

## Biomass – Village biogas grid in Thailand

Type of project: (tick off the type)	PV	Solar Thermal	Biomass to Energy	
			x	
Project name:	Village biogas grid in Thailand			
Location of the plant:	Mu Bang Sosa Nongphan, Chiang Mai province, Thailand			
Year of Implementation:				
Operator: (Name and address)	Local Farmer			
Planner: (Name and address)	Biogas Advisory Unit, Chiang Main University			
Detailed description of the installation: (technology, function, benefit for users, etc. max 150 words)	<p>The biogas plant of a pick farmer in the village Sosa Nongphan, Chiang Mai province, Thailand was implemented as village project. The biogas produced in the plant is piped to 94 village households and used for cooking. The households paid between 400 to 600 THB for getting the gas connection. This money was used for the investment in the gas line. The gas lines were constructed by the villagers, thus the investment for the gas lines could be kept low.</p> <p>Basic information on the biogas plant:</p> <ul style="list-style-type: none"> <li>• Input: Manure from 500 pigs, 100m<sup>3</sup>/day</li> <li>• Gasversorgung: 94 Haushalte</li> <li>• Investment: 2 digester vessels with accessory 200.000 THB (5.700 US\$) per digester. The first vessel was financed partly by the farmer (50%) and the Ministry of Agriculture. The second by the farmer (50%) and the village authority.</li> <li>• The manure is pumped every morning when the stables is cleaned with a lot of water into the biogas plant.</li> <li>• The digested manure is pumped twice a day from the digester into the final storage tank.</li> </ul>			
Generated Energy service: (tick off the energy type)	electricity	heat	gas	light
			x	
Power output of installation: (kWel, m <sup>3</sup> biogas, kW th, etc.)	Biogas for cooking for 95 households			
Financing (tick off the financing type)	private investment	loan	donation	grant
	50%			50 %
Investment costs in US\$	Biogas plant: 11,400 US\$ Gas tube connection: 11,43 to 17,15 US\$ per household			
Maintanance costs in US\$	No information available			
Savings:	No information available			
Energy sale income in US\$:	No information available			
Comments:	none			
Pictures and grafics				



Digested manure tanks



Pig stable



Technical system scheme



Gas utilisation for cooking