

SunEPI Project Profile: Jordan and West Bank, Palestine



December 2009

Project Overview:

In late 2008, SunEnergy Power International teamed up with Solar Energy International, a premiere training organization based in Carbondale, Colorado, to provide a week-long hands-on solar photovoltaics training for engineers in the West Bank, Palestine, as part of their affiliation with Engineering for Developing Communities Program at the University of Colorado, Boulder and Engineers without Borders - International (EWB-I). The program was expanded this year, and in December, 2009 SunEPI conducted two, one-week trainings for EWB-I, again in partnership with SEI. The first was in Amman, Jordan, followed by a session in Bethlehem.

An excellent follow-up opportunity to the work we did last year, both classes included hands-on work with actual equipment and visits to existing renewable energy sites,

Project Information:

Location: Amman, Jordan and Bethlehem, Palestine

Partners:

SunEnergy Power International (SunEPI), Solar Energy International (SEI), Engineers without Borders International (EWB-I)

Scope of Project:

Hands-on training and site studies for two groups of engineers based in Jordan and Palestine.



Project Execution:

In both countries, classes focused on real world considerations for solar photovoltaic designs. The students were experienced engineers, many of whom have been involved in solar energy systems prior to taking the course.



In Jordan, the class was conducted at an engineering training center in Amman. We had the opportunity to visit one of the student's employer, Philadelphia Solar, which happens to be one of the only solar panel assembly plants in the Middle East. They are assembling mono and poly-crystalline solar panels and are distributors of balance-of systems equipment. We also visited a

solar system at an Eco-Tourism lodge in the desert which needed some help to improve the system. A third site study took us on a drive to the southernmost point of Jordan to view a 17KW solar system installed by some of the students a couple of years ago. This system is being used to power a desalination plant in Aqaba.

The Palestinian class was conducted in Bethlehem. As part of the class we visited a Bedouin village with a solar / wind power system. The villagers would like to upgrade their system. We also visited a solar street lighting project that



was designed and installed by students of our class in 2009. In Hebron, the class toured the largest hospital in Palestine, and learned of their plans to promote renewable energy first with a 750KW wind project, and then with a large grid connected solar project.

In both classes we went through many design situations, and explored some of the adjustments that need to be taken into account due to real world conditions.

Going Forward:

Training in solar electricity is something that is needed throughout this area. We are in the beginning stages of exploring how we can participate with a group that is managing the vocational educational training in some of the Palestinian refugee camps, to help them incorporate solar electricity design and installation into their curriculum.

