

Date 13th November 2009
 Subject Assignment "Development training materials"
 From Henry de Gooijer, Pico Sol Netherlands (Amersfoort)
 To Whomever it may concern

Introduction

To build up a professional solar power sector in Cambodia, Pico Sol Cambodia runs the vocational training centre "Solar Campus". The Solar Campus is a decent and modern education building in a rural environment that provides in all modern luxury of the big city: Electricity, internet, running water and gas for cooking. At the Solar Campus young Cambodian persons are trained in solar technology and solar micro-entrepreneurship. Because most of them come from other parts of Cambodia, they also stay at the Solar Campus during the trainings.

At present, the Solar Campus is in development. Last years, trainings on solar technology and solar entrepreneurship have been implemented on irregular basis. In 2010 Pico Sol Cambodia wants to increase its training services for technicians. This ambition opens the opportunity for an educationalist to support the development of technical training services. The project can be carried out as a graduation assignment for the Master of Science title.

Assignment "development of technical training materials"

Within this project, a modular set-up of a training programme is developed and tested. Emphasis is put to the educational point of view: How to formulate the methodology, how to translate learning targets into a daily curriculum, how to instruct the trainer by a step-by-step manual what practical tasks need to be developed.

		10 modules									
		Energy	Electro	Math for technicians	Solar power	Components	Tools	Installation skills	Service and maintenance	Fault finding	Social skills
Three levels	Quick level	En-Q	El-Q	M-Q	Sol-Q	C-Q	T-Q	I-Q	S&M-Q	FF-Q	SK-Q
	Basic level	En-1	El-1	M-1	Sol-1	C-1	T-1	I-1	S&M-1	FF-1	SK-1
	Advanced level	En-2	El-2	M-2	Sol-2	C-2	T-2	I-2	S&M-2	FF-2	SK-2

In this project, the student will be responsible for outlining, creating and testing of 2-4 modules, trainer’s manuals and exams. The content of the modules is yet to be decided upon (that remains under the responsibility of Pico Sol in the Netherlands), but subject matter expertise will be available, as well as a group of trainees and a trainer for trying out the materials. The student will research the effects the products that were developed and propose suggestions for improvement. Outcomes of the study will also inform another, follow-up project about training the trainers.

Parallel to the training development project, the construction of class-rooms for the training will take place.

The student will be requested to play an advising role in this project.

A test of the training materials and a resulting optimisation is the final part of the assignment. This test will be performed to a class of 6-10 trainees at the Solar Campus.

Time schedule

The project is carried out in 2010, preferably in the first half of this year.

Supervision

The project is supervised from The Netherlands by ir. Henry de Gooijer, Co-ordinator Cambodia programme of the Dutch foundation Pico Sol in Amersfoort. In Cambodia the project is supervised by drs. Mira Weber, who is the director of the Solar Campus.

What do we offer

We offer a well-coached graduation position in Cambodia. We offer you a 50% contribution to the real made costs, like the air ticket, vaccinations, visas, local travel, food and stay. We assess the total of the real made costs to € 2500,-. During the project you will stay at the Solar Campus. Any project related costs (educational materials, pilot sessions) are paid by the organisation.

Who is Pico Sol Cambodia?

Pico Sol Cambodia supports the introduction of solar power in rural Cambodia. There are great opportunities for solar energy in Cambodia. The country has limited fossil fuel resources, but it receives on daily base over five full solar hours, with a balanced distribution over the year. It's one of the sunniest countries in the world. Pico Sol Cambodia considers Cambodia's solar resources as an opportunity for a sustainable development of the rural areas.

In Cambodia 85% of the households has no access to electricity. For this reason it seems that there is a large market for solar energy applications. The opportunities of solar energy to reach the electrification goals are acknowledged by Cambodian government. Therefore the government is planning to provide subsidies for rural households to use solar energy. Through these upcoming subsidy schemes solar energy will come within reach of a large group of rural households.

This provides larger opportunities to develop the solar energy sector. When the solar energy market develops it could also enlarge the need for well trained personnel in the solar energy sector, a need in which the solar market cannot foresee (yet). Pico Sol Cambodia would like to contribute to a solution for this problem by establishing and exploiting a training centre: the Solar Campus.

Pico Sol Cambodia is a spin-off of 10 years project based work of the Dutch Foundation Pico Sol. More information is found at the websites <http://cambodia.picosol.nl> and <http://picosol.nl>

If you are interested

More information is found in reports that are found in the download area of our website. Especially the reports of Jony Heering and Leonie van Eeten might be of interest for you.

If you are interested, please contact Henry de Gooijer (e-mail Henry@picosol.nl Phone +31 (0) 6 204 25 747 / +31 (0) 33 4650988)