



INSTALLATION



MAINTENANCE

Solar Water Heaters for the Healthcare Sector

SUMMARY

Country	Benin
Implementer	Laboratoire d'Energétique et de Mécanique Appliquées de l'Ecole Polytechnique d'Abomey-Calavi / Université d'Abomey-Calavi (LEMA/EPAC/UAC)
Target groups	Maternity wards
Duration	08/2020 – 07/2021
Type of energy use	Other

CHALLENGE

The various health centres in Benin rely on the use of hot water e.g. in the maternity wards. Often this is not available. Mostly water is heated by the use of firewood and its byproducts. Generally, clean hot water is not sufficiently available. This situation affects access to dependable and quality health care. In addition, these energy sources used contribute negatively to climate change.

IMPACT LOGIC

The maternity wards of two health centers need to be equipped with solar water heaters to improve hygiene on site and at the same time save costs and protect resources (forest). To this end, two locally easy-to-replicate, low-cost boiler models are developed by the project. Subsequently, four craftsmen are trained in design and manufacture of the solar water boilers. The project measures are divided into three phases:

- (1) Provision of hot water to two selected nonprofit, non-governmental hospitals;
- (2) Capacity building: Train craftsmen in the construction of the solar boilers;
- (3) Enable the hospital staff to use and maintain the systems autonomously.

The beneficiaries of the project make a small financial contribution in return, from which the maintenance of the systems is financed. The project activities lead to the effect that the skills to construct hot water boilers are taken over by the trained craftsmen. Similarly, the training enables the hospital staff to operate and maintain the heaters in such a way that their working life will be extended accordingly.

INNOVATIVE PROJECT ELEMENTS

The introduction of the climate-friendly technology of solar energy for hot water production for the social infrastructure of the maternity wards is innovative. The main feature of the intervention is the fact that the boilers are easy-to-build and locally-sourced. Thus, the project provides hot and clean water efficiently and directly for the use on site to ensure the necessary health care at the health centres and their maternity wards.

FURTHER INFORMATION

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