



Technology a data sheet : Pilot rental solar home system

Type of project: (tick off the type)	PV	Solar Thermal	Biomass to Energy	
	✓			
Project name:	Pilot rental solar home system for income generation			
Location of the plant	Lao PDR Bansorg, Sangthong district, Vientiane capital			
Year of Implementation:	2003			
Operator (Name and Address)	Mr. Bualay and Khamsao Bansorg, Sangthong district, Vientiane capital			
Planner: (Name and address)	Sunlabob rural energy system Co. LTD P.O.Box 9077, Watnak. Vientiane, Lao PDR			
Detailed description of the installation: (technology, function, benefit for users, etc. max 150 words)	Sunlabob has pilot scheme of renting solar PV system to its franchisees to provide installation and maintenance service to render. The system components like PV panel, charge controller and battery is belong to company, user just pay for rental fees that depend on the size of system, as the solar home system sizing of 110 Wp which consists of 110 Wp PV panel, 8 A Stecca Charge Controller, 120 Ah Sealed deep cycle battery and two of 7 W Energy saving lamps. This system are also designed to use AC appliance there 150 Watt AC output was added to for powering to 21" Colour TV, VCD and 20 W of AC lamps. Power from system availability 3 days without sun, 3 hours of power available per day. The user will pay 10 US\$ one-time for connection and 15 US\$ monthly rent.			
Generated Energy service: (tick off the energy type)	Electricity	heat	gas	Light
	✓ (12V DC)			
Power output of installation: (kWel, m³ biogas, kW th, etc.)	110 w			
Financing (tick off the financing type)	Private investment	loan	donation	grant
	✓			
Investment costs in US\$	The cost of the system is 1000 US\$ invested by Sunlabob co. The renter will pay 10 US\$ for one-time connection, and 15 US\$ for monthly rent.			
Maintenance costs in US\$	100 US\$(Battery), and 60 US\$ (Charge controller) if fault, company replaces it without any charges from user. The user is responsible to replaces the lamps.			
Savings:	Around 292 US\$ per year saved cost for Diesel for 3 hours daily gen-set running (1litter per day x 0.8 US\$/ litter x 365 days).			
Energy sale income in US\$:	40 US\$ per month from evening TV and VCD movies show. This is not neither Khamsao nor Boualay income. Some clever users rent bigger SHS and then provide movie shows at night for fees. Village technicians (Sunalbob franchisees) get commissions from Sunlabob, e.g., 20% of 15\$ monthly fee and 10\$ of an one-time connection fees			

	for this system
Comments:	The user is only benefit from using solar home system in household but also using it to generate income.
Pictures and graphics	
 <p>Solar Home System components for 110 Wp system size, designed to use with AC colour TV and VCD player.</p>	 <p>VCD playing with colour TV powered by Solar PV</p>