



## Reform of TVET in Viet Nam

Innovation and Learning Practice

Bridging Innovation and Learning in TVET (BILT) Project



**Submitted by College of Machinery and Irrigation, Viet Nam**

In Viet Nam, the general level of environmental awareness is low, and the proportion of the economy that is devoted to green industry is relatively small. However, a willingness to shift towards a greener society is beginning to emerge, which creates a growing demand for green jobs and competencies. A Technical and Vocational Education and Training (TVET) reform programme is transforming the country's TVET system into an important facilitator of the green economy and turning institutes like the College of Machinery and Irrigation into regional hubs for green TVET.

Start date: 2015

Type of implementing institution: Training provider

Target group: TVET managers, teachers and administrative staff, in-company trainers

## College of Machinery and Irrigation (VCMI)

Since 1976, the College of Machinery and Irrigation has trained more than 100,000 skilled technical workers for the industry, agriculture and rural development sectors in Viet Nam. In 2014, the College was approved by the Prime Minister as one of 45 public institutions slated to become high-quality vocational schools by 2020. As part of the TVET reform programme, VCMI is emerging as a High-Quality Institute for Green TVET.

## Description of activities

The TVET system in Viet Nam faces challenges in providing the qualifications and competencies needed to meet the requirements of the changing world of work: low business sector participation, outdated training programmes and trainers who lack the latest sector knowledge, skills and teaching methods are among the challenges.

The solution calls for quick and coordinated top-down efforts to change the country's institutional and legal TVET framework based on established practices. With the German Agency for International Cooperation (GIZ) serving in an advisory role and Vietnamese institutes facilitating change, the Vietnamese Directorate of Vocational Education and Training and eleven TVET colleges are part of the TVET reform programme. The country's College of Machinery and Irrigation is one of the participating institutes. The reforms focus on normative and administrative change, supporting TVET institutes in providing training programmes that are aligned with international standards and increasing cooperation with the business sector.

An important element of the TVET reform programme is aligning TVET with Viet Nam's National Green Growth Strategy, which addresses the process of economic restructuring towards more sustainable use of natural resources and reduced carbon emissions.

## Relevance

### What is unique about VCMI's participation?

VCMI aims to become a High-Quality Institute for Green TVET by developing, piloting and disseminating the delivery of new initial and further **training programmes in two occupations**: Electronics Technician for Energy and Building Technology; and Mechanics Technician for Sanitary, Heating and Climate Technology. These training programmes were jointly developed based on

occupational profiles and learning outcomes developed by VCMI, companies, sector associations, relevant ministries and the Directorate for Vocational Education and Training, with input from the TVET programme's German stakeholders. These training programmes have been assessed and recognized as equivalent to German standards regarding the practical and theoretical content.

### Why is a top-down approach the best solution for reforming TVET in Viet Nam?

Effective TVET reform in Viet Nam requires significant and simultaneous changes to multiple institutional and legal frameworks. It also involves a large group of stakeholders: state actors, representatives from enterprises, chambers of commerce and industry, professional associations, trade unions, TVET managers, teachers and students. Given the scope of the change, coordinated top-down efforts with specific overlap between stakeholders at other levels creates a collective effort.

### Why are such comprehensive reforms necessary?

Viet Nam has recognized the need to develop a competent workforce capable of meeting the requirements of a greening economy. Human resource training and development is seen as a strategic instrument supporting the country's Green Growth Strategy. Until the green economy is mature enough to provide sufficient training and reskilling at a company or sector level, TVET institutions in a reformed system are best suited to meet the demand for new qualifications and competencies.

## Added value

### How does the programme target greening in TVET specifically?

Renewable energy is a priority topic in Viet Nam and is an important part of long-term changes needed for an evolving Vietnamese socio-economic growth model. TVET institutes such as VCMI receive support from the TVET reform programme for providing green and inclusive programmes for initial and further training. By taking a broad approach to reforming TVET, all stakeholders can align on a common goal of developing a competent workforce capable of meeting the requirements of the greening economy in Viet Nam.

### How do teachers and trainers benefit from the TVET reforms?

Teachers and trainers at the eleven institutes directly involved in the reform process serve as multipliers for spreading knowledge, skills and methods to other TVET institutes. For example, VCMI teachers who were trained in energy efficiency and renewable energy in Germany developed and successfully implemented a basic green module on "Environmental protection, energy and resource efficiency" at VCMI. VCMI multipliers conducted

further trainings on the basic module for teaching, administrative and management staff from 37 other TVET institutes in Viet Nam. This basic module is being multiplied to other TVET institutes and can be integrated into all training programmes nationwide.

### What about input from the private sector?

The business sector is actively involved in developing and updating demand-oriented standards and training programmes, qualifying in-company trainers and examiners, conducting joint training at TVET institutes and at enterprises, and developing mechanisms for stakeholder interconnection. In the case of VCMI, two industry advisory boards involving seven companies and two sector associations were established for the college's two new occupational training programmes. These companies made a commitment to provide trainees with in-company training phases and to participate in the examination committees with VCMI.

## Transferability

### How will the pilot training programmes be transferred to other TVET institutes?

By becoming a High-Quality Institute for Green TVET, an institute like VCMI will provide insights to other TVET institutes on how to implement the labour-market oriented training programmes for the two new occupations in addition to integrating the basic green module mentioned above into all remaining occupation training programmes. Train-the-trainer courses in occupation-related competences and green procedures or technologies allow management personnel of other TVET institutes to take advantage of benefits such as demand analysis insights, practical training for workshop organization and maintenance, cooperation with the industry, quality management of TVET or tracer studies.

### How are training concepts adapted to other institutional environments?

The initiative targets institutes such as VCMI with the specific goal of equipping them as multipliers: technical exchange workshops to share experiences in preparation for the implementation processes are prioritized when transferring the training programmes to other TVET institutes.

### Will the benefits of the TVET programme extend beyond Viet Nam?

In the medium-term, Vietnamese TVET actors will be enabled to co-design active and independent dialogues in addition to providing advisory services and capacity development on **concepts, instruments and further training for greening TVET**. In this respect, a new entity like the High-Quality Institute for Green TVET at VCMI can become a contact point and knowledge transfer agency for interested parties in Viet Nam as well as other countries, such as Cambodia, Laos or Myanmar.

**Viet Nam's TVET reform programme is one of the BILT project's Innovation and Learning Practices that address systemic challenges within the five work streams of the project. Specifically, the TVET reform programme addresses greening TVET:**



### Greening TVET

*Responding to new development paradigms for sustainability and reduced environmental impact*

**Additional Innovation and Learning Practices cover the following areas:**



**New Qualifications and Competencies**



**Entrepreneurship in TVET**



**Digitalization in TVET**



**Migration and TVET**

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For more information about this practice:  
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## About the BILT Project

UNESCO-UNEVOC's Bridging Innovation and Learning in TVET (BILT) project is a reference point for innovation and learning in TVET. It utilizes the international UNEVOC Network to create opportunities for collaboration and a platform for bridging innovation and learning between Europe, Africa and the Asia-Pacific region. BILT complements developments at the national level in supporting innovative, market-oriented and attractive modes of learning and cooperation in TVET.

The BILT project explores the process of identifying, integrating and implementing new qualifications and competencies in TVET. This is known as the 'three I's process'. In addition to the broad focus on new qualifications and competencies, BILT addresses four complementary themes: Digitalization and TVET, Greening TVET, Entrepreneurship in TVET, and Migration and TVET.

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## New Qualifications and Competencies in TVET

- **Identifying** new qualifications and competencies in a timely manner;
- **Integrating** them into appealing and flexible curricula and training regulations; and
- **Implementing** them in innovative training approaches

## Entrepreneurship in TVET

Unlocking the potential of innovative entrepreneurial activities and fostering entrepreneurial culture

## Greening TVET

Responding to new development paradigms for sustainability and reduced environmental impact

## Digitalization in TVET

Providing response to new skills demands, as technology has permeated the world of work and is changing the profile of jobs

## Migration and TVET

Accelerating the integration of migrants into their host communities, and allowing them to become productive members of the workforce

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