

# Energy Access for Refugees and Host Communities

## The challenge

In the past five years, at least 15 armed conflicts have broken out or resurged across the globe, including those in Syria, Iraq, South Sudan, the Central African Republic, Burundi, Ukraine and Myanmar. These conflicts have been accompanied by persecution, generalised violence and human rights abuses, and have led to 59.5 million individuals being forcibly displaced globally through the end of 2014 (UNHCR, 2015).

According to UNHCR, most of the displaced people (86%) are taking refuge in developing countries. Of these, 8.7 million are being accommodated in camps, where they have minimal access to energy.

## Access to cooking energy

80% of the refugees that live in camps rely on biomass, such as fuelwood, for their daily cooking (Chatham House, 2015). In many host countries, fuelwood is already a scarce resource, and bringing it to refugee camps from distant areas is expensive. Fuel costs often account for a high percentage of a camp household's expenses. Some are even forced to barter food rations in exchange for fuel.

When refugees collect firewood 'for free' in areas surrounding their camps, this results in severe deforestation and also exposes women and children to the risk of injury and physical assault. Social tension and conflict between displaced people and the host communities are common whenever competition for scarce resources takes place. Indoor air pollution attributable to the incomplete combustion of biomass in traditional, primarily three-stone, fireplaces causes respiratory and heart afflictions and was responsible for the premature death of 20,000 displaced people in 2014 (Chatham House, 2015). As 95% of all staple foods need to be cooked prior to consumption, energy is an indispensable resource for ensuring that people have access to nutritious meals. The lack of cooking energy often leads to malnourishment, food rationing and hunger.

The adoption of improved cookstoves can reduce fuelwood consumption as well as pressures on this scarce resource. Minimising the time people spend collecting firewood has the benefit of decreasing safety risks for women. It also gives children more time to attend school and women more time to pursue other activities. Additionally, more complete fuel combustion means that fewer pollutants are emitted, benefitting all members of the household in terms of improved indoor air quality and health.

Project name	Sector Project "Basic Energy Services (HERA)"
Commissioned by	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ)
Project region	Global
Lead executing agency	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Duration	01.03.2014 – 28.02.2017

Some possible approaches for improving the cooking situation in camps include:

- Introducing improved stoves,
- Implementing central, shared cooking areas,
- Introducing alternative fuels such as LPG and briquettes,
- Increasing the sustainable woodfuel supply by introducing woodlots and crops that can be also used as fuels (such as pigeon peas),
- Introducing cash-for-work measures and market-based approaches.

## Access to electricity

In and around camps, access to electricity is often insufficient, comparatively expensive and unreliable. Nevertheless, people need electricity to charge their phones, to power lights and for productive uses. Having the ability to charge a



L. to r.: Stove production and solar street lighting in Kakuma Refugee Camp, Kenya.

mobile phone allows them to contact loved ones and carry out payment transactions. Electricity for productive uses provides opportunities for generating income while electric lighting increases safety at night and allows for educational activities after sunset.

There is a range of technologies available for this context. In camp settings, mobile, low-cost solutions such as Pico-PV and Solar-Home-Systems (SHS) can deliver numerous energy services, including lighting, mobile-phone charging and powering small appliances. Their technical reliability has been proven and millions of systems are currently in use worldwide. For appliances with higher energy consumption, such as power tools and computers, local energy generation and distribution systems based on renewable energies offer a solution. These mini-grids can even generate grid-quality electricity and are suitable for supplying businesses or large settlements.

The cost of accessing electricity from a mini-grid is usually unaffordable for the inhabitants of refugee camps. However, innovative financial approaches such as Pay-As-You-Go (PAYG) or rent-to-own are payment modalities that can provide many households with access to a market-based supply of energy technologies, even for those in the lower income bracket.



Figure 1. Access to energy has a positive impact on almost all dimensions of people's livelihood.

## Our approach

The sector programme "Access to Energy (HERA)" develops approaches aimed at bridging the gap between humanitarian aid and development cooperation. Specifically, it seeks to:

- Integrate medium to long-term market-based approaches in protracted crisis situations,
- Provide integrated approaches to refugees/internally displaced persons and host communities,
- Offer technical and vocational training,
- Support private-sector development,
- Implement activities in a way that is environmental-friendly and based on do-no-harm approaches.

## An example from the field

The Kakuma Refugee Camp was established in 1992 and is currently home to about 190,000 refugees. The GIZ project "Support to Refugees and Host Communities in Kakuma" (SIF), conducted on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), promotes access to energy within and around the camp. GIZ supports a local NGO in producing so-called Maendeleo stoves. Over the past years, 4,200 stoves have been distributed to refugee as well as host-community households as an initial fast-track measure.

GIZ now aims to develop market-based approaches for broadly promoting access to modern energy in both communities. This includes private-sector engagement, training programmes and promoting entrepreneurship to stimulate the local economy and improve access to modern cooking energy, lighting and electricity for productive uses.

SIF and the Energising Development Programme Kenya (EnDev-K) intend to cooperate on these activities.

Published by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH  
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As at May 2016

GIZ is responsible for the content of this publication.