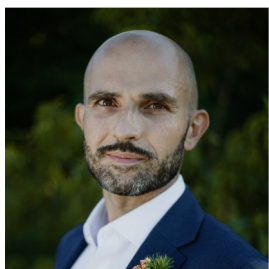# IOM Energy Needs Assessment Framework

GSC NFI Working Group: 1st Meeting of 2021: Energy and Environment Linkages

19 January 2021

Adam Ostaszewski and Anaïs Matthey-Junod
aostaszewski@iom.int / amatthey@iom.int

IOM Team for Energy Needs Assessments

Adam Ostaszewski
Energy Data Officer

Anaïs Matthey-Junod
Junior Energy Expert

Both **NORCAP** Energy Experts Deployees
- IOM Headquarters, Geneva
- Timeframe: October 2020 - April 2021

Objectives:

- to design **standardized energy needs assessments** for households, community facilities and IOM facilities

- to improve access to missing data, which would support **project implementation** and **track progress** toward energy access goals...

- … while anchoring the work in existing **IOM Displacement Tracking Matrix (DTM)** methodology and processes

- and in line with the **Global Plan of Action (GPA), UNHCR** Clean Energy Challenge (CEC) and Joint Intersectoral Analysis Framework (**JIAF**) **indicators**
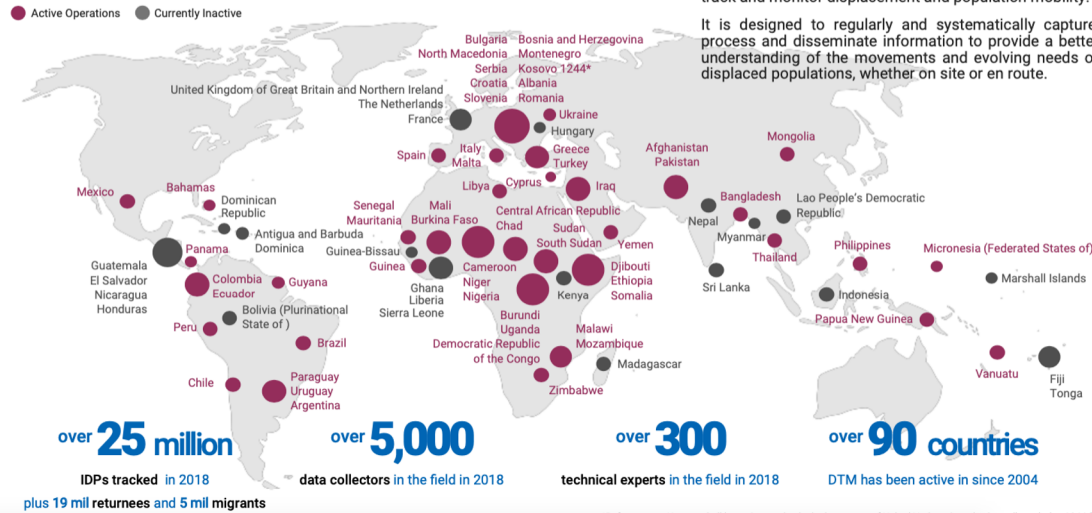
The Displacement Tracking Matrix (DTM)

DISPLACEMENT TRACKING MATRIX • DTM

Understanding Displacement for Better and Accountable Humanitarian Response

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.

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

● DTM data is **used by large number of partners**, including *Disaster Management Authorities, Ministries, Inter-Cluster, Shelter Cluster, CCCM Cluster, other Clusters, AoRs, Sectors and Working Groups as well as individual organizations*

● DTM provides data to the large **humanitarian community**, mostly through **public** dissemination

Identify Data Users

Disaster Management Authorities

Inter Cluster Coordination Group

Local Service Providers
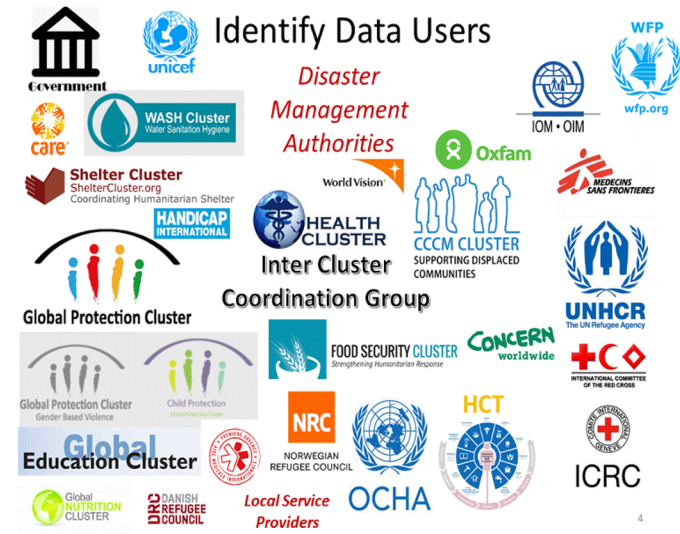
DTM Components

MOBILITY TRACKING

Tracks mobility and cross-sectoral needs in locations of interest (systematically)

Sub-components:
- Baseline Area/ Sub Area
- Multi Sectoral Location Assessment (MSLA)
- Emergency Event Tracking (Sudden large movement of population)

FLOW MONITORING

Tracks movement of flows at specific points

Sub-components:
- High mobility location assessment
- Flow Monitoring Registry

Groups and Location

DTM

REGISTRATION

Registers individuals or households for beneficiary selection, vulnerability targeting and programming

Sub-components:
- Rapid Emergency Registrations
- Biometric Registration

Households and Individuals

SURVEYs

Gather specific information using sample from population of interest

Examples:
- Return Intention
- Community Perception
- Displacement Solutions
- Flow Monitoring Surveys

5

DTM *Field Companion*

- **The Multi-Sectoral Location Assessments (MSLA)** are created by selecting questions in the sectoral Field Companions according to the information needs in the field

- Field Companions comprise **a compilation of suggested questions** compiled by clusters, AoRs, WGs, etc. to choose from and adapt according to the context

- The data collection methodologies are **KEY INFORMANT INTERVIEWS** and **OBSERVATIONS**

- Each Field Companion systematically **includes the same information**

- **DTM Teams** at the national/regional level **decide** on what are the information needs (based on the suggestions in the Field Companions) they will **include** in a MSLA

  ⇒ We aim to create an Energy Field Companion

Example of a Field companion question:

The IOM Energy Needs Assessment Framework [working draft]

The IOM Energy Needs Assessment Framework

Fuel Sources	Fossil fuels (diesel, kerosene, etc.) || Renewable sources (solar, wind, etc.)

Services	**Electricity** **Cooking** **Heating / Cooling** **Transport**

End Users	**Household** || Community Facility || Institutional (IOM) Facility || Enterprise

Objectives	The objectives of the Framework are to support and **operationalise** IOM's commitment to assess energy needs in displacement settings. Collecting energy needs data in a **harmonised** and **standardised** way enables: - to track the progress towards <u>SDG7</u> for displaced people; - for host governments to better <u>understand the energy use</u> of displaced people and to incorporate these needs into national energy access planning and targets; - for humanitarian agencies and partners to more effectively plan, resource and align their energy programmes; - inter-agency <u>comparison of datasets and analyses;</u> - to <u>inform programme and project design</u> (facilitate a better-tailored design of energy interventions); - to inform evidence-based fundraising as well as to support <u>humanitarian needs overviews, humanitarian response plans</u> and any other relevant appeals; - to ease the process of <u>data sharing</u> among organisations and institutions, leading to <u>collaboration</u> on joint project development.

Global-level Framework	<u>**Phase I:**</u> Information used to provide a snapshot of energy access, track changes over time and prioritize displacement settings with the biggest (sustainable) energy access gaps <u>**Methods:**</u> Secondary data review + Key Informants Interviews & Direct Observations by Enumerators

Project-level Framework	<u>Phase II</u>: Information used to support project and programmes development, engage private sector, and unlock financing opportunities <u>Methods</u>: Secondary data review + interviews with key informants (community and institutional facilities levels) and individuals (household interviews) & Direct Observations by Enumerators

Key Indicators	⇒ Selection of **standardized and harmonized energy indicators** <u>Sources</u>: UNHCR, GPA, MTF, UN SDG7, etc.

Global Level - suggested Data Collection Focus through DTM MSLA*

Energy services at the household level

*Through key informants interviews, based on suggested DTM Energy Field Companion

ESMAP
Energy Sector Management Assistance Program

Heating / Cooling	Cooking	Electricity
Winterisation Thermal comfort	Cooking fuel Cooking stove	Lighting Connectivity

Information needs

Heating / Cooling	Cooking	Electricity	Also identify:
● **Level** of access ● **Technologies** used ● **Available** solutions at the local market/ through distribution	● **Level** of access ● Cooking **fuel** sources ● Cooking **stoves** used ● Cooking **environment** (in/outdoor) ● Means of fuel and stoves **acquisition** ● **Available** cooking solutions at the local market/ through distribution ● **Coping strategies** for lack of fuel	● **Level** of access ● Electricity **sources** ● **Technologies** used ● Number of **hours** of lighting and electricity available ● Main **barriers** for access	- **Priorities** in terms of energy needs - **Specific/vulnerable groups** with most limited access

GLOBAL LEVEL

Fuel Source	Fossil fuels (diesel, etc)			Renewable sources (solar, wind, etc.)	

Output & Distribution

Households			
Off-grid systems	Hybrid systems	National grid	Fuel

MTF Multi-Tier Framework Attributes (World Bank)

Peak Capacity	Availability (Duration)	Reliability	Quality	Affordability	Legality	Convenience	Health	Safety

Services

Electricity	Cooking	Heating/Cooling

Examples of Key Global Level Indicators*

* not definitive indicators ⇒ currently under revision for feedback (!)

- Proportion of population with access to electricity for at least four hours per day, including two hours during the night (%)
- Proportion of households with access to at least two hours of lighting in their shelters during night time (%)
- Proportion of population with primary reliance on clean fuels for cooking (%)
- Proportion of population with primary reliance on clean stoves for cooking (%)
- Proportion of households with access to heating solutions in their shelter (%)
- Proportion of households with access to cooling solutions in their shelter (%)

ESMAP — Energy Sector Management Assistance Program

Coordination and consultation with other stakeholders
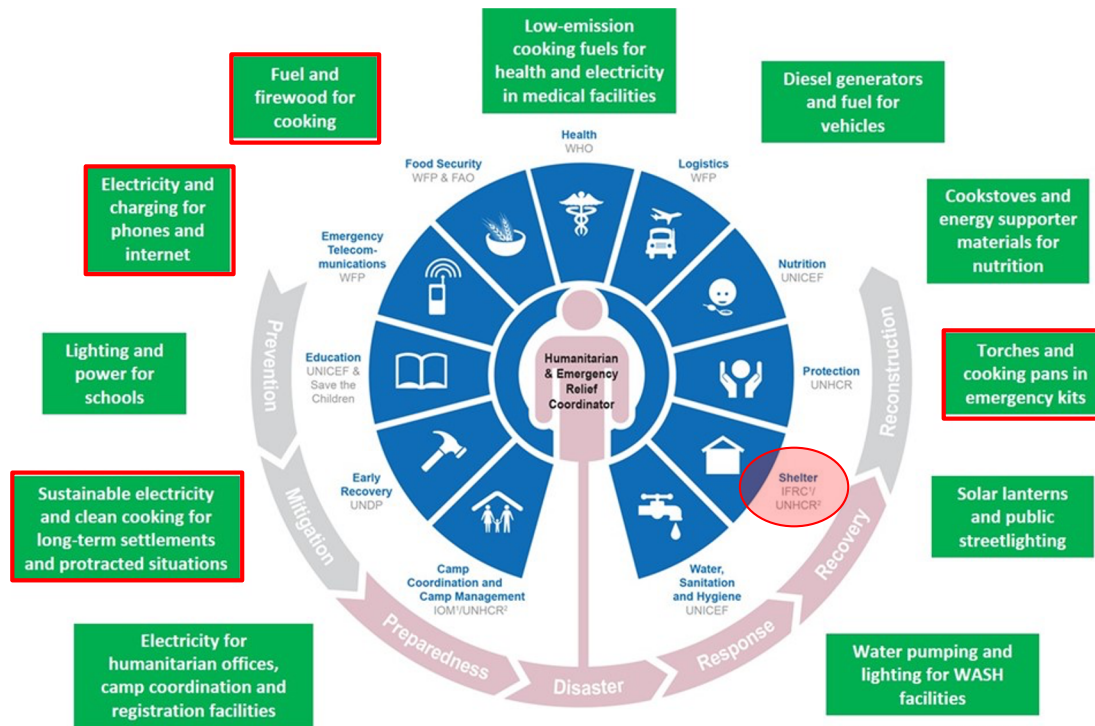
Interactive Q&A and feedback gathering from NFI WG members

Keeping in mind DTM's Multi-Sectoral Location Assessment (MSLA) methodology
(i.e. key informant interviews) and that data are meant to serve the humanitarian sector:

- Which energy-related **information needs** are most relevant/important to Shelter & NFI practitioners?

- Which associated energy **indicators** would be aligned/useful for the Shelter & NFI Cluster?

- Where do you see the biggest **energy data gaps in the field**, and thus an opportunity to use DTM MSLA to fill these gaps?

- Which type of energy-related data are most impactful **for decision making** by the shelter & NFI Cluster?

- What would be the best way to use MSLAs to **prioritise energy needs** and **most vulnerable populations**?

We would greatly benefit from your feedback and inputs, so thank you in advance!
Link to Google Document:
https://docs.google.com/spreadsheets/d/1nueebAcD0bLT4C5jKgNObP0YPh5FKk5neQdAEgQ7el8/edit?usp=sharing
(also sent in the chat, please put your name and organisation when commenting)

Thank you for your attention

Contact details:

Adam Ostaszewski and Anaïs Matthey-Junod
aostaszewski@iom.int / amatthey@iom.int