

**Greening TVET**

Training and certification of knowledge and skills in energy saving in the field of construction

Innovation and Learning Practice**Bridging Innovation and Learning in TVET (BILT) Project**

Submitted by the Small Enterprises' Institute of the Hellenic Confederation of Professionals, Craftsmen and Merchants (IME GSEVEE), Greece

The main aim of the IME GSEVEE initiative titled 'Training and certification of knowledge and skills in energy saving in selected construction sector professions' was to train 1,500 construction industry professionals in energy saving techniques. Between June 2018 and November 2021, 1,467 professionals participated in 69 subsidized vocational training programmes lasting 50 hours each. The training programmes were delivered remotely using distance learning methodologies, including the use of training manuals, an e-Learning platform, a help desk, educational materials, case studies, virtual work scenarios and educational mentoring. 1,379 trainees passed the certification exams and were certified to ISO/IEC 17024 standard.

Start date: 18 June 2018

End date: 30 November 2021

Type of implementing institution: Social partner VET institute

Funding programme: "Competitiveness, Entrepreneurship & Innovation" (EPAnEK) Operational Programme of the EU National Strategic Reference Framework (NSRF) for the period 2014-2020

Target group: Private sector professionals in five fields of construction – electricians, plumbers, glass installation technicians, aluminum and iron technicians, and refrigeration contractors – from all regions of Greece, who were interested in upgrading their knowledge and skills and in improving their career prospects.



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IME GSEVEE
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Hellenic Confederation of Professionals, Craftsmen, and Merchants, and its entities

The Hellenic Confederation of Professionals, Craftsmen, and Merchants (GSEVEE) is an employers' organization founded in 1919. GSEVEE's aim is to defend, promote, and consolidate the professional, economic and social interests of professionals, craftsmen, and merchants in Greece. GSEVEE incorporates 87 federations (56 local, 30 sectoral, and 1 for pensioners) and has 1,100 associations and 140,000 entrepreneurs on its registered members' list. In 2006, GSEVEE established the Small Enterprises' Institute (IME) to provide evidence-based support to GSEVEE, to conduct studies and scientific surveys, and to design and implement actions for the economy, the strengthening of SMEs, and employment. IME GSEVEE also conducts activities in the field of VET by identifying workers' skills needs and then planning and implementing education, training and certification projects, linking education and vocational training with employment and the economy.

Description of activities

Realizing the significant impact of climate change on the environment and the subsequent need for professional skills modification and transformation in the area of energy saving and energy efficiency, IME GSEVEE worked with professional bodies and federations to update the curricula of construction-related VET programmes to reflect new developments in energy saving techniques. The focus was not only on integrating new materials, new installation methods and new institutional requirements for energy saving, but also on promoting associated changes in professional frameworks and improving and validating workers' knowledge and skills. The project was based on the understanding that European initiatives on energy saving and energy efficiency for construction require specific training. It also aimed to strengthen jobs in the construction sector in line with changes taking place in the economic, business and technological environment.

Relevance

What challenge was your initiative designed to fix, and how?

Climate change is causing strong negative impacts to the environment and the labour market, and is driving the need for professional skills transformation and upgrading. In recognition of the important role that

energy conservation plays, the IME GSEVEE initiative was designed to raise construction professionals' awareness of energy saving and energy efficiency through enhancing their green skills. Its main aim was to contribute to the strengthening of jobs in the construction sector, while at the same time responding to changes in the economic, business and technological environment affecting the workforce. The initiative also sought to address the need at national level for modern, upgraded TVET curricula and educational materials on installation methods and technical requirements for energy saving in the building and construction sector.

How was the energy saving training designed and implemented?

The online training courses on energy saving techniques were delivered in synchronous and asynchronous mode via the use of an integrated Learning Management System (LMS), and targeted professionals in five thematic fields of construction: electricians, plumbers, glass installation technicians, aluminum & iron technicians and refrigeration contractors. Each training programme had a total duration of 50 hours and consisted of lectures and case studies sessions combined with work case scenarios. There was a training the trainers component to familiarize training staff with the educational materials, and the conditions and the requirements for the remote TVET delivery. Additionally, to support both the trainees and the trainers, training materials, manuals and guidelines were prepared.

Was the initiative linked to wider international, national or local development goals?

The IME GSEVEE initiative was part of a national action to promote and upgrade the knowledge and skills of private sector professionals, in particular those working in sectors with identified shortages of modern professional skills.

Added value

What impact did the COVID-19 pandemic have on the initiative and on IME GSEVEE's operations?

Training and certification were initially designed to be provided in person. However, the COVID-19 pandemic led to IME GSEVEE needing to adopt distance learning modalities and to use digital tools and learning materials to implement the training.

The pandemic environment provided a valuable learning experience for IME GSEVEE, as it accelerated IME's acquisition of digital skills in the field of education and training and also demonstrated its resilience in the face of critical conditions. It led the institution to offer new remote educational services in cutting-edge subjects such as energy saving, climate change and environmental protection via the use of an LMS. An

innovative element of the project was the certification of acquired knowledge and skills using the ISO 17024 standard.

What were the broader impacts of the initiative on employment and environmental protection in Greece?

The initiative has enhanced construction industry professionals' acquisition of skills needed to maintain productive employment in an important sector of the Greek economy. It also strengthened their ability to adapt to changes taking place in the labor market and to respond effectively to environmental challenges.

Transferability

To what extent is your initiative transferable to other contexts?

The project has already been replicated within Greece. The Public Employment Service has adapted the initiative to provide training on energy saving in the field of construction to unemployed persons who are registered with the Service. However, because this new target group lacks recent work experience and because they may face difficulties in adapting to energy issues, the duration of the training was increased from 50 hours to 70 or 80 hours, with corresponding adjustments made to the digital learning materials.

The initiative can also be replicated in settings outside of Greece, since all of the learning materials produced have been released as **Open Educational Resources**.

Has your initiative received national or international recognition?

The initiative is nationally recognized as a best practice by the Operational Programme on Competitiveness, Entrepreneurship and Innovation (EPAnEK) 2014-2020 and publicized on the EPAnEK official website.

IME GSEVEE's initiative 'Training and certification of knowledge and skills in energy saving in selected construction sector professions' 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 IME GSEVEE initiative addresses greening TVET:



Greening TVET

Fostering the culture of sustainable practices in TVET and facilitating the transition to green economies and societies

Additional Innovation and Learning Practices cover the following areas:



New Qualifications and Competencies



Entrepreneurship in TVET



Digitalization and TVET



Migration and TVET

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For more information about this practice:

Project [webpage](#) (in Greek)

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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 AsiaPacific region. BILT complements developments at the national level in supporting innovative, marketoriented 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.

For more information, please visit
www.unevoc.unesco.org/bilt

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New Qualifications and Competencies in TVET

- **Identification** 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 entrepreneurial potential of learners through innovative activities and nurturing entrepreneurial culture

Greening TVET

Fostering the culture of sustainable practices in TVET and facilitating the transition to green economies and societies

Digitalization in TVET

Providing a 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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