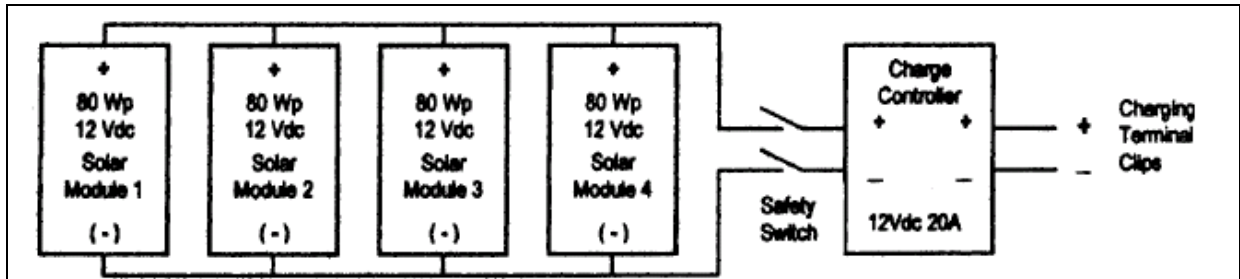


PV - Piagapo solar electrification project in Philippine

Type of project: (tick off the type)	PV x	Solar Thermal	Biomass to Energy	
Project name:	Piagapo solar electrification project			
Location of the plant:	Municipality of Piagapo, Lanao del Sur, Philippines			
Year of Implementation:	2003			
Operator: (Name and address)	Beneficiaries from the project			
Planner: (Name and address)	Bytex Information Technology and Engineering Services in cooperation with Department of Energy of the Philippines and Mindanao State University (MSU) Affiliated Nonconventional Energy Center			
Detailed description of the installation: (technology, function, benefit for users, etc. max 150 words)	<p>There are totally 7 stations where installed the project in the Municipality of Piagapo. At each station there are three different designs:</p> <p>Solar battery charging station: it is a 1.28 KW peak 4 channel photovoltaic BCS with identical charging channels. Each channel has a capacity of 300-320 watt peak. It is composed of 4 solar modules per channel.</p> <p>Solar street light: it is composed of a 75 watt peak polycrystalline solar module, 100 ampere-hour automotive battery, 6 ampere battery control unit, 20 watt florescent lamp and anti-theft frames for solar module and battery</p> <p>Solar home system: it is composed of a 75 watt peak polycrystalline solar module, 100 ampere-hour automotive battery, 6 ampere control unit, 24 watt micro inverter, 2 AC compact florescent lamp (11 & 9 watts) and anti-theft frames for solar module and battery</p>			
Generated Energy service: (tick off the energy type)	electricity x	Heat	gas	Light
Power output of installation: (kWel, m ³ biogas, kW th, etc.)	<p>Solar battery charging station (7 stations): 8.58 KWp Streetlights (7 stations): 1.05 KWp Solar home system (7 stations): 0.525 KWp</p>			
Financing (tick off the financing type)	private investment X	Loan	donation X	Grant
Investment costs in US\$	9,185 US\$ (for one channel PV battery charging station only - remember that there 4 channels per station and there are totally 7 stations implemented by this project)			
Maintanance costs in US\$	1,177 US\$ per year (for operation and maintenance)			
Savings:	N/A			
Energy sale income in US\$:	3129 US\$ per year			
Comments:	---			
Pictures and grafics				



Schematic diagram of one 320-Wp charging channel



Two of 4 channel of the solar battery charging station



Solar street light and entire 4 channel solar battery charging station



Solar module mounted on top of a mosque as part of solar home system

Source: Asian Energy Awards 2004