



ENERGY ACCESS

Mercy Corps' Approach

OCTOBER 2020

Today, 860 million people still lack access to reliable electricity and 2.6 billion people live without access to clean cooking facilities¹. These are basic requirements to overcoming poverty. The communities Mercy Corps work with are disproportionately reliant on natural resources for livelihoods and the least able to access energy. If the energy challenge is left unaddressed, communities will face multiple adverse consequences, that are further amplified by poverty and climate change². At the same time, we are witnessing a global clean energy revolution with a drop in prices that couples exponential growth in investment driven by technological and business model innovations. This revolution offers huge potential to reduce poverty and drive economic opportunity in the clean energy space.

Mercy Corps views access to clean energy services as a necessary condition for sustainable development (SDG7) and as a vital cross-cutting issue that underpins the achievement of a number of SDGs³. By enabling *access to* and *use of* sustainable, affordable and reliable energy services, we can increase the resilience of communities and ecosystems to climate change. Higher demand for sustainable energy will lead to reduced reliance on natural resources⁴, create new employment opportunities across a range of 'green' value chains, and promote low carbon development worldwide. Whilst the majority of the countries where Mercy Corps is engaged are not the leading

¹ IEA (2019). [SDG 7: Data and projections](#)

² Jessel, S. G. & Hernández, D (2019). [Energy, poverty, and health in a changing climate: A conceptual review of an emerging literature](#). *Frontiers in Public Health* 7, 357.

³ International council for science (2017). [SDG Interactions, Goal 7: Affordable and clean energy](#).

⁴ The combustion of fossil fuel for electricity is responsible for 70% of global greenhouse gases annually - the energy sector is contributing directly to climate change, ESMAP & The World Bank (2011). [Climate Impacts on Energy Systems: Key issues for energy sector adaptation](#).

contributors to climate change⁵, they are disproportionately impacted by it and we are working to ensure that 'green' growth is prioritized as these countries develop economically.

Mercy Corps' approach to energy access is rooted in innovative, market-based energy programming that both reduces emissions and supports resilient livelihoods. We apply our expertise in harnessing the power of market systems and good governance to test solutions in multiple contexts. We have the ability to scale models that enable communities to access the technology, information, financial tools, and the social support they need to adapt, and ultimately transform their access to reliable, clean, affordable energy.

Our Principles

Sustainability: Reflecting the UN SDG 7, Mercy Corps looks to prioritize sustainable energy solutions that meet the current energy needs of communities without threatening the ability of future generations to do the same.

Scale: With over 2.6 billion people without access to reliable electricity or clean cooking facilities, we believe that any investment must tackle the problem at scale. We address challenges at their roots, starting small and learning as we go. We pilot our programs directly with specialized private sector organizations before improving and replicating at scale.

Evidence-based: We use our internal Design for Impact Guide to find and select industry standard indicators for our programs. This allows us to establish a theory of change and improve our program impact overall, by using our indicators to monitor progress and adapt based on results.

Champion gender, inclusion and diversity: As women, girls and children are the usual custodians of household energy, they are at increased exposure of risk of gender-based violence (GBV), for instance during firewood collection. Our strategies aim to cultivate greater equity and inclusion by empowering those who are the most vulnerable within the community.

Addressing climate change and strengthening ecosystems: We prioritise *clean* energy solutions that will allow communities to reduce their reliance on scarce natural resources, strengthening damaged and at-risk ecosystems. This will reduce environmental degradation and increase the ability of ecosystems to cope with changes in the climate as well as capture CO₂ from the atmosphere.

Building resilience: Climate shocks and stresses disproportionality affect those who are reliant on natural resources. Our energy access strategies seek to build the resilience of communities, small businesses and households by reducing reliance on natural resources. At the same time our work addresses the vulnerabilities embedded within energy systems themselves, which are increasingly exposed to extreme weather events.

Our Approach

COMMUNITY ENERGY SERVICES

⁵ USAID & NREL (2017). Bridging Climate Change Resilience and Mitigation in the Electricity Sector Through Renewable Energy and Energy Efficiency

Mercy Corps works directly with communities to ensure that access to energy is available across diverse user groups. This approach allows us to conduct capacity building exercises at the appropriate scale; facilitate targeted awareness campaigns; and ensure strong and inclusive governance at the community level.



Capacity building

In Maluku Province, Indonesia, Mercy Corps is increasing the uptake of affordable, reliable, and renewable energy to improve social well-being and economic development. Through a series of workshops, mentoring, technical exchange programmes, and interaction between Maluku educational institutions and renewable energy specialists we are enhancing local public and private sector renewable energy capacity. In Liberia we designed, developed and incorporated a renewable energy curriculum into the technical education syllabus of selected vocational and technical schools, while strengthening the country's renewable energy ecosystem.



The productive use of electricity (PUE) to diversify livelihood options

In Myanmar, Mercy Corps is working with the local community to increase demand and promote the benefits of a community mini-grid. We are raising awareness around PUE by highlighting the multiple uses of electricity such as: the local production of goods; new sector introduction; and the electrification of existing businesses.



Strengthening governance at the community level

In Puerto Rico, the establishment of solar powered Resilience Hubs has enabled us to strengthen governance at the local level. This is achieved through a range of training activities conducted with Community Based Organisations who, through this training, are equipped with the skills to manage and run the Hubs.

HARNESS PRIVATE SECTOR PARTNERSHIPS THAT WORK FOR THE POOR

Our experience has proven that acting in partnership with the private sector is essential to making market systems work better for the poor. We have learned that partnerships with the private sector are critical to achieving scale, even in complex settings.



Last mile distribution and market systems development

Mercy Corps' experience demonstrates that market systems offer the best opportunity to scale up energy access rapidly, equitably, and sustainably. We work with distributors, local sales networks, finance groups, and business support services to overcome the barriers to market penetration and help build a sustainable supply chain that can support a quality offer. To build demand in local markets we run community activation campaigns and consumer messaging to demonstrate the benefits of the products, while ensuring post-sale services and customer protection.



Displacement settings

We focus on those who are the most vulnerable to a lack of energy access - including refugees and the surrounding host communities, women and children. In Bidibidi, a refugee settlement in Uganda, we were able to bridge the gap between demand and supply of quality, affordable energy services and equipment at the household, small business and institutional level. This program resulted in the employment of both male and female refugees and host community members. It also enabled refugees to access quality solar products with the option to pay through a set of smaller regular payments to increase affordability.

UTILISE INNOVATIVE FINANCING SOLUTIONS

One of the main barriers to providing and accessing clean and sustainable energy products is the high upfront costs. On the supply side, the markets we support are viewed as unattractive and the private sector are often hesitant to invest. On the demand side, a lack of economic opportunities and financial constraints means many are dependent on seasonal or small incomes, which makes saving difficult. To address these challenges Mercy Corps uses a range of financing options to encourage private sector investment, whilst focusing on mechanisms that remove the high upfront costs of products for consumers.



Pay-as-you-go (PAYGo)

PAYGo enables customers to pay for products over time, rather than paying the entire cost upfront, through manual or mobile-based payments⁶. Mercy Corps partnered with PAYGo suppliers in Uganda and Liberia to support their expansion of affordable renewable energy products for a range of market segments. In Liberia, we reduced poverty and improved stability and living conditions of the rural poor through increased access to modern, affordable, sustainable and scalable energy services using a PAYGo model.



Build-Operate-Lease-Transfer of Ownership (BOLTO)

In Afghanistan we demonstrated business viability in fragile markets by piloting the BOLTO model, which enabled households, businesses and public institutions to eventually own reliable solar PV systems. The initial capital investment is repaid under monthly BOLTO lease contracts which are financed through savings in avoided diesel fuel consumption. At the end of the contract, the ownership of the system is transferred to the household or business.



Results Based Financing

For our work in Bidibidi, Uganda, we wanted to build the confidence of clients in reliable and quality solar products. We used a results-based financing framework that ensured repayment of the agreed subsidy upon completion of the installation and satisfaction of customers on the service received. Establishing a price incentive was instrumental in opening the market for solar products; with the companies now able to sell the smaller solar lanterns at full market prices.



Revolving fund mechanism

In Ethiopia we are launching the first iteration of a sustainable revolving fund to increase access to energy in situations of displacement for institutions, community services, productive uses and households. The fund is used to de-risk private sector actors for the initial capital investment and operational costs. While learning and adapting through the process, Mercy Corps wants to leverage the initial seed money welcoming crowding-in from other interested contributors.

Through Mercy Corps' approach to energy access we are enabling vulnerable communities to adapt, transform, and build resilience both now and in the future.

⁶ Global Distributors Collective (2019). [Last Mile Distribution: State of the sector report](#). Practical Action Publishing.

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About Mercy Corps

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within.

Now, and for the future.



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