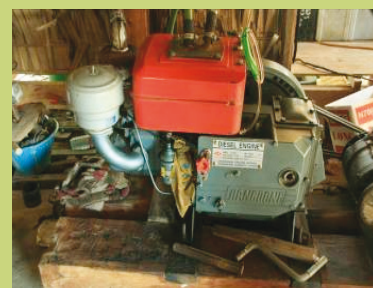


ENERGY FOR LIFE BEST PRACTICE PROJECT

System / Location

Hybrid system / Cambodia

Solar battery charging by LOCAB Cambodia



The battery charging station located in Daeum Popel village, Thma Edth commune, Kampong Tralach district, Kampong Chhnang province was installed in the frame of the LOCAB UNDP Solar Battery Charging Stations Project, in which 4 stations were built, each with a 1,56 kWp PV system and a 28 VDC diesel backup generator.

The 12 PV modules are installed on a metal substructure, which is movable and connected with a pole that elevates the modules to about 3 meters. Four ropes placed on the edges of the panels below the modules enable the operator to move this biaxial tracker manually offering an increase in solar energy yield of about 30%. Simple diodes are used as charge controllers. Four battery charging entrepreneurs received the described PV system as a donation.

In return they must give 50 % of their daily earnings to a saving fund, and are obligated to sell their services 40 % cheaper than diesel battery chargers.



Planning

LOCAL CApacity Builder
pharith.kong@gmail.com
www.locab.org



Installation

LOCAL CApacity Builder
pharith.kong@gmail.com
www.locab.org



Donation/Supporter UNDP

www.undp.org
www.reepro.info

PROJECT DATA SHEET

Year of installation	2009
Type of installation	Photovoltaic and Diesel (hybrid)
Type of energy produced	Electricity
Geographical position	11.973N 104.6544E
Location	Cambodia, Kampong Chhnang Province, Kampong Tralach district Thma Edth commune, Daeum Popel village
Peak Power of installation	1,560 Wp (12x130Wp)
Use of energy produced	Battery charging
Electricity produced	7,560 Wh per day
Type of financing	Grant
Source of financing	UNDP, Global Environmental Fund
Hybrid installation investment cost	8,000 USD
System costs	5.13 USD per Wpeak
Income generated from hybrid installation	8.00 USD per day (30 to 40 batteries charged/day for 0.20-0.30 USD/charge)
Maintenance cost	1.30 USD per day
Fossil fuel savings	~ 255 l diesel per year
Environmental gain	> 671 kg CO ₂ per year
Number of beneficiaries	105 families
Presence of renewable energy country program	Yes



Photovoltaic and Diesel (hybrid)