

Energizing the Most Vulnerable: Sustainable Energy in Displacement Settings

Humanitarian Networks and Partnerships Weeks 2021

28 April 2021



Things to remember

- The meeting is recorded.
- Please stay muted over the course of the meeting and unmute when you speak.
- Feel free to turn on your video when you take the floor and introduce yourself.
- Introduce yourself in the chat, e.g. Name, Organization, Location.

Agenda:

1. Introduction - Energy in Displacement Settings

- Mr Thomas Fohgrub, Head of the Global Platform for Action on Sustainable Energy in Displacement Settings, UNITAR

2. Productive Use of Energy: Learnings from EnDev

- Mr Florent Eveillé, Adviser – Humanitarian Energy, Energising Development (EnDev)

3. Measuring the unknown: Including Energy in Data collection

- Ms Eva MACH, Environmental Sustainability Programme Officer, IOM
- Mr Adam OSTASZEWSKI, Energy Data Officer, IOM Environmental Sustainability Programme
- Ms Anaïs MATTHEY-JUNOD, Junior Energy Expert, IOM Environmental Sustainability Programme

4. Modern Energy Cooking in Displacement Settings

- Ms Dr Iwona Bisaga, Research Associate, MECS/Loughborough University

5. Closing

Introduction

Mr. Thomas Fohgrub

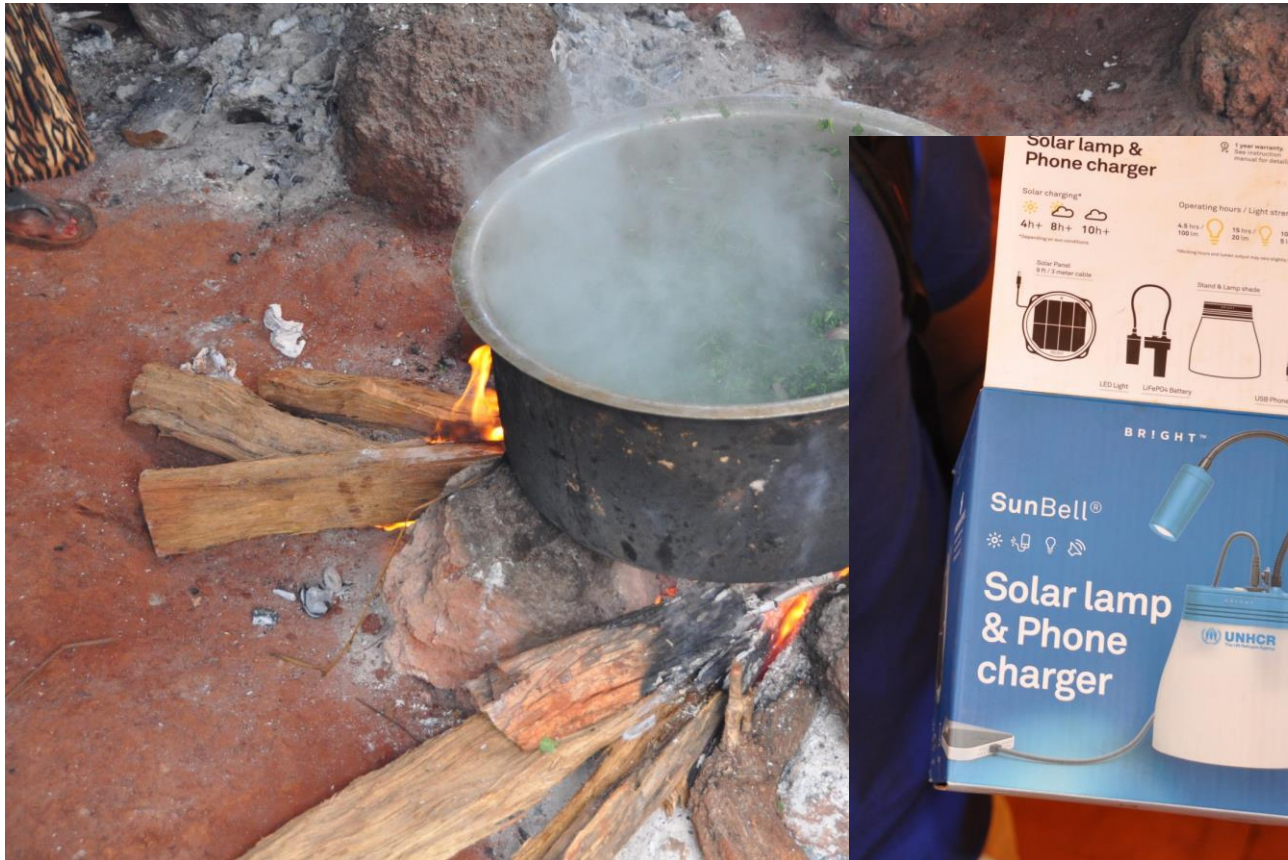
Head of the Global Platform for Action on Sustainable Energy in Displacement Settings, UNITAR

Poll

- **Are you actively working on sustainable energy delivery in humanitarian contexts?**
 - Yes
 - No
 - Willing to work in future

- **Which type of energy is most relevant for your work?**
 - Electricity access for households
 - Cleaner cooking for households
 - Clean energy for institutions (schools, health clinics, community centres, etc)
 - Clean energy for local businesses and entrepreneurs
 - Clean energy for humanitarian facilities and operations
 - Other

Energy situation in displacement settings



80% rely on solid fuels for cooking
Stop inefficient and unhealthy
cooking practices



90% *no electricity access*



400 m USD p.a. estimated for fuel
and operation
Stop burning money!

If we don't address the cooking topic... example for extensive deforestation - Bangladesh



- Loss of bio-diversity +
conflicts with locals and
elephants

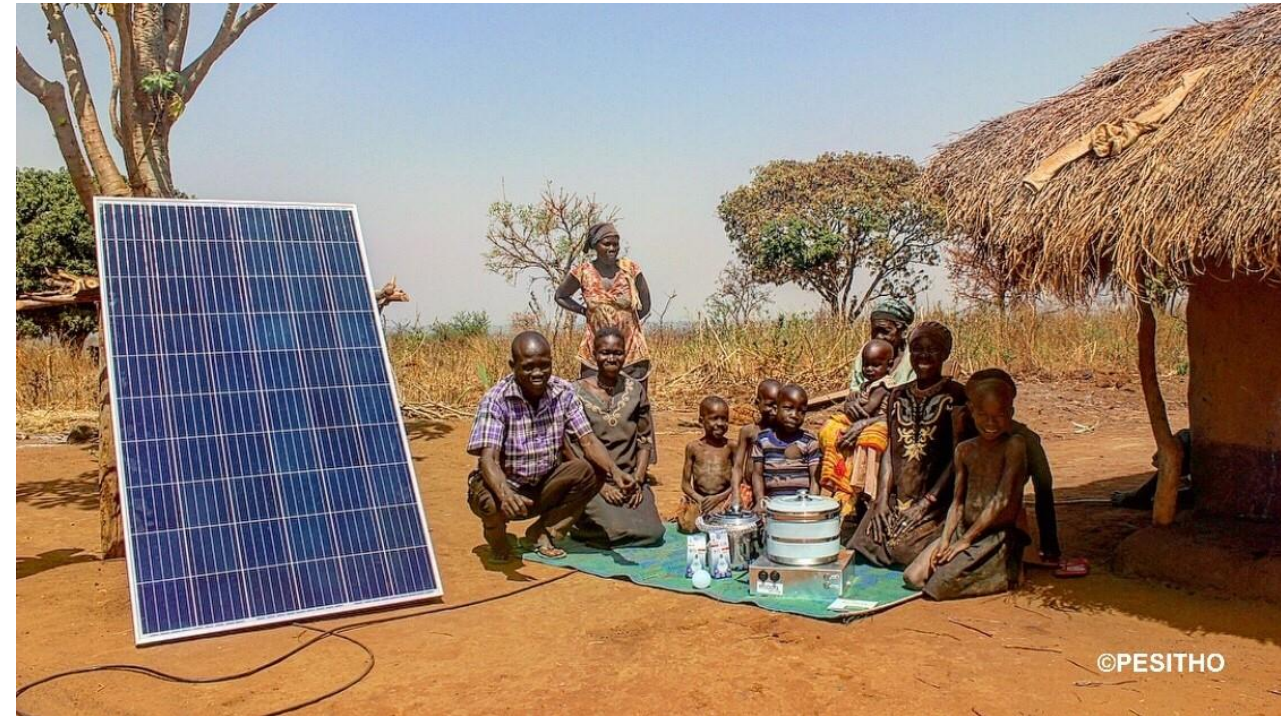
- *Landslides, Accidents*
- *Flooding*
- *Hygiene problems because
of spoiled groundwater*

Some 'worst practice' to address the cooking topic from the field...



Please don't do these anymore!

Some modern cooking solutions ...



Key Challenges



Energy is not a formal priority in humanitarian assistance

Displaced people are not included in national or international energy-access agendas

Energy in displacement settings is underfunded but also not efficiently used

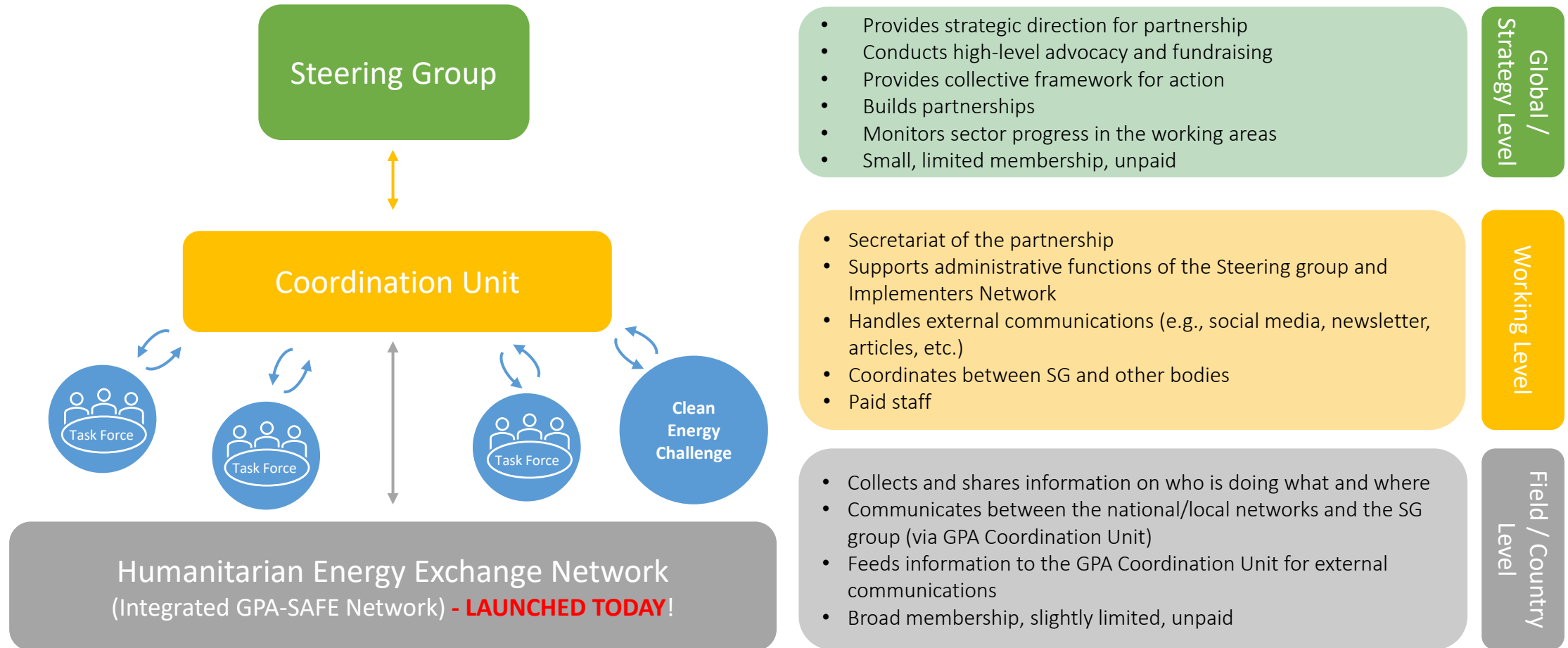
Limited expertise and capacity to plan or implement sustainable energy solutions

Limited and poorly shared data on humanitarian needs and solutions

Opportunities with clean energy

- 1. Environmental benefits**
- 2. Reducing energy costs** for displaced population and humanitarian actors
- 3. Value for money:** value of \$1.40 to \$1.70 is generated for every dollar invested
- 4. Bridging short-term humanitarian work and longer-term development**
- 5. Bringing in the private sector:** there is a true business case for private investments
- 6. Knowledge transfer to remote and fragile areas:** Refugee Settlements as regional “innovation hubs”
- 7. Immediate positive effects on Women and Children:** Energy-poverty is mainly affecting women and children

Overview of GPA and Clean Energy Challenge



Membership of GPA Steering Group and Clean Energy Challenge

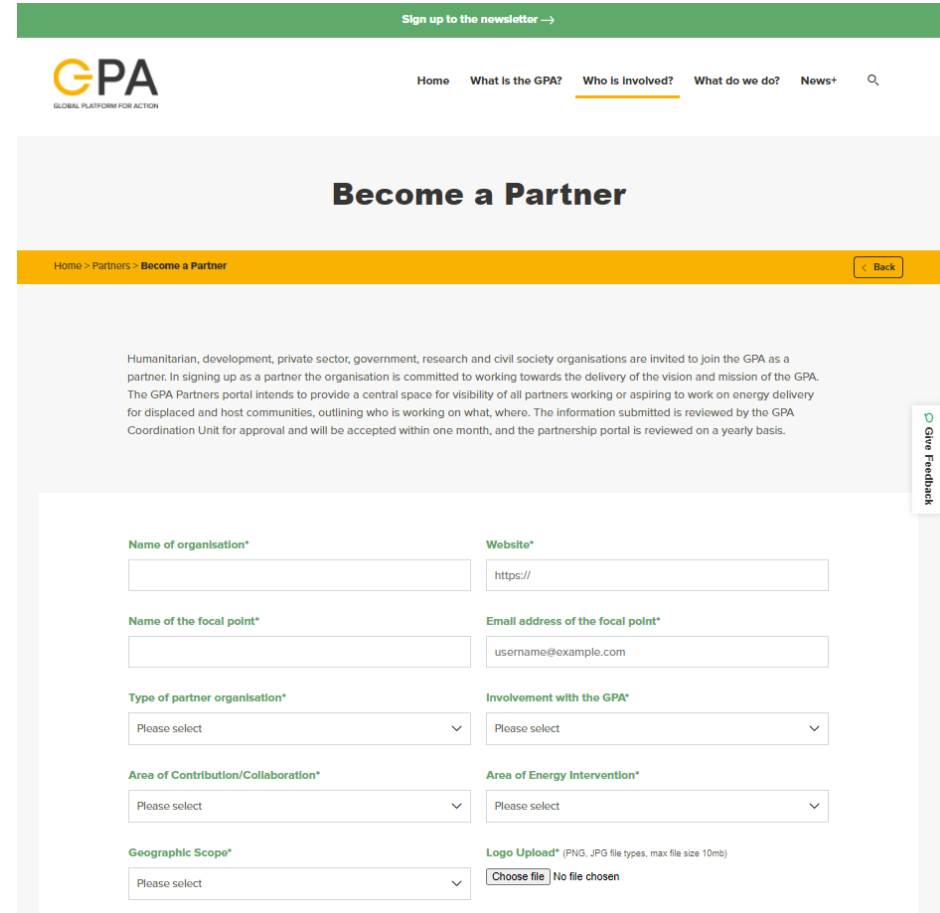
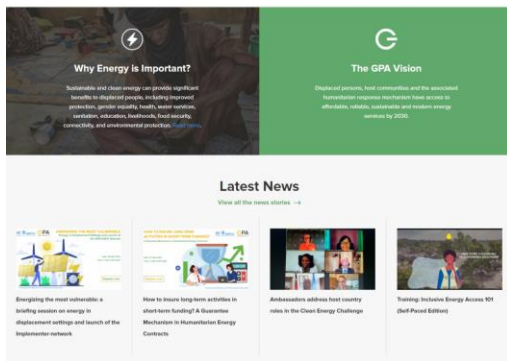
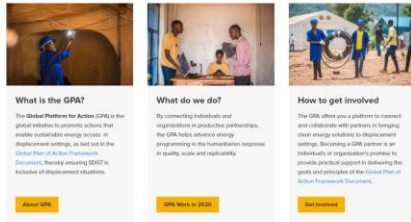
Steered by



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The new GPA Website has been launched today!



www.humanitarianenergy.org



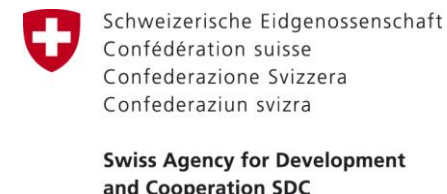
Learning and Innovation Report

Energy for micro-enterprises in displacement settings

Mr Florent Eveillé, Adviser – Humanitarian Energy, Energising Development (EnDev)

What is EnDev?

Energizing Development (2005 – 2025) is a strategic partnership of likeminded donors and partners to support access to modern energy. Access to modern energy is a prerequisite for social and economic development. EnDev works in more than 20 countries around the globe.

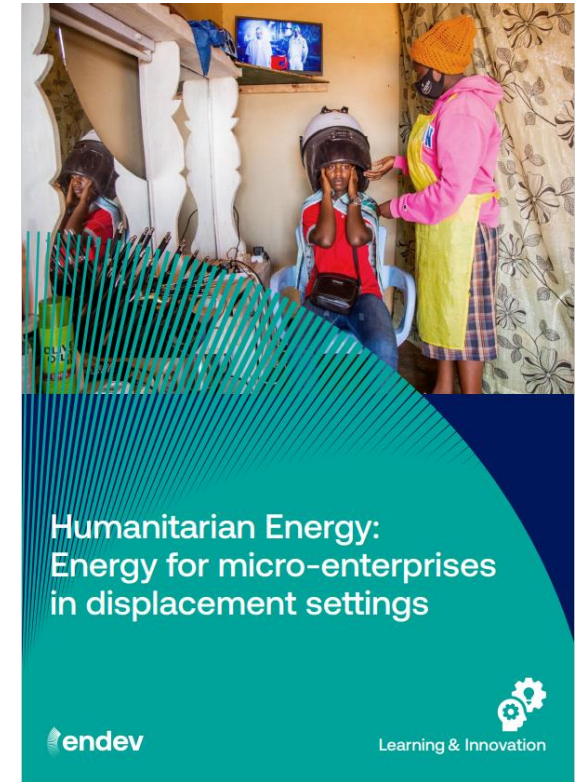


Energy for micro-enterprises in displacement settings

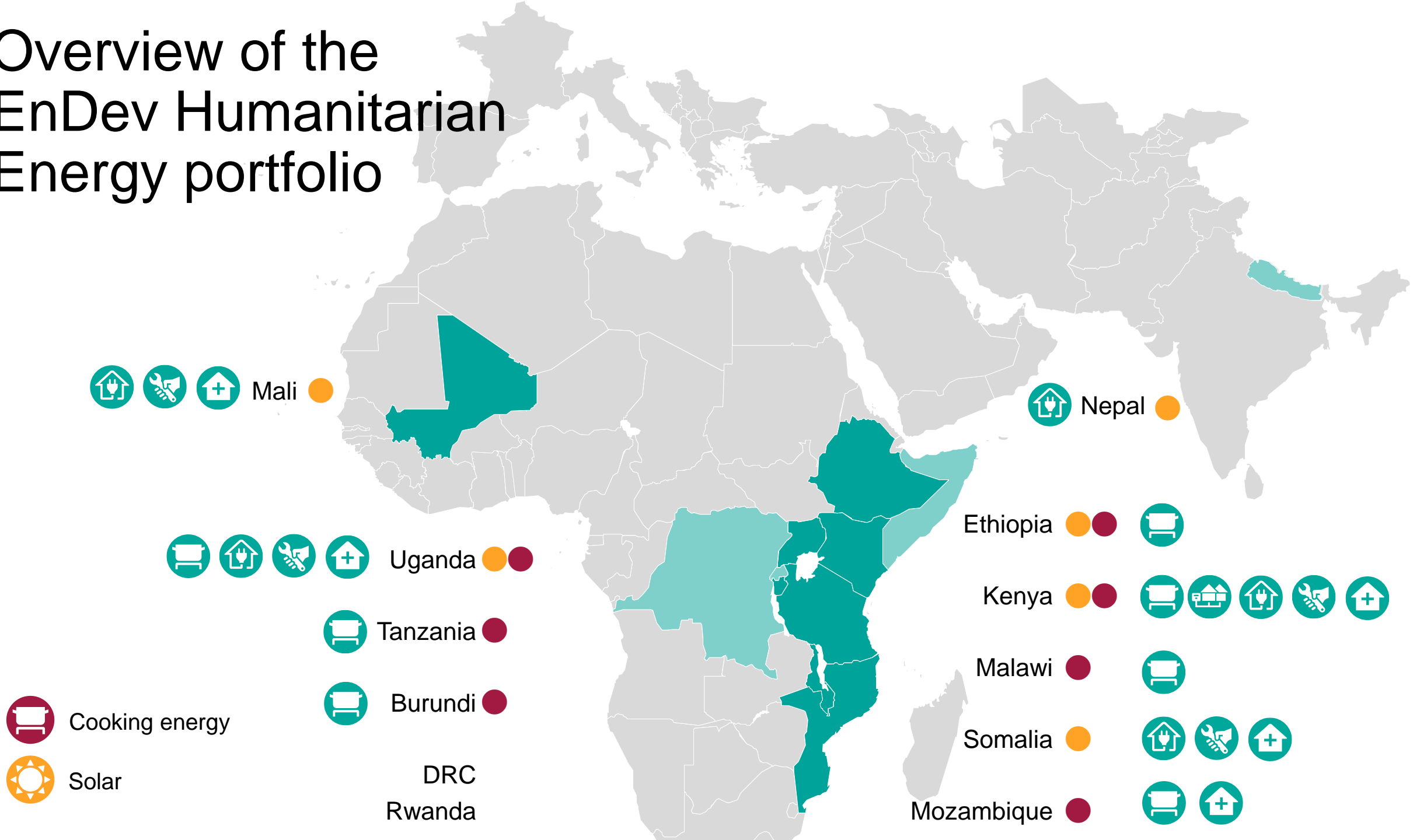
Poll - What is a productive use of energy?

- 1 – a solar water pump for a free of charge community well
- 2 – an off-grid powered TV to watch football games at home
- 3 – a solar kiosk to charge mobile phones
- 4 – a clean cookstove to feed the family

You can only select one answer



Overview of the EnDev Humanitarian Energy portfolio








 Mali 


 Nepal 





 Uganda  


 Tanzania 


 Burundi 


 Cooking energy


 Solar

DRC
Rwanda

Ethiopia   

Kenya  






Malawi  

Somalia 




Mozambique 



The Smart Communities Coalition Innovation Fund

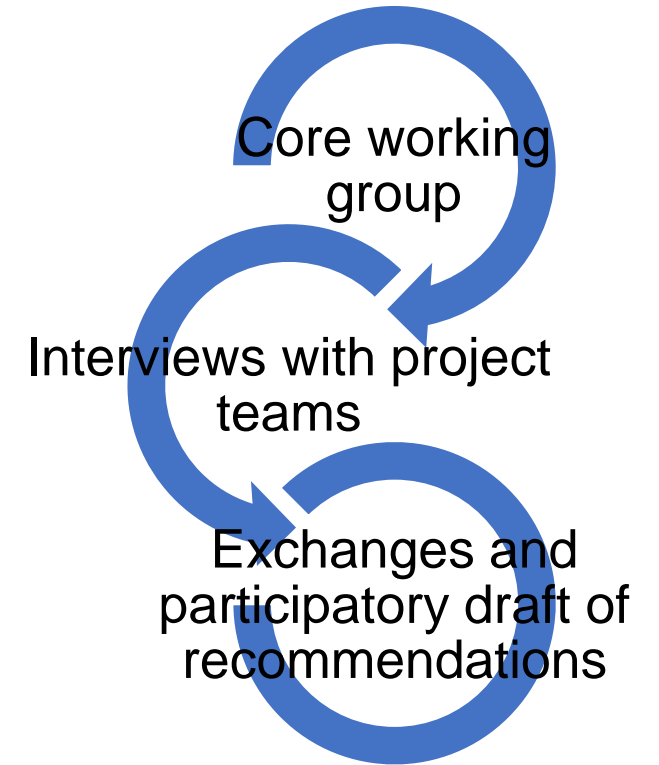


- Target business oriented private sector actors in Kenya and Uganda
- Grant funding from €10 000 to €120 000 to provide renewable electricity solutions (higher than tier 1) to refugee and host communities in refugee-hosting areas
- 4 winners contributing to 30% of the total projects value with their own funds
- Company and consortiums focusing on PUE (mobility, water/connectivity, chicken farm, light industrial)
- Contact: sccif@giz.de



Humanitarian Energy

The use of a range of clean energy sources across all contexts of Forcibly Displaced People (FDP). FDP includes refugees, internally displaced people (IDP), asylum-seekers and their host communities.



Key facts – Humanitarian Energy

Only 10% of households in camp settings have access to electricity

80% of households in refugee camps use a three stone fire

Shift towards more market- based approaches (**protracted displacement**)

Energy recognized as one of the **key components of resilience**

How best to capture markets for Off Grid Systems and facilitate **systemic change**

Sufficient budget allocation vs pressing humanitarian needs to respond to crisis

Micro-enterprises in displacement settings

(and their host communities)

covers a wide range of businesses, shops, and enterprises that are **owned, run and/or managed by displaced people** who can be called (micro)entrepreneurs

Energy-consumer entrepreneurs

Energy-supplier entrepreneurs

Energy economies

[How to tackle energy needs in displacement settings? EnDev and Practical Action present a joint publication - EnDev](#)



Case studies

The initiative

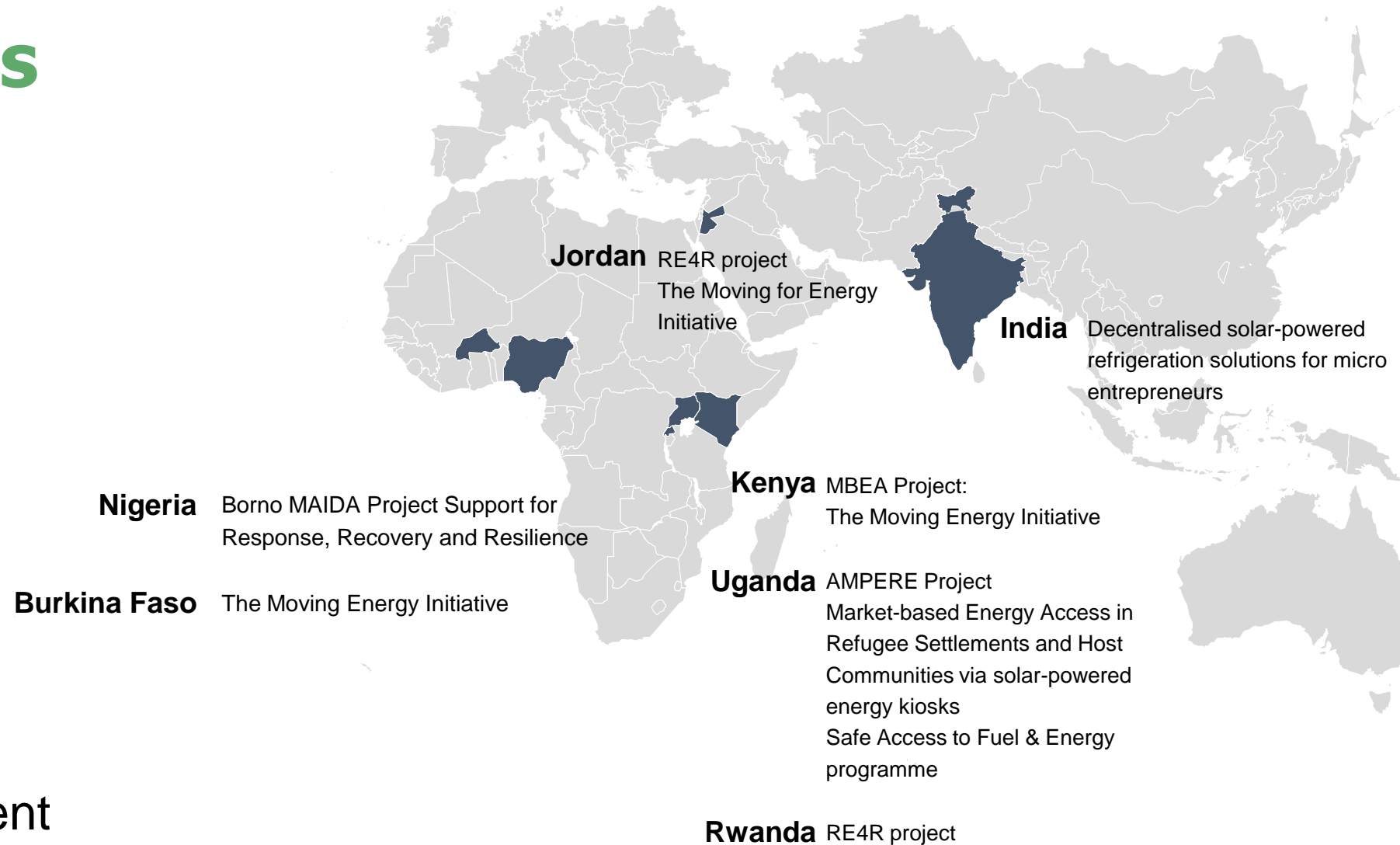
Key achievements

Innovative aspects

Drivers of success

Main barriers

Enabling environment

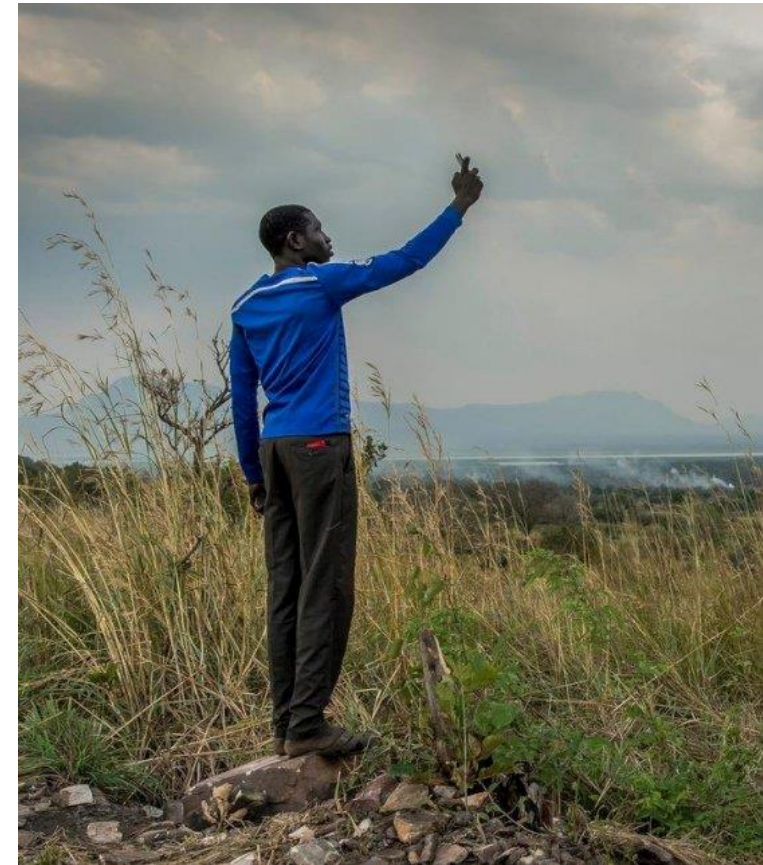


Energy for micro-enterprises in displacement settings

Poll – Do you want to know more?

- 1 – No, thank you
- 2 – Let me read first and come back to you
- 3 – Yes, through a webinar
- 4 – Other (type your answer in chat)

You can select more than one answer





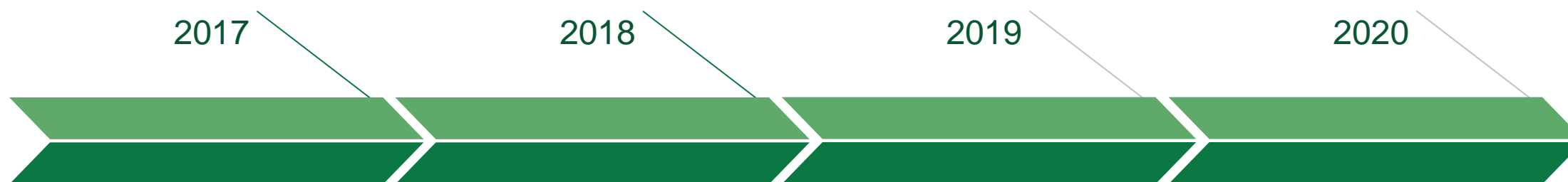
Introduction to IOM Energy Needs Assessment

Ms Eva MACH, Environmental Sustainability Programme Officer, IOM

Mr Adam OSTASZEWSKI, Energy Data Officer, IOM Environmental Sustainability Programme

Ms Anaïs MATTHEY-JUNOD, Junior Energy Expert, IOM Environmental Sustainability Programme

IOM and Energy in Displacement Settings



IOM launched its Environmental Sustainability Programme

Institutional commitment to improve the environmental sustainability of its operations, focusing on three key areas: energy, water and waste management

IOM becomes a founding member of the GPA

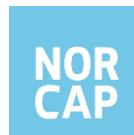
Advocating and piloting innovative approaches to enable the clean energy transition in facilities and to provide access to energy to displaced communities and their hosts

IOM signs the Joint Appeal from the UN System to the Secretary-General's Climate Action Summit

Includes commitments referring to strengthening environmental sustainability and climate action commitments within Agencies

IOM sets an objective to operationalize the energy data-related work areas identified under the GPA

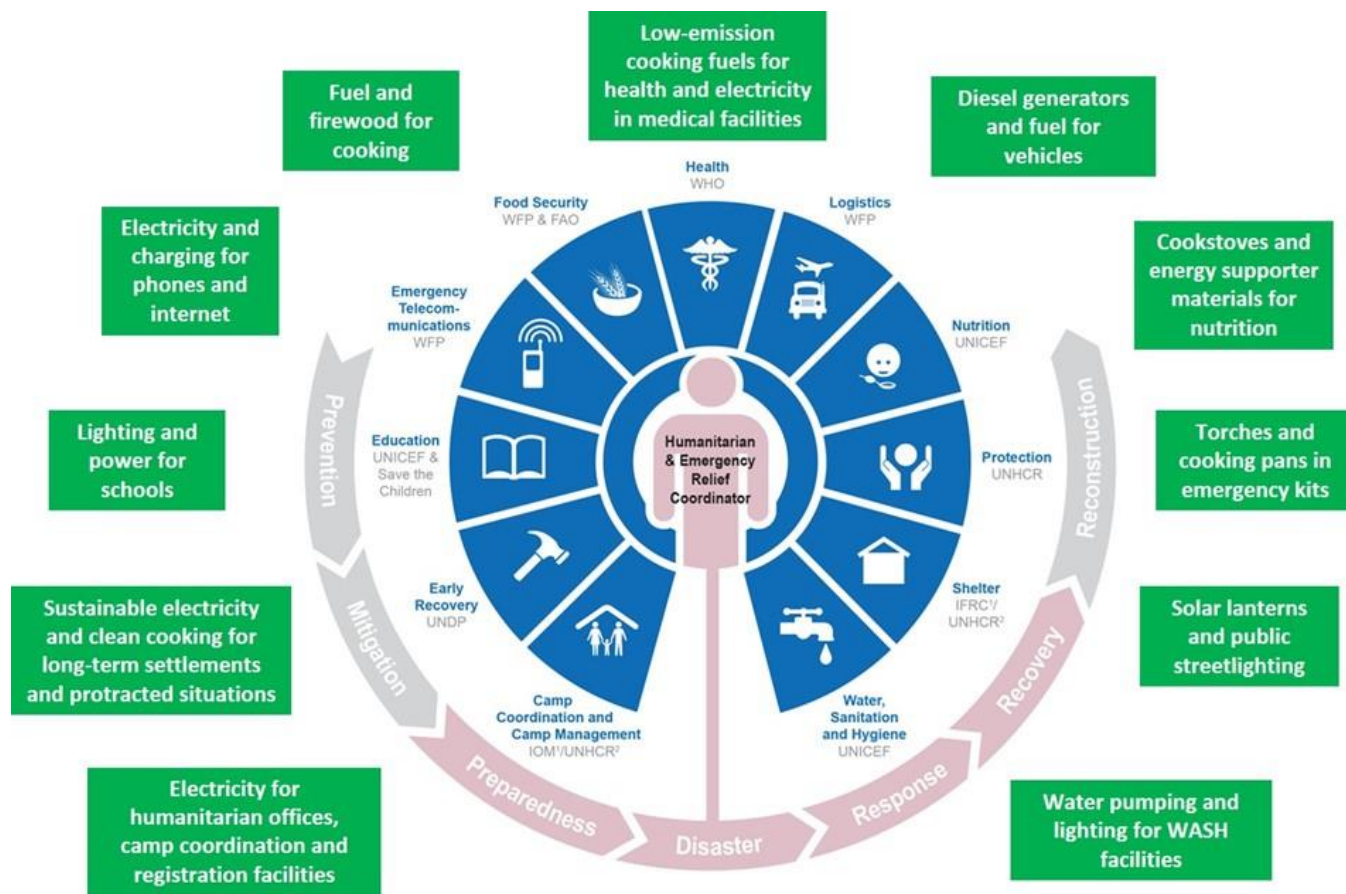
Establishing an energy data assessment methodology and concrete tools, while incorporating it in the IOM Displacement Tracking Matrix (DTM) activities



The Current State of Energy Data in Displacement Settings



Energy is a Cross-Sectoral/Cluster Issue



- Energy itself is *not* a **cluster**, but it cuts across ALL clusters
- **Ownership** and responsibility for **data collection** and **energy supply** is unclear and often context-dependant
- Energy data is (almost) **non-existent** in humanitarian settings

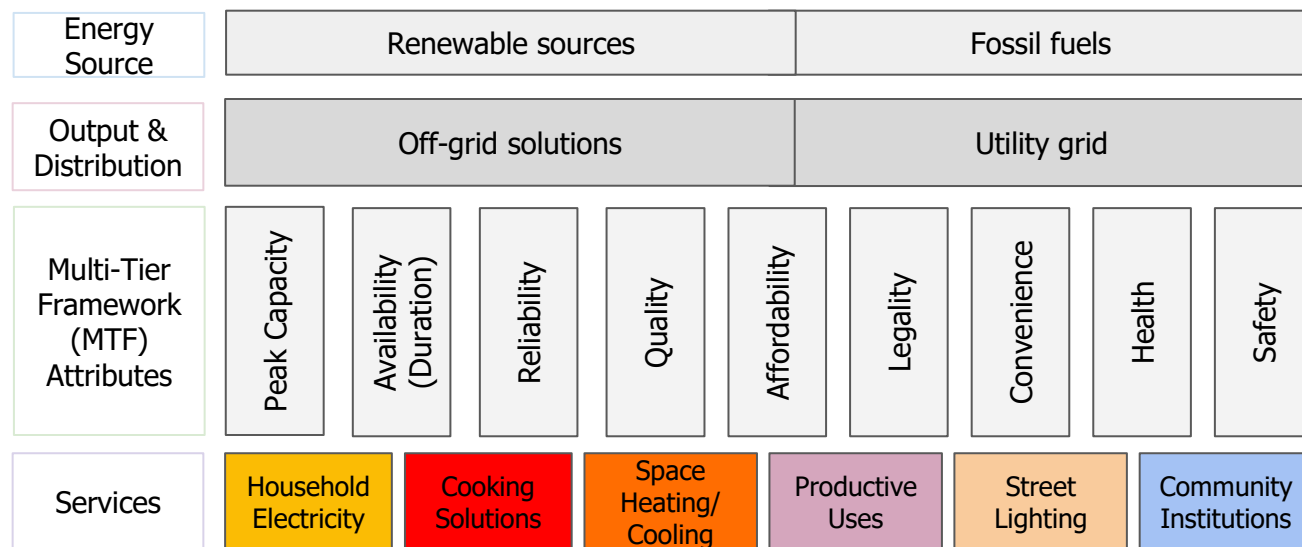
Source: Thomas, P., Rosenberg-Jansen, S. and Jenks, A. (2021 forthcoming) Moving Beyond Informal Action: Sustainable Energy and the Humanitarian Response System. Journal of International Humanitarian Action.

Collecting Energy-Related Data

Standardizing and Harmonizing Energy Data

- GPA Indicators
 - UNHCR Indicators
 - Clean Energy Challenge
 - SDG 7 Indicators
- IOM to align with existing indicators used in the (humanitarian) energy sector as well as the definitions
- IOM to leverage internal capacity such as the Displacement Tracking Matrix (DTM) to collect energy-related data

Measuring Energy Access: The Multi-Tier Framework (MTF)



ESMAP
Energy Sector Management Assistance Program

WORLD BANK GROUP

Poll

- **Are you familiar with the IOM Displacement Tracking Matrix (DTM)?**
 - Yes, I know DTM and I use DTM data and reports in my daily work
 - Yes, I know DTM and I use DTM data and reports periodically, whenever needed
 - Yes, I've heard about DTM but I don't use any DTM data or reports in my daily work
 - No, I do not know about DTM

IOM and Energy Data Collection

The Displacement Tracking Matrix (DTM)



Past and Present Operations as of November 2019

● Active Operations ● Currently Inactive



The Displacement Tracking Matrix (DTM) is a system to track and monitor 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.

<https://dtm.iom.int/>

over **25 million**

IDPs tracked in 2018

plus 19 mil returnees and 5 mil migrants

over **5,000**

data collectors in the field in 2018

over **300**

technical experts in the field in 2018

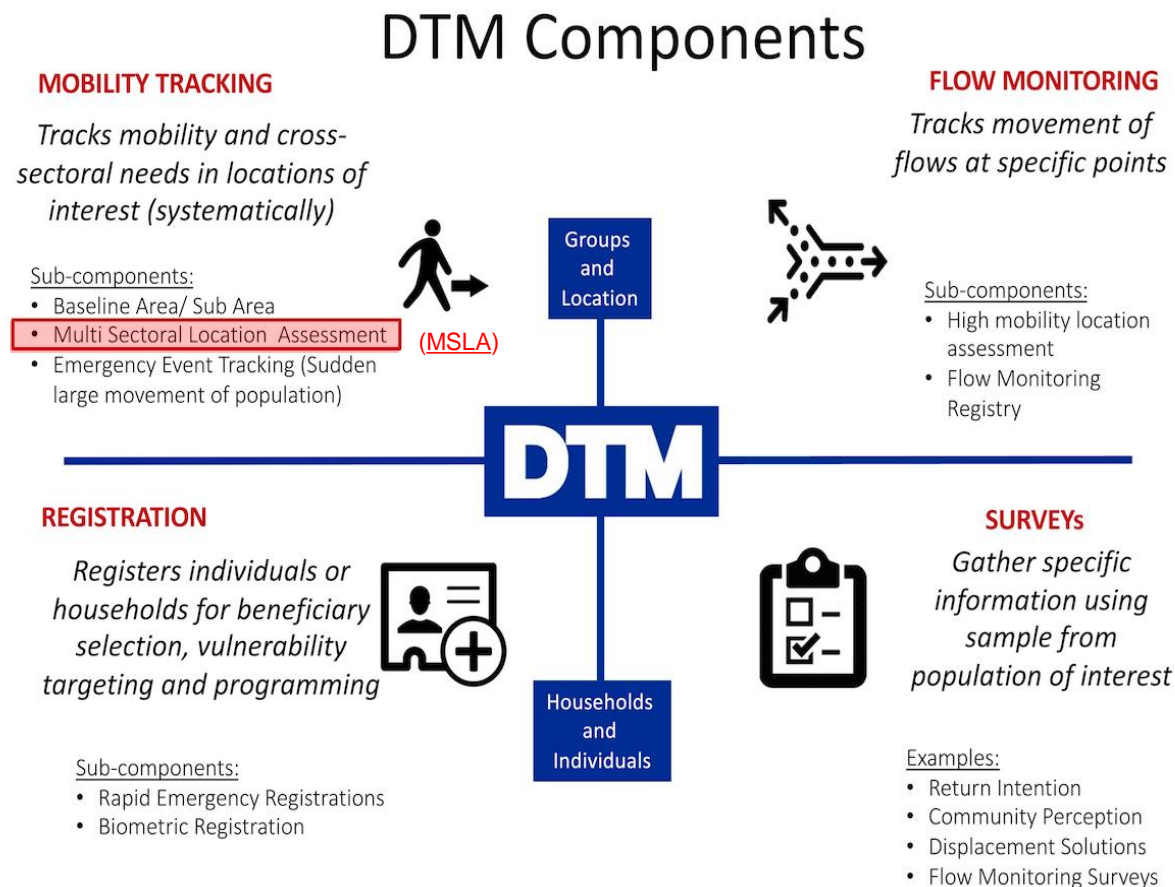
over **90 countries**

DTM has been active in since 2004

*References to Kosovo shall be understood to be in the context of United Nations Security Council resolution 1244 (1999)

DTM and Energy Data

- ❑ Integrating energy-related data collection through the **DTM Multi-Sectoral Location Assessment (MSLA)**, using key informant interviews
- ❑ Leveraging the existing DTM network of trained **enumerators** and strong **technical teams** operating in IOM country missions



MSLA Field Companion

- A Multi-Sectoral Location Assessment “Field Companion” is a compilation of suggested standardized DTM questions to choose from and adapt according to the context. These questions are developed and agreed on by clusters and sectoral actors.

→ A dedicated Energy “Field Companion” has been developed

- ◆ to **complement** existing Field Companions from other clusters
- ◆ to suggest **standardized** energy questions and answers...
 - ... that can be translated into **harmonised** indicators across the humanitarian energy sector (e.g. GPA)

→ An **analysis framework** has been created

Example of an existing Field companion question related to energy:

DTM Field Companion - MS Location Assessment Sectoral Questions for Key Informant interviews and Observation

Unique ID	Dissemination Category	Instructions for the Form	Information Need	Type of Question
M0022	Public	select one	Source of cooking fuel	Recommended by Cluster/WG/AoR

Question Text
What is the main source of cooking fuel?

Response Options
Fire wood; Charcoal; electricity; Gas (e.g., bottled); liquid fuel (e.g., Kerosene/Diesel); Other, specify; no fuel is used; do not know/no answer

Preconditions for Data Collection	Recommended Source of information
	NFI actor/Site Management/Enumerator

Example of Visualisation

Fuel Source	Number of Sites
electricity	25
Gas (e.g., bottled)	20
liquid fuel (e.g., Kerosene/Diesel)	10
Fire wood/ Charcoal	10
Other	5
no fuel is used	2
do not know/no answer	5






Example of Descriptive Analysis

According to Key Informants, the main source of cooking fuel is gas in xx% of assessed sites, charcoal/fire wood in xx% of assessed sites, liquid fuel in xx% of assessed sites, electricity in xx% of assessed sites and other in xx% of assessed sites. In xx% of sites, no fuel is used. In xx% of sites, KI could not answer.

Example of Use that can be done by Data Users (eg, CWG, Cluster)
cross analyse with other protection related questions to identify potential risks limiting access to fuel for cooking

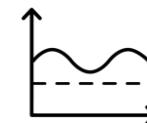
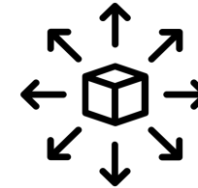
Dataset of Interest for:					
		CCCM	Child Protection		Food Security
			Protection	Shelter & NFIs	GBV

Collecting Energy Data through the DTM MSLA

	Cooking  Cooking fuel Cooking stove	Electricity  Lighting Connectivity	Space Heating / Cooling  Winterisation Thermal comfort	WASH  Water pumping Solid waste treatment Final treatment of excreta	General  Priorities in terms of energy gaps Vulnerable groups with limited access Barriers for access
Information needs	<ul style="list-style-type: none"> • Cooking fuel sources • Cooking stoves used • Means of fuel and stoves acquisition • Coping strategies for lack of fuel 	<ul style="list-style-type: none"> • Electricity sources • Technologies used • Number of hours of lighting and electricity available 	<ul style="list-style-type: none"> • Technologies used 	<ul style="list-style-type: none"> • Technology used for water supply • Lighting technologies • Technique for solid waste disposal • Energy source for final treatment of excreta • Use of biogas as treatment for excreta 	<ul style="list-style-type: none"> • Priorities in terms of energy gaps • Specific/ vulnerable groups with most limited access • Main barriers for access

What can we do with the data once we've collected it?

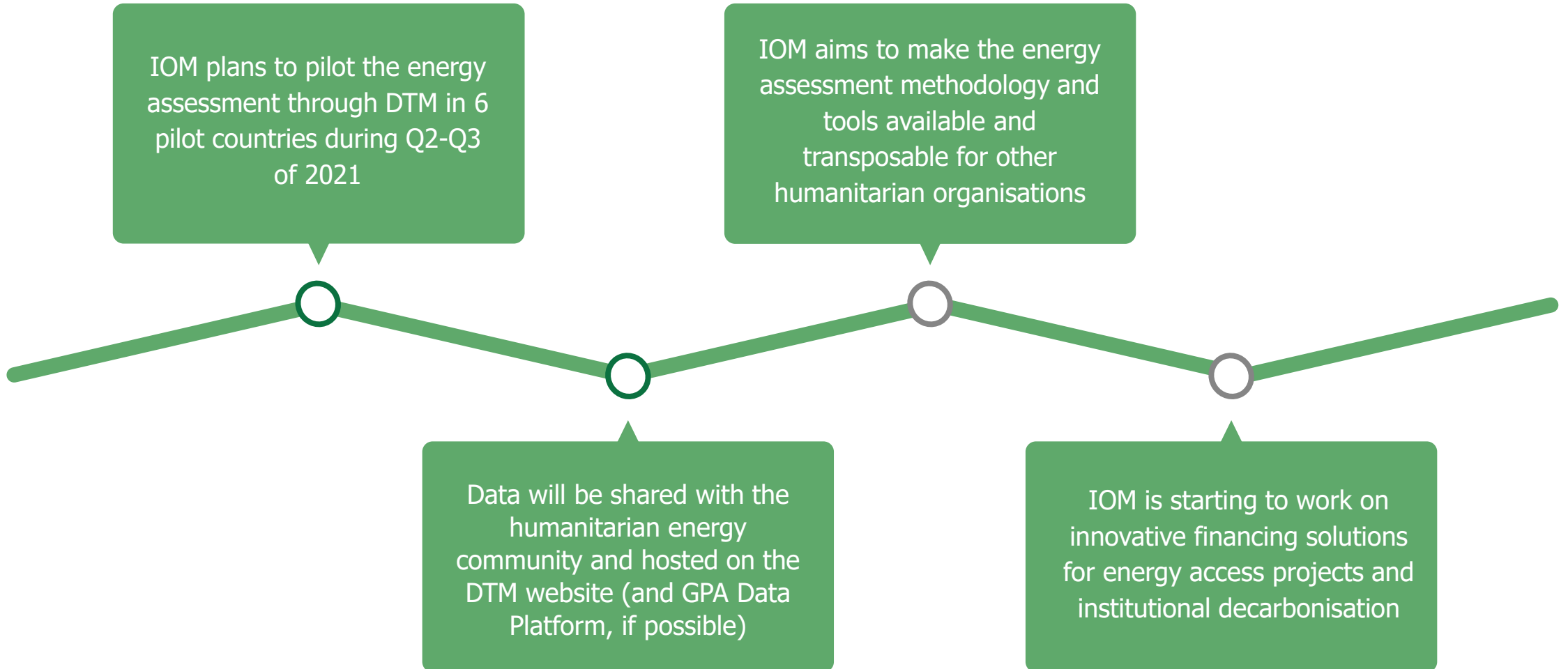
- Identify **gaps** in NFI distributions and adjust
- Flag issues concerning the **distribution** of energy products (cooking/heating fuel, cooking stoves, solar lanterns, etc.)
- Evaluate potential direct/indirect negative **impacts** on health, protection, food security and the environment
- Identify **groups** with limited or no access to basic energy services
- Understand **priorities** of affected populations in terms of energy access
- Prioritize **locations** with no decent energy access meeting minimum standards (e.g. Sphere Standards)
- Create energy **baseline** data and track progress towards SDG 7



What would you use the energy data for if they were available?

Please type your answer in the Zoom chat

Next steps



Thank you

Eva MACH, Environmental Sustainability Programme Officer, IOM Environmental Sustainability Programme emach@iom.int

Adam OSTASZEWSKI, Energy Data Officer, IOM Environmental Sustainability Programme aostaszewski@iom.int

Anaïs MATTHEY-JUNOD, Junior Energy Expert, IOM Environmental Sustainability Programme amatthey@iom.int



Modern Energy Cooking in Displacement Settings

Dr Iwona Bisaga, Research Associate, MECS/Loughborough University

Modern Energy Cooking Services (MECS) Programme

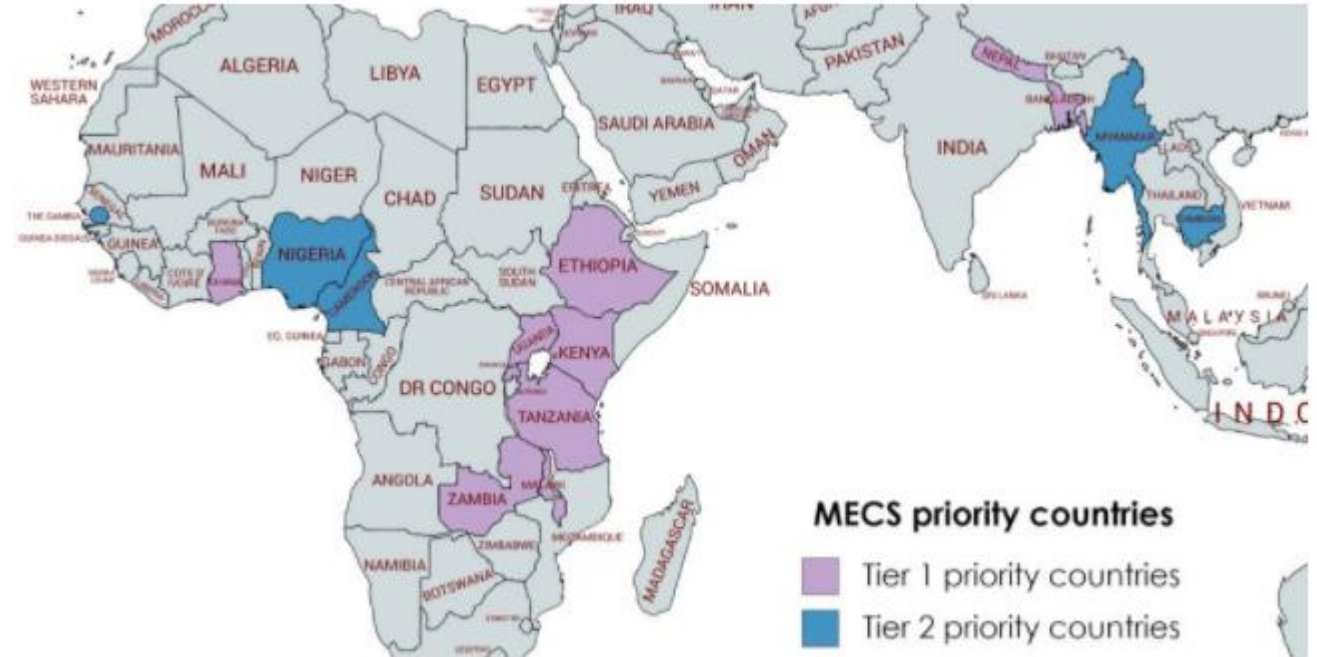
2018 - 2023

MECS's goal is to break out of business-as-usual approaches and rapidly accelerate the transition from biomass to clean cooking on a global scale. It does so through:

- Research partnerships
- Supporting innovation
- Going to scale
- Leaving no one behind

Focus on:

- understanding progress in the transition to modern energy cooking services
- taking advantage of new technological developments, relative price movements and new knowledge
- generating new knowledge on how to scale the transitions and transformations, putting these into practice in collaboration with private sector partners
- strengthening the monitoring of global progress in order to influence the policy environment



The 15 MECS priority focus countries are divided into Tier 1 and Tier 2 categories, depending on the strength of the connection and relevance to the MECS programme.

MECS Humanitarian

3 work packages:

- 1) Understanding transition pathways for MECS in displacement situations
- 2) Technology, innovation & delivery models
- 3) Capacity building & scale up



Geographical locations (camps, peri-urban and urban)

Scales (households and community)







Spatial timeframes (humanitarian emergencies vs protracted crisis)

Refugee or IDPs rural **camps**
Urban (city) displacement settings
Peri-urban, slum settlements and informal settlements

Households: cooking within individual dwellings for a family unit
Community: feeding of large numbers of people (e.g. school feeding)

Emergencies: displacement situations that are less than 5 years old
Protracted crises endure for periods greater than 5 years

Barriers and enablers of MECS

POLICY		FINANCE		COORDINATION	
					
<p>Restrictions by host communities or governments</p> <p>Lack of support from host communities or governments</p> <p>Restrictive movement policies hindering access to local markets</p> <p>Low/lack of prioritisation of MECS in humanitarian response</p>	<p>Inclusive cooking interventions (host communities and the displaced)</p> <p>Self-reliance policies for the displaced</p> <p>Integration of cooking services into food and fuel strategies</p>	<p>Limited access to finance for the displaced</p> <p>Free handouts leading to dependency</p> <p>Restricted provision of cooking services through market-based approaches</p>	<p>Provision of innovative finance</p> <p>Self-reliance policies for the displaced</p> <p>Cooking interventions enabling choice for the displaced & reducing cost of MECS</p>	<p>Lack of clear coordination and/or consistency among multiple agencies in displacement settings</p>	<p>Support for coordination of humanitarian actors, community development, etc. to encourage long-term approaches to energy services</p>

MECS in displacement settings: priority research areas

Urban and peri-urban displaced

Collect data on urban and peri-urban displaced (incl. legal status, access to land, utilities, capital etc.)

Evaluate stakeholder harmonisation for urban/peri-urban energy interventions

Evaluate current access to MECS

Design business models and financing schemes to scale up access to MECS

Community facilities and humanitarian institutions

Understand current cooking fuels and practices

Assess viability of MECS where traditional biomass still used

Collaborate with humanitarian partners on facilitating MECS transitions

Inclusive models of MECS provision for the displaced and host communities

Lessons from existing inclusive initiatives (e.g. electrification)

Research enablers and barriers to inclusive models of MECS provision (incl. policies regarding displaced populations)

What other critical areas of enquiry should be prioritized to facilitate MECS transitions?

Quality data

Harmonise energy indicators

Support and facilitate data collection and sharing to gain an understanding of the current status of energy for cooking (incl. MECS) in settings of displacement

Financing MECS in displacement settings: beyond grants

Leverage MECS finance and unlock investments on cooking appliances

Explore innovative financing mechanisms and financial inclusion opportunities

Thank you

Contact: Dr Iwona Bisaga; i.m.bisaga@lboro.ac.uk

Closing Remarks

Mr. Thomas Fohgrub

Head of the Global Platform for Action on Sustainable Energy in Displacement Settings, UNITAR

Thank You

Website: www.humanitarianenergy.com

LinkedIn expert group: <https://www.linkedin.com/groups/12310695>

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