



**USING SOLAR ENERGY IN
INTERNATIONAL AID : EXPERIENCE AND
RECOMMANDATIONS**

ELECTRICIENS SANS FRONTIÈRES

French NGO active in international solidarity, founded in 1986

more than **1200** volunteers

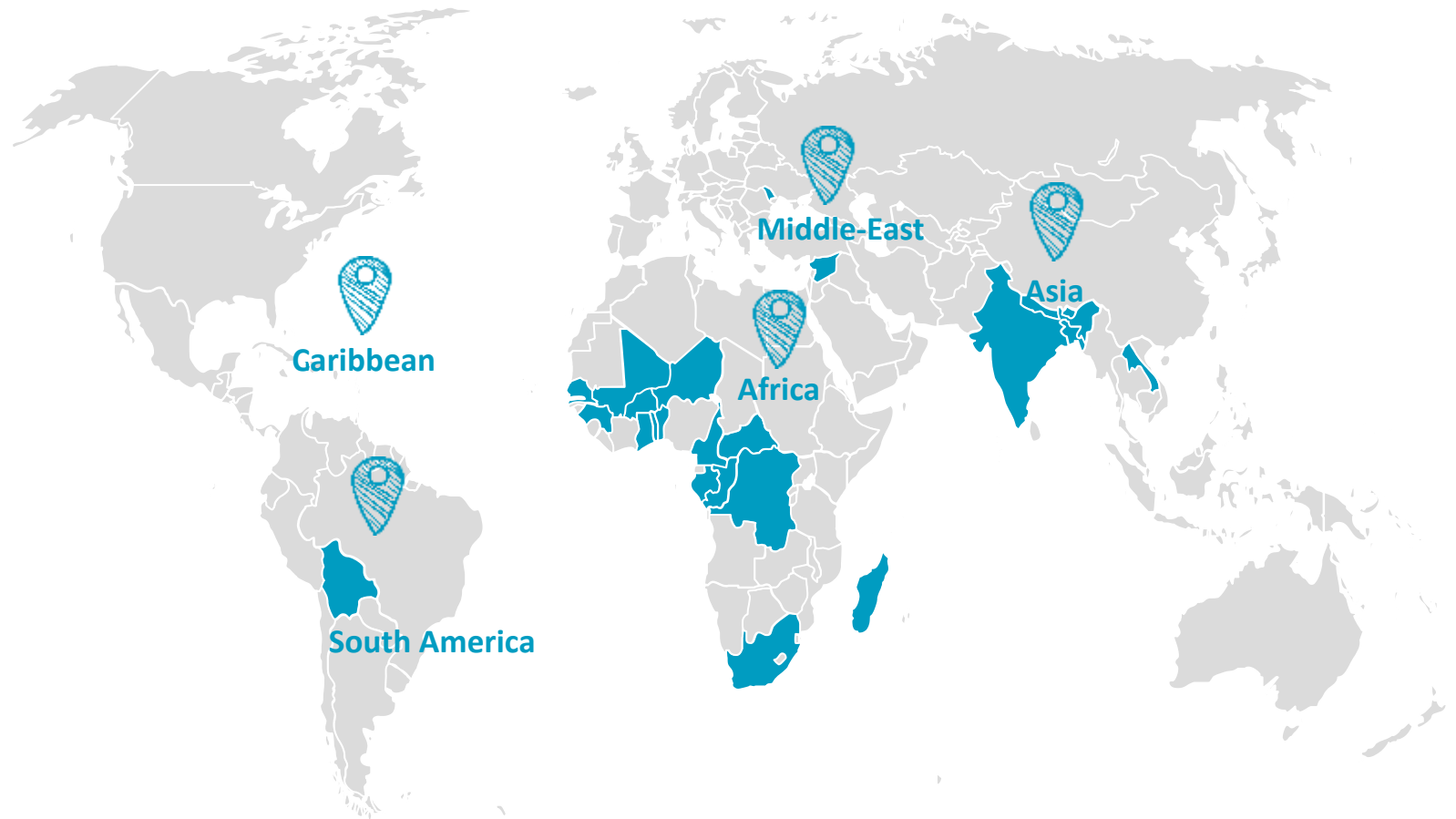
≈ **120** ongoing projects in
almost 40 countries

more than **95 %** of projects
based on renewable energy

50 % of projects
Include access to water

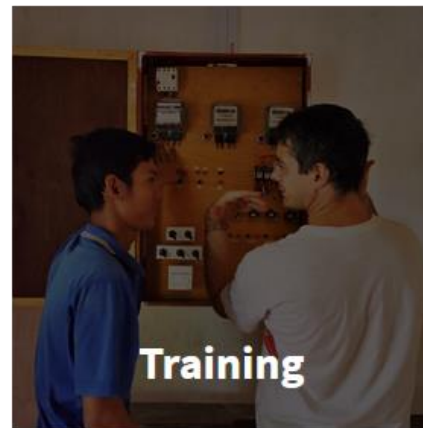
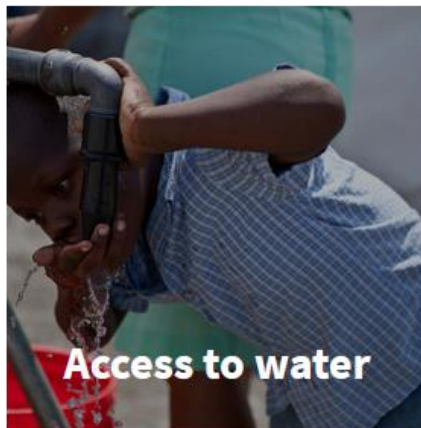
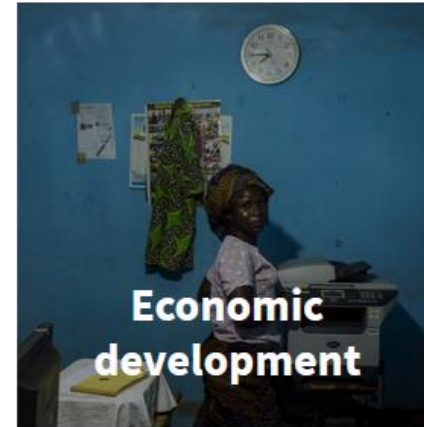
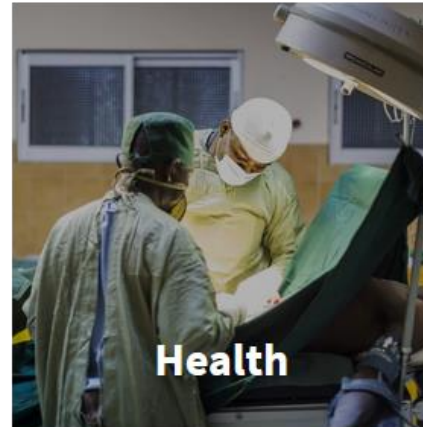
7,6 M€/year

(3,3 M€ of financial resources ; + 4,3M€ of resources in kind)



OUR GOAL: TO MEET BASIC NEEDS

Energy is not a goal in itself, but a multi-purpose tool that improves living conditions



Energy & international development: a long road to SDG 7

7 AFFORDABLE AND CLEAN ENERGY



2000s: Energy was the major absentee of the 8 Millennium Development Goals (MDGs)

2011: "Sustainable Energy for All" (SE4All) initiative, launched in by Ban Ki-Moon, Secretary-General of the United Nations

2012: International Year of Sustainable Energy for All

2015 : Sustainable Development Goals for 2030 with the 7th dedicated to energy

2020s: Growing preeminence of energy and especially renewables in the face of rising climate threat, COVID etc

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

7.1 By 2030, ensure universal access to affordable, reliable and modern energy services

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

7.3 By 2030, double the global rate of improvement in energy efficiency

7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology

7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support

2019: UN prize for climate action awarded during COP 25

For our actions in Dominica after hurricane Maria



2020: Zayed prize for sustainable development

For our actions in the Rohingyas refugee camps in Bangladesh



2022: Prince Talal international Prize SDG 13 Climate Action

For an innovative replicable solution implemented in Togo that allows deprived countries to improve their access to water, electricity and sanitation services in a decarbonated manner





OUR ORGANISATION

Expert volunteers at the core of our action!

Projects managed by volunteers mainly **professionals from the energy sector**: from the **analysis of the requests** received by our NGO up to the **completion** and **follow-up** of projects.

In France

+ than 1200 volunteers

14 regional delegations

EMERGENCY INTERVENTIONS



We act in case of humanitarian catastrophes to bring back power and water access to people in need.



EXPERTISE AND SUPPORT TO OTHER ACTORS IN INTERNATIONAL AID



We put our expertise in terms of access to electricity and water at the service of other actors of international solidarity:



And many others !



EXPERTISE AND SUPPORT TO OTHER ACTORS IN INTERNATIONAL AID



This support can be of different natures :

- audit/diagnosis of existing electrical installations
- recommendations for security and implementation compliance or implementation work
- the qualification of local suppliers and installers
- support for the implementation of projects to install PV: technical assistance for the entire process, from needs analysis, scoping energy needs, drafting specifications for tenders, choice of equipment, estimating costs
- follow up of the electrical works carried out until completion
- training actions of staff : basic principles, maintenance, etc



EXPERTISE AND SUPPORT TO OTHER ACTORS IN INTERNATIONAL AID

Overview 2018 – 2022 for international aid actors



**Médecins sans frontières
Switzerland**

17 expertise missions

French Red Cross

2 expertise missions

- **Solidarités International**
- **Première Urgence Internationale**
- **Oxfam**
- **Coalition Plus**
- **World Vision**
- **ALIMA**



Locations: Cameroon, Guatemala, Honduras, Ukraine, Lebanon, Kenya, Nigeria, Burkina Faso, Guinea Democratic Republic of Congo and South Sudan, Central African Republic, etc

A VARIETY OF INTERVENTIONS

For field offices and guesthouses :

- Audit and securization of electrical installations
- devising solutions to switch to solar PV installations or a hybrid system



A VARIETY OF INTERVENTIONS

On health centers, dispensaries or hospitals :

- auditing existing installations
- securing the power supply for life saving equipment
- needs analysis
- solar kits/ PV power plants/hybrid/
- in isolation/connected to the grid/ backup generators



A VARIETY OF INTERVENTIONS

For other project activities:

- water pumping,
- public lighting in refugee camps,
- training





KEY FACTORS TO TAKE INTO ACCOUNT

Needs analysis and adequate sizing : a proper evaluation of energy needs of the structure, of the equipments.

Robust and high quality equipment: to ensure safety & longevity, reduce risks of breaks and waste, etc

Maintenance and planning the financing of the renewal of the equipment at the end of their life cycle

Transfer of skills and know-how

Thank you!

Any questions ?

In need of expertise? Contact us :



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And for more information:

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