



## Humanitarian Response – the future is solar.

Solar water pumping improves reliability and reduces the cost of providing water to people affected by humanitarian crises. However despite obvious benefits, adoption of solar remains low as there is relatively little quantitative documented information on the benefits and awareness of the technological leaps that have occurred in recent years still remains low with both practitioners and policy makers.

## What is the Solar & Water Initiative?

The European Commission Humanitarian Aid Office (ECHO) is funding IOM, Oxfam and NRC to lead a project which aims to increase the number of water pumping systems running off renewable solar energy. The above named strongly believe that there is enormous scope for solar to provide a more affordable, reliable and sustainable solution to water service provision than the current proliferation of generators which are costly and complicated to operate and maintain. The project will initially focus in Horn and East Africa Region but aims to serve the whole WASH sector globally.

## Why solar.

Since 2012, solar pumping systems have been successfully installed in refugee and IDP camps in Kenya, South Sudan and Tanzania. The largest of these is able to pump over 60,000 litres per hour, against a total head of 150 metres and providing for the needs of 37,000 refugees. Solar now matches the performance of other off grid solutions (generators) but incurs minimal operating costs and requires little or no maintenance.

## Solar Facts.

The cost of solar photovoltaic panels has reduced by a factor of 100 since 1977. The cost per Watt of solar electricity is typically now well below \$1.

The perception that the upfront capital costs of a solar pumping system are more expensive than other off grid systems such as diesel generators is no longer true.

With no moving parts there is much less that can go wrong with solar panels, consequently they are cheaper to operate, simpler to maintain and therefore offer a more affordable and sustainable solution that can be maintained by communities and local suppliers.





## Project Activities

The overall aim of **the solar & water initiative** is to increase the number of solar pumping systems being used globally within humanitarian operations. This will be achieved by:

- Conducting workshops for decision makers in Government and non government organisations to highlight the benefits of solar. and provide technical training to increase understanding of solar.
- Undertake a minimum of 60 technical assessments in identified high priority sites to develop a economic business case for switching to solar..
- Setting up a technical working group and solar helpline to support partners interested in solar.
- Documenting best practice and developing an evidence base to lobby Governments and Donors to invest more resources in renewable solar energy

## How can I benefit?

This project aims to support the whole WASH sector and has been endorsed by the WASH Cluster. If your organisation is involved in humanitarian response and would like to learn more about the benefits of solar or are planning to install a solar pumping system then please contact Solar.

## Contacts

For more information about this project contact:

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