

Ok Tedi Development Foundation Solar Schools

Project Location: Middle Fly, Western Province, Papua New Guinea

Client: Ok Tedi Development Foundation for Ok Tedi Mining Limited

Completed: July 2013

Project Objectives

Provide multiple standalone solar power supply systems to support schools in the Western Province of PNG (Middle Fly communities of Kuem and Nakaku). As part of its Community Mine Continuation Agreement, Ok Tedi Mining Limited supplied a solar standalone system to each school where power was previously available only intermittently via a small genset. Solari Energy was engaged by the Ok Tedi Development Foundation to assist with systems implementation.

Services Provided

Solari Energy provided engineering design, software simulation of power and energy flows, CAD documentation, remote technical and commissioning assistance, as well as shipping and logistical support to Ok Tedi Development Foundation for multiple off-grid solar standalone power systems for schools in Papua New Guinea's remote Western Province. The systems consisted of 4.95 kW ground mounted solar PV arrays coupled with 900 Ah VRLA battery banks and 2.2 kW battery inverter chargers. These systems now provide constant reliable power to a number of schools where previous access to electricity was extremely limited.

This project was installed by Ok Tedi Mining Ltd electrical workers with assistance from local unskilled labourers. Solari Energy provided remote phone/email-based technical support and training during construction and commissioning. Supply line and logistics management, including compliance with Maritime Dangerous Goods requirements, was also part of the service offering.

Additionally, capacity building and training was provided for local electrical workers. These workers now deliver on-site scheduled maintenance, as well as first level fault finding and system repair. The Ok Development Foundation is currently working with Solari Energy to plan implementation of a large-scale solar SAPS system to support a hospital and health care precinct.

