

Global Solar-and-Water Initiative.

Reducing Medium and Long Term Recurrent Costs: mainstreaming the use of Solar Energy to ensure water supply in local communities, refugee and IDP Camps.

Background.

Refugees (20 millions) and IDPs (40 millions) figures have reached record levels for the last 5 decades across the world. In many of the places where this population lives, water pumping is powered with generators, leading to high fuel consumption and high recurrent costs.

Low funding, especially for protracted situations, and the need for continued provision of basic services requires more cost effective, reliable and sustainable approach. The best approach is the use of solar energy to power water pumping, where technically feasible and financially sensible. Some factors are making that adoption of this solar solution is not adopted at scale:

- Severe shortage of energy expertise among relief workers.
- Inability to properly show benefits to donors and management.
- Lack of tools, standards, capitalisation and information to gauge solar options.

Solar-&-Water Initiative.

In order to address the above mentioned constraints, a Solar-and-Water team (2 people as resource for the WASH sector, with 100% dedication for 2 years) has been set up in Kenya, with the endorsement of the Regional WaSH group, the support of the Global WaSH Cluster and partial funding from ECHO.

The Initiative intends to have global reach by -among others- visiting several Regions across the world and networking and attending events at Global level, with the following objectives:

- Increase technical and financial understanding among all stakeholders dealing with existing or new solar-water supply projects.
- Improve cost-effectiveness, efficiency, reliability and sustainability of existing and new water pumping schemes.
- Advocate for other agencies and donors to incorporate in their strategies sustainable solar solutions.

Aim and activities.

The aim of the initiative is to mainstream wise and efficient use of solar technology in water projects for both, humanitarian and development actors. This is expected to be achieved when the following activities and services are carried out/ developed:

- 1) Common agreed methodology to consistently assess and monitor technical and financial aspects of Solar pumping schemes.
- 2) Carry out techno-economic assessments of selected, high priority 60 sites (camps, villages) prone to solarization.
- 3) Running of technical workshops (at HQs, Regions and country level). Setting up self-sustained training programmes at key selected Universities.
- 4) Engagement with private sector actors; exploring of PPP's and business models.
- 5) Steering of Solar Technical Working group; opening technical helpline at solarquery@iom.int
- 6) Linking with other Regions, global WaSH Cluster and global related platforms, Energy Practitioners Groups and other Solar initiatives to maximize global impact and sustainability.
- 7) Creation of solar tools to better gauge opportunities; Monitoring and capitalization of solar projects; research on other uses of energy and complementary applications of cutting-edge related technologies.
- 8) Engage with decision makers to advocate for solar solutions; Setting of standards for Solar&Water projects.

Expected Results.

- Technical and economic assessment methodology embedded at WASH cluster level.
- Solar guidelines and best practices created/ collected and widely shared.
- Referent Solar training courses running at key Universities beyond the duration of this Initiative.
- Solar energy embedded in strategy documents, country plans and advocacy documents of key WASH stakeholders.
- Main WaSH stakeholders have referent technical people with Solar/ Energy background.
- Key private solar companies make resources available to support project design and implementation for WASH partners.
- Raise support (fund or in-kind) to solarize water points of 10 most critical sites assessed during the course of the initiative.
- Research and Academia involved to explore secondary uses of energy.