Technology data sheet: Community rental solar PV systems

Type of project: (tick off the type)	PV		Solar Thermal	Biomass to Energy	
	✓ (Community solar PV system)				
Project name:	**Operation of community rental solar PV systems (rural health clinic)**				
Location of the plant	**Lao PDR** Ban Kuai village, Sangthong district. Vientiane capital. Lao PDR				
Year of Implementation:	2005				
Operator (Name and Address)	Sunlabob's franchisees: Mr. Khamsao Khamphavongsa and Mr. Boualay Keomangkone, Health post chief: Mr. Sonxay Phonexaysak Supervision: village committee of Ban Kuai Village, Sangthong district. Vientiane capital. Lao PDR				
Planner: (Name and address)	Sunlabob Co. Watnak. Lao-Thai friendship road. Vientiane Lao PDR Tel.: +856-21 313874				
Detailed description of the installation: (technology, function, benefit for users, etc. max 150 words)	Sunlabob has piloted another scheme of renting solar PV systems: rental community solar PV system, for powering rural clinic, which serves several villages (Ban Sor, Ban Kuai, Napo and Vangma) in the cluster. The system is owned by Sunlabob. Users charge is around 500 LAK or 0,05 US$//household/month. The system Income is estimated as following: 500 households/4villages x 0,05US$/household/month x 12 months ~300 US$/year. This figure is slightly increased due to changing number of moved in households. The system supplies electricity for lighting, ventilating and vaccine storage at the clinic. The monthly rent of the system is around $ 0.05 per household per month, which is quite affordable for them. This fee has declined due to rapidly increasing number of households in the cluster. The renting system consist of PV panel 4x75 W, 1X 20 Stecca Charge Controller, 2x150 AH Deep cycle sealed maintenance free batteries, 5x7 W Energy saving lamps and 1X50 L STECA vaccine storage. The system is 3-4 ours of power available per day for lighting and 24 hours for vaccine fridge. The power is still available 3 days without sun in case it is used 3 hours per day.				
Generated Energy service: (tick off the energy type)	Electricity	Heat	Gas	Light	
	✓				
Power output of installation: (kWel, m³ biogas, kW th, etc.)	PV: 300 Wp (4x75Wp),				
Financing (tick off the financing type)	Private investment		loan	donation	Grant
	✓				
Investment costs in US$	Total investment: 5000 US$ (Sunlabob investment)				
Maintanance costs in US$	Around 40 US$ per year				
Savings:	• Expenditures on Kerosene or/and car battery charging, which usually available in nearest electrified village (16 km far away) • More conveniences in the clinic: light available, vaccine storage, electric ventilation				
Energy sale income in US$:	Average income 300 US$ per year from provided energy service				

	(source: Sunlabob co.)
Comments:	If administration is well set up at the clinic, such system would perfectly be functioning, supplying electricity by affordable prices
Pictures and grafics	

Ban Kuai health clinic and its PV system
(Courtesy by Sunlabob Co.)

Solar PV powered Vaccine storage
(Courtesy by Sunlabob Co.)