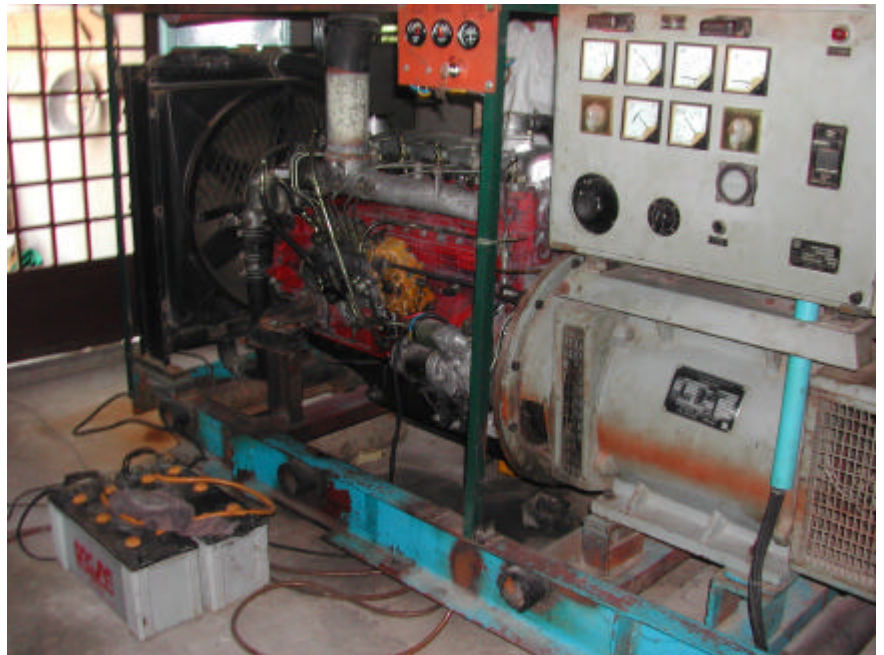


Vocational Technical training for Cambodia and Laos rural electrification SMEs (VTCL)

Project 165 - 2005

Inception Report



December 2005

**Support by the ASEAN Center for Energy
through the EC-ASEAN Energy Facility**

**Vocational Technical Training for Cambodia and Laos rural electrification SMEs
(VTCL)**



Supported by the European Commission
through the EC – ASEAN Energy Facility



Disclaimer

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1 PROJECT PRESENTATION

Currently, the provision of rural electricity service in Cambodia and Laos is largely left to small private entrepreneurs with no formal training in power generation, distribution or business. Consequently the rural consumers face some of the highest electricity prices in the world. This situation is a significant barrier to development because households are spending limited income on energy costs, rather than food, shelter or education; and many potential income generating opportunities are not feasible due to the high power prices.

This project aims to improve the quality, safety and affordability of rural electricity services in Cambodia and Laos by training the rural energy providers in the skills and knowledge they need. The activities will include assessment of the needs of the rural electricity providers in both countries, designing a curriculum to meet those needs, incorporating relevant stakeholders' comments, training local trainers to teach this curriculum, then delivering a pilot course in each country to ensure its suitability and sustainability.

Sustainability will be fostered by the fact that the project partners are premier institutions in Laos and Cambodia, who will then mainstream the courses in their curricula. The project includes activities for promotion of the courses and developing their business case.

1.1 Objectives

1. Improve affordability, quality, safety and sustainability of rural electricity in Cambodia and Laos.
2. Establish a high quality vocational technical training courses specially designed for the rural electricity operators, existing and potential, in Laos and Cambodia on the subjects :
 - Business management for energy service companies
 - Generator types and fuel sources
 - Energy efficiency, technical standards and government licensing requirements
 - Diesel generator sizing, operation and maintenance.
 - Design and maintenance of distribution network
 - Practical skills and techniques for O&M and Safety

1.2 Activities

- Review and context study of vocational technical training issues in Cambodia and Laos.
- Survey of training needs for rural electrification operator and students in trainings

- Design curriculum guidelines and organize related review workshop
- Design a business case
- Design and produce curriculum kits, organize review workshop and translate the kits into Khmer and Laos
- Training of trainers
- Conduct pilot courses

1.3 Expected results

1.3.1 Estimated impact on target groups :

- The ITC and NUOL by strengthening their cooperation and networking capacity. The two universities will be endowed with a new set of training courses. Their teachers will be trained to offer the training courses. They will have capacity adapt the material and approach.
- SMEs rural electrification operators with their capacity to provide a service with an improved quality level. Their managerial and technical performance will be enhanced, which will make their business more profitable.
- End users will be provided more efficient services with better quality.

1.3.2 Publications and other outputs :

- 1) Survey report of need analysis and curriculum guidelines;
- 2) Curriculum documentations for the 6 courses and curriculum kits in English, Laos and Khmer;
- 3) Business case;
- 4) Team of capable trainers for each course ;
- 5) First batch of certified graduates;
- 6) Newsletters and project reports.

1.3.3 Multiplier effects :

With the learning packages (curriculum guidelines and kits) and trained teachers, it will be possible to extend training networks through local vocational training institutes.

The project outputs can be of use for countries in the SE Asian region, where small-scale private electricity suppliers are operated.

1.4 Partners

1. IED (Innovation Energie Development) – French engineering and consulting firm, Project' Leader. www.ied-sa.fr

2. ETC / TTP – Technical Training Programme functioning within ETC Energy Unit of the ETC Foundation, Netherlands non-for-profit organisation. www.etc-energy.org
3. ITC (Institut de Technologie du Cambodge) – High education institution in Cambodia under the Ministry of Education. www.itc.edu.kh
4. NUOL (National University of Laos) – High education institution in Laos under the Ministry of Education. www.nuol.edu.la

1.5 Other project's data

Starting date : October 2005

Ending date : October 2006

Total efforts : 63.75 man-months

Contracting authority : EC-ASEAN Energy Facility (EAEF)

Support : 199,355 euros

1.6 Observations

Since the 17 October 2005 at which the contract entered into force, no major deviations have been observed compared with initial objectives and activities. However, after initial context study and technical field trip to visit two REEs in Cambodia, the project's partners agreed that the final subjects (units) for training will be finalized after the needs assessment and analysis being done. In any case, all major deviations from initial proposed training subjects will be discussed between partners and will be informed promptly to EAEF during the project's implementation (see also annex 1 Project Brochure).

2 IMPLEMENTATION OF ACTIVITIES

Progress status for each activity of the project is presented hereafter.

2.1 Activity 1 : Assessment of needs and specifications of requirements for curriculum development

1) Kick-off meeting

The kick-off meeting was held at ITC campus in Phnom Penh, Cambodia from 22-23 November 2005 with all project's partners, plus key stakeholders : MIME, EAC, REE, EDC, IE group (Cambodia), SME Cambodia. See annex 3 for the agenda of the meeting and annex 6 minutes of meeting for more information about the kick-off meeting activity.

The partners were discussed and agreed on budget issues, partners' responsibilities, and the project's work plan. See annex 2 for the detailed work plan.

2) Context study

At the kick-off meeting, the participants from ITC and NUOL presented the first preliminary results of the context study. See the annexes 7 and 8 for the results of the context study and the presentations.

3) Survey of REE needs in Cambodia and Laos

The survey form was prepared and discussed actively between partners during the kick-off meeting. It was decided to do the survey for about 150 (REE + other stakeholders) in Cambodia and 50 (PESCO + other stakeholders) in Laos (see also annexes 9 and 10). The survey modalities and plan were discussed and agreed upon.

In order to obtain good results from the survey, the project's team has conducted a survey-test for two REEs during the field technical visit. Corrections have been made to adapt to the REE contexts and real conditions. The survey form then has been finalized and translated into Laos and Khmer. Presently, the survey is conducting by ITC and NUL. See annex 11 for survey questionnaire form.

4) Draft curriculum guideline

The first draft of curriculum guideline has been circulated to all partners and discussed during the kick-off meeting. See annex 5 for the draft of the curriculum guideline.

2.2 Activity 2 : Curriculum design, review and documentation

This activity is not implemented yet.

2.3 Activity 3 : Training of trainers and pilot course delivery

This activity is not implemented yet.

2.4 Activity 4 : Coordination, Management and Dissemination

This activity takes place, as planned in the proposal document, during the duration of the project.

At the beginning, a project brochure has been prepared before the launching the project. It was send to all concerned parties for wider information about the project, and has been uploaded into internet site www.ied-asean.com. See annex "Project's brochure".

During the kick-off meeting in Phnom Penh, the VTCL consortium has agreed that the final dissemination workshop will be held on October 2006 in Phnom Penh.

Three newsletters will be published and upload into all partners websites after the implementation of the activity 1, 2 and 3.

3 PRESENT AND EXPECTED RESULTS

3.1 Measurable impacts on the target groups

Actually as project is going on, it is difficult to measure quantitatively the impacts on the target groups. But it is estimated that the curriculum development and training of REE in Cambodia and Laos, once terminated, will provide REEs a good management and technical knowledge to provide better services, policy makers, regulators and other stakeholders a clear picture of the training opportunities with regards to rural electrification and the role of the private sectors.

3.2 Outputs and publications

An importance is attached in the project to results diffusion of the project's outputs. The outputs of the project have been and will be uploaded (where relevant) on all partners and relevant websites: www.aseanenergy.org, www.ied-asean.com, www.ied-sa.fr, and www.etc-energy.org. To date, several documents are available on it: (i) the brochure (description) of the project and (ii) kick-off meeting proceedings.

Several presentations have been communicated during the kick-off meeting and they are uploaded into internet for wider dissemination.

3.3 Multiplier effects and sustainability

Results in terms of multiplier effects and sustainability of the project cannot yet be assessed. They will be discussed in the final report of the project.

4 NEXT STEPS

The detailed plan of action (work plan) for the project's activities is presented at the annex

5 ANNEXES

A1. Project brochure (attached file “brochure project 165-2005.pdf”)

A2. Detailed work plan (attached file “VTCL schedule.pdf”)

A3. Kick-off meeting agenda (attached file “Agenda kick-off.pdf”)

A4. List of participants (attached file “List participants_VTCL.pdf”)

A5. Presentations documents

Curriculum guidelines_Module A.ppt

curriculum_development-v3.ppt

ETC Presentation.ppt

IED Presentation.ppt

ITC PRESENTATION.ppt

NUOL presentation1.ppt

NUOL presentation2.ppt

NUOL presentation.ppt

INTRODUCTION.ppt

A6. Minutes of meeting (attached file “Minutes of meeting.pdf”)

A7. Context study in Cambodia (attached file “Need assessment Cambodia.ppt” and “Need assessment Cambodia.pdf”)

A8. Context study in Laos (attached file “Need assessment Laos.pdf”)

A9. List of REEs in Cambodia (attached files “List REE licensee.pdf” and “List REE non-licensee.pdf”)

A10. List of REE in Laos (Electricity resources in Laos.pdf)

A11. Survey questionnaire form (Attached file « Survey questionnaires.pdf »)

A12. Photo of activities during the kick-off meeting in Phnom Penh



Photo1 : Consortium partners in Kick-off meeting



Photo 2 : Interview with Rural Electricity Enterprise



Photo 3 : Generator set REE

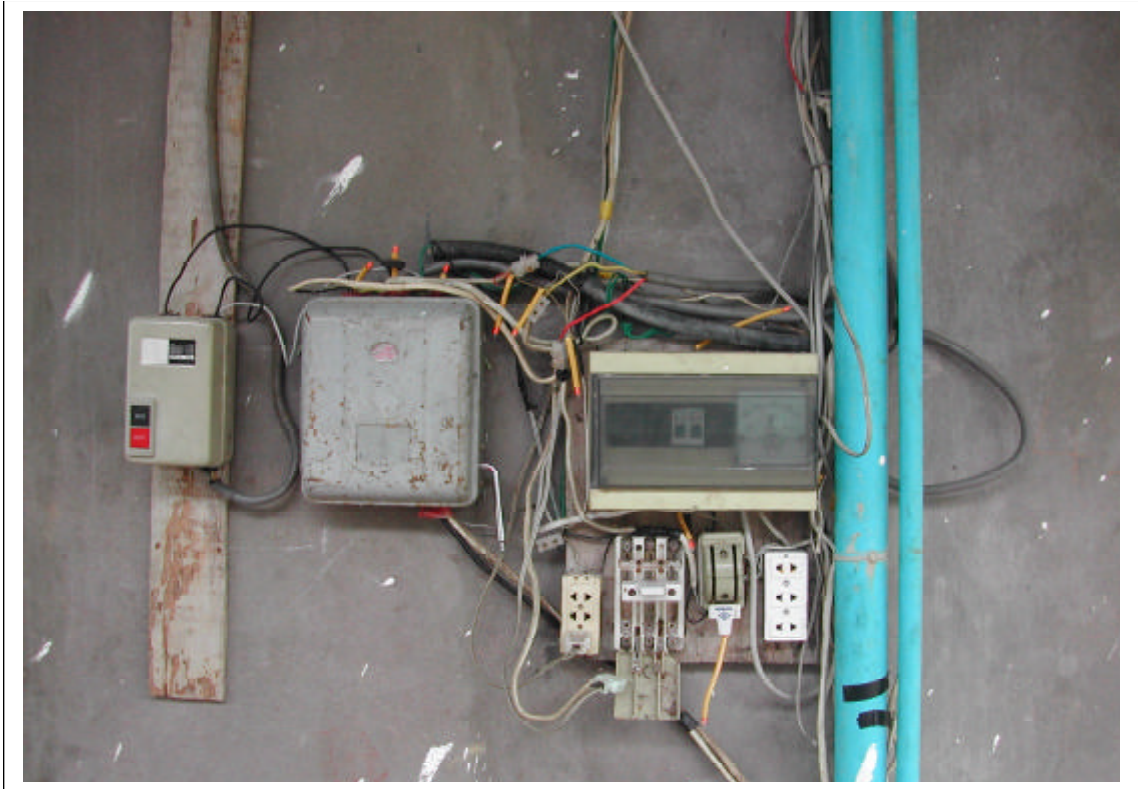


Photo 4 : Switchers REE



Photo 5 : Price list for battery charging

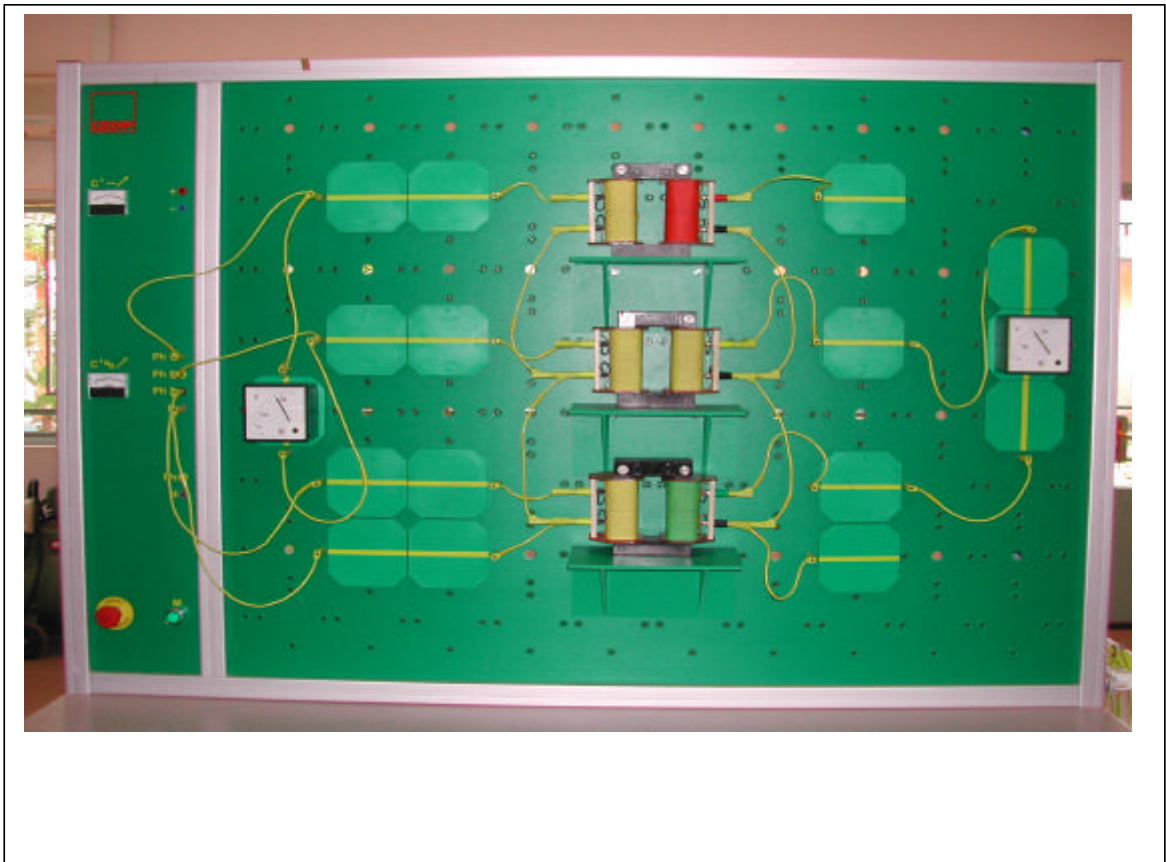


Photo 6 : Instruction panel Training Institute Electricité du Cambodge