

Case Study

Rural Hospital in the Masai Region

Ngoswani, Kenya



The Challenge

Help Masai is a registered Kenyan community-based organization, with the mission “Helping improve maternity and child care, income generation training, and food growing in the Masai region of Kenya”. This project consists of the development of a maternity / child hospital in Ngoswani since the nearest hospital that provides 24/7 emergency Cesarean section operations is 160 Kms (100 miles) away on roads that are not well maintained in this very remote region.



Center for Alternative Technologies (CAT) Kenya

Why Studer

The Studer solution, as always, is robust and suitable for the rural and harsh conditions of this part of Kenya. The flexibility of having two different outputs enables the use of different medical devices donated by European and American organizations. The remote monitoring facilitates the follow up of the installation by the technicians from both Nairobi and the US and reduce the need for travel to site.

The Solution

The Lions Maternal Child Health Centre in the Masai region is in a remote part of Kenya with no access to electricity. Now the health centre can provide 24/7 medical services thanks to the energy system installed.

The solar power charges the battery bank during the day. The battery system with Studer inverters ensures continuous electricity supply to the health centre and all of the equipment installed there. The second Studer inverter provides a second output at 120Vac for US manufactured medical devices available in the hospital.

System components

The system contains the following components:

- 7kWp Amerisolar AS-6P30-255W
- 24 x Sunlight RES 2V OPzV 1360
- 1 x Studer XTH 6000-48 (standard AC-output at 230Vac)
- 1 x Studer XTH 6000-48-01 (AC-output at 120Vac for specific medical devices)
- 1 x Studer VS-120 VarioString MPPT
- RCC-02, BSP-500 and Xcom-LAN for remote monitoring from USA

Project outcome

The hospital will provide a reliable service available 24h/7 improving the maternity/child medical services and care in the Masai region. This includes the advanced medical equipment not usually available in this region, powered by the Studer system. This will also encourage doctors from the city to be deployed in this rural area, bringing their skills and ensuring an improved service contributing to an increased life expectancy for births in this region.

The Company

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The **Center for Alternative Technologies (CAT) Kenya** is a Renewable energy distributor for solar, wind, power backup, water and batteries for the East African region. They have been in the renewable energy business in Nairobi since 1996 and have successfully completed many installations for lodges, residential homes, farms, offices, hospital power backup and village water pumping. They offer Local Solar Product Warranty to all their Dealers and Installers, End Users and Projects, supported by Studer Innotec.

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Help Masai

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