent possible. Consider solar energy over diesel generators when feasible even during the emergency phase (e.g. solar lanterns, solar home systems, solar water heaters, solar street

lights, solar powered water pumps, solar systems for health care facilities and schools, etc.).

Resources and partnerships

- Government ministries (energy, environment, natural resources, climate change).
- Development actors
- Affected communities: forcibly displaced persons and host communities.
- National, regional and global private sector organizations with relevant expertise (energy, environment).
- Local and international NGOs, faith-based organisations, Civil Society Organizations (CSO) with relevant expertise.

Checklist

- Embed energy needs in sectorial discussions (e.g. in protection, settlement, shelter, WASH, basic needs, CBI, health, education, etc.). Ensure wide representation of all involved and relevant stakeholders.

- Undertake a rapid needs assessment that include energy needs at both household level, and community infrastructures that need energy for their functioning (water systems, health care facilities and schools as a bare minimum).

- Develop a response plan in association with government counterparts, selected partners and technical services.

- By means of a needs assessment, consult both the forcibly displaced and host communities on habits and traditions that might increase the burden on the environment, related to meeting energy needs – including for cooking, lighting, heating, and powering energy-fed systems.

- Identify affordable products and services that beneficiaries can access easily and affordably, with the aim of improving local provision, market development, and job opportunities.

- Take steps to ensure that, as far as possible, all domestic and institutional energy needs are immediately met in a sustainable manner. Review the situation after 4 to 6 months. Wherever feasible, the aim should be to meet energy needs from renewable sources

(e.g. solar).

- If biomass is used for energy needs (esp. cooking), consider the use of sustainable ones (e.g. briquettes from agriculture activities), in conjunction with energy efficient technologies (e.g. pressure cookers and other fuel efficient stoves).

- Draw up and implement awareness-raising campaigns on energy use. These should benefit forcibly displaced as well as hosting communities.

- Test and establish a preliminary monitoring system.

- If need be, provide training for partners and community mobilizers that build their capacity to implement, monitor and evaluate energy-related responses, including energy-saving best practices, energy-efficient use, and maintenance and repairs techniques.

- Consult the UNHCR Green Companion for further advice on how to ensure energy needs are met in an environmentally sustainable manner.

4. Standards

8.2 core outcome indicator (UNHCR COMPASS)

Proportion of forcibly displaced and stateless people with primary reliance on clean (cooking) fuels and technology [SDG 7.1.2 Tier 1].

9.2 core outcome indicator (UNHCR COMPASS)

Proportion of forcibly displaced and stateless people who have energy to ensure lighting.

5. Learning and field practices

Learning component: Access to Clean Energy for Refugees

- Uganda Case Studies: Full report - Leaflet
- Rwanda Case Studies: Full report - Leaflet

- Kenya Case Studies: Full report - Leaflet
- Ethiopia Case Studies: Full report - Leaflet

6. Links

The Sphere Project, Reducing Environmental Impact in Humanitarian Response UNHCR Environmental Guidelines UNHCR Global Strategy for Sustainable Energy 2019 - 2025 Compendium: Protection-Sensitive Access to Lighting Compendium - Protection-sensitive access to clean cooking

7. Main contacts

Contact the Technical Support Service (TSS), Division of Resilience and Solutions (DRS): hqsl00@unhcr.org