

Project Report: Bueng Klueng Solar Systems



Sep – Oct 2010

Project Overview:

The Border Green Energy Team (BGET) has been working along the Thailand/Burma border since 2005 with the mission to implement renewable energy and sustainable technologies and also demonstrate how these technologies are integral and economically viable aspects of improving livelihoods. BGET has been working to provide solar electricity to medical clinics and schools in Karen villages and Internally Displaced People (IDP) camps. This year it partnered with Green Empowerment and Free Burma Rangers to build a 780W solar system for the Bueng Klueng student dormitory, to power four laptop computers and eight lights.

The dormitory is part of the Bueng Klueng church established 14 years ago. Currently the dormitory provides home for 38 children, age 5 to 16 years old. The children have traveled from villages far away from both sides of the border to study in the Thai public school up to ninth grade. The students are able to receive better education through using computers and nighttime lights for studying.

After completing the ninth grade from the village school, several students have received scholarship to continue their higher education in the larger towns in these areas.

Project Information:

Location:

Bueng Klueng village, Umphang district, Tak Province, Thailand

Partners:

Border Green Energy Team (BGET), Green Empowerment (GE), and Free Burma Rangers (FBR)

Donors:

Friends of GE, BGET, and FBR

Scope of Project:

Hands on training and project implementation for an off-grid computer power and dormitory lighting systems.

System description:

The three system included two-130 watt panel solar systems with Morningstar charge controllers. All of the systems are AC powering four laptop computers and eight 20-watt fluorescent lights in computer room and dining hall.



Project Execution:

Prior to the training and implementation work, BGET prepared all of the equipment and training materials. Two new buildings at Bueng Klueng boarding home were built for computer room and dining hall. The village can be accessed by four-wheeled drive truck.

The area consists of nine buildings including pastor's house, dining hall, village cooperative building, computer room, male and female dormitories, workshop room, doctor house, church, and meeting hall.

One of two-panel system powers lights in dining hall. The other two systems power four laptop computers and lights in the newly built computer room.

Following the basic training and installation work, the BGET team conducted training in maintenance and operation of the system.

The students will be able to use the solar power for computers and lights during nighttime studying, and to properly maintain systems for the best of the equipment.



Going Forward:

There are many similar places in the border area that are in equal need of electricity. BGET and GE hope to collaborate again in the future to replicate their efforts at student dormitory in Bueng Klueng village.

Please visit www.bget.org and www.greenempowerment.org to read more about past projects on the Thailand/Burma border and to learn of ways to help.