
POWER FOR ALL FACT SHEET

Decentralized Renewables: Improve Safety for Vulnerable Communities

POWER FOR ALL

91%

PERCENTAGE OF HAITIAN FAMILIES WHO FELT SAFER AFTER INTRODUCTION OF SOLAR LIGHTING

20,000

NUMBER OF SOLAR LAMPS DISTRIBUTED AS EMERGENCY AID FOR HURRICANE VICTIMS IN THE PHILIPPINES

284,000

JORDANIAN AND ETHIOPIAN REFUGEES SAFER DUE TO SOLAR LANTERNS & STREET LIGHTS

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Decentralized renewables improve the safety of remote communities, areas of conflict, and post-disaster relief areas.

Decentralized renewables increase safety for communities

- » Prior to using a solar light, 64 percent of participants in a survey in Haiti did not feel safe during evening hours. Only 2 percent remained concerned after receiving a solar light, with 91 percent reporting they felt very safe walking around their home at night. Participants also reported a dramatic decline in fire hazards and theft incidences.¹
- » Provision of solar lights and energy-efficient stoves to survivors of Sexual and Gender Based Violence (SGBV) in Somalia resulted in 83% of women feeling better protected from SGBV²
- » When solar systems were installed in 8 primary schools in Uganda, the percentage of students feeling “scared” or “unsafe” declined from 85 percent to less than 1 percent. They also felt safer using latrines at night, leading to greater use of facilities and improved sanitation³
- » Handheld solar lamps are an important personal resource for women and girls in humanitarian settings, however they must be part of a comprehensive risk-reduction strategy that may also include improved public lighting, improved infrastructure and increased security presence.⁴

Decentralized renewables increase safety for displaced communities

- » Research demonstrates that after disasters and conflicts, women and children in internally displaced person camps that are unlit at night face increased risks of assault and SGBV. Women and children who collect firewood for cooking, heating, and lighting are especially vulnerable.⁵
- » 284,000 refugees and members of host communities in Ethiopia and Jordan live in greater safety at night due to the provision of more than 56,000 solar lanterns and installation of 720 public solar street lights by the UNHCR within local refugee camps since 2015.⁶
- » To ensure protection risks are reduced, lighting interventions in vulnerable communities must be well funded and well planned, with increased public lighting being accompanied by adequate security presence and patrol.⁷

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By the Numbers:

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Decentralized renewables increase safety after disasters

- » Decentralized renewable energy systems are more resilient than centralized grids in the aftermath of natural disasters, during which electricity access is a critical need to ensure that critical communications, health, and basic needs can be provided⁸
- » After Hurricane Matthew devastated Haiti, electric power was restored to a mini-grid within 55 hours, while grid power still had not been restored nearly four months after the hurricane struck, leading customers to turn to solar lamps, kerosene lamps, or candles for lighting.⁹
- » Due to the absence of grid power in the Philippines in the aftermath of Typhoon Haiyan (Yolanda), 20,000 solar lanterns distributed by UNHCR helped increase a sense of safety and normalcy to typhoon victims. The lanterns also allowed for charging of mobile phones, which were used to search for day jobs and fish markets for fishermen, thereby increasing income generation.¹⁰

Share the Message

Development targets relating to health, safety, clean water and sanitation will not be met without decentralized renewables. Clean energy technologies make it possible to operate hospitals, power fresh water pumps, reduce toxic indoor air pollution, and far more. Join Power for All and share these messages:

- » Hundreds of millions will be left without clean water and sanitation, access to health care, and safe lighting without decentralized renewables
- » Decentralized renewable technologies already save lives and improve the welfare of millions of people living in the world's poorest and most vulnerable communities
- » To create a safer and healthier world, in which everyone has an opportunity to prosper, we must accelerate access to decentralized renewables

Sources:

1. MPowered (2013) *A Life with Luci: Assessing the Social, Economic and Environmental Impact of Luci Solar Lights in Haiti* p. 18
2. Save the Children/Norwegian Church Aid (2016) *Protecting Women and Girls Against Sexual and Gender Based Violence (SGBV), and Harmful Traditional Practices (HTPs) and Participation of Women In Peace-building*, p. 4
3. War Child/BBOX (2015) *THE IMPACT OF SOLAR LIGHTING ON EDUCATIONAL OUTCOMES IN 8 PRIMARY SCHOOLS IN NORTHERN UGANDA*, p. 2; p. 6
4. International Rescue Committee. <http://www.safefuelandenergy.org/files/IRC%20Haiti-Solar-Light-Evaluation-Research-Brief.pdf>
5. UNHCR (2017) *"Sexual and Gender Based Violence (SGBV) Prevention and Response"*, "Child Protection" UNHCR Emergency Handbook
6. IKEA Foundation (2016), *"IKEA Brighter Lives for Refugees Campaign Raises 30.8 million Euros for Renewable Energy Sources for Refugee Families"*
7. *Submission to the UN UPR(2011)* <http://ijdh.org/wordpress/wp-content/uploads/2011/03/UPR-GBV-Final-4-4-2011.pdf>
8. UNDP (2013) *Resilient and renewable energy systems for local government centers and designated resettlement sites*, p. 1
9. Fast Company (2016) *"In Haiti, a Startup Is Building 100% Renewable Grids for Towns With No Power"* 10/21/2016; EarthSpark International (2017) *"Survey Highlights Community Resiliency Post-Matthew"*
10. UNHCR (2013) *"Typhoon Haiyan: UNHCR solar lamps ease life after dark"*