ACTION AGAINST HUNGER

INFORMATION SHEET

RESEARCH, DEVELOPMENT & INNOVATION

GREENING HUMANITARIAN RESPONSE IN EMERGENCY CONTEXTS

A WEB APP THAT FACILITATES THE INCORPORATION OF RENEWABLE ENERGIES DURING HUMANITARIAN INTERVENTIONS

THE PROBLEM: THE WIDESPREAD USE OF FOSSIL FUELS IN HUMANITARIAN RESPONSES

Energy is a basic need that must be met in all phases of humanitarian response. For a long time, energy solutions in crisis contexts have been mostly based on fossil fuels, which are very harmful to the environment. This was mainly due to the ease of access to fossil fuels globally and the urgency of the situations we face.

Although energy is present in every phase of response, it is a sector of humanitarian aid that has often been relegated to the background. However, the impact it has on the environment and communities is of paramount importance.

WHY CHANGE THIS?

In 2022, 94% of displaced people living in camps had no significant access to electricity and 81% had access to no more than the most basic cooking fuels.

Promoting the use of renewable energies in the humanitarian sector can have a great impact. It reduces damage to the environment and limits the overexploitation of natural resources, while empowering beneficiary communities by providing them with sustainable livelihoods.

Therefore, this project seeks to give the transition to renewable energies in the humanitarian sector the importance it deserves.

THE SOLUTION: REACT, THE TOOL FOR A SUSTAINABLE HUMANITARIAN RESPONSE

REact is a free to use assessment tool that allows estimating energy needs in humanitarian contexts and guides the decision making process to meet those needs through solar energy.

The project has been developed by combining the experience of Acción contra el Hambre and Fundación acciona.org, and is co-financed by the European Union.

To ensure that this tool responds to the real needs of humanitarian actors in the field, the design phase of the tool included the participation of 170 people from 40 humanitarian organizations who contributed their experience, knowledge and vision.

HOW DOES IT WORK?

REact has two different modules that can be accessed together or separately: one that assesses the different energy needs by humanitarian sector and a second that provides solar-based alternatives to meet that demand and compares the costs, time and environmental impact of fossil fuel-based and renewable energy-based solutions, making the process much easier and more accessible.

Specifically, the **Energy Needs Assessment module** consists of questionnaires that are easy to fill in even for non-energy experts. It presents results in units of energy (kW/h), in each of the traditional sectors of humanitarian response according to the needs included (type of device and its consumption). It also includes consumption graphs by sector and the estimated carbon footprint associated with the data included.

The second module, the **Solutions Design one, presents technological solutions according to the pre-estimated energy demand, such as photo-voltaic systems (solar or hybrid) and stand-alone solutions. The results provided include the LCOE (cost of converting a pre-estimated energy source into electricity) of each solution compared to fossil fuel-based solutions and the national grid. It compares also the carbon footprint, different renewable energy options, operation and maintenance recommendations for each of these options, and some advice that may be necessary.**

HUMANITARIAN SECTORS EVALUATED IN THE FIRST MODULE

- REFUGE
- EDUCATION
- WASH (WATER, SANITATION AND HYGIENE)
- LOGISTICS AND TELECOMMUNICATIONS
- FOOD SAFETY AND NUTRITION
- HEALTH
- PROTECTION
- LIVELIHOODS

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NEXT STEPS AND SPACES FOR COLLABORATION

- Share the tool with other entities to receive their feedback and improve its usability.
- Ensure the hosting and ongoing support of the app in order to maintain its open and free nature.
- Disseminate the results of the project and disseminate the application to the largest number of external stakeholders, potential users of REact.
- The project includes the realization of a pilot project (measurement of energy needs, advice for the implementation of renewable energies and their installation) in an emergency context, as well as tests in as many contexts as possible.

We have already explored 3 contexts and with current funding we could implement a full cycle test in one of them. To implement further actions we require new sources of funding.

We need to join efforts and capacities, building alliances that are committed to a different way of dealing with malnutrition, and with whom we can work together.

The project team reviews the energy facilities of a Displaced Persons Camp near the Municipality of Datu Salibo, Maguindanao Province (Philippines).