
Harmonising Data Practices on Sustainable Energy in Humanitarian Contexts

Taking stock, coordinating, and aligning partners around a common data framework

Workstream 1, Discussing Energy Indicators for Humanitarian Settings: Summary Report, July 2020

Background

Currently, there is not a comprehensive overview of how many displaced people have access to energy within the humanitarian contexts. Despite global efforts to measure and track progress on SDG 7, crisis affected populations fall in a grey zone as many refugee and displacement contexts are under the remit of UN and NGO partners rather than national governments. In the humanitarian sector, there are no standard procedures, and limited guidance on collecting data and information to measure energy access rates or understand the energy needs of displaced communities. Understanding what indicators and data is needed, and streamlining data collection, analysis, reporting and sharing processes, will play an important role in improving access to affordable and reliable clean energy at scale for displaced populations and their local hosting communities. Among others, harmonisation and standardisation of indicators and data collected on energy access can:

- Enable inter-agency comparison of datasets and analyses.
- Provide a more effective and comprehensive standard for needs and feasibility assessment tools.
- Inform programme and project design: a comprehensive set of indicators will facilitate a better-tailored design of various energy interventions.
- Inform evidence-based fundraising as well as support Humanitarian Needs Overviews, Humanitarian Response Plans and any other relevant appeals.
- Ease the process of data sharing among organisations and institutions working on energy access (or related) issues and promote data exchanges, leading to collaboration on joint project development where this makes sense.
- Facilitate accountability for energy provision across the humanitarian sector and support the delivery of sustainable energy access for displaced communities.

A global energy baseline is needed to help prioritise and systematically make decisions supporting improved energy work in displacement settings and monitor progress towards both Sustainable Development Goal (SDG) 7 on access to affordable, reliable, sustainable and modern energy for all and ESMAP's Multi-Tier Framework (MTF) for assessing energy. The work is explicitly aligned with UNHCR's Clean Energy Challenge and Sustainable Energy Strategy, WFP's Safe Access to Firewood and alternative Energy (SAFE) initiative, FAO's Energy-Smart Food (ESF) Programme, the GIZ ENDEV and Energy Supply in Displacement Settings (ESDS) programmes, IOM's Displacement Tracking Matrix (DTM) and the Joint Intersectoral Needs Analysis for Efficient and Effective Joint Response Planning (JIAP). In addition to the global data needs, the proposed indicators target information required for new energy access projects and programmes.

2020 Developments

To support the build-up of energy data within the humanitarian sector, the Global Plan of Action Coordination Unit (GPA) and Chatham House have been working with humanitarian sector partners to outline the types of energy indicators that can lay the ground for a harmonised data collection and analysis in forced displacement settings.

Initial discussions on this topic were held during the Working Group V call during March 2020 to prioritise data and evidence areas for the sector. Between March and May, the team (led by Chatham House, GPA/UNITAR, UNHCR) [mapped](#) the core indicators for global data and project-level data¹, as well as a long list of indicators covering a wide range of evidence and information needed by the humanitarian sector to develop energy projects and interventions. In the course of May, a series of one-to-one consultations with GPA partners, Working Group V members and other relevant stakeholders took place to gather initial feedback on the proposed indicators, shaping the outputs which were then presented and discussed during workshops 1a (Indicators for Measuring Energy Access on Global Level) and 1b (Key Indicators and Data for Energy Programme Design).

The workshops' primary objective was to align key humanitarian, development and energy partners around a common framework for energy data collection, analysis and reporting in humanitarian contexts in order to measure global progress on SDG 7 in humanitarian contexts and develop a coordinated pipeline of energy programmes. The workshops will be followed by an open consultation process from July-September to ensure stakeholder alignment around the common indicators, which will then be presented in workshop 2 (to be held in October 2020) where discussions around co-creating a coordinated approach to data collection and reporting will take place. To participate in the on-going consultation and share your feedback, please see and comment on [this document](#) or get in touch on Iwona Bisaga (i.bisaga@ucl.ac.uk) and Jonathan Archimi (jonathan.archimi@unitar.org).

2020 Online Workshops

In July 2020, the workshop series was initiated to discuss the indicators mapping research, define the core short list of indicators which were identified as the most important to start collecting across organisations, and evaluate the possibility for alignment around these core indicators. The aim of the wider workshop series is to align key humanitarian, development and energy partners around a common framework for energy data collection, analysis and reporting in order to measure global progress on SDG 7 in humanitarian contexts and develop a coordinated pipeline of energy programmes (implemented across agencies and sectors) meeting the targets of the Clean Energy Challenge [and UN agency commitments on sustainable energy](#). The workshop series timeline is as follows:

Online Data Workstream Kick Off:

- Through the CEC Action group, 10 June 16:00 - 17:00 CET.

Session 1a: Data for reporting on global SDG7 progress (6 July, 15:30 - 18:00 CET).

- Present and discuss key energy indicators and data needed for measuring energy access levels in displacement contexts.
- Generate awareness of data and information current being collected in the humanitarian and energy sectors.
- Hold dialogue on proposed indicators for inter-agency adoption.
- Come to consensus on most important indicators needed for discussion & integration of agencies.

Session 1b: Data for energy programme development (8 July, 15:30 – 18:00 CET).

- Present and discuss minimum energy indicators and data needed for developing energy programs.
- Review and learn from past experiences on data collection for energy programming in displacement situations.
- Hold dialogue on proposed indicators for inter-agency adoption
- Come to consensus on most important indicators needed for discussion & integration of agencies.

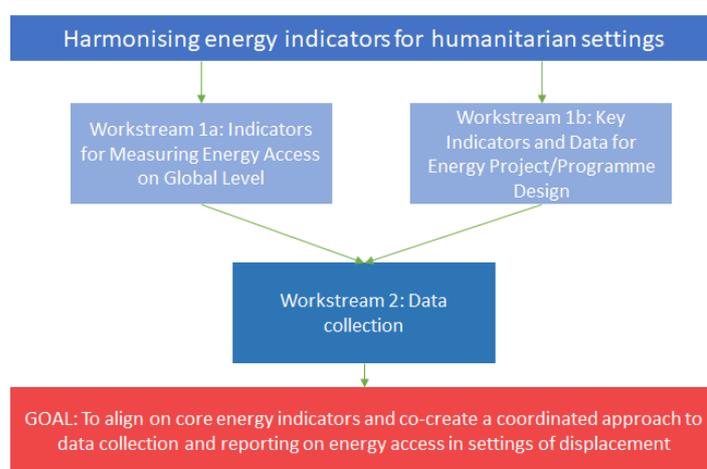
¹ For the full list of core indicators discussed during the workshops, please see Appendix 1.

Online consultations and alignment around minimum indicators list:

- Online document, from 8 July – September.

Session 2: Consensus on minimum indicators and pathway to harmonisation (October 2020, date and time TBC)

- Reporting out and consensus building around the final list of minimum energy indicators, aligned with existing global tracking processes.
- Discussion and consensus building on progress indicators for the Clean Energy Challenge.
- Evaluate the willingness to collaborate on the proposed data collection, analysis and reporting framework developed in sessions 1a and 1b.



Workstream 1: Review and Alignment around Common Indicators

Workstream 1 was separated into two workshops (Workshop 1a and Workshop 1b), the aims and contents of which are noted in the following sections.

Workshop 1a – Global Level Indicators for Measuring Energy Access in Humanitarian Contexts

During the workshop, presentations were given on the energy data currently collected by UNHCR and IOM, and existing standard data collection processes for measuring progress on SDG7. Then, the pre-workshop research on [mapping existing indicators](#) for measurement of energy access levels was presented as the basis for the breakout discussions.

Subsequently breakout discussions were held to identify whether the outlined global data core indicators were the correct ones, whether they were phrased and formulated correctly, and to identify any concerns or other feedback among the participants. The longer, comprehensive list of indicators was also examined to determine whether there were any indicators which should be promoted as core or, alternatively, 'nice to have' optional data. Here, the workshop participants were asked to vote on the proposed long list indicators to highlight their priority or importance. The last section during the breakout discussions covered data collection. While this was not the key focus of the workshop, the idea was to understand which organisations already collected data on the outlined core indicators. For those who do, the workshop participants discussed how data was collected and how frequently, whereas for those who did not collect data, the question was whether they were planning to or would be interested to collect it.

Some of the key feedback from the breakout discussions to the plenary was as follows:

1. Developing a global data baseline on energy access in humanitarian settings was identified as an important aim for the sector;
2. The energy access tiers indicators should be included among the core indicators for global data or otherwise the proposed core indicators should incorporate a tiered approach so as to ensure the capture of tiers of energy access in settings of displacement;
3. The SDG7 indicators used in the mapping tend to be seen as not specific enough or difficult to measure (given their phrasing and scope);
4. There is a need to not only align the implementing stakeholders on the core indicators but also the donors as they often have reporting requirements which dictate what indicators are used and what type of data is collected;
5. There was an overall consensus on the split between global and project level data as a useful distinction.

Downloads: [Workshop 1a Presentation](#) and [Recordings of Online Workshop and Mural Boards](#).

Workshop 1b – Project Level Indicators and Data for Energy Programme Design

The aims of Workshop 1b were to:

- Present and discuss minimum energy indicators and data needed for developing energy projects and programmes.
- Review and learn from past experiences on data collection for energy programming in displacement situations.
- Hold dialogue on proposed indicators for inter-agency adoption, focusing on project-level data.
- Come to a consensus on the core indicators needed for a discussion and integration among agencies.
- Consider concrete next steps and pave the way forward.

Similarly, as in workshop 1a, breakout discussions were held to identify the relevance of the proposed indicators, their suitability for project needs and to allow the participants to express any concerns, questions or other feedback. The format of the breakout discussions followed the one in workshop 1a. With the use of Mural boards, participants were asked to answer questions around the core list of proposed indicators, to comment on the longer, comprehensive list in order to choose any additional indicators of high priority, and to declare whether or not they or their organisations already collect data on the core indicators. The focus was on project level indicators.

Some of the key feedback from the breakout discussions to the plenary was as follows:

1. Energy access projects and programmes are very diverse and to decide what core indicators should be included and to harmonise them across various stakeholders is challenging as it depends on the context, the scope of the project and what it is trying to achieve;
2. There is a need to integrate projects and project-level indicators for displaced populations with the host communities;
3. There is worth in deciding 2-3 core indicators for each energy access domain (households, enterprises, community facilities and humanitarian operations) and then offer the longer list from which organisations can choose the ones most suitable for them;
4. There was some level of agreement that community facilities and humanitarian operations should be merged as in most cases it is the humanitarian organisations that are responsible for energy access in community facilities in refugee and IDP camps, and other displacement settings;
5. The incentives for why organisations should harmonise the indicators should be made very clear to encourage buy in;

6. Similarly as in workshop 1a, there were proponents of harmonisation of the proposed indicators with those used by the donors.

Downloads: [Workshop 1b Presentation](#), [Recorded Presentation on Initial Energy Assessment in Cox's Bazar](#) and [Recordings of Online Workshop and Mural Boards](#).

Recommendations

The recommendations in this section were developed as a follow up to the workshops outlined in this summary report. The GPA Coordination Unit and Chatham House will continue facilitating the process with all partners involved, taking forward the most feasible recommendations in consultation with the network. The intention with these recommendations is to develop a roadmap on way forward in the data alignment process, through stakeholder consultations and a second online workshop (to be held in October 2020). The recommendations on next steps are as follows:

1. For **measuring and reporting global levels of energy access** in forced displacement settings, work with main humanitarian and energy data custodians on the following activities:
 - a. Coordinate learning and exchanges across the humanitarian sector on energy data, evidence, monitoring and evaluation techniques, and learning needs.
 - b. List and discuss with the main data custodians who do global energy access level modelling and reporting as well as main custodians of humanitarian data collection to understand their data collection processes (ground and global level). (*Key stakeholders: ESMAP, WHO, main INGOs & UN humanitarian agencies*)
 - c. Develop concrete steps with humanitarian agencies to adopt existing standard energy data indicators (i.e. SDG7 and MTF) in their reporting in order to systematically measure energy access levels in forced displacement settings. This could include adaptation of data collection tools for measuring energy access (i.e. MTF survey) for forced displacement contexts.
 - d. Support humanitarian agencies and partners in integrating energy questions into existing multi-sector surveys which are carried out by humanitarian organisations and their partners, in order to mainstream energy indicators into local and global reporting.
 - e. Work with energy, development, humanitarian and private sector partners to define clear ownership, coordinate and streamline reporting and analysis on energy access data, and integrating data collected from both humanitarian and energy actors into the global work of ESMAP and existing SDG7 tracking process.
 - f. Develop a humanitarian energy data state of play report, providing a summary of the main data custodians and current institutional reports, and how global data links with project data and energy assessments.

2. For the collection, reporting and analysis of **energy data for project development**, work with relevant stakeholders on the following activities:
 - a. List and discuss with the main organisations willing to participate in data collection and analysis for energy project development in forced displacement settings. (*Key stakeholders: INGO implementing partners, private sector implementing partners and industry associations*)
 - b. Work with partners to conduct a mapping of existing surveys that should be undertaken in order to evaluate what is already ready for use and what needs to be adapted or developed. Potentially categorise existing surveys by objectives of data collection (example: electrification of a health post).

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- c. Support organisations in defining energy data collection tools, including developing a proposed standardised survey format for the aggregated data accessibility by the contributing organisation.
Working with partners to:
 - d. Map existing platforms for storing energy reports, case studies, and best practice guidance for energy projects in forced displacement settings.
 - e. Collate list of 'best practice' surveys with an associate menu of options for suggested indicators that to include in data collection.
 - f. Create or adapt existing technical tools to support streamlined data collection and reporting by humanitarian organisations (both agencies and implementing partners), aiming to easily collect and aggregate high-quality, comparative data.
 - g. Explore collaboration on funding proposals by organisations or groups (such as a coalition of INGOs) to carry out energy assessments in selected locations.

APPENDIX 1 - CORE INDICATORS FOR GLOBAL AND PROJECT DATA

Key Indicator (s) for Global Data Needs	Key Indicator (s) for Project Data Needs
HOUSEHOLD ELECTRICITY	
Proportion of PoC population with access to electricity (on or off-grid) (Access %)	Type of electricity in households with access (grid, mini-grid, SHS, solar lantern, standalone diesel, shared diesel, other) (Technology %)
Renewable energy share in total final PoC energy consumption	Average household monthly spend on electricity (Spend\$)
	Proportion of average household monthly spend on electricity (% of total spend)
HOUSEHOLD COOKING	
Proportion of PoC population with primary reliance on clean fuels and technology for cooking	Type of primary cooking fuel (%) (firewood, animal dung, charcoal, LPG, biogas, other)
Average fuel acquisition and preparation time (hrs/week)	Average total monthly spend on cooking fuels (\$) AND Cooking fuel expenditure share of household income if not freely collected (measured as a %)
Proportion of renewable cooking fuels in the total household cooking fuel mix (renewable cooking %)	Average total spend on cooking stoves (\$) (either as a one-off payment or per month, <i>where applicable</i>)
HOUSEHOLD HEATING AND COOLING	
% of households with access to heating and/or cooling solutions (i.e. thermal comfort solutions)	Average monthly spend on heating and cooling solutions (Spend \$)
% of households with access to energy efficient heating and/or cooling solutions	Primary thermal comfort solution - cooling (fan, AC, other) and heating (electric heater, gas heater, fire stove, other)

Number of solar water heaters per capita (#/1000 inhabitants)

LIGHTING AND ELECTRICITY FOR MICRO-ENTREPRENEURS AND PRODUCTIVE USES

% of businesses and enterprises with access to electricity (on or off-grid)

Average businesses/enterprises monthly spend on electricity (\$)

% of businesses and enterprises with access to electricity through renewable sources

Primary source of electricity in businesses/enterprises (grid, mini-grid, SHS, solar lantern, battery torch, candle, kerosene lantern, firewood, standalone diesel, shared diesel, other)

Electricity-dependent appliances used in businesses/enterprises (multiple selection)

Average monthly electricity use per business (kWh/business)

Average businesses/enterprises monthly spend on cooking fuels (\$) *[where applicable]*

Type of primary cooking fuel (%) (firewood, animal dung, charcoal, LPG, biogas, other) in businesses/enterprises *[where applicable]*

INFORMATION AND COMMUNICATION TECHNOLOGY FOR ENTERPRISE USES

% of population with access to information technology (radio, TV, internet)

% of population with access to mobile phone

Number of businesses or enterprises supplying energy or ICT services *[list all relevant]*

Average weekly spend on mobile phone charging per person in population with access (\$)

MOTIVE POWER FOR PRODUCTIVE USES

% of businesses/enterprises (food processing, distribution, etc.) with access to motive power

Primary source of motive power in businesses/enterprises (grid electricity, diesel, solar, manual, other)

% of businesses/enterprises (food processing, distribution, etc.) with access to motive power through renewable sources

Main applications of motive power used in businesses/enterprises (e.g. milling machine, oven, welding machine, etc.)

Average monthly spend on motive power in businesses/enterprises (\$)

REFRIGERATION FOR ENTERPRISE USES

% of total businesses/enterprises with access to power supply for refrigeration

% of total businesses/enterprises requiring refrigeration

% of total businesses/enterprises with access to energy efficient refrigeration solutions

Primary source of power to support refrigeration in businesses/enterprises (grid electricity, diesel, solar, other)

Average monthly spend on refrigeration in PoC businesses/enterprises (\$)

HEATING FOR ENTERPRISE USES (SPACE, PRODUCT, WATER, PROCESS)

% of businesses and enterprises with access to a fuel supply for heating

% of total businesses/enterprises (refugee camp, IDP camp/area, other) requiring heating

Primary source of power to support heating in businesses/enterprises (grid electricity, diesel, solar, other)

Average monthly spend on heating in businesses/enterprises (\$)

WATER PUMPING FOR ENTERPRISE USES

% of businesses/enterprises with access to a power supply for pumping

% of total businesses/enterprises requiring pumping

Number of formal (with permit) and informal (without permit) water pumping points serving PoC businesses/enterprises

Primary source of power to support pumping in businesses/enterprises (grid electricity, diesel, solar, other)

Number of water pumping points/stations serving PoC businesses/enterprise (number)

Average monthly spend on pumping in businesses/enterprises (\$)

COMMUNITY FACILITIES

% of community facilities with access to electricity (Access %)

Primary (most commonly used) source of electricity in community facilities (grid, mini-grid, SHS, solar lantern, standalone diesel, shared diesel, other) (Technology %)

% of community facilities with access to electricity through renewable sources (Access %)

Average monthly spend on electricity in community facilities (Spend \$)

% of community facilities with access to clean cooking solutions

Price per unit of electricity (kWh) in community facilities *[where applicable]* (Price \$/kWh)

Electricity-dependent appliances used in community facilities (multiple selection)

Annualised load profile of community facilities (Consumption kWh)

PUBLIC SPACE LIGHTING (INCL STREET LIGHTING)

% of area with street or public lights (Coverage %)

Street/public lighting technology used (Technology %)

Average monthly spend on street/public lighting (Spend \$)

Annualised load profiles of public lighting (incl. street lighting)
(Consumption kWh)

HUMANITARIAN OPERATIONS AND FACILITIES

INSTITUTIONAL AND OPERATIONAL ELECTRICITY

Annualised electricity use related CO2 emissions (absolute) AND Annualised electricity use related CO2 emissions (per capita)

Primary source of electricity in HO facilities (grid, mini-grid, solar (AC), solar (DC), diesel/petrol, other) (Technology %)

% of humanitarian operational facilities with access to electricity through renewable sources

Average monthly spend on electricity (total) in HO facilities (excluding community facilities, such as boreholes) (Spend \$)

Energy efficiency policies for Humanitarian Operations in the location (Yes/No/Partial and details)

Cost per kWh of electricity used (Cost \$)

% of CCRM facilities, logistics and operations with reliable energy access

Annualised load profiles for HO country operations (site-specific) (Consumption kWh)

100% of unavoidable carbon emissions offset via certified carbon credits (Yes/No)

Average amount of fuel used for ground transport per month (Litres/month)

INSTITUTIONAL AND OPERATIONAL COOKING

% of HO facilities with access to clean cooking fuels

Primary cooking fuel in HO facilities (firewood, animal dung, charcoal, kerosene, LPG, electricity, biogas, other) (Cooking fuel %)

Average monthly spend on cooking fuels in HO facilities (Spend \$)

HEATING AND COOLING FOR HUMANITARIAN OPERATIONS

% of HO facilities with access to heating and/or cooling

Average monthly amount of electricity used for heating and/or cooling in HO (in kWh) (Consumption kWh)

% of HO facilities with access to energy efficient heating and/or cooling

Average monthly spend on heating and/or cooling in HO *(if separate from other energy expenditure, i.e. electricity and cooking fuels)* (Spend \$)

WATER PUMPING FOR HUMANITARIAN OPERATIONS

% of water pumping solutions (incl. boreholes) using renewable energy sources for functionality

Average monthly spend on water boreholes operational fuel *[where applicable, i.e. where diesel, PV, grid other non-manual as source of power]* (Spend \$)

Existing water programmes in the location (number and qualitative detail)

TRANSPORT FOR HUMANITARIAN OPERATIONS

Transport-related CO2 emissions (Volume)

Average monthly spend on transport fuel (Spend \$)

Fuel efficiency of ground transportation (l/100km)