

Solar Doctors project concept



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The Problem

Several small-scale solar plants in the **African schools** and **health center** remain operational for less time than their intended lifespan due to a **lack of adequate maintenance**.

Actually, such plants become inefficient also due to a lack of skills and commitment from local communities.

The result is also a consistent increasing of e-wastes....

*...TOO MANY DAMAGED
SOLAR SYSTEMS in Africa..*



The Problem



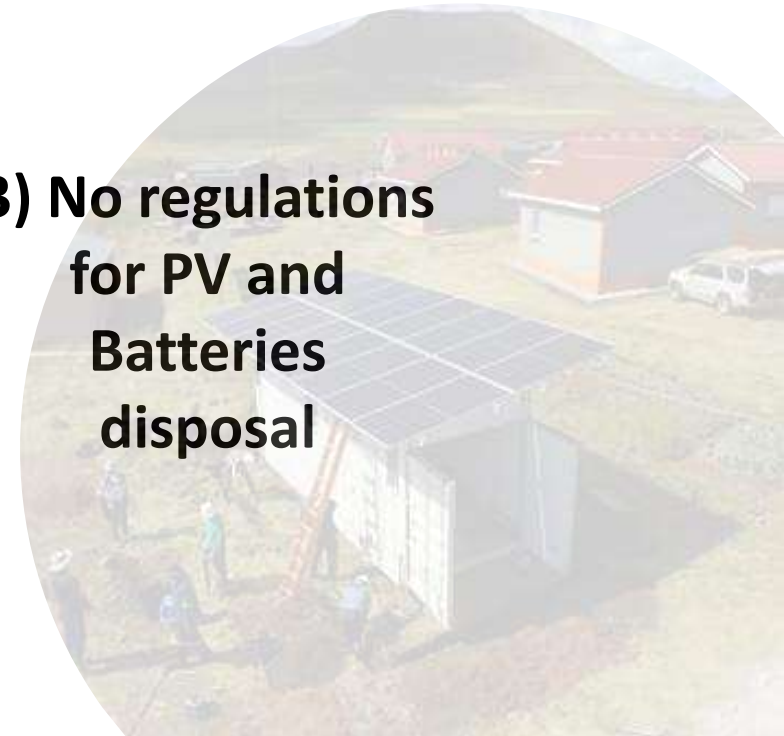
1) Lack of local skills



2) Absence of recycling Value Chain



3) No regulations for PV and Batteries disposal



The Solution

SOLAR DOCTORS is a not-for-profit initiative aiming at improving the impact of Solar PV systems for public facilities in Sub-Saharan Africa by...



- 1) **Creating local competences and skills and promoting a certification pathway**
- 2) **Extending lifetime of solar plants and reducing impact of energy sector on environment**
- 3) **Guaranteeing a safe e-waste disposal promoting a reuse and recycling approach**



The Solution

SOLAR DOCTORS is a not-for-profit initiative aiming at improving the impact of Solar PV systems for public facilities in Sub-Saharan Africa.



1

Pre-screening of
facilities

2

On-site
diagnostic and
troubleshooting

3

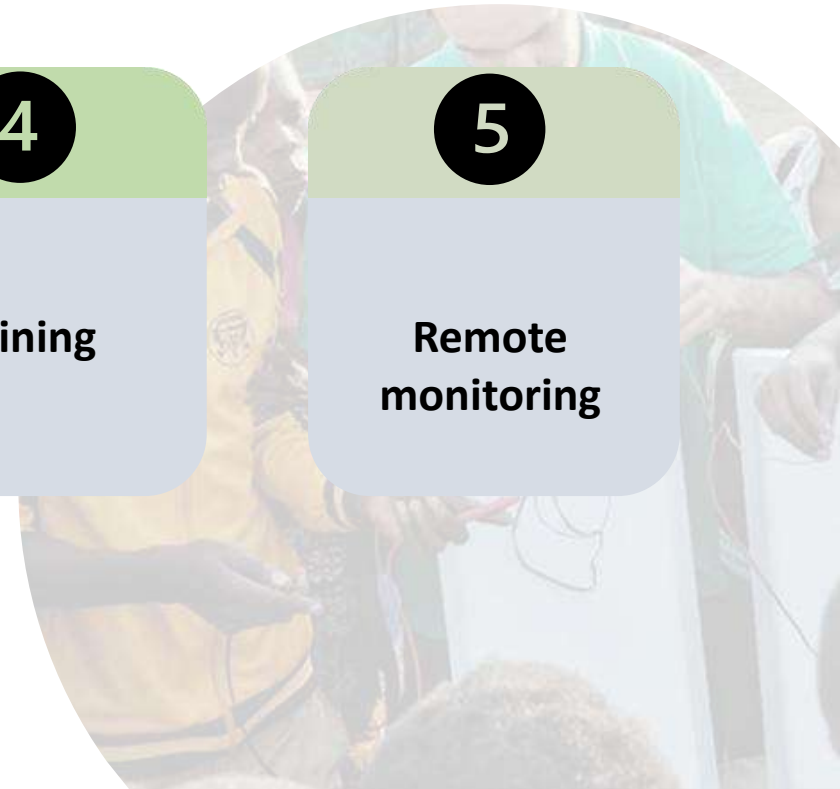
Fixing and
Revamping

4

Training

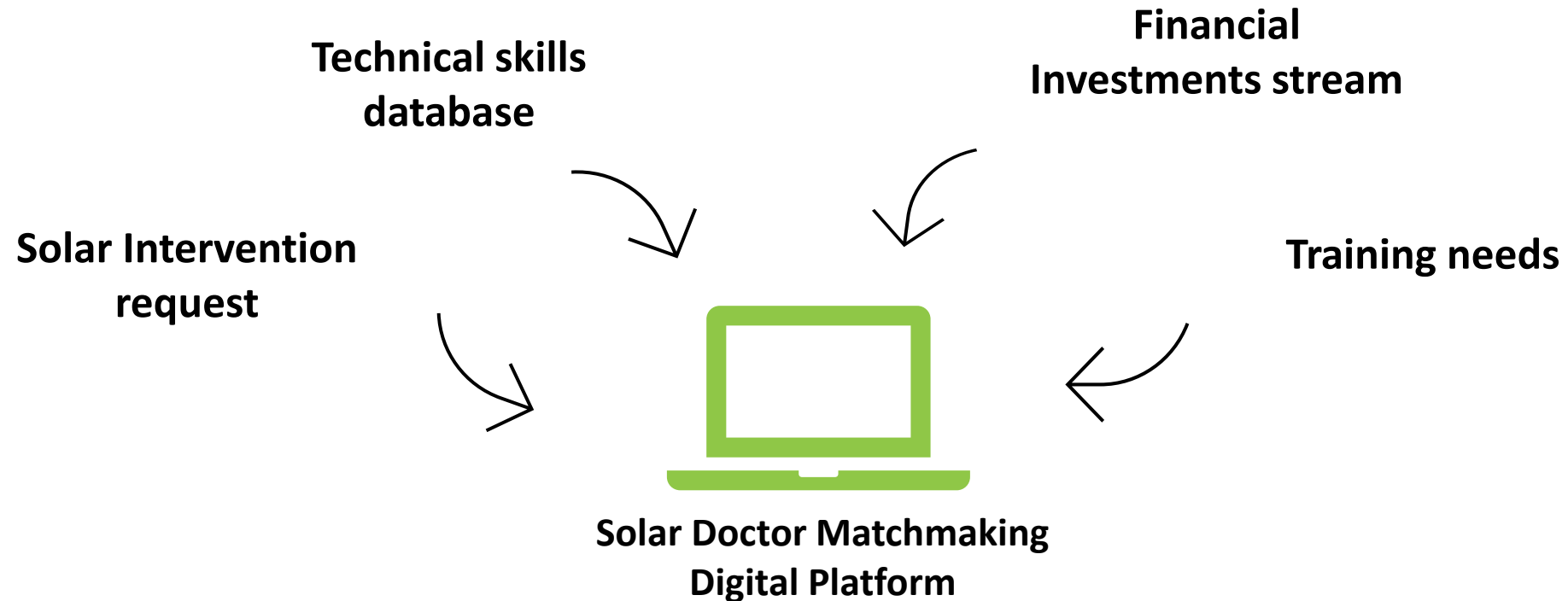
5

Remote
monitoring



The Solution

SOLAR DOCTORS is also
Solar Doctor Matchmaking Digital Platform



Some insights

Off-grid solar waste has significant impacts, including childhood lead exposure.

Emerging waste management consensus fails to address most of the waste flow.

Estimated 12,000 tonnes of waste generated in 2020, a 545 % increase from 2016.

Off-grid solar market and waste flow in sub-Saharan Africa are mostly unregulated.

Profitable opportunities to close the lead-acid battery material loop in Africa

STAKEHOLDERS

SOLAR DOCTORS seeks support from different partners to cover all the needs:

*Pre-screening,
country-based
facilities assesment*



NGOs

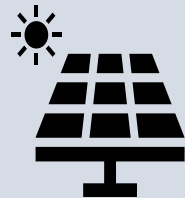


*Technical on-site
operation, training
delivery and
monitoring*

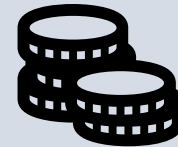
EnGreen

Solar Industry

*Materials donation,
in-kind
contributions*



Financial Institution



*Support for on-field
expenses coverage,
support for visibility and
scale-up*

STAKEHOLDERS

SOLAR DOCTORS seeks support from different partners to cover all the needs:



People for development



SAPIENZA
UNIVERSITÀ DI ROMA



WHO WE ARE

- EnGreen is a technical advisory start-up helping NGOs and government disseminate renewable energies to boost rural electrification and socio-economic development
- 15 staff employees based in Europe
- 100+ grid-connected and off-grid solar hybrid systems designed and installed



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