

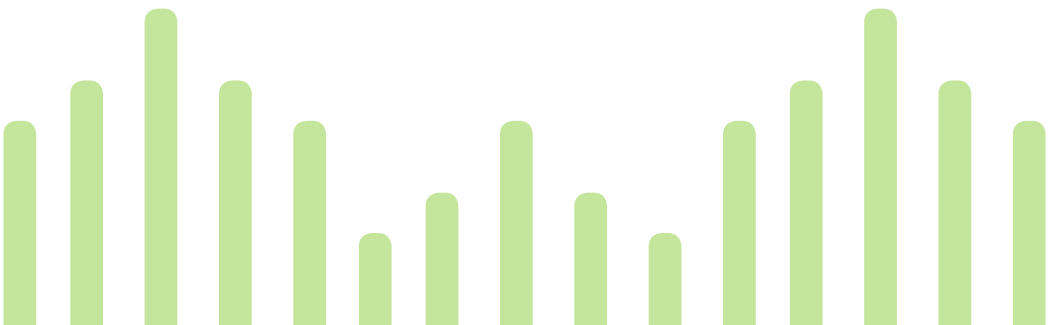
# ELECTRIC TRAINING



**KFW** DEG

**Schneider**  
Electric

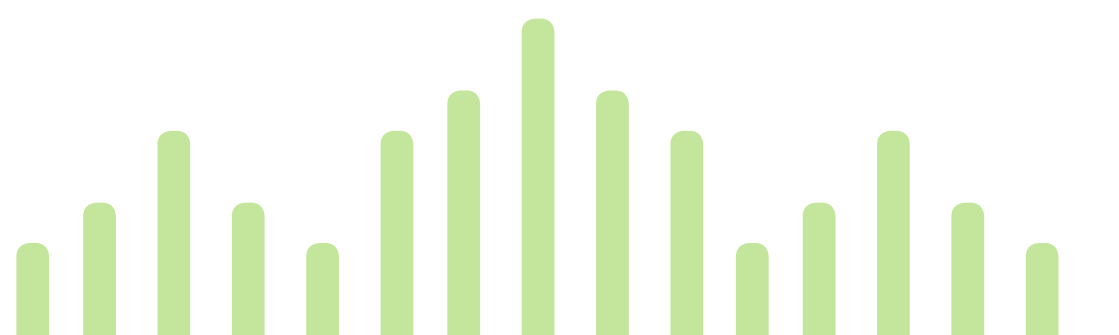






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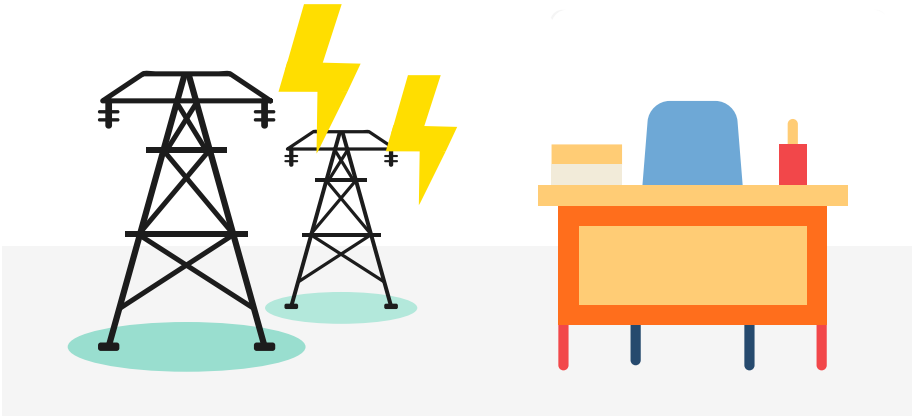
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# INTRODUCTION



Electric Training is a Public-Private Partnership project aims at improving vocational training in the energy industry in Vietnam.



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Its focus is on developing training programs concerning electricity and sustainable energy management, as well as on entrepreneurship. These programs are directed towards disadvantaged students from underprivileged backgrounds as a means of gaining them access to stable employment opportunities.

Executed with a partner training center at Ly Tu Trong Technical College, state-of-the-art Electric Training laboratories will be installed for hands-on experience

Additionally, the project will train teachers for the further dissemination of knowledge to other training centers and run a promotional campaign to improve the reputation of vocational training. Ultimately, Electric Training will increase the supply of skilled workers through improved vocational training which will furthermore contribute to sustainable economic development.

# PROJECT BACKGROUND

**14 M**  
new technicians enter  
labor force each year



**27%**  
have relevant  
training



**15%**  
have formal  
vocational  
training



## SITUATION



Vietnam forecasted to  
face **energy shortage** of up to  
**70% by 2015**

## SOLUTION



Building energy  
management skills  
> to ensure environmentally  
sustainable development

## TARGET



Wishing to increase the percentage of trained  
skilled workers in labor force from the current  
**30% to 55% by 2020**



# PROJECT TIMELINES AND ACTIVITIES

Year 2016

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## **Developing**

developing training programs



## **Establishing**

the laboratory



## **Promoting**

vocational training



## **Conduct**

train for Teachers program  
teachers program



# 2017

# 2018



**Promoting**  
vocational training



**Conducting**  
training programs



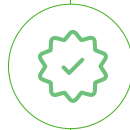
**Enhancing**  
the laboratory



**Evaluating** and  
**Improving** training  
course



**Maximizing** and  
**Facilitating** career  
opportunities for  
students



**Getting** national  
accreditation for  
training programs



**Transferring** the  
laboratory and the  
program to local  
partner



**Conducting**  
entrepreneurship  
courses to  
encourage start-up  
ideas



# TRAINING PROGRAMS

**With the consultancy of Institute of Electricity and Energy Management based in Bangalore, India, on specialism, the Electric Training develops and trains 2 main programs, Fundamentals of electricity and Sustainable energy management**

## **Program 1** **Fundamentals of Electricity**

This course introduces the care/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 interpreting troubleshooting. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with residential electrical installations.

### **Total training time in hour**

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 program is divided into 3 modules focused on principles of designing and installing a sustainable energy product as following:

**Module 1:** Fundamentals of design for a sustainable system includes topics of basic knowledge on understanding functions of individual components and installation, wiring and component selection, of sustainable system in accordance with the standard practice.

**Module 2:** Low voltage electrical installation – Building focuses on identifying the nature of the activities of the sit regarding the intervention work (without voltage or vicinity), wiring and configuring a VDI system, fire and intrusion alarm, and access control system, and electric installation.

**Module 3:** Industrial electricity and automation covers reading and designing industrial wiring according to 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 test and measurements.

Upon completion, the students should have fundamental knowledge on designing, installing, and operating properly a sustainable energy system.

### **Total training time in hour**

52 hours/ module

### **Target participant**

existing technician students in LTTC



# Vision

Promoting vocational training  
in energy industry

# Mission

Enhancing the training content  
in both theory and practice

# Objective

Achieving national accreditation  
for the training programs

# Value

Sustainability – Knowledge  
transformation – Economic  
welfare





# BENEFITS



**Improving** reputation of vocational training



**Encouraging** greener generation of energy managers



**Increasing** quality of electrical training and energy management education



**Developing** nationwide adaptation and recognition



**Reducing** gap between supply and demand of skilled workers



**Collaborating** with private sector to ensure needs are met



**Creating** brighter future for underprivileged students



# PARTNERSHIPS



## DEG

DEG, 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 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 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 all its projects, the Schneider Electric Foundation pays a great attention to Schneider Electric employee's commitment.



## 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 College

Established in 1986, Ly Tu Trong Technical College of 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.

