The Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement

Framework for Action



















World Food



UNITED NATIONS

Foreword

This Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement (GPA) was introduced at the High-level Political Forum on Sustainable Development in 2018.

This is a non-binding document based on extensive exchanges among various stakeholders from humanitarian and development organizations, the private sector, governments, academia, not-forprofit organizations and others, starting with the Berlin 'Energy for Displaced People' conference on 15–16 January 2018. During this conference, 120 practitioners were brought together to kick off the development of this Global Plan of Action to enhance humanitarian response for displaced people through accelerated access to sustainable energy solutions.

From January to June 2018, a Steering Group of 12 entities (shown below) drafted this Global Plan of Action Framework, with significant contributions from additional partners across all working areas. See Annex I for a full list of acknowledgments.

The recommendations developed by the stakeholders will build the framework for a work plan with concrete activities to improve the energy situation for the benefit of displaced people, host communities, and implementing agencies.

The Steering Group would like to thank the Federal Foreign Office of Germany for their kind support of the opening conference in Berlin, as well as every organization that contributed to this plan for enabling their staff to provide in-kind support for its development.







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Executive Summary

The Global Plan of Action Framework For Sustainable Energy Solutions in Situations of Displacement

Today, over 134 million people are in need of humanitarian assistance due to conflict, natural disasters, and other complex global challenges. Access to fuel and energy is critical to essential activities such as cooking meals, heating shelters, cooling vaccines, charging mobile phones, and powering humanitarian operations.

Current energy practices in situations of displacement are often inefficient, polluting, unsafe, expensive and inadequate for displaced people, harmful to the surrounding environment, and costly for implementers. Given the complex nature of humanitarian situations and the challenges of integrating sustainable energy solutions into the humanitarian program cycle, there is a need for systemic actions to mobilise resources, build capacity, raise awareness, and use the opportunity for energy solutions to enhance positive impact in sectors such as health, protection, food security, and WASH.

The Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement (GPA) is a non-binding framework that will provide concrete actions for accelerated progress towards the vision of "safe access to affordable, reliable, sustainable, and modern energy services for all displaced people by 2030." Its mission is to equip all stakeholders with the capacity to mainstream sustainable energy solutions into programming and implementation, with the goal of delivering improved protection, dignity, and energy-related social, environmental, and economic benefits to displaced people. The GPA is the result of extensive consultation among humanitarian and development organisations, the private sector, governments, academia, and other stakeholders involved in the provision of fuel and energy to displaced people. It is a contribution to the review process of Sustainable Development Goal 7 (SDG 7) and is intended to align with the New York Declaration for Refugees and Migrants, the Agenda for Humanity, and other international initiatives such as the Paris Agreement. It seeks to strengthen and coordinate, rather than duplicate, existing initiatives working to improve energy access in situations of displacement, including the Safe Access to Fuel and Energy (SAFE) Working Group, UNHCR's Global Strategy for SAFE, WFP's SAFE initiative, the Moving Energy Initiative, the Smart Communities Coalition and others.

This document comprises the first part of the GPA – the Framework. Section I provides a brief overview of the current state of energy in situations of displacement and identifies five major challenges that must be addressed in order to improve the current situation. Each challenge is addressed by one of five GPA Working Areas. In Section II, the major challenges are broken into smaller components across the five Working Areas and examined in further detail. Each Working Area outlines a specific vision, assesses existing and potential solutions, and provides numerous recommendations as a basis for defining actions. The key challenges and main recommendations are as follows:

I. Planning and Coordination

IV. Technical Expertise, Capacity Building and Training

Major Challenge	Priority Recommendations	ority Recommendations Major Challenge Priority	
Energy is not a formal priority in humanitarian assistance	 Formally recognize sustainable energy access as a priority within the humanitarian system. Foster 'bottom-up' collaborations and engagement on energy and environment interventions between displaced people, host community members, local experts and energy product/ service providers. Build energy activities into other humanitarian assistance priorities. 	Expertise and capacity to implement humanitarian energy solutions is limited	 Build in-hou level to plar and to imple Develop tai capacity ne Create or an discuss issu

II. Policy, Advocacy and Host-Country Resilience

ajor Challenge	Priority Recommendations			
-		Major Challenge	Prie	
	I. Bring displaced people into the SDG 7 agenda and the Global Tracking Framework with a clear link to the response and resilience agenda		I.	
ed people are often uded in national national energy- agendas	II. Encourage and support the design and implementation of response and resilience plans, including attention to energy priorities and energy linkages with other priorities such as housing, water supply, environment, food security and health	Data on humanitarian energy needs and solutions is limited and not widely shared	II. III.	
	III. Foster national-level dialogue to enable successful sustainable energy-access interventions at the country level. Provide examples of how clean energy investment and self-reliance create a virtuous circle of beneficial change			

III. Innovative Finance

Major Challenge	Priority Recommendations
types of projects or parts of the value chain that requ financing, the instruments that would be best suited	types of projects or parts of the value chain that require financing, the instruments that would be best suited to each, and how they can be developed through discussions with
Energy in displacement settings is under-funded	II. Hold discussions with donors to identify potential sources of funding to test out new financing instruments, with an emphasis of coordinating investment approaches and exploring more innovative financing options
	III. Design a financing facility or financial instruments that could be used to support energy investments in displacement settings

Following the release of this document at the High Level Political Forum in July of 2018, the Global Plan of Action Steering Group will coordinate the development of the second part of the GPA – a Work Plan for the next two to three years that translates the Framework into concrete actions with clear roles, responsibilities, objectives and timelines. The Work Plan will be developed until end of 2018 through a consultation process.

Further information about the GPA and how to support it can be found here.

mmendations

se capacity of staff at the field and international for multi-year interventions and energy strategies ement projects

lored training packages according to stakeholders' beds

dopt a common repository to exchange knowledge, ues and receive support from peers and experts

V. Data, Evidence, Monitoring and Reporting

iority Recommendations

Integrate energy indicators into planning and assessment tools for the humanitarian sector, in collaboration with Working Area I

Harmonize and standardize the types and forms of data collected to enable comparison and to facilitate effective monitoring and evaluation

Design and deliver of holistic monitoring, evaluation and learning tools for humanitarian energy programmes, with ways to share data and best practices between the humanitarian, development and private sectors



Mission and Vision

The Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement (GPA) is a non-binding framework that provides concrete actions for accelerated progress towards the vision that

Every person affected by conflict or natural disaster has access to affordable, reliable, sustainable and modern energy services by 2030.

The mission of the GPA is to equip stakeholders with the capacity to mainstream sustainable energy solutions into programming and operations, with the goal of delivering improved protection, dignity and energy-related social, environmental and economic benefits in situations of displacement. It advances this mission by providing a strategic, multi-sector framework for addressing current challenges and barriers to achieving sustainable energy access in situations of displacement.

The Global Plan of Action Framework is a contribution to the review process of Sustainable Development Goal 7 (SDG 7) and is intended to align with the New York Declaration for Refugees and Migrants, the Agenda for Humanity and other international initiatives such as the Paris Climate Agreement.

Part I of the GPA Framework outlines the state of energy in displacement settings, the overall existing challenges and the political environment. Part II outlines concrete recommendations to improve the energy situation of displaced populations and the operations that support them. These recommendations will be the basis for a detailed work plan with concrete activities.

Guiding Objectives

It is time to accelerate the transition to a more sustainable and safe provision of energy in situations of displacement, since energy is essential for all areas of human development.

With this document, we are aiming to:

• **Promote:** Foster an open and strategic dialogue on sustainable energy solutions between global energy actors, development and humanitarian partners, host countries and communities, including regional and local government authorities, policymakers

and financial institutions in support of Sustainable Development Goal 7 of the 2030 Agenda, the Paris Agreement, the New York Declaration for Refugees and Migrants and the Core Responsibilities of the Agenda for Humanity. Ensure actors are well coordinated, are planning together and are developing strategic policies to enhance humanitarian response on sustainable energy.

- **Partner:** Mobilize and strengthen multistakeholder partnerships involving host governments, the private sector, humanitarian and development organizations, donors, financial institutions, civil society and academia, while emphasizing cross-sectoral approaches that can simultaneously accelerate progress on energy access and other Sustainable Development Goals to achieve synergetic results. Mobilize resources so that financing, training and capacity building needs are available and utilized.
- Learn: Pool and generate awareness of existing resources, evidence, initiatives and ongoing efforts around sustainable energy in humanitarian settings. This includes sharing and developing best practices, based on concrete evidence and proven examples of energy solutions' positive impact in the field.
- Activate: Create a collaborative and inclusive framework for unified, multistakeholder action regarding improved energy access for displaced people. Formulate recommendations on energy standards and practices that organizations that are active in situations of displacement can apply to increase their operational efficiency and reduce their ecological footprint.

The GPA Steering Group encourages all stakeholders in this process to support the recommendations described here, leveraging partnerships, knowledge and resources to facilitate improved and scaled access to safe, affordable and sustainable energy for displaced people. Based on these broad recommendations, the GPA Steering Group will provide a concrete, living work plan with activities to improve the energy situation in situations of displacement. The timeline set for the first Work Plan draft is January 2019.

Guiding Principles of the GPA

The following principles underpin the recommendations of this Global Plan of Action.

- Displaced people, host communities and host governments must be involved from planning to implementation to ensure that their needs and priorities are reflected.
- Energy solutions must be contextappropriate and based on a thorough understanding of beneficiaries' age, gender, needs, culture, safety, different disaster scenarios and other factors. There is no 'one-size fits all' solution. It is important to choose financially and environmentally sustainable solutions, preferably costefficient renewable energy solutions.
- Energy is not a goal in and of itself but a crucial enabler for humanitarian relief and development. It is intrinsically linked to, and has multiplier effects on, issues such as food security, shelter, protection, health, livelihoods, sustainable management of natural resources and resilience to climate change.
- Where possible, energy solutions should promote recovery and self-reliance among beneficiaries, as well as be financially and environmentally sustainable.
- Energy interventions and technical solutions • should be sensitive to the unique needs and challenges of women and girls, who are disproportionately impacted by lack of energy access.
- Energy solutions in this context should recognize existing market-based solutions and involve market actors, including existing local energy and technical-services providers within the affected and host communities.
- Adhere to the 'do no harm' principles¹:

those involved in humanitarian response take steps to avoid or minimise any adverse effects of their intervention, in particular the risk of exposing people to increased danger or abuse of their rights.

The State of Energy in Situations of Displacement

Currently, over 134 million people need humanitarian assistance¹. They include refugees², internally displaced people (IDPs)³, returnees to areas rebuilding after conflict or disaster and returnees settling outside their areas of origin. Of these, 68.5 million individuals have been displaced as a result of persecution, conflict or generalized violence⁵. An average of 26.4 million people per year have been displaced from their homes by natural disasters since 2008,6 a trend likely to continue as climate change increases the intensity and frequency of these.

Looking at energy in these situations, one can highlight two main categories: energy for displaced persons and energy for humanitarian operations.

Energy for Displaced Persons

Displacement refers to the movement of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters.6

In situations where large numbers of people are moving within or across borders, access to energy is a priority for basic survival. Safe and accessible cooking fuel is needed to be able to eat. In the absence of adequate shelter, energy is needed to maintain liveable temperatures. Power is needed for lighting to address protection and safety as well as to support households in undertaking productive economic activities or for children to study in the evening hours. Power is also needed to charge mobile phones that enable communications allowing contact with family members and receipt

⁷ Source: Adapted from Guiding Principles on Internal Displacement, annexed to United Nations Commission on Human Rights, Report of the Representative of the Secretary-General Mr. Francis M. Deng, Submitted Pursuant to Commission Resolution 1997/39, Addendum (11 February 1998) UN Doc E/CN.4/1998/53/Add.2, 5, para. 2 of the introduction. IOM, Glossary on Migration, IML Series No. 34 (2018), forthcoming,

of information as well as supporting the transfer of money in cash-assistance programmes.

Despite these needs, energy is a scarce resource in situations of displacement. The majority of displaced people do not have access to affordable, safe, reliable and clean energy. For example, around 90 per cent of refugees who live in camp settings lack access to electricity and 80 per cent rely on solid fuels, such as firewood and charcoal, for cooking⁷. This lack of access to safe and sustainable energy comes at a high cost to the health, safety and wellbeing of displaced people. For example, lack of sufficient cooking fuel impacts nutrition and food security in vulnerable households, since families often resort to under-cooking food or skipping meals to save fuel as well as to bartering food for fuel. Smoke inhalation from cooking over open fires threatens respiratory health. While cooking fuel is the bulk of household demand, the daily fuel requirements in situations of displacement have traditionally not been significantly funded or considered by donors, despite this being a high priority for host governments. Woody biomass remains the main source of fuel, which results in serious environmental impacts. Cleaner fuel interventions are more of an exception than a standard practice in emergency and protracted settings. Electricity for cooking is not yet an option due to low levels of rural electrification, irregular generation of power and high costs per kWh.

Energy poverty disproportionately impacts displaced women and girls. As the family members traditionally responsible for providing fuel, they invest time and physical effort collecting firewood over long distances, often in remote locations, which exposes them to risks of sexual and genderbased violence. Collecting fuelwood also takes time away from school attendance, income-generating activities, childcare and leisure, and it can reduce the effectiveness of other programmes targeting women and children⁸. Energy is also extremely expensive for displaced people, who currently shoulder the vast majority of energy costs themselves, mostly for cooking food. For example, the average displaced household is estimated to spend at least \$200 per year on fuel, which represents up to a third of its overall household income.9

Current energy practices among displaced people also come at great cost to the environment in which they live. Displaced families living in camps burn

an estimated 64,700 acres of forest each year¹⁰. Degradation of forests contributes to erosion, which increases the risk of floods and other disasters that may result in further or protracted displacement. Competition over natural resources such as wood fuel is also an important factor creating tensions and conflict between neighbouring communities and impact the willingness to host refugee and asylum seekers.

Energy for Humanitarian Operations

Delivering protection and humanitarian assistance requires a reliable power supply in off-grid situations, such as for water pumping and treatment, offices and residences, cooling of medicine and vaccines, laboratory services or light for emergency services (such as baby deliveries) at night. Businesses need energy to prosper and lift communities out of crises toward recovery. At present, fossil-fuel powered generators tend to be the main source of electricity in displacement settings, which results in high costs caused by high fuel prices, logistics, transportation, maintenance, and security as well as administrative and technical inefficiencies.

Five Key Challenges

Numerous barriers and challenges prevent the mainstreaming of sustainable energy solutions into humanitarian assistance. As a result, current energy practices in situations of displacement are often inefficient, polluting, unsafe, expensive and inadequate for displaced people and potentially harmful to the surrounding environment.

There are five major challenge areas identified that must be addressed if this situation is to be improved. Each of these challenges is addressed by the five GPA Working Areas – (I) Planning and Coordination; (II) Policy, Advocacy and Host-Country Resilience; (III) Innovative Finance; (IV) Technical Expertise, Capacity Building and Training; and (V) Data, Evidence, Monitoring and Reporting - and are examined in more detail in Section II. These five challenges are pervasive, crosscutting and mutually reinforcing; therefore, they are referred to throughout the document.

Challenge 1: Energy is not a formal priority in humanitarian assistance

Unlike for other assistance priorities, such as shelter, logistics or health, there is no mechanism that mandates humanitarian and development

¹ See also: http://www.spherehandbook.org/en/protection-principle-1-avoid-exposing-people-to-further-harm-as-a-result-of-your-actions/

² United Nations Office for the Coordination of Humanitarian Affairs (OCHA, 2018), Global Humanitarian Outlook 2018,

³A person who, "owing to a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinions, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country. (Art. 1(A)(2), Convention relating to the Status of Refugees, Art. 1A(2), 1951 as modified by the 1967 Protocol).

⁴ The internationally recognized Guiding Principles on Internal Displacement define IDPs as: persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border (United Nations, 1998 (E/CN.4/1998/53/Add.2)).

⁵ UNHCR (2018). Global Trends, Forced Displacement in 2017. ⁶ Internal Displacement Monitoring Centre (2017), Global Report on Internal Displacement,

⁷ Lahn, G. and Grafham, O. (2015). Chatham House Report for the Moving Energy Initiative - Heat, Light and Power for Refugees: Saving Lives, Reducing Costs. ⁸ Rivoal and Haselip (2017) found that in Nyarugusu camp of Tanzania, refugees spend an average of 19 hours per week collecting firewood from around the camp and over six hours daily cooking with traditional cookstoves. Studies from the FAO, the IOM and the UNHCR show that, on average, women spend 18 hours per week collecting wood in Bidibidi camp (Uganda) and 31 hours in camps in Cox's Bazar (Bangladesh).

⁹Lahn, G. and Grafham, O. (2015). Chatham House Report for the Moving Energy Initiative - Heat, Light and Power for Refugees: Saving Lives, Reducing Costs. 10 Lahn, G. and Grafham, O. (2015). Chatham House Report for the Moving Energy Initiative - Heat, Light and Power for Refugees: Saving Lives, Reducing Costs.

organizations (UN and non-UN) to plan, cooperate, exchange, learn from and streamline energy interventions, despite the fact that energy is an essential element in all 11 humanitarian 'clusters'11. This has numerous consequences, including a highly fragmented sector of organizations working on energy in humanitarian assistance, poor working knowledge of potential energy solutions, unrealized potential for sustainable energy solutions in the humanitarian system, expensive inefficiencies in providing humanitarian assistance and increased exposure to protection risks and health concerns undermining efforts made across other sectors. These and other issues are explored in all five working areas. Recommendations for addressing this overall challenge are included in Working Area I.

Challenge 2: Displaced people are not included in national or international energyaccess agendas

Displaced people are unlikely to be included in national or international plans to scale up energy access. This is partly because host governments consider displaced people as only temporarily living in their new environments, and hence they do not want to establish stable infrastructure for settlements. Often, displaced people live in isolated areas or informal settlements, designated as temporary, alongside others who are also marginalized. Even if they return to their home areas, they often remain in fragile post-conflict/disaster situations with limited energy services. This lack of an enabling policy environment and recommendations on how to address it are explored in Working Area II.

Challenge 3: Energy in displacement settings is under-funded

Providing sustainable energy solutions in situations of displacement is consistently hindered by the lack of dedicated, consistent and significant funding, usually because it is considered to be less critical than other basic needs. Unlike other assistance areas, this is not included as a line item in humanitarian response plans or flash appeals - two chief sources of funding for humanitarian relief. Instead, energy programming is typically extra-budgetary or included as an activity under a different line item, such as protection. Where energy programming does exist, it is usually dependent on short-term donor funding and the voluntary efforts of dedicated individuals. Thus, even successful energy programmes have typically been unable to scale up their efforts. This challenge heavily impacts all five Working Areas and is explored further in each one of

them. Working Area III explores innovative financing options for supporting future initiatives.

Challenge 4: Expertise and capacity to implement humanitarian energy solutions is limited

Energy is needed to protect and care for displaced people but it is not a core competence of humanitarian actors. Therefore, there is a lack of technical expertise, limited knowledge about the potential of sustainable energy solutions, and hardly any exchange about capacity building and training opportunities in the sector. This challenge also limits stakeholders' capacity to tackle challenges in other working areas. Recommendations to solve this challenge are outlined in Working Area IV.

Challenge 5: Data on humanitarian energy needs and solutions are limited and not widely shared

Delivering energy to displaced people in a more sustainable way and the opportunity to use sustainable energy solutions on a large scale in situations of displacement are a relatively new practice. Consequently, there is a significant lack of detailed, aggregated and guality data and evidence about energy needs and programmes in situations of displacement. Additionally, where data is collected, it is not often shared effectively among actors. Without this key resource, humanitarian agencies, NGOs and local governments will be unable to respond effectively to the needs of displaced people, and donors and investors will not consider supporting energy programming without concrete evidence of impact and early recovery will be hindered. Recommendations for addressing this issue are explored in Working Area V.

Environment for a change

Despite the aforementioned challenges, there is a conducive political and technological environment for an energy transformation in displacement settings.

Political Environment

The Global Plan of Action Framework is aligned with and designed to support several important international initiatives.

 The New York Declaration for Refugees and Migrants¹³ contains bold commitments to address migration and forced displacement challenges, and represents the starting point of the processes to develop a new Global Compact for Safe, Orderly and Regular Migration (GCM) and a Global Compact on Refugees (GCR). The GPA outlines recommendations on how to support countries receiving and hosting large numbers of displaced people with humanitarian needs, as well as on how to improve the delivery of humanitarian and development assistance in view of access to energy, including through innovative multilateral financial solutions. It also calls for addressing the impacts of large-scale displacement on the environment by helping to protect the environment and strengthening infrastructure affected by large movements in host countries.14

- Within Sustainable Development Goal 7: To Ensure access to affordable, reliable, sustainable and modern energy for all,¹⁵ the international community agreed to ensure access to affordable, reliable, sustainable and modern energy for all, and to increase the share of renewable energy solutions and energy efficiency. Achieving SDG 7 is considered a key enabler for the attainment of most other SDGs.
- The GPA contributes to an energy transition from using fossil fuels to cost-efficient renewable energy solutions and supports the aim of the Paris Agreement¹⁶ to reduce greenhouse emissions to keep global temperature increase for this century well below 2 degrees in line with SDG 13: Take urgent action to combat climate change and its impacts.
- Aligned with the Agenda for Humanity¹⁷ to deliver better for people affected by crises, the GPA contributes most notably to Core Responsibility 4: 'Change people's lives: from delivering aid to ending need' as access to energy is a practical measure to bridge the humanitarian and development divide as well as helping displaced communities to achieve self-reliance.

¹⁶ UN FCCC/CP/2015/L.9/Rev.1, adopted in December 2015

17 Online: https://www.agendaforhumanity.org/

Technological Environment

In the pursuit of alternative solutions to camp settings for displaced people, the flexible and increasingly economically viable nature of sustainable energy solutions is an advantage. Solutions such as containerized, cost-efficient renewable energy solutions for power generation can be rapidly deployed or removed as circumstance governs. Pay-as-you-go business models can be combined with cash-based initiatives, giving displaced people the opportunity to purchase small systems or clean cooking solutions that are fit for their needs. This level of flexibility helps mitigate the potential uncertainty of situations of displacement changing if people are given the opportunity to return home.

Sustainable and reliable energy products and services are available on the market at a comparable cost, and sometimes cheaper (depending on the time span, current fossil fuel prices, etc.), than traditional fossil-fuel systems. This includes flexible and mobile technology solutions that can support a temporary character of displacement situations. Similarly, new delivery models and financial mechanisms are emerging that, together with the engagement of the private sector and financial institutions, can address the need for capital investment.

With access to reliable alternative energy sources, pressure on the environment coming, for example, from deforestation from firewood collection can be decreased or avoided. Improved cooking fuels and technologies can mitigate health and protection risks as well as reduce the economic burden of fuel purchases. Further existing and potential solutions are described under the specific working areas in Section II.

¹³ UN General Assembly Resolution A/RES/71/1, adopted in September 2016

¹⁵ Online: https://environmentalmigration.iom.int/un-summit-refugees-and-migrants

¹⁵ UN General Assembly Resolution A/RES/70/1, adopted in September 2015

¹¹ For an overview, see https://www.humanitarianresponse.info/en/about-clusters/what-is-the-cluster-approach. The Cluster System only governs humanitarian assistance to nonrefugees. Protection and assistance to refugees is coordinated and delivered through the refugee coordination model.



Section II

From Challenges to Actions

Section I focused on the political, technical, financial, social, environmental and economic rationale for an energy transition in displacement settings. In Section II, this Global Plan of Action provides concrete recommendations on how to achieve this transition, with specific reference to five Working Areas that were identified during the initial GPA Conference held in Berlin in January 2018 (see Foreword).

Each area addresses, in detail, one of the five major challenges outlined in Section I, and are as follows:

Plann	Working Area I
Policy Coun	Working Area II
Innov	Working Area III
Techr Buildi	Working Area IV
Data, and R	Working Area V

Experts on each of the working area have outlined and developed a specific vision, list of major current challenges, existing and potential solutions and recommendations as a basis for defining actions.

Noting the cross-cutting nature of energy and the subject of each working group, some duplication exists. As a next step, the recommendations will be translated into a work plan with concrete actions (see also 'Next Steps' further below). In this process the existing duplications will be further reconciled as the Action Plan is developed.

ning and Coordination

cy, Advocacy and Host ntry Resilience

vative Finance

inical Expertise, Capacity ding and Training

, Evidence, Monitoring Reporting



Vision

All stakeholders engaged in planning and implementing sustainable energy solutions in situations of displacement coordinate smoothly within and across sectors, so that activities are not duplicated, resources are not wasted, lessons are learned and shared, and best practices are observed.

Within this, it is envisioned that all stakeholders engaged in planning and implementing humanitarian energy interventions as well as early recovery coordination, especially for displaced people and host communities:

- Are aware of, and engaged in, projectcoordination mechanisms that aim to reduce duplication and increase collaboration;
- Know where to share and access critical data, including needs assessments and information about previous and concurrent energy interventions in the affected area;
- Make use of this information as part of due diligence to improve future programmes; and
- Can ameliorate or overcome potential barriers to full participation, including language, geographic distance, and data connectivity.

The GPA does not prescribe the use of any specific coordination mechanism; nor does it advocate for the arbitrary creation of coordination mechanisms for humanitarian energy programming where they are not needed. Any coordination and planning mechanism addressing the energy needs of displaced people should be appropriate for the specific context, make use of existing structures, and adhere to principles of efficacy and inclusiveness.

Challenges

Several challenges prevent the smooth and inclusive coordination and planning of energy initiatives for displaced people. They are as follows.

Challenge I. A: Lack of internal and external planning and coordination mechanisms

Stemming from the lack of a mandate or institutional support for energy (Key Challenge 1), humanitarian

staff are not often required – internally or externally – to assess energy needs, develop strategies, plan actions, collaborate with other actors or report on progress in this area. Consequently, the efficacy of past energy interventions has sometimes been diminished by duplication of effort, wasted resources and uneven assistance across beneficiary populations. Additionally, while the need for energy access is typically well understood by humanitarian staff in the field, awareness and understanding of its importance might be less evident at the strategic level.

The lack of significant funding for energy programming (Key Challenge 3) exacerbates this challenge since most organizations lack the staff capacity to dedicate additional time to developing internal strategies or coordinating with other organizations on energy. Similarly, limited technical expertise and information sharing in this area (Key Challenges 4 and 5) makes it difficult for humanitarian organizations to improve their energy programming and strategies over time. These issues are explored below.

Challenge I. B: Barriers to participation by all stakeholders

Obstacles that prevent key stakeholders from participating complicate fully inclusive planning processes for energy interventions in situations of displacement. For example, numerous nonhumanitarian actors that want to participate in providing solutions in displacement settings – including private companies, engineers and development organizations – are prevented from doing so by, among other things, a lack of understanding about how to collaborate with displaced populations, host communities and humanitarian actors.

Additionally, while including displaced people and host communities in the planning and design of humanitarian interventions is considered best practice, it is complicated in reality. As a result, some past energy interventions have not been fully adopted due to a lack of understanding about the needs and priorities of these populations. National laws that restrict their movement and ability to work may also further complicate the full participation by displaced people in energy planning. These are explored in Working Area II.

More generally, limited or non-existent data connectivity and internet access in remote areas often make it difficult for some field-based stakeholders to network with potential partners or to participate in planning and coordination processes at the global level. It also prevents field-based stakeholders from accessing online knowledge-sharing platforms and information hubs, which are explored in Working Areas IV and V. Language barriers or limited literacy can make it difficult for displaced people and host communities to contribute to designing energy interventions.

Existing and Potential Solutions

Coordination and planning are key factors in systematically improving the enabling environment for energy access and sustainability, as well as for improving the effectiveness of energy interventions through the organization of joint assessments, agreement on product standards, joint fundraising activities and the inclusion of all actors concerned (for example, local and national authorities, the private sector and research institutions). This working area discusses existing resources, mechanisms and initiatives that may be leveraged, adapted and/or expanded to improve overall coordination and planning of humanitarian energy initiatives worldwide. Further detail on these initiatives is provided in Annex II.

Global Coordination Mechanisms

Currently, there is no formal global coordination mechanism for energy interventions in situations of displacement; however, this has not always been the case. In 2007, the UN Inter-Agency Standing Committee (IASC) formed the Task Force on Safe Access to Firewood and Alternative Energy (SAFE) in Humanitarian Settings. Its mandate only lasted two years but it produced a critical resource - the Matrix on Agency Roles and Responsibilities for Ensuring a Coordinated, Multi-Sectoral Fuel Response in Humanitarian Settings. The matrix defines energy activities according to three response phases (preparedness, acute emergency and protracted crises), explains how energy impacts various areas of humanitarian assistance and designates responsibilities for energy activities to cluster leads according to the humanitarian Cluster Approach managed by the IASC and United Nations Office for the Coordination of Humanitarian Affairs (OCHA)¹⁸. Although the Task Force was disbanded in 2009, the matrix provides a valuable foundation for defining future inter-agency collaboration on energy among agencies at the global level.

IntheabsenceofaformalUNcoordinationmechanism.

current humanitarian energy interventions are often planned, funded and implemented by individual agencies with minimal inter-agency collaboration. However, an increasing number of independent partnerships are beginning to fill this gap. The Safe Access to Fuel and Energy (SAFE) Humanitarian Working Group, the independent successor to the IASC Task Force on SAFE, acts as a de facto global coordination mechanism for energy interventions in humanitarian crises. However, its effectiveness is limited by a lack of dedicated funding and full-time staff (Key Challenges 1 & 3), and its application to become a formal IASC Reference Group in 2016 was declined due to a desire to limit the number of IASC subsidiary bodies.

National and Local Coordination Mechanisms

National and local coordination mechanisms for humanitarian energy initiatives exist, and are growing in number. Recent years have seen the creation of local SAFE working groups in the Democratic Republic of Congo (South Kivu), Nigeria (northeast), Bangladesh (Cox's Bazar), Uganda, Burundi and Kenya. Motivated individuals recognizing the linkages between energy and humanitarian action created these groups with the support of their respective institutions; most work in partnership with the local or national government.

In Uganda, for example, the national Working Group on Energy and Environment (WorkGrEEn) is established under the umbrella of the Comprehensive Refugee Response Framework (CRRF). The CRRF, which was adopted as part of the New York Declaration for Refugees and Migrants, sets out a new approach to responding to large-scale refugee situations in a manner that aims to work with all stakeholders, especially national governments, to enable refugees to be included into communities from the very beginning (see Annex Il for further explanation of the CRRF). Its terms of reference state that the group is accountable for the objectives related to energy in areas of displacement under Uganda's 2018 Integrated Refugee Response Plan (IRRP).¹⁹ More recently, an Energy and Environment Technical Working Group (EETWG) was established in Bangladesh to coordinate efforts among the government, the United Nations High Commissioner for Refugees (UNHCR), the International Organization for Migration (IOM), the Food and Agriculture Organization (FAO), the World Food Programme (WFP) and other agencies

to address cooking solutions for the growing population of Rohingya refugees in Cox's Bazaar. In Jordan, an Energy and Water working group has been established to foster the effective and sustainable implementation of the energy priorities set out in the Jordan Response Plans, bringing together the government, humanitarian agencies, local and international NGOs, and business. These examples represent effective ways of working due to their alignment and linkages to the development plans of national government programmes.

However, national and local working groups face distinct challenges. They cannot officially request funding through Cluster System channels and they heavily on the voluntary efforts of dedicated individuals, making their continuance subject to staff turnover.

Cross-Sector Partnerships

Outside of (or in parallel to) the humanitarian system, global, multi-partner initiatives such as the Moving Energy Initiative, the Smart Communities Coalition and the Solar and Water Initiative are creating the space for actors across different sectors to plan, coordinate and collaborate specifically on humanitarian energy interventions. Existing platforms, networks and initiatives such as Lighting Global, the Energy Access Practitioner Network and the Smart Communities Coalition can also be linked with complementary humanitarian bodies to build trust, promote cross-sector collaboration and increase information sharing. Some humanitarian organizations and academic institutions specifically collaborate with refugee associations and local community groups to design and implement energy interventions, a model that can be duplicated.

Sustainable Energy for All has also engaged in promoting energy access for displaced people as a key topic of growing concern that must be addressed to achieve SDG 7.²⁰ To do so, it has also started to work with its partner organizations within the UN framework as well as in the humanitarian sector, civil society and the private sector to support the efforts of the GPA Steering Group.

Additional partnerships or communication channels among international donors, investors, private companies or other key stakeholders could also be identified and fostered.

Planning and Assessment Tools

Numerous risk assessment tools in use by humanitarian organizations, including the MIRA, R/PDNA,²¹ and EMMA toolkits, provide procedural foundations and principles for assessing needs and risks in situations of displacement. Additionally, several energy needs-assessment tools have already been developed by humanitarian and nonhumanitarian organizations. In collaboration with experts from Working Areas IV and V, these tools can be updated and integrated to support improved planning and design of future energy interventions.

Recommendations

Challenge I. A: Lack of internal and external planning and coordination mechanisms

Recommendations (medium and long term)

Aid Agencies and Policymakers (UN agency leads, member-state representatives)

- Formally recognize sustainable energy access as a priority within the humanitarian system. Some form of high-level mandate on energy is necessary to ensure that humanitarian agencies have the funding, expertise and staff needed to address energy issues, as well as to ensure that these agencies are accountable for providing energy-related assistance. Without this, any coordination effort will be limited in its efficacy.²²
- Build energy activities into other humanitarian assistance priorities. Energy in situations of displacement cannot be viewed as an isolated issue. It is intrinsically linked to other issues such as food security, shelter, protection and health. Where applicable, it is recommended that humanitarian organizations independently assess how energy access and use relates to their own work and develop internal strategies to integrate energy into existing programming.
- Define or adopt a global coordination mechanism for energy interventions in situations of displacement.
- Update existing humanitarian tools with information on how to assess energy needs and risks in collaboration with Working Areas

¹⁸ Matrix can be found online: https://reliefweb.int/report/world/matrix-agency-roles-and-responsibilites-ensuring-coordinated-multi-sectoral-fuel

¹⁹ The Integrated Refugee Response Plan states that some three million refugees and host community members receive improved cook stoves and efficient energy for cooking, and that 500,000 refugee households receive fuel, energy saving stoves and equipment.

²⁰ Online: https://www.seforall.org

²¹ The basis for such a mandate could be found in UN General Assembly Resolution A/RES/72/133, adopted in December 2017, which 'expresses concern about the challenges related to, inter alia, safe access to and use of fuel, firewood, alternative energy, water and sanitation, shelter and food and health-care services, including psychosocial services, in humanitarian emergencies

²² The basis for such a mandate could be found in UN General Assembly Resolution A/RES/72/133, adopted in December 2017, which 'expresses concern about the challenges related to, inter alia, safe access to and use of fuel, firewood, alternative energy, water and sanitation, shelter and food and health-care services, including psychosocial services, in humanitarian emergencies.

Recommendations (short term)

All Stakeholders

• Advocate internally and externally for the recognition of sustainable and safe energy access as a formal priority in humanitarian assistance.

Policymakers (UN agency leads)

• Update and adopt the IASC matrix to include all energy services across all cluster groups.

Aid Agencies

- Where applicable, conduct an internal review of your organization's humanitarian activities and identify where energy plays a role.
- Develop a business plan to incorporate or support energy programming (or the transformation to sustainable energy) in your activities.

Donors and Funders

- Support the creation (or expansion) of energy-related activities/initiatives within at least two organizations that provide humanitarian aid. Consider innovative financing mechanisms in this endeavour (see Working Area III).
- Fund a project to update the IASC matrix to cover all energy applications and current cluster approaches.

Challenge I. B: Barriers to participation by all stakeholders

Recommendations (medium and long term)

All Stakeholders

 Broker partnerships that build relationships and understanding between humanitarian and non-humanitarian stakeholders, such as private companies and investors. There are numerous opportunities for beneficial collaboration, but mutual trust and understanding must be established before smooth coordination is possible.

- Foster 'bottom-up' collaborations and engagement on energy and environment interventions between displaced people, host community members, local experts and energy product/service providers. This will help to promote inclusiveness, reduce inter-communal tensions, ensure culturally appropriate interventions, and ensure accountability to affected populations.
- Work to align energy programming with national government development objectives for effective partnership.

Recommendations (short term)

All Stakeholders

- Identify and partner with existing initiatives that work to overcome limited internet access and data connectivity to seek solutions that will increase local stakeholders' access to online resources as well as their participation in global partnerships.
- Identify and partner with existing initiatives that work to overcome language and literacy barriers through translation, alternative communications or other means to increase the participation of affected populations and host communities in humanitarian energy initiatives.

Working Area II

Policy, Advocacy and Host Country Resilience - Supporting National and Local Development Plans

6

Vision

The vision for this working area is to "unlock wideranging policy and governance change, which will make it easier to meet the energy needs of displaced people". In particular, this will mean the following:

- At the international level, States and other stakeholders agree to a global policy framework that encapsulates a clear vision. This commitment fosters systematic change, allows innovative financing, and enables all stakeholders to measure progress towards energy goals for displaced people in terms of the 2030 Agenda for Sustainable Development.
- At the national level, the energy needs of displaced people are incorporated into development, energy and climate change action plans as well as national level preparedness and contingency planning.
- At the community level, local policies enable the investment in financially sustainable clean energy services for the benefit of displaced populations and host communities.
- At the sectoral level, energy-service considerations and priorities are integrated into programming. Donors and humanitarian actors are actively making provision for sustainable energy solutions, safer and cleaner fuels that contribute to local sustainable development objectives.

Challenges

Challenge II. A: Displaced people are often among the most vulnerable in terms of energy poverty but they are rarely part of national plans for energy access

Energy access for displaced people is challenging for governments to prioritize and balance alongside the energy needs of non-displaced people. This can be especially true in developing countries where nationwide energy availability and access remains an obstacle amongst a range of challenges to development. As such, energy access for displaced people is often of low priority or is entirely omitted in national planning.

While all relevant global policy frameworks – including inter alia the Sustainable Development Goals, Paris Agreement, Agenda for Humanity,

Sendai Framework for Disaster Reduction - have an implication on displaced people and the stakeholders in service of them, they only marginally refer to energy access in displacement settings and how the situation can be improved. Displaced people often fall outside of national plans for energy access, which thus miss a potential opportunity to access and combine development and humanitarian aid and investment towards sustainable development targets. Responding to the energy access challenge for displaced people requires recognition and commitment at the international and national levels in line with the motto of Agenda 2030 to leave no one behind.

Challenge II. B: Energy service is not yet internationally recognized as an essential enabler in the transition from emergency relief to self-reliance and host-country development

Governments globally are demonstrating unprecedented momentum to address access to sustainable energy while migration continues to be a top foreign and national policy concern for many governments. However, in spite of its relevance to enabling other humanitarian priorities, energy is still not widely integrated into humanitarian programming due to the lack of sectoral policies. This means that opportunities to benefit from cross-sector efficiencies and sustainable solutions are missed. Considering how humanitarian programming aligns with and can contribute to SDG 7, incorporating energy in the wider effort to reduce the environmental footprint of the humanitarian sector is urgently needed.

Challenge II. C: Given the supposedly temporary nature of displacement there is a high perceived risk among donors and business that long-term investments in energy risk being undermined by lack of government policy frameworks

More organizations and companies than ever are interested in providing sustainable energy for displaced people bridging the humanitariandevelopment divide. In many countries, however, there is a lack of clarity over the process (and legalities) for implementing sustainable energy projects, especially in displacement settings. Where there is no framework for investment and/ or channelling aid in a way that aligns with ongoing country energy-access and energy-security ambitions, a country is likely to miss out on the long-term benefits of sustainable energy investment through humanitarian and development aid. Host governments also regularly (and rightly) emphasize that the needs of displaced populations should not be prioritized above local and national ones,

particularly where energy-access conditions are similar between the host and displaced communities. the humanitarian sector is urgently needed.

Challenge II. D: The national and local policy framework is not conducive to providing sustainable energy access or developing local energy markets

Energy interventions have the power to create associated benefits for displaced people. Having access to energy can create livelihood opportunities for micro-businesses like barbers, tailors and food sellers by allowing them to operate tools of the trade. But if displaced people are not able to work legally, then it may be difficult to justify such energy improvements. Similarly, large settlements of displaced people offer market opportunities for expanding energy services on a commercial basis but lack of stable income raises the risks for companies (for example, in offering solar home systems). In the short to medium term, the move to cash based support from humanitarian agencies could help. Being able to work and open small enterprises can allow people to pay for and access energy services; it can also reduce recourse to sourcing scarce biomass materials. There may also be opportunities for win-wins such as sustainable fuel markets supported by displaced people-staffed sustainable agriculture and forestry management programmes. Over the longer term, in protracted situations easing restrictions on the rights of displaced people to move freely and be legally employed are crucial to the energy-access conversation.

Existing and Potential Solutions

At the international and national policy level, several large-scale political processes support and can assist with the success of the Global Plan of Action.

The attempt to reshape the system of humanitarian aid delivery

To varying degrees, reliable energy will be a requirement of meeting the key commitments in the New York Declaration for Refugees and Migrants and in implementing many elements of the Global Compact for Safe, Orderly and Regular Migration (GCM) and the Global Compact on Refugees (GCR). The New York Declaration recognizes that underdevelopment and lack of opportunities

are among the drivers of migration and that infrastructural support to countries experiencing large population movements is needed.²³ Multiple processes - including the World Humanitarian Summit resulting in the 'Grand Bargain' and 'New Way of Working' - have catalysed efforts to define, implement and measure new ways to address and prevent crises. The Agenda for Humanity calls for action to prevent and end conflict, to leave no one behind, to work differently to end need and to invest in humanity. Re-shaping the way energy is dealt with in displacement settings can support all of these goals but it is particularly pertinent to ensuring that no one is left behind.

The visibility of displaced people at different SDG 7-related fora and in the Global Tracking Framework²⁴

Since 2017, several fora related to SDG 7 have included displaced people's energy-access issues, helping to generate greater awareness among a wider development and business community. For example, the Global Tracking Framework, which monitors progress on delivery of SDG 7, first raised the issue of energy for displaced people in its 2017 report.23

Donor recognition of energy access for displaced people and several new funding streams

Several donors have recognized energy access for displaced people through statements, funding of research or funding of projects. This includes agencies in the United Kingdom, Germany, the Netherlands, Norway, the European Office of Civil Protection and Humanitarian Aid Operations, the United States and Canada. However, this interest has not necessarily been incorporated into longterm strategy. Other actors are also interested in funding energy for displaced people; for example, the IKEA Foundation and the USAID-Mastercard partnership. There is now an opportunity to make the link between energy access and humanitarian programming so that sustainable energy access for displaced people becomes a consideration, request and measurable deliverable when designing aid packages.

The integration of environmental good practice throughout humanitarian response with sustainable energy being a natural part of this

The fourth edition of the Sphere Handbook for the

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humanitarian sector, which will be released in 2018, integrates energy needs in the core humanitarian standards for the first time. This provides a jump off point for integration of training on energy-access priorities and means of sustainable delivery across the core response areas.

The environmental expertise of the United Nations Environment Programme (UNEP) and the humanitarian response network coordinated by OCHA have been paired in the Joint Environment Unit (JEU) partnership. It incorporates several donors, the UN and environmental NGOs, and is working to raise awareness and to provide for coordination with environmental NGOs on the ground to support environmentally sensitive responses. This includes developing guidelines and tools that represent best practice in the area of environmental emergencies. Energy is naturally a part of this and can be included in the tools and processes of this agenda.

Joint country national response and resilience plans to displacement crises that define energy as a national priority

Response and resilience plans²⁶ that are jointly designed and agreed upon by host-country governments, UN agencies, NGOs and expert civil society are helping to integrate national development priorities that can channel donor funding to priority sectors to the mutual benefit of displaced and local populations.²⁷ Such plans and coordination processes can help make sure there is a positive legacy left by humanitarian aid (see Working Area I for further explanation). An increasing number of response plans recognize the need to deal with energy and environmental concerns in the transition beyond aid dependence, and there are several tools and examples to help agencies integrate energy awareness and sustainable and efficient practice throughout their operations.28

Recommendations

Challenge II. A. Displaced people are often among the most vulnerable in terms of energy poverty but they are rarely part of national plans for energy access

At the international and national levels, displaced people should be brought into the SDG 7 agenda and the Global Tracking Framework with a clear link to the response and resilience agenda. By explicitly reporting on energy access for displaced people at the multilateral level (for example through the

World Bank and Sustainable Energy for All) and encouraging their incorporation into governments' energy-access action plans, countries will gain the opportunity to benefit from blending humanitarian aid and development financing to meet national energy priorities. In addition, reporting and evaluation mechanisms will help to keep the energy issues facing displaced populations and opportunities to solve them on the agenda at the international level.

Challenge II. B: Energy service is not yet internationally recognized as an essential enabler in the transition from emergency relief to self-reliance and host-country development

All relevant stakeholders working in the context of displacement settings should commit to the ambitions of the GPA, foster actions to achieve its vision and integrate energy considerations in programming. There is a need to understand clearly the potential linkages between energy and other humanitarian priorities and development. Humanitarian agencies should communicate the energy needs of a humanitarian crisis to donors as part of their communication with donors. Donors should ask questions about sustainable energy opportunities in their related funding programmes towards building a measure of evaluation for sustainable energy access in situations of displacement. Host countries can benefit from the GPA process to ensure that their needs and specific conditions and concerns are understood.

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All relevant stakeholders working in the context of displacement settings should commit to the ambitions of the GPA, foster actions to achieve its vision and integrate energy considerations in programming. There is a need to understand clearly the potential linkages between energy and other humanitarian priorities and development. Humanitarian agencies should communicate the energy needs of a humanitarian crisis to donors as part of their communication with donors. Donors should ask questions about sustainable energy opportunities in their related funding programmes towards building a measure of evaluation for sustainable energy access in situations of displacement. Host countries can benefit from the GPA process to ensure that

²³ Ionesco, Dina, and Eva Mach. 'New Steps for Migration Policy: The New York Declaration for Refugees and Migrants Recognizes the Crucial Role of Environmental Degradation, Disasters and Climate Change for Human Mobility.' Environmental Migration Portal, International Organization for Migration

²⁴ Tracking SDG7: The Energy Progress Report', formerly known as the Global Tracking Framework, which is a global stock-take on data showcasing progress to energy goals as set out in SDG 7

²⁵ World Bank (2017): Sustainable Energy for All Global Tracking Framework: Progress toward Sustainable Energy,

²⁶ As an example, see UNDPs solutions for resilient recovery, for refugee host communities around the Syria crisis, and for IDPs in Palestine, Yemen, Somalia and Sudan. "Solar Solutions for Crisis Affected Communities in the Arab Region, Regional Policy Brief, UNDP (2018) http://www.rbas-knowledgeplatform.org/files/Energy_for_Crisis_Recovery.pdf

http://www.undp.org/content/undp/en/home/blog/2018/Solar-solutions-for-displaced-communities.html ²⁷ See UNHCR Refugee Response Plans (RRPs). https://emergency.unhcr.org/entry/61168/refugee-response-plans-rrps-interagency. National response plans have emerged since 2014, in response to the Syria crisis, and are now becoming a widespread mechanism; for example, Uganda, Nigeria and Bangladesh are engaged in this process. 28 See Grafham, O, Attwood, J and Lahn, G. (2018 forthcoming) 'Powering Up', The Royal Institute of International Affairs.

their needs and specific conditions and concerns are understood.

Challenge II. C: Given the supposedly temporary nature of displacement there is a high perceived risk among donors and business that long-term investments in energy risk being undermined by lack of government policy frameworks

UN agencies, donors and host countries should continue to encourage and support the design and implementation of response and resilience plans in all countries suffering large-scale or protracted displacement crises. Due attention should be given to energy priorities and energy linkages with other priorities such as housing, water supply, environment, food security and health.

Donor countries and humanitarian organizations can support energy (and related plans) in a way that fosters preparation for sustainable financing and local market development (see also below). Humanitarian aid can be deployed in ways that assist the development of self-financing models (either private, public-private or public). Funding processes for response plans need careful attention as some countries will have less capacity to manage this than others. Climate resilience plans will provide another opportunity for some countries to address issues affecting displaced people and attract financing for sustainable energy access.

Host-country governments hosting large populations of displaced people (and particularly those where the challenge is primarily urban) are increasingly devoting time and attention to response and resilience plans, although in most cases these are in their infancy. A clear framework with guidance on how funds should be channelled can help enable meaningful results, avoid duplication with existing national initiatives and processes, and build donor confidence in terms of project need.

Host-country governments can actively engage with these plans, which they can help steer and enable. Energy (as well as other issues) can be considered in terms of an opportunity to contribute to national energy-access goals and other development efforts. This is also an existing source of potential financing for achieving SDG 7 in the involvement of the private sector (including local entrepreneurs, skills and jobs) in the country.

Challenge II. D: The national and local policy framework is not conducive to providing sustainable energy access or developing local energy markets

Donors should foster national-level dialogue to

enable successful sustainable energy-access interventions at the country level. Donors supporting energy access for displaced people can assist with projects' effectiveness and long-term sustainability by supporting dialogues between government, humanitarian agencies, NGO and business practitioners to enable best practices, consider local market development issues and avoid duplication.

While there will not be a one-size-fits-all approach, energy access can create some space to discuss ways forward that enable livelihoods and develop resilience among displaced communities as well as help ease pressures on the hosting community. Sustainable energy solutions have the potential to reduce environmental and protection, socioeconomic and health risks (for example, by reducing firewood consumption through use of better stoves and alternative fuels), to save money and even to create opportunities for local energy-service companies to help meet the needs of displaced populations (for example, by offering solar home systems to customers who have a proven willingness to pay for such technologies). Such examples of how clean energy investment and self-reliance create a virtuous circle of beneficial change should be highlighted and discussed in international dialogues in order to share good practices.

Innovative Finance: Public, Private and Public-private Models of Delivery for Sustainability

Vision

Financing mechanisms that can be tailored to the needs of different projects that improve energy access and management within displacement settings are designed, tested, and scaled up. These cover a range of energy needs, including:

- Consumptive use (such as household cooking and lighting)
- Productive use (such as power for small businesses and machinery)
- Public use (such as street lighting and power for health facilities)

In addition, these projects increase the purchasing power of end users and small businesses; for example, through increasing the availability of credit, creating livelihood opportunities, or the use of cash transfers in line with the core commitments of the 'Grand Bargain' in the Agenda for Humanity.

To achieve this vision, innovation is required to attract alternative sources of capital and partnerships as well as to provide new financial instruments to leverage private-sector expertise. As noted in Section I: Challenge 3, current energy initiatives in situations of displacement are largely dependent on short-term donor funding. Exploring alternative and innovative financing can increase funding available to energy projects and result in faster resource mobilization by leveraging private and commercial sources of capital. Opportunities exist to use donor funding in more innovative ways to bring in private sector capital and expertise; for example, by derisking initial investments that can help validate more commercial business models.

Donor funding could also be used to guarantee energy-supply contracts between humanitarian agencies and private sector actors rather than to fund energy infrastructure directly. This could enable funding to attract external capital and to support commercial projects. This working area lists some of the challenges hindering the financing of energy projects in displacement setting, lists some potential opportunities and outlines next steps to increase the availability and effectiveness of financing. These proposed financing mechanisms cannot work in isolation and funding by itself will not solve all the challenges. Instead, a holistic approach is needed that considers the complete value chain of energy products, the enabling environment, the institutional frameworks and the local context.

Challenges

The lack of prioritization of energy is exacerbated by limited financial resources in humanitarian assistance (Section I: Challenge 1). Currently, there are no financing facilities that specifically focus on energy in displacement settings or provide the support and expertise needed for these types of projects.

Challenge III. A: Lack of long-term investments

Energy projects tend to be funded on an ad hoc basis by donors focusing on product handouts or as an add-on to other activities. The majority of funded projects are pilots that lack scalability as they are designed based on traditional grant-funding models and ignore applicable business models and commercial funding vehicles. While budgets are assigned to provide energy for humanitarian operations, short-term funding cycles restrict agencies from investing in energy infrastructure with long-term economic payoffs, such as solar or wind systems, or to enter into Power Purchase Agreements (PPAs) or Water Purchase Agreements (WPAs) for longer than five years. As a conseguence, most humanitarian missions remain reliant on diesel generators to power their operations. Displaced households and businesses are either left with little or no access to energy services, or access power through informal businesses running inefficient diesel mini grids.

Challenge III. B: Limited data on what is viewed as a low-return market

Within the energy access sector, the majority of financing facilities focus on private sector initiatives that can generate potential economic returns. However, the private sector still largely views the humanitarian space as a risky market and would rather invest funds in locations with fewer challenges. As limited data exists about the potential market and proven business models in displacement settings, it is difficult for the private sector to leverage purely commercial financing. Limited data also exists on the ability of displaced people to engage as direct consumers and how to distinguish segments within displaced populations that can afford to pay for some services and products and those that will require a consumer grant solution to meet their basic energy needs. In emergencies energy is a lifesaving basic need that is provided. Existing financing facilities also lack the specific humanitarian expertise and capacity to evaluate sustainable energy interventions in a displacement context. The need for more data and expertise is explored in Working Areas IV and V.

Challenge III. C: Positioning funding as part of a holistic approach

Funding for energy activities often targets a specific intervention, such as making cook stoves available to displaced people, or funding a piece of infrastructure for powering operations. In general, these programmes do not consider the whole value chain or take a more holistic view of the challenges involved. In addition to the challenge of short-term funding cycles, many current energy projects lack a plan for follow on funding, scaling up, or for providing continued servicing of products and equipment. A lack of coordination among donors funding energy interventions means they are often working at crosspurposes, for example a programme giving away energy products alongside one working to create a market for energy products.

Existing and Potential Solutions

While the majority of funding for energy interventions in displacement settings comes from traditional grant based models, several organizations are exploring more innovative models to provide financing. For example, the Moving Energy Initiative is exploring non-wood/cleaner fuel concessions and providing small grants to a solar pay-asyou-go (PAYG) company to start operations in Kakuma refugee camp in Kenya, and KOIS Invest is designing an impact bond to fund interventions aimed at improving the lives of Syrian refugees. In addition, energy access programmes are starting to consider displacement settings in their work. For example, Energising Development (EnDev) has plans to facilitate the construction of two mini grids in the Kalobeyei settlement and host community in Kenya through its Results-Based Finance (RBF) programme. Additionally, technology can enable better guarantees on returns by improving repayment rates, customer tracking, data management, and operation and maintenance management.

However, more work needs to be done to explore financing models for these types of projects. Several financial instruments and business model can be explored.

- 1. Grant instruments. These could include grants to incentivize the private sector and de-risk their investments to engage in displacement settings. Grants can also be used to provide price subsidies or tariff topups to allow new products or services to be established in the market.
- 2. Debt instruments. These should be flexible

and structured on a case-by-case basis, and they could include subordinated debt, working-capital facilities and debt that is convertible to a grant in the case of a camp closure to help mitigate against this concern. For projects that can stand on a commercial basis, debt at common market rates should be deployed to attract commercial debt providers to the projects.

- 3. Guarantee instruments. These can be used to incentivize the private sector to engage in displacement settings and could be combined with grants and other instruments. Guarantees could be used to cover the risk of non-payment by displaced people and to offtake risk from humanitarian agencies or businesses (including camp closure).
- 4. Impact investment. Rather than gifting money to projects, impact investors could provide debt or equity at lower than market or zero interest rates.
- 5. Climate finance mechanisms.

Environmental attributes, such as carbon credits or Renewable Energy Credits (RECs), can provide additional value to renewable-energy projects as well as investigating the scope to tap into other climate-finance mechanisms and funds such as REDD+, the Global Environment Facility and the Green Climate Fund. These climatefinancing instruments could help support the establishment of value chains for clean and sustainable energy for host communities and displaced people. New variants of these mechanisms, such as the Peace Renewable Energy Credit (PREC), can be developed and adapted for displacement settings in order to monetize renewable energy generated and to provide additional revenue streams to support new projects.

6. Increasing access to credit. Instruments and business models can be developed to increase access to credit for households and businesses within IDP, refugee and host communities so as to stimulate the demand for energy products and services. This could include the private sector extending credit downstream to distributors and customers, or working with financial institutions and local groups to set up small-loan products accessible by displaced people and host communities, or through community microfinance such as the Village Saving Loans Association (VSLA) approach. The

provision of energy can have positive impacts on livelihood opportunities for refugee and host communities. Hence projects should consider this in their implementation, including local businesses as offtakers of energy and integrating local entrepreneurs into energy value chains.

7. Cooperative business models.

Cooperatives have a role to play in addressing challenges related to renewable energy through community-driven initiatives supporting access to affordable and clean energy sources for all. Cooperatives have the capacity to produce and distribute energy, to create local employment and to promote local development and reasonable pricing. Energy cooperatives could be run by the host community to supply displaced people.²⁹

It remains to be seen what would be the household penetration rate and the willingness/ability to pay for energy due to variation from situation to situation. No one solution will fit all; some displaced people will be able to pay directly for energy products and services while others would need a credit scheme, but a significant portion may be unable to pay even with credit. For these subsidies, such as cash transfers, cash for work or vouchers may be required. Considerations for provision of energy to those at heightened risk should always be considered as priority. Consideration should also be given to local context. For example, in Uganda, refugees have the right to work, which improves their ability to engage in the local economy. In other countries, the government may have supportive policies to encourage the local private sector to engage in displacement settings.

Risk is fundamental to any investment decision; understanding the risks for different projects and investors will aid in designing the appropriate instruments. It is likely that grant instruments will still play an important role in implementing energy projects while potential revenues, cash flows and the ability of displaced people to pay for energy products and services remain largely unproven. Financial instruments are likely to fall within the scope of promoting more efficient aid and promoting aid through markets. For the cases where purely commercial or blended (for example, through impact investment) approaches are feasible, the use of grants should be carefully considered so as not to

distort the market. This calls for a clear segmentation of application areas for energy interventions as well as additional mapping to understand those projects that can absorb commercial debt and those that require other instruments. Any grant instrument should be preparing the market for more commercialor market-based investments for two to three years down the line, and it should be framed in such a way that it can build the necessary evidence to do this. To mitigate the possibility of displacement situations changing, the development or stimulation of existing markets in the host population and extending them to displaced people could be an equitable solution alongside insurance solutions.

It is important that financial instruments are coupled with appropriate expertise to support transactions, pipeline development and project implementation. Technical assistance can be vital for successful project implementation by providing market data, by facilitating and structuring partnerships between the private sector, humanitarian agencies and local organizations, and by ensuring that local communities are involved. This issue is explored further in Working Area IV.

Recommendations

Challenge III. A and B: Lack of long-term investments and limited data on what is viewed as a low-return market

Recommendations (medium and long term)

Implementers, finance specialists and research organizations

• Conduct further mapping and research on the different types of projects or parts of the value chain that require financing, the instruments that would be best suited to each, and how they can be developed through discussions with different stakeholders, including the private sector and humanitarian agencies. Financing instruments relevant for each of these different parts of the value chain will be different and will come with their own impacts and risk-return relationships. This work would analyse how blended financial instruments can be used as catalysts or as safety nets to maximize the efficiency of the capital deployed.

²⁹ Services offered currently range from rural electricity in Costa Rica and Bangladesh and biomass production plants in Brazil and Finland to photovoltaic cooperatives in Denmark and Argentina

- Collect data from any existing projects and potential cash flows, and map out returns and market data for example projects. Implementers and the private sector can provide examples and data from projects already happening and projects they want to implement to map out potential returns and build a project pipeline for investment. Understanding what is affordable to customers and their willingness to pay will be critical market dimensions.
- Identify or develop standards and guidelines that define benchmarks that enable planners, implementers and operators to make investments in energy interventions that maximize efficiency and return on investment.

Challenge III. C: Positioning funding as part of a holistic approach

Recommendations (medium and long term)

Donors, Funders and Implementers

 Hold discussions to identify potential sources and modalities of funding to test new financing instruments. Donors need to be open to exploring and investing in more innovative financing approaches and longerterm interventions as well as to coordinating their approach to investments.

Aid Agencies

• Raise the call for additional funding for energy and provide information on the types of energy interventions required as well as the link to live saving and protection risk mitigation. The need and demand should be driven by the humanitarian community, keeping in mind the interest of beneficiaries and service providers in displacement settings.

Aid Agencies, Implementers, Private Sector, Donors and Funders

 In accordance with the mapping research above, design a financing facility or financial instruments that could be used to support energy investments in displacement settings, considering the need for longer-term investment and more holistic approaches. The need for technical assistance to complement these instruments should also be built in.

Recommendations (short term)

Donors and Funders

 Organize a global event among donor and investor agencies that support (or are interested in supporting) humanitarian energy initiatives to better understand goals, identify funding gaps, reduce overlap and discuss innovative options for future initiatives.



Vision

Each stakeholder involved in humanitarian relief has, in its own capacity, access to the knowledge and expertise necessary to provide sustainable energy solutions in displacement settings.

This can be enabled by conducive institutional structures, the ability to access common repositories, exchange platforms and global discussion groups, the availability of professional training and the possibility to draw specialist help from external resources.

Enabling factors to achieve this vision are:

- Institutional structures that enable in-house capacity for strategic energy programming and are conducive to partnerships that draw technical expertise from outside the humanitarian sector;
- Tailored training packages in operational form to meet capacity and knowledge needs of each stakeholder;
- A common central knowledge-sharing and practitioner-connection platform specifically on energy for humanitarian settings; and
- Mechanisms to analyse and evaluate technical quality and effectiveness of energy-service delivery.

Challenges

The energy-expertise gaps found across the humanitarian sector have an impact at all levels, local and global, and on all stakeholders, from decision-makers to implementers and end users. Major challenges affect the sector at the institutional and programmatic level. Most notably, building that capacity is hindered by absence of robust mechanisms to identify good practices and little knowledge exchange between agencies and within agencies across different departments. Lack of funds to create positions for expert personnel, to invest in capacity building and to create knowledge is ultimately at the root of this problem. In turn, the low visibility for the energy sector hinders funds flowing in to address the gap.

Challenge IV. A: Lack of Capacity and Technical Expertise

Research and Development While technical innovation and production must be carried out by bodies that hold the technical expertise, such as industry and academia (preferably at the local level), this cannot be done successfully without a profound understanding of the humanitarian context and the needs of displaced people and host communities as well as those of the humanitarian organizations on the ground. Solutions developed for different environments are often ill fitted to the varying specific conditions of relief work. This represents only a small fraction of the whole delivery model, which also includes installation, operation, distribution, use, payment, maintenance and repair.

Delivery Model Design

Implementing agencies are responsible for delivering the solutions, which requires a broad range of skills and competencies. This expertise may be shallow in each different discipline but spans from technical to anthropological branches of knowledge and much more in between. It includes an understanding of various technologies, notions of economics, market dynamics, logistics, end-user needs and wants, cultural norms and behaviours, the institutional environment and so forth.

Technical Know-how

Organizations at the implementing level often power operations themselves without having proper in-house resources. Expertise on procurement, installation, operation and maintenance of equipment is needed for sustainable impact. Beneficiaries are often given products without support to achieve an adequate understanding of their correct use and value.

Challenge IV. B: Lack of knowledge sharing and common repository

Lacking trusted and effective information and guidance is another major obstacle to more effective energy delivery. Project reports and evaluations are available, but often not too widely or not in a format that is readily accessible and useful for programme design. No user-friendly informationsharing repository that addresses capacity needs of all stakeholders is available to date.

When it comes to capacity and knowledge, current working practices tend to be ineffective for exchanging experiences and results or are often not cognizant of other agencies' activities. A different, equally important aspect is the lack of communication within organizations where the technical competence of HQ personnel and the knowledge and awareness of field teams do not meet to create positive synergy but remain instead in separated clusters (see Working Areas I and V for further challenges regarding knowledge sharing).

Existing and Potential Solutions

This following outlines potential solutions, tailored to different stakeholders, to fill capacity gaps across the value chain.

Capacity building

Practitioners have elaborated several recommendations in order to address the vast challenge of capacity gaps, starting from tailored training packages that are developed for different audiences according to their needs.

- Trainings for refugees, IDPs and host **communities:** Some vocational training programmes by the private sector, such as the technical schools that Schneider Electric runs around the world, represent good examples of existing resources to draw from. Applicable trainings would be focused on vocational training, technical training for energy solutions and training in entrepreneurship.
- Humanitarian organizations (UN/Red • cross/international NGOs): For camp managers, useful and cost-efficient delivery models could be in the format of short seminars/webinars or e-learning materials and classes. At the HQ level or in regional hubs, in-person brown bags, lectures, dedicated seminars and conferences could be organized, focusing on sensitizing higher-levels staff. Operative personnel can be trained with more detailed modules. Procurement officers can be trained on energy services and products focused on the design of sustainable energy delivery models.
- Donors, decision-makers, local • governments: Trainings focused on sustainable delivery models so they can identify greatest impact of programme success. Handbooks and in-person workshops that co-create projects that benefit donor and implementing organizations.
- Private sector and academia: Training • on humanitarian response for privatesector actors that are designing solutions is beneficial so energy delivery models are adapted to local context. Collaborating with

academic institutions can provide curriculum and align research goals.

Joint learning: Energy trainings to different groups of displaced people and hostcommunity members may also serve the additional function of peacebuilding and using humanitarian resources to boost development in host countries, particularly with examples around the circular economy (the energy, waste and sanitation nexus)

Drawing talent from outside

Despite the ambition to train existing personnel to fill the current knowledge gap, drawing capacity from outside can be a useful and cost-effective solution.

Acquiring already skilled new personnel for central positions, such as reference persons, within organizations to support their field teams would benefit the humanitarian sector. Comprehensive energy planning can be facilitated by such personnel. For example, the Norwegian Refugee Council though NORCAP funds a central roster of energy expert consultants and the Global Alliance for Clean Cookstoves has developed a standard curriculum for energy experts. A specialized recruitment plan with earmarked funding is necessary to fill these staff positions.

Outsourcing the tasks may be appropriate in some situations. This may be the case of large power generation that can be done more cheaply, effectively and cleanly by the private sector. This requires contracts that include negotiated management, maintenance, procurement and operational terms. Distribution is also something that most often existing commercial distribution networks already present in the field are best positioned to do with minimal need for support.

Hiring external consultants and partnering with organizations that already contain expertise is another cost-effective way for humanitarian organizations to benefit from existing technical capacity. Notable examples of partnership include the Alianza Shire and the Engineers Without Borders-USA projects in Ethiopia.³⁰

Developing tighter relationships with industry associations such as the Global Off-Grid Lighting Association (GOGLA), the World LPG Association, Power for All and World Bank Lighting Global would enable access to expertise on quality certification, product standards and latest solutions. Joint programmes with educational

institutions (universities, technical colleges), such as staff exchange and other partnerships, in-country and internationally could enable the introduction of innovative concepts and products. Linking up with energy-access networks such as the Energy Access Practitioners Network or the ACCESS coalition would provide technical insight and lessons learned that could be adapted to the humanitarian context.31

Knowledge sharing

Working Area V discusses the task of building a body of useful materials, including best practices, standard assessments and evaluation templates. The concern of this working area is around how to make available those resources and finding mechanisms for collaboration.

For widespread collaboration, the creation or identification of a common platform to share resources and fostering discussions around energy in the humanitarian sector must be a priority. Its design should be informed by the different needs of energy practitioners for humanitarian response. Its management should be built on intrinsic mechanisms aimed at keeping it alive, useful and funded.

Examples of knowledge-sharing platforms that can be built upon are ENERGYCoP, Energypedia and DisasterReady. Good practices of information sharing from the field include the SAFE Humanitarian group monthly calls. Support services for practitioners such as hot lines, dedicated expert help desks and peer-to-peer exchange are useful for practitioners. Examples of this are "Practical Action's Practical Answers" help desk and Energypedia's question space.³²

Recommendations

Challenge IV. A: Lack of capacity and technical expertise

Recommendations (medium and long term)

All Stakeholders

 Humanitarian organizations build in-house capacity and strengthen internal staff at the international level to plan for multi-year interventions and energy strategies, and to implement projects regionally/locally that are contextual to the situation of displacement.

- Partnerships with stakeholders outside the humanitarian context are developed to enable capacity development.
- Tailored training packages are developed according to stakeholders' capacity needs.

Recommendations (short term)

Aid Agencies, Academia, Donors, Private Sector

- Assess need to develop new curriculum by analysing existing training material that can be adapted to the humanitarian context and identify existing training facilities.
- Develop tighter relations with energy-sector associations and programmes (such as GOGLA, Lighting Global, the Alliance for Rural Electrification (ARE) etc).
- Identify institutions offering engineering for development, build linkages and create opportunities for fieldwork in humanitarian settings.

Aid Agencies, Donors

- Add technical expertise on energy to job descriptions for programme and procurement staff.
- Develop standard curricula for energy experts and encourage the use of external consultants and energy organizations for technical tasks, building on existing knowledge.

All Stakeholders

- Develop and deliver trainings to senior staff of humanitarian organizations, donors, decision-makers and local governments.
- Compile and operationalize trainings for displaced people and host community as workforce and/or users of energy products.
- Identify/develop and deliver trainings to private sector and academia on humanitarian response.

³⁰ Multistakeholder partnerships enabling energy access in refugee settings. Linked in Annex ³¹Networks with quality insured products and expertise in the energy access space. Linked in Annex ³² Knowledge sharing platform examples linked in Annex

Challenge IV. B: Lack of knowledge sharing and common repository

Recommendations (long term)

All Stakeholders

• Energy practitioners in humanitarian settings have access to a common repository to exchange knowledge, discuss issues and receive support from peers and experts.

Recommendations (short term)

All Stakeholders

- Identify platform and associated funding sources for a central humanitarian energy knowledge exchange, ideally building on already existing platforms.
- Identify additional features to meet the specific need of GPA users.
- Design competitions or introduce themespecific categories in existing ones from both the energy and humanitarian spaces.

Aid organizations

- Organize one yearly conference as a multistakeholder space to accelerate energy action in humanitarian space.
- Organize monthly calls for humanitarian energy practitioners.



Vision

Harmonized, standardized, high-quality and usable data on sustainable and safe energy for the humanitarian sector is produced, used and shared for planning, learning, monitoring and evaluation.

High-quality data and usable evidence are critical in supporting the objectives of the GPA, which will require the following:

- Accurate and effective monitoring of energy needs and interventions to produce highquality, accurate and relevant data as a basis for evidence building and evaluation to ensure access to sustainable and safe energy and addressing protection risks.
- Relevant data to be collected, utilizing existing mobile platform tools when possible and avoiding additional administrative burdens.
- Non-personalized data to be digitally shared openly between stakeholders. Where possible, data should be harmonized and standardized to enable comparison and to facilitate effective monitoring and evaluation.
- Humanitarian and energy actors to learn from each other to ensure a holistic and effective approach.
- Inclusive learning processes and evidenceled decision-making that place the voices and needs of displaced people at the heart of sustainable energy responses.

As discussed above (Section I, Challenge 5), delivering sustainable energy for displaced people is a relatively new practice. As projects and programmes scale up, reliable data, hard evidence and clear monitoring and evaluation approaches are essential for ensuring that the energy needs and aspirations of displaced people are well understood. It is also vital for facilitating long-term sustainable approaches for humanitarian organizations to increase substantially the share of sustainable energy and energy efficiency in their operations. Without measurement, informed management is not possible.

Challenges

Limited and unavailable data on sustainable energy solutions in situations of displacement is one of the five key challenges (see Section I, Challenge 5). This can be broken down into the following subchallenges.

Challenge V. A: An overall lack of data on energy issues in humanitarian settings

Partially due to energy not being a formal part of humanitarian response (see Section I, Challenge 1), there is an overall lack of aggregate, widely available and detailed data on how households, communities and institutions use energy in situations of displacement and how access to energy can reduce protection risks. Without good information and clear data, humanitarian agencies, NGOs and host country governments will be unable to plan and respond effectively (see Working Area I). The energy needs of displaced people will not be understood, nor will community priorities be incorporated into decisionmaking. In addition to this, markets and privatesector suppliers will not have the information they need to invest in humanitarian energy projects or to work with other organizations to develop marketbased solutions (see Working Area III).

Challenge V.B: A lack of standards for gathering and reporting of data

Where data is available (for example, from pilot and start-up projects), it is often not comparable to data from other projects. Each project and/ or implementing organization has its own set of indicators and reporting structures, making it difficult to judge effectiveness or identify lessons learned.

Challenge V.C: Limited evidence on the effectiveness of some of the current approaches and narratives, and lack of indepth studies that compare crosscutting issues or regional evidence

There are few detailed and scientifically rigorous studies on the impacts of existing energy programmes in displacement settings. Evidence is lacking across several areas, such as specific technological solutions or business models, as well as general evidence on the need for the provision of safe and sustainable energy solutions in camps and informal settlements to contribute to protection risk mitigation.

Challenge V.D: Data, research and evidence is not shared or readily available

Knowledge and data sharing about humanitarian energy initiatives is limited. Existing information is disaggregated across many organizations and not shared outside of the implementing organization, or it cannot be shared due to security, privacy and confidentiality concerns. This makes it difficult to assess the potential benefits, costs and opportunities for engagement - particularly among private companies, investors and other non-humanitarian actors. It also raises the risk of duplicating ineffective programming. In addition, it seems to be a challenge to publish information in such a way, that it can be used by decision-makers, practitioners and other partners. For example, while some tools and methodologies for data collection already exist (such as these from D-Lab), decisionmakers are often unaware of them or are untrained in their use. (See Working Area IV. B for examples of mechanisms for knowledge sharing.)

Existing and Potential Solutions

There are a few existing and potential solutions as well as initiatives for improving and sharing of data and evidence on energy for displaced people.

The World Humanitarian Summit emphasized the importance of an inclusive model of humanitarian aid, suggesting one way of doing this is to focus on the affected communities and enhancing local capacities. In addition, delivering universal energy access by 2030 and meeting SDG 7 requires meeting the energy needs of everyone, including displaced people.³³ However, displaced people were not often included in national or international planning. For the first time, displaced people were mentioned in the Global Tracking Framework (2017) that monitors the progress of SDG 7. This is a major step forward in drawing attention to the evidence needs in this area, but it is just a start.³⁴

To tackle the shortage of general data, research has been undertaken in recent years to understand the lack of energy in humanitarian settings. It is increasingly accepted that the energy needs of millions of displaced people are being met inadequately or not at all.³⁵ For example, some initial analysis and evidence gathering has been completed by the Moving Energy Initiative (MEI) and by some academics.³⁶ There are also several new academic research programmes emerging in this area - on generating quantitative data and sensor measurement as well as the new ENERGYCoP Community of Practice, developed in the framework of the SET4food project and hosted by the SAFE initiative.37

There are some best-practice toolkits and these

could be adapted and integrated into new ones. For example, users of the ENERGYCoP online platform have produced new toolkits and resources for understanding humanitarian energy needs; for example, the Decision Support System (DSS) that can help to identify appropriate energy technologies for food utilization, given a certain context of displacement. Detailed surveys using participatory engagement methods for energy have been proposed in camps in Burkina Faso and Kenya. There is also a preparation guide on Energypedia, presenting different assessment tools.³⁸

Inclusive approaches are essential to engage displaced people as more than 'beneficiaries'. Displaced people and host-community members often have technical energy skills (reparation and implementation) and financial means (business organizations, cooperatives), and they are sometimes already implementing energy programmes themselves.³⁹ Partnering with them as actors to be directly involved in response programming should be prioritized to leverage existing operations and assets. Tools for developing inclusive approaches already exist and can be further developed by the private sector.40

Recommendations

Challenge V. A: An overall lack of data on energy issues in humanitarian settings

Recommendations (medium and long term)

All Stakeholders

Collaborate to develop primary research and core data on topics such as:

- Assessment of appropriate technologies, socio-cultural factors and community adoption of renewable and sustainable energy
- How displaced communities perceive and use energy sources for cooking, including primary data collection on the use of kerosene or traditional biomass and firewood and their health impacts across different country contexts
- Analysis on productive use and incomegenerating opportunities - how energy/ electricity enables businesses and

- Understanding electricity use within infrastructure systems and institutional use of energy
- Evidence on the connection between energy poverty and sexual violence against women and children

Recommendations (short term)

All Stakeholders

- Assess existing information on the above topics and develop an overview of core data gaps.
- Explore options to work with data custodians.41

Challenge V.B: A lack of harmonized standards for gathering and reporting of data

Recommendations (medium and long term)

Aid Agencies, Donors and Funders

- Integrate energy indicators into planning and assessment tools for the humanitarian sector, in collaboration with Working Area I. These could combine current sources of data, with participatory energy market activities and inclusive survey and data development with displaced and host communities.
- Harmonize and standardize the types and forms of data collected to enable comparison and to facilitate effective monitoring and evaluation. Main humanitarian agencies should foster the use of the standards.

Recommendations (short term)

Aid Agencies, Donors and Funders

 Conduct a full review of existing tools for energy assessments in displacement contexts.

³⁵ Lahn, G. and Grafham, O. (2015). Heat, Light and Power for Refugees: Saving Lives, Reducing Costs.

- Gain a common understanding what information is needed along the evidence chain - from understanding the issues, to the start-up and commencement of programmes, to designing suitable interventions, through to implementation, monitoring, reporting and evaluating change.
- Where needed, defining additional criteria for feasibility assessments to be undertaken to support programme design prior to implementation, even in emergency situations.
- Develop standards and a common set of measurable indicators for energy assessments.
- Establish and support feedback mechanisms for information from local populations - displaced people, hostcommunity members and local providers - to be formally received and integrated in programme design, measurement and evaluation by humanitarian operators.

Challenge V.C: Limited evidence on the effectiveness of some of the current approaches and narratives, and lack of indepth studies that compare crosscutting issues or regional evidence.

Recommendations (medium and long term)

Aid Agencies, Donors and Funders

- Design and deliver of holistic monitoring, evaluation and learning tools for humanitarian energy programmes.
- Understand the ethnographic evidence base for displaced communities and behavioural change opportunities, focused on inclusive approaches.

Creating usable and reliable evidence for humanitarian resonance on sustainable energy along some key areas such as:

- Nexus between energy and: health, food security, education, protection and sexual and gender-based violence risks
- Environmental impacts including carbon

41 For example, the custodian agencies that prepare the 'Tracking SDG7: The Energy Progress Report' are the International Energy Agency (IEA), the International Renewable Energy

livelihoods within refugee and displaced settings

³⁹ This has been observed predominantly in established locations, or in locations in which refugees have access to cash or technical resources and materials. Indigenous mini grids, vendors, mini utilities often develop natively and are operative in many refugee settings without humanitarian intervention. ⁴⁰ Tools for developing inclusive approaches, linked in Annex.

Agency (IRENA), the United Nations Statistics Division (UNSD), the World Bank and the World Health Organization (WHO),

³³ Online: https://www.agendaforhumanity.org/summit

³⁴ Online: http://www.worldbank.org/en/topic/energy/publication/global-tracking-framework-2017

³⁶ Cerrada 2017, Caniato et al 2017, Barbieri et al 2017, Lehne et al 2016, Ossenbrink et, al, 2018

³⁷ Academic research programs emerging on data in humanitarian settings, Linked in Annex.

³⁸ Best practice toolkits on energy in humanitarian settings. Linked in Annex.

dioxide generation and emissions levels from current energy use; data on the negative environmental impacts of diesel and kerosene use; reducing the high costs associated with conventional energy generation in camp settings; and costbenefit analyses.

• Evidence on the barriers to delivering decentralized clean energy services at scale and how information, business models and innovative financing can address developing country energy gaps.

Recommendations (short term)

- Conduct a full review of existing tools and indicators for performance and impact. Create additional meaningful and measurable indicators as needed.
- Integrate measurement tools for humanitarian energy interventions into standard project reporting.
- Explore economically viable technical solutions for long-term energy monitoring; for example, through sensors.

Challenge V.D: Data, research and evidence is not shared or readily available

Recommendations (medium and long term)

- Develop ways to share data and best practices between the humanitarian and development sector to improve the effectiveness of response.
- Non-personalized data should be digitally shared openly between stakeholders.
 For information sharing, ideally existing platforms (for example, ENERGYCoP, Energypedia and others) should be used with some further development to make them more effective and efficient.
- Develop open-source technical solutions (or preferably use existing ones) that can facilitate collective access to data, streamlined analysis and evidence-based policy options to objectively inform countries and all stakeholders in their decision-making on policy, implementation or monitoring of

progress.

Recommendations (short term)

- Adopt standardized processes for reporting of disaggregated data on fuel use, energy practices and costs.
- Raise awareness of existing resources and inform policymakers and other partners about their existence and how to use them.
- Analyse information gaps for decisionmakers and procurement experts when it comes to technical specifications or supporting evidence.

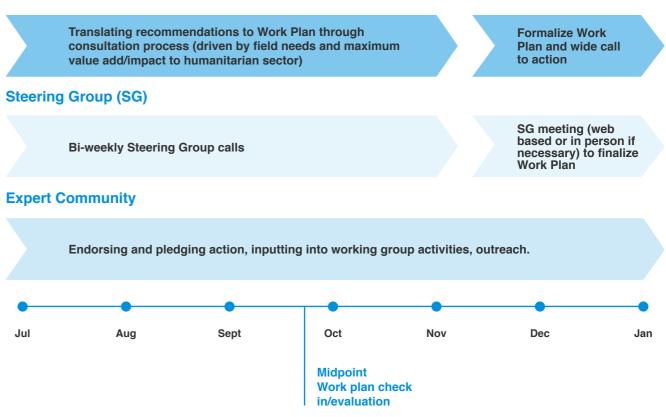


Next Steps

Building the Workplan from the GPA Framework

As of July 2018, this Global Plan of Action Framework presents 66 recommendations on how to improve life for displaced people through sustainable and safe energy. After the launch during the 2018 High Level Political Forum, a Steering Group and a Coordination Unit will be formally established (see also section about Support Structure below) that will conduct a six to eight months consultation process to translate these recommendations into a living Work Plan with concrete objectives, outputs and activities aligned with the five working groups. The Work Plan will outline priority action to take in the coming 2-3 years, convene key implementers of the action items, specify stakeholder engagement and outline the scope of the action (sub-regional, regional, and global).

Coordination Unit (CU)



The community of experts working on energy in humanitarian and development settings will be further involved through the five working groups.

The Work Plan will be a living document that can be adapted and has room for additional activities. It will be aligned with the strategic objectives, avoid any duplication by building on existing activities, be jointly developed by all stakeholders and address current gap areas in the sector.

Next Steps

Support Structure of the Global Plan of Action

Support Structure

This work under the framework of the GPA will be facilitated and guided by the GPA Steering Group, with the support of the GPA Coordination Unit (currently hosted at the United Nations Institute for Training and Research – UNITAR). The Steering Group will formalize a mechanism for an GPA Expert Community to join the GPA framework and engage in the Work Plan action. The Work Plan will be jointly developed by the Coordination Unit, the Steering Group (SG) with input and consultation with member states and all stakeholder groups in the Expert Community. The Coordination Unit will manage and update the Work Plan.

Steering Group

The Steering Group is responsible for directing and steering the activities of the Global Plan of Action at the global level. Particularly, it will oversee and support the work of the five Working Groups of the GPA. Its composition reflects a wide and balanced geographic representation. The UNHCR, the IOM and the Global Alliance for Clean Cookstoves are standing member of the SG as well as the organization which hosts the GPA Coordination Unit.

Coordination Unit

The work of the Steering Group will be supported by the Coordination Unit, acting as a secretariat and ensuring the day-to-day coordination of efforts by key stakeholders and the implementation of the actions. This includes supporting the Working Groups; monitoring, mapping and analysing gap areas; developing recommendations on measures and tools to fill these gaps; and coordinate common fundraising. The Coordination Unit reports to, and is a part of the Steering Group.

Expert Community

The Expert Community provides input and strategic advice to the Steering Group and, as applicable and appropriate, supports implementation of activities of the Working Groups in consultation with the Coordination Unit and the Steering Group. It consists of individuals and representatives of international and regional organizations, research institutions, academia, private sector, NGOs and other stakeholders with expertise in displacementrelated fields, such as humanitarian assistance and protection, human rights, migration management, refugee protection, disaster-risk reduction, climatechange financing and development.

Modus Operandi

The Steering Group will have bi-weekly calls. A physical meeting could be foreseen every year, preferably at the margin of another international conferences.

The purpose of this support structure is to assist in implementing the Global Plan of Action and, through that, to mainstream sustainable energy solutions in situations of displacement in the absence of a humanitarian energy cluster or another coordinating mechanism. To play an ambitious and meaningful role, the first phase of the GPA should be foreseen to last three years. To avoid any duplication of work and to react to possible changes and needs in the humanitarian environment in the meantime, the structure should be evaluated after the second year so as to decide about its continuity after three years.

Supporting the Global Plan of Action

Recognizing that development and implementation of this comprehensive framework will be a longterm process, the committed parties hereby invite all interested stakeholders to become a Partner in the Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement at one of the following levels:

Level I - Commit to the development of the GPA by joining as a representative of your organization or agency (i.e., acting with its authority). In so doing, you declare your commitment to the GPA by direct participation in, and/or financial support of, its development, in addition to self-defined, public commitments to be shared with the GPA Steering Group.

Level II – Endorse the goals of the GPA by joining as a representative of your organization or agency (i.e., acting with its authority). In so doing, you declare your intention to accelerate and improve access to safe and sustainable sources of fuel and energy in situations of displacement through self-defined, public commitments to be shared with the GPA Steering Group, as well as potential participation in the GPA Working Areas.

Level III – Express interest in the GPA by signing as an individual or as a member of your organization or agency. In doing so you indicate your interest in the GPA and potential to increase your participation at a later stage.

To participate in the Global Plan of Action at any of the above levels or for additional information, email energy@unitar.org.

Coordination Unit

Lean management team who coordinates the GPA process

- Establish, manage, update, and monitor the Work Plan
- Involves and engages partners to implement action under the GPA objectives and strategy (with SG)
- Facilitate mainstreaming of humanitarian energy into international policy
- Evaluate gaps in the Work Plan
- Supports the working groups on institutional planning, policy, knowledge sharing and capacity building
- Resource mobilization / fundraising

Expert Community role:

collaborating with each other and the SG to provide field based evidence/best practices, strategic priorities by stakeholder group, needs/gaps, and pledges to the Work Plan

Humanitarian Energy Expert Community

Network of practitioners in humanitarian and development agencies, private sector, donors and funders, governments and academia working on sustainable energy in situations of displacement; organized by the five working groups, subject to change if necessary

- Assessing and identifying field needs
- Sharing knowledge and evidence from the field
- Gathering data and communicating financial or capacity gaps
- Pledging action to the Work Plan
- Collaborating and sharing knowledge for impact driven and inclusive planning
- Working with national governments and local/regional implementing partners on inclusive planning to meet host government and humanitarian needs

Steering Group:

10-15 humanitarian and development organizations (UNHCR, IOM, The Alliance - Standing Members)

- Guide and provide strategic input for GPA activities at the Int'l level
- Contribute to GPA Work Plan in their agencies
- Coordinate with SG members in partner agencies on int'l energy strategies for synergetic planning
- Help facilitate field projects when possible

Steering Group and Coordination Unit role:

Creating and facilitating systematic ways of working through international strategic planning, institution building, policymaking, resource mobilization, knowledge sharing

Annex I

Acknowledgments

Authorship

This Global Plan of Action was collectively drafted by the following entities, who comprise the Global Plan of Action Steering Group:

- FAO Food and Agriculture Organization of the United Nations
- GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
- Global Alliance for Clean Cookstoves
- IOM The International Organization for Migration - The UN Migration Agency
- MEI The Moving Energy Initiative
- Practical Action
- UNDP The United Nations Development
 Programme
- UNEP-DTU UN Environment and Danish Technical University
- UNF The United Nations Foundation
- UNHCR The United Nations High Commissioner for Refugees
- UNITAR The United Nations Institute for Training and Research
- WFP The World Food Programme

Contributors to the Global Plan of Action

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FAO, GIZ, IOM, Moving Energy Initiative/Chatham House, Practical Action, The Global Alliance for Clean Cookstoves, UNEP-DTU, the UN Foundation, UNITAR, UNHCR, WFP; African Clean Energy, Atmosfair gGmbH, Autarsys GmbH, Climate-KIC, COOPI - Cooperazione Internazionale, Coventry University, DAZ Consulting, Democratic Republic of the Congo Province of Tanganyika, DFiD (UK Department for International Development), East African Centre for Renewable Energy and Energy Efficiency (EACREEE), EDP Energias de Portugal SA, E.ON Off Grid Solutions GmbH, Energy 4 Impact, Energy Peace Partners, Energypedia nonprofit, Engineers Without Borders - USA, ERK Eckrohrkessel GmbH, ETH Zurich-SusTech, EU Delegation to the UN-Geneva, EU Energy Initiative Partnership Dialogue Facility (EUEI-PDF), EURELECTRIC, The Federal Ministry of Economic Cooperation and Development of Germany (BMZ), Federal Ministry for Economic Affairs and Energy of Germany, Federal Ministry of Economic Cooperation and Development of Germany (BMZ), Federal Foreign Office of Germany, Fraunhofer ISE, Food and Fuel consultant, German Mission in Geneva, Gaia Association, Gibson Environmental Consultancy Ltd. Institute for Climate and Sustainable Cities, IKEA Foundation, Infintra360 Limited, INTEGRATION Environment & Energy, International Committee of the Red Cross, International Lifeline Fund, International Olympic Committee, itdUPM (Universidad Politécnica de Madrid), L'Institut Technique de la Cote-Sud (ITCS), Little Sun, Low Carbon Energy for Development Network-Loughborough University, Maxx-solar & Energie GmbH, Mercy Corps, Netherlands Enterprise Agency, Norwegian

Refugee Council, Norad, Ossenbrink Consulting, OXFAM, Overseas Development Institute (ODI), Permanent Mission of Norway to the UN in Geneva, Philips Lighting, Politecnico di Milano, Power Africa, Project Gaia, Plan International, Power-Blox AG, PWRstation, Premiére Urgence International, Solarkiosk, Schneider Electric, Scene Connect, SNV Netherlands, Scene Connect, Scatec Solar, Sustainable Energy for All, Total Access To Solar, W. Giertsen Energy Solutions, University of Edinburgh, The University of Tokyo, UN OCHA-UNEP Joint Environment Unit, World Bank, World Agroforestry Centre, World LPG Association

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Annex II

Further Resources

I. Useful Resources

Enabling Political Processes and Initiatives that the GPA Supports

New York Declaration for Refugees and Migrants and the Comprehensive Refugee

Response Framework: http://www.unhcr.org/en-us/new-york-declaration-for-refugees-andmigrants.html

The New York Declaration sets out the key elements of a Comprehensive Refugee Response Framework (CRRF) to be applied to large-scale movements of refugees and protracted refugee situations. The CRRF focuses on the importance of supporting those countries and communities that host large number of refugees, promoting the inclusion of refugees in host communities, ensuring the involvement of development actors from an early stage, and developing a 'whole-of-society' approach to refugee responses. The framework of the GPA can work to support national strategies to meet the four CRRF objectives:

- Ease pressures on host countries •
- Enhance refugee self-reliance •
- Expand access to third-country solutions (i.e. resettlement and other complementary pathways) •
- Support conditions countries of origin for return in safety and dignity •

Global Compact on Refugees

The New York Declaration gave UNHCR the task of building upon the CRRF to develop a 'global compact on refugees'. UNHCR has been engaged in consultations with governments and other stakeholders to develop the compact, and the High Commissioner will propose the text of the global compact on refugees in his 2018 annual report to the United Nations General Assembly.

The global compact on refugees is a unique opportunity to strengthen the international response to large movements of refugees and protracted refugee situations. It will consist of:

- The Comprehensive Refugee Response Framework (CRRF), as agreed to by Member States in the New York Declaration.
- A programme of action that builds on the CRRF and sets out measures for States and other relevant stakeholders to better share responsibility and cooperate more effectively in the response to largescale movements of refugees and protracted situations. The programme of action provides a blueprint to support host countries and communities to ensure, for example, that refugees have better access to health, education and livelihood opportunities and are included in their host communities from the very beginning.

Further information can be found at www.unhcr.org/refugeecompact

The Agenda for Humanity

The Agenda for Humanity is a five-point plan that outlines the changes that are needed to alleviate suffering, reduce risk and lessen vulnerability on a global scale. In the Agenda, humanity-people's safety, dignity and the right to thrive— is placed at the heart of global decision-making. To achieve this, global leaders and all humanitarian actors are called upon to act on five core responsibilities. Under the Agenda for humanity, two important initiatives are directly aligned with the GPA Framework:

- The Grand Bargain: an agreement between more than 30 of the biggest donor and aid providers to get more means into the hands of people in need. It aims to be a solution to address the humanitarian financing gap, including priorities to gear up cash programming, provide greater funding for national and local responders, and cut bureaucracy through harmonized reporting requirements.
- New Ways of Working: a movement aimed at offering a concrete path to remove unnecessary barriers to collaboration between humanitarian and development actors, non-governmental organizations and private sector actors. It will work over multiple years and strengthen the capacities that already exist at national and local levels.

Information Sharing Platforms and Databases

Inter-Agency Standing Committee (IASC) Task Force on Safe Access to Firewood and Alternative Energy (SAFE): https://interagencystandingcommittee.org/safe-access-firewoodand-alternative-energy-humanitarian-settings

The IASC Task Force on SAFE, founded in 2007, consisted of a group of organizations whose mandate was to reduce vulnerable populations' exposure to violence, to ease the burden of collecting firewood and to reduce environmental impacts by providing access to alternative energy solutions. The task force created the following two critical tools for the humanitarian system, aimed at ensuring the predictable development of holistic fuel strategies in different regions around the world.

SAFE Matrix on Agency Roles and Responsibilities

http://www.safefuelandenergy.org/files/IASC%20Task%20Force%20Matrix.pdf

The matrix defines energy activities according to three response phases (preparedness, acute emergency and protracted crises) and explains how energy impacts eight areas: camp coordination and camp management; emergency shelter; environment and natural resource management; food and nutrition; health; information, education and communication; livelihoods, development and food security; and protection. Crucially, the matrix also designates responsibilities for energy activities to cluster leads according to the humanitarian Cluster Approach managed by the IASC and OCHA.

The matrix has limitations. For example, it only takes into account energy required for cooking and heating leaving out lighting, powering and other energy applications - while accountability for heating and cooking is spread among different clusters. Moreover, the Cluster Approach itself only governs coordination among agencies in non-refugee humanitarian emergencies. However, the matrix provides a valuable foundation for defining future inter-agency collaboration on energy among agencies at the global level

SAFE Decision Tree Diagram

http://www.safefuelandenergy.org/files/IASC%20Task%20Force%20Decision%20Tree.pdf

The Decision Tree outlines factors affecting the choice of fuel strategy in humanitarian settings to help determine which cooking fuel options will be most appropriate in diverse response settings. After the formal end of the IASC Task Force on SAFE in 2009, some of its members continued the initiative as the independent the SAFE Humanitarian Working Group.

Safe Access to Fuel and Energy (SAFE) Humanitarian Working Group:

http://www.safefuelandenergy.org/about/working-group.cfm

The SAFE Humanitarian Working Group is an inter-agency consortium of key partners working to meet the energy needs of crisis-affected populations around the world. It has expanded the IASC Task Force's original scope and definition of SAFE to include cooking, lighting, heating and powering (for example, of phones and small appliances, and more recently of cooling and energy-powered water services).

Refugee Refugee Response Plans:

https://emergency.unhcr.org/entry/61168/refugee-response-plans-rrps-interagency

Refugee Response Plans (RRPs) are comprehensive inter-agency plans for responding to refugee emergencies. They are a key feature of the Refugee Coordination Model, and provide the vehicle through which leadership and coordination of a refugee response may be exercised. An RRP articulates the protection and solution priorities and describes the needs of refugees, host communities, and other persons of concern, states how and by whom these needs will be addressed, and defines the financial requirements of all the humanitarian actors involved. It builds on national preparedness measures and prior contingency plans.

Moving Energy Initiative Resources:

https://mei.chathamhouse.org

The Moving Energy Initiative is an international partnership sharing insightful and policy relevant research, learning from innovative on-the-ground projects, and investing in partner organizations that provide sustainable solutions. Interactive Database on Global Energy Access for Displaced People Statistics: https:// mei.chathamhouse.org/hdx-visualisation; Toolkits on Private Sector Engagement and a Review of Cooking Systems for Humanitarian Settings: https://mei.chathamhouse.org/resources/toolkits; Evidence and Survey Tools for Situations of Displacement: https://mei.chathamhouse.org/resources/reports

ENERGYCoP Community of Practitioners Database:

http://energycop.safefuelandenergy.org/

ENERGYCoP space to foster Knowledge Sharing and collaboration on energy access in humanitarian settings. This database is a repository specific to energy in humanitarian settings, and contains projects, existing sustainable energy technologies, resources, tools, and webinars for programme officers. The website contains a dedicated space for discussion on humanitarian energy topics, including cooking, preservation, heating, lighting, powering and general use. Some useful tools mentioned in the GPA Framework for humanitarian energy programming include the SET4FOOD Decision Support System, an interactive Excel worksheet that can be used offline to identify appropriate energy technologies for food utilization, given a certain context of displacement; included modules are: food cooking, food preservation, power generation, water pumping and water treatment; and a Cooking Stoves Catalogue for humanitarian and critical settings.

EnergyPedia Database:

https://energypedia.info/wiki/Main_Page

Energypedia is an open source wiki platform for collaborative knowledge exchange of renewable energy, energy access and energy efficiency topics in developing countries. This platform contains tools and resources including case studies, technical information, financing and business models, policy frameworks, monitoring and evaluation frameworks, etc. Detailed resources on solar, hydro, bioenergy and wind are outlined. The site contains practitioner's spaces on improved cooking, productive use, mobility, countries, impact, grid, mini-grid, financing and funding, and powering agriculture. Useful in consulting the network of 8,000+ experts working on energy in development or humanitarian settings.

IOM Displacement Tracking Matrix

http://www.globaldtm.info/

The Displacement Tracking Matrix is a system to track and monitor the displacement and population mobility. It is designed to regularly and systematically capture, process and disseminate information to provide a better understanding of the movements and evolving needs of displaced populations, whether on site or en route.

UNHCR Operational Portal:

https://data2.unhcr.org/en/situations

The Refugees Operational Portal is a Partners coordination tool for Refugee situations provided by UNHCR. Information exchange through reports, updates, maps and other tools are uploaded through this portal, including energy and environment working group reports or assessments.

HEDON Household Energy Network:

http://www.pciaonline.org/node/337

The HEDON Household Energy Network is an informal forum dedicated to improving social, economic and environmental conditions in the South, through local, national and regional and international initiatives in the household energy sector. This collaborative discussion forum is used for discussion on household smoke monitoring, policy and agenda to decrease indoor air pollution levels, elements in ensuring project sustainability, energy and HIV/AIDS, fuels, tools and resources.

Energy Access Practitioner Network (EAPN):

http://energyaccess.org/

The EAPN is a global platform that brings together energy service providers and stakeholders from 170 countries to support the delivery of clean, reliable, and affordable decentralized energy as a contribution to the Sustainable Development Goal of universal energy access by 2030.

Alliance of Civil Society Organisations for Clean Energy Access (ACCESS): https://access-coalition.org/

The ACCESS network consists of a wide range of international and national CSOs who work to strengthen the visibility and presence of CSOs working to deliver universal energy access.

Project Planning Tools and Guidelines

Multi-Cluster/sector Initial Rapid Needs Assessment toolkit (MIRA): https://emergency.unhcr. org/entry/187590/multicluster-sector-initial-rapid-needs-assessment-mira

A MIRA is an inter-agency needs assessment and analysis process, from which a joint strategic plan for emergency response is developed by the humanitarian country team.

Emergency Market Mapping and Analysis (EMMA) toolkit: https://www.emma-toolkit.org/

The EMMA toolkit is an approach to assessing market systems in post-emergency contexts that aims to improve emergency responses by encouraging and assisting relief agencies to better understand, support and make use of local market-systems in disaster zones.

WFP Handbook on SAFE Access to Firewood and Alternative Energy:

https://documents.wfp.org/stellent/groups/public/documents/newsroom/wfp252989.pdf

This handbook provides comprehensive guidance on fuel-efficient programming for implementers.

Poor Peoples Energy Outlook (PPEO):

https://policy.practicalaction.org/policy-themes/energy/poor-peoples-energy-outlook

The PPEO and Total Energy Access Framework outline energy services that matter most to energypoor people and outlines how decentralized approaches can be used for universal energy access. The Sustainable Humanitarian Energy Services briefing looks specifically at inclusive participation of displaced people in humanitarian energy planning.

Potential Resource Mobilization Mechanisms

World Bank IDA 18 Regional Sub-Window for Refugees and Host Communities

http://ida.worldbank.org/financing/replenishments/ida18-overview/ida18-regional-sub-window-for-refugees-host-communities

This funding window provides US \$2 Billion by 2020 of dedicated funding to help low-income countries hosting large numbers of refugees. Funds are provided on more favourable terms for medium term investments that benefit both refugees and host communities. Cameroon, Chad, the Republic of Congo, Djibouti, Ethiopia, Niger, Pakistan and Uganda are eligible for funding and these countries host 4.1 million refugees, or 60% of the total number of refugees living in IDA countries.

NORCAP Energy Expert Roster

https://www.nrc.no/expert-deployment/how-to-request-experts

Through NRC, NORCAP deploys experts on demand to the UN, regional organizations, and national governments. The Expert Roster serves to strengthen operations during crucial phases of emergency response and help deliver in accordance with the needs of affected populations. To request an expert, humanitarian organizations are advised to identify needs and personal gaps, consult focal point at HQ (if in the field), and submit the request to **norcap@nrc.no**.

Global Environment Facility (GEF)

https://www.thegef.org/about-us

The GEF provides grants and co-financing on topics such as sustainable forest management, sustainable land management, GHG emission reduction, integrated water resources management, adaptation to climate change, and protected areas.

Green Climate Fund (GCF)

https://www.greenclimate.fund/home

The GCF supports the efforts of developing countries to respond to the challenge of climate change, helping with adaptation and reduction of greenhouse gas emissions. The fund particularly takes into account the needs of nations that are particularly vulnerable to climate change impacts.

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mechanism; for example, Uganda, Nigeria and Bangladesh are engaged in this process.

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- 30. Existing knowledge sharing platforms for energy solutions or humanitarian and development situations: ENERGYCoP: http://energycop.safefuelandenergy.org/; EnergyPedia: https://energypedia.info/wiki/ Main_Page; DisasterReady: https://www. disasterready.org/; Practical Actions Answers help desk: https://answers.practicalaction. org/; Energypedia's question space: https:// energypedia.info/wiki/Category:Community_ Questions.

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- ENERGYCoP Database: http://www. safefuelandenergy.org/; SET4Food Decision Support System toolkit: http://www.set4food. org/tools/decision-support-system-public; participatory engagement surveys:

https://mei.chathamhouse.org/resources/ reports; Preparation guide for assessment tools https://energypedia.info/wiki/ Preparation_Guide_for_a_Sustainable_ Energy_Project_in_Refugee_Settings

This has been observed predominantly in established locations, or in locations in which refugees have access to cash or technical resources and materials. Indigenous mini grids, vendors, mini utilities often develop natively and are operative in many refugee settings without humanitarian intervention.

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