GREEN ELECTRICIAN

Education in Electricity for Employment

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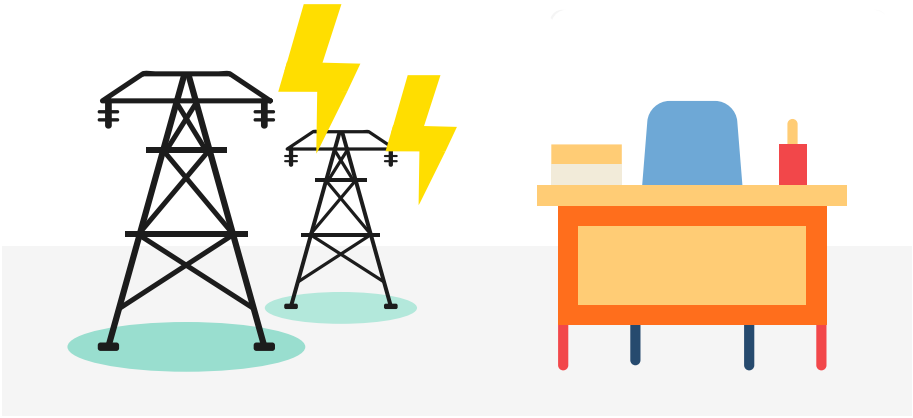
INTRODUCTION

Green Electrician is a Public-Private Partnership project which aims to improve vocational training in the energy industry in Vietnam.



To achieve this aim, Green Electrician develops training programs concerning electricity, sustainable energy management, and entrepreneurship. Specifically, the project will target students from underprivileged backgrounds via a free basic training program in order to help students gain access to stable employment opportunities.

Aiming at the value of sustainability, Ly Tu Trong Technical College Ho Chi Minh City (LTTC) is the local training partner for the project. Two laboratories, with modern equipment, will instill hands-on experience. Additionally, the project will train teachers to further disseminate knowledge to other training centers.

Ultimately, Green Electrician will increase the supply of skilled workers through improved vocational training, which will furthermore contribute significantly to sustainable economic development.

PROJECT TIMELINES & ACTIVITIES

Year 2016

Development of training programs

Establishment of the laboratory

Rollout of "Train the Teachers" program

2017

Promotion of vocational training

Organisation of training programs

Enhancement of the laboratory

Evaluation of the training course and undertaking of improvements based on findings

2018

Maximization and **Facilitation** career opportunities for students

Application for national accreditation for training programs

Transfer of the laboratory and the program to local partner

Organization of entrepreneurship courses to encourage start-up ideas

TRAINING PROGRAMS

Green Electrician incorporates two main programs: Fundamentals of Electricity and Sustainable Energy Management. We have leveraged the participation, on consultancy basis, of our project expert from the Institute of Electricity and Energy Management, located in Bangalore, India.

Program 1
Fundamentals of Electricity

The Fundamentals of Electricity program introduces the care or usage of tools and materials used in residential and industrial electrical installations, and the fundamental computations related to electricity. Topics include standard practices of electric devices and apparatus, installation of electrical distribution equipment associated with residence and industry, alarm and access control system, electric measurement, reading and interpretation, and troubleshooting.

Upon completion of the course, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with residential electrical installations.

Training time

Full-time course: 350 hours
Evening course: 120 hours

Target participant

Full-time course: underprivileged high school graduates/non-graduates
Evening course: existing electricians

Program 2:
Sustainable Energy Management

The Sustainable Energy Management program is divided into three modules focused on the principles of designing and installing a sustainable energy product.

Module 1: The fundamentals of energy management

This module covers basic topics such as understanding functions of individual components and installation, wiring and component selection of a sustainable system in accordance with the standard practice.

Module 2: Solar energy system & constructing a low voltage electrical installation

This module focuses on helping students identify the nature of the work they will need to do pertaining to any specific task, as well as practice these interventions. Topics covered include wiring and configuring fire and intrusion alarm, access control system, safety lighting, and electric installation.

Module 3: Industrial electricity and automation

This module covers training in reading and designing industrial wiring according to a given specification; wiring a programmable logic controller (PLC), an electronic starter and a speed driver; setting up basic PLC parameters; identifying and setting up sensors; and performing tests and taking measurements.

Upon course completion, the students should possess fundamental knowledge regarding how to design, install, and properly operate a sustainable energy system.

Training time
52 hours per module

Target participant
Existing technician students

BENEFITS

Introduction of a new and more practical pedagogical method

Increasing quality of electrical training and energy management education

Reduction of the gap between the demand for skilled electricians and their availability

Creation of job opportunity for underprivileged students

Introduction of Sustainable Energy Management courses to the new curriculum

Proper preparation of local trainers to train others through a Train the Trainer

Creating a skilled work force pool that has expertise in electricity and green technology

PARTNERSHIPS

KFW DEG

German Investment & Development Corporation (DEG)

DEG (Deutsche Investitions-und Entwicklungsgesellschaft) is a member of KfW Bankengruppe (KfW Banking Group), finances investments of private companies in developing and transition countries. As one of Europe's largest development finance institutions, it promotes private business structures to contribute to sustainable economic growth and improved living conditions.

Schneider Electric Foundation Schneider Electric

Schneider Electric Vietnam

Schneider Electric Vietnam is a branch of Schneider Electric a global corporation which specializes in automation, electricity, and energy management. Dedicated to sustainable development, Schneider Electric is constantly pursuing innovative technological advancement to increase efficiency and better cope with growing demands. They aim to provide universal access to clean energy and are calling on partners to dramatically reduce their own energy consumption. Leading by example, Schneider Electric hopes to inspire a global movement prioritizing sustainable practices.

Schneider Electric Foundation

Schneider Electric Foundation is a public interest foundation which supports, in new economies, vocational training in energy management, contributing to Schneider Electric's access to energy program. In mature economies, the Foundation fights against fuel poverty, offering education and awareness programs for households in this situation. Globally, it also supports projects to raise awareness on sustainability. In every project, the Schneider Electric Foundation pays a great attention to Schneider Electric employee's commitment.

Asia Society for Social Improvement and Sustainable Transformation (ASSIST)

ASSIST is a non-governmental international capacity building organization with its headquarters in the Philippines. It aims to achieve and witness meaningful change to and for our planet and the people living on it. ASSIST tackles social issues in developing countries through sustainable practices, focusing mainly on regions in Africa and Asia. Prioritizing social welfare and environmental consciousness, the organization hopes to develop and protect all facets of society. Since 2003, ASSIST has implemented over 55 projects funded by multi-lateral donors such as European Union, USAID, UNEP, UNIDO, DEG, and GIZ, amongst others.

Ly Tu Trong Technical College Ho Chi Minh City (LTTC)

Established in 1986, Ly Tu Trong Technical College Ho Chi Minh City (LTTC) is one of the major public schools in Ho Chi Minh City which has specialized in vocational training. Offering 16 different majors such as Electrical & Electronics Engineering, Economics, Biotechnology, and Mechanical Engineering, etc., LTTC has been training over 10,000 students which is providing a quality workforce to Vietnam market. With a mission of developing LTTC to be a leading university of Ho Chi Minh City in vocational training, LTTC commits to bring a quality education combined between advanced theory and practical exercises.