

European Education Area Strategic Framework

Working Group Vocational Education and Training and the Green Transition

Peer Learning Activity

21 and 22 October 2024 – Torino, Italy

Summary report

Introduction

The Peer Learning Activity (PLA) of the European Education Area (EEA) Working Group on Vocational Education and Training (VET) and the Green Transition was held in Torino, Italy, from 21 to 22 October 2024. The event was hosted by the **European Training Foundation (ETF)**.

Participants included representatives from various EU Member States (Austria, Bulgaria, Estonia, France, Ireland, Latvia, Lithuania, Luxembourg, Portugal, Romania, Slovenia and Sweden) and a candidate country (Georgia). Participants from EU level stakeholders included European Association of Institutes for Vocational Training (EVBB), European Association of Institutions in Higher Education (EURASHE) and Crafts and SMEs in Europe (SMEunited). International organisations present at the meeting included the the Education and Culture Executive Agency (EACEA), European Commission (EC), European Training Foundation (ETF) and the International Training Centre of the International Labour Organization (ITC-ILO). Consultants present at the meeting were from ICF.

The primary objective of the PLA was to showcase the international dimension of VET particularly in advancing green VET innovation across and beyond Europe.

The main location of the PLA was the ETF and included an on-site visit to the **Environment Park** – a regional reference point for public administrations and companies working on environmental innovation.

The first day of the PLA commenced at ETF with a warm welcome by Pilvi Torsti, Director of ETF. The event was moderated by **Romain Boitard, adviser on greening at ETF**.

Pilvi Torsti, ETF Director, welcomed the participants by stressing how Vocational Education and Training (VET) is seen as crucial in supporting the green economy. The European Training Foundation (ETF) provides concrete analysis to address VET needs at governmental, intergovernmental, national, and international levels through a bottom-up approach. Additionally, it fosters the internationalization of VET, blending both top-down and bottom-up strategies, as countries increasingly prioritise green and digital transitions.

Subsequently, **Romain Boitard** explained the aim of the session, namely, to outline how ETF promotes the green transition, by providing two examples of ETF's areas of work: **sustainability within VET** and the **internationalization of VET**.

Next, **Manuela Prina, Head of the ETF's Knowledge Hub for Skills and Jobs** provided an overview of ETF activities in the areas of green transition and VET. ETF recognizes the importance of equipping upcoming generations with the necessary skills and awareness for the green transition. Since 2012, ETF has analysed partner countries' innovation landscapes, a topic that initially received limited attention, but has since gained popularity—especially following the emergence of the European Green Deal (EGD). This shift sparked interest in defining "green skills" and understanding their role in the green transition. ETF's early work involved exploring partner countries' readiness to support the green transition and identifying whether they had a clear vision for it.

In 2021, ETF launched the **Green Skills Award** to recognize best practices, which has proven to be a valuable learning experience. Through its report "**The future of skills in in ETF partner countries**", ETF has also begun examining future skill demands, particularly within key sectors across partner countries. The analysis identified a strong demand for upskilling and reskilling, particularly in competitive fields like agribusiness in the Western Balkans, where ETF collaborates with Centres of Vocational Excellence (CoVEs). A priority is to ensure that actionable insights reach policymakers so they can implement effective strategies.

Objectives of the Peer Learning Activity:

- To showcase how ETF promotes inter-country exchanges for the benefit of countries' green industrial policies inside and outside the EEA
- To illustrate how international organisations promote green VET internationally
- To provide examples of innovative approaches to skilling for green technology deployment in the private sector

1 Skills for the green economy – the role of TVET

Anna Zongollowicz, Senior Programme Officer at ITCILO (International Training Centre of the ILO - International Labour Organization) presented how Technical and Vocational Education and Training (TVET) supports the development of skills for the green economy. The speaker started by stating that a green economy is not only low carbon but also socially inclusive, emphasizing the need to ensure that women and marginalized groups are fully integrated into these transitions.

The Paris Agreement serves as a guiding framework for developing skills for the green economy, complemented by the [ILO's Just Transition Guidelines](#), focused on **youth employment** and **related to environmental policies, green technologies, and natural disaster readiness**. While the green transition brings job creation and sectoral shifts, it also triggers fears about job loss, particularly with the rise of artificial intelligence (AI) and automation. Addressing these challenges requires bridging skill gaps, **increasing training for teachers**, and offering **lifelong learning options** to adapt to evolving green roles.

In addition, a **lack of data on skills shortages** is a noted limitation, as is the need for policy coherence—where policies should realistically reflect current job market demands. **TVET is increasingly central to equipping workers with green skills**, though it has traditionally been undervalued. Now, however, discussions around TVET's role in the green transition are taking a more prominent position in workforce planning. Practical examples include successful green job policies, such as the Philippine government's green job incentives and the development of green competency standards for TVET. In collaboration with international partners, pilot programmes in countries like Ghana and Thailand have implemented tools for greening TVET curricula, professional development, and workplace-based training, illustrating a comprehensive approach to making green skills accessible across different economies and industries. The main takeaways were that to ensure a sustainable transition, it is critical that policy and training systems are **responsive, inclusive, and adaptive** to the realities of both environmental demands and workforce needs.

2 Creating new learning: a Scaffold for greening VET programmes

Olena Bekh, Senior Human Capital Development Expert, Coordinator for Innovative Teaching and Learning, ETF, stressed how critical it is to ensure that citizens have the skills, knowledge, and attitudes needed for employability, personal growth, and active citizenship. The European competence frameworks—DigComp, EntreComp, LifeComp, and the new GreenComp—are central to this effort, offering comprehensive guidelines to support sustainable, inclusive education. These frameworks address essential competencies, including **digital literacy, personal and social skills, entrepreneurship, and environmental sustainability**, underscoring the need for skills like critical thinking, creativity, teamwork, and intercultural awareness. To assist educators in applying these competencies, ETF and the Joint Research Centre (JRC)

created the *Scaffold* card deck. This practical tool includes 102 cards divided into five categories: setting, planning, competencies, teaching methods, and assessment strategies. The deck is designed to help educators plan lessons and integrate the key EU competencies into diverse learning environments effectively. Scaffold promotes a **learner-centred approach**, where teachers can flexibly combine competencies for designing engaging, tailored educational experiences. A prerequisite for the successful use of Scaffold is that teachers themselves possess the skills they teach.

To effectively disseminate Scaffold practices, next year's initiative will involve launching a poll to gather insights on innovative practices, leading to the development of guidelines for the usage of such practices.

3 The role of centres of vocational excellence in the green transition

Jolien van Uden, Expert on new forms of learning, ETF, presented the ISATCOVE initiative (International Self-Assessment Tool for CoVEs) which is designed to enable VET providers to review their development, practices, progress and aspirations in relation to vocational excellence. The initiative covers three dimensions (**Teaching and Learning, Partnership and Coordination, Governance and Funding**) which encompass 23 criteria. It offers 577 indicators for decision-making. The initiative is testing six thematic labels, including one focused on **green skills**, aimed at facilitating a sustainable transition. Key aspects include governance and funding, encouraging centres to continue developing VET. An e-Library is available with many resources dedicated to green skills and environmental issues, highlighting the role of Centres of Vocational Excellence in the green transition.

The initiative extends beyond EU Member States and ETF member countries, with significant interest, for example, from African countries. The plan is to complete the pilot phase and then present it to DG EMPL for potential rollout. There is also a suggestion to share the tool with Erasmus+ CoVEs and invite them to participate in the pilot.

4 NDCP activities relevant to green VET

Sarah Wolf and Romeo Bartolini, NDCP associates, discussed the work of the NDC Partnership in bringing together more than 200 members, including more than 130 countries, developed and developing, and nearly 100 institutions to create and deliver on ambitious climate action that help achieve the Paris Agreement and the Sustainable Development Goals (SDGs).

The need for a connection between SDGs and national budgeting, particularly in relation to green skills, has gained importance in various countries. Shared principles are being established to align development and cooperation with **climate action, gender equality, and inclusivity**. Stakeholder engagement, particularly with ministries of environment, is emphasized to ensure that not only are Nationally Determined Contributions (NDCs) reviewed, but financial planning is also aligned with priorities. Governments serve as focal points for identifying key priorities, such as policies addressing skills in the employment sector, ensuring that budgets reflect these needs.

The membership involved is broad and diverse, with around 37% of countries expressing **a need for support regarding the green transition** for instance, Kenya has launched significant green skills initiatives. The focus is on connecting to the concerned sector to identify potential improvements, supported by various case studies. A critical question raised is how to ensure that the workforce possesses the necessary skills, with countries providing support to others, particularly for just and green transitions.

Two main requests have emerged from members: **enhancing stakeholder engagement** and **building evidence** from participating countries. When asked about the nature of support required, it was clarified that assistance is primarily directed toward countries in the Global South, although there is awareness of support needs in EU countries. Focal points are established to channel requests and facilitate connections.

5 Moderated discussion

Day One closed with a moderated discussion amongst PLA members. Key takeaways are shown in the box below.

Key takeaways from the moderated discussion with participating Working Group members:

- Establishing **a connection between the business sector, the education sector and trade unions** is crucial for developing effective vocational training programs and enhancing employability in the green transition.
- Recognizing the importance of **a global dimension** is critical for adapting to modern challenges in VET systems.
- There is a need **to assess the effectiveness** of student mobility initiatives in VET as well as the quality of internationalisation.
- The greening of VET systems faces significant obstacles due to **limited resources**, including staff constraints, for example in Estonia and Portugal. Such issues also make it difficult to develop CoVEs and to participate in CoVE projects funded by Erasmus+
- In Romania, schools are interested in participating in green initiatives, but companies are hesitant to engage. Initiatives like [InnoVerde](#) have shown potential at school/education level but require **more business interest**.
- Latvia has introduced the concept of **internationalization in VET**, which involves integrating global knowledge into the education system, though understanding of this concept varies.
- Through Erasmus+, Estonia has facilitated discussions among Baltic countries and Ireland, to share **best practices** for sustainability and green transitions, improving policymaking through collaboration.
- Slovenia faces **challenges in funding** internationalization efforts, with a reliance on Erasmus+ funds and limited financial resources for small companies. SI is also working on modernising its education system to integrate digital and green skills across all subjects.
- In Sweden, there is a push for defining and applying green skills practically across all sectors, focusing on **concrete benefits**.

6 Site visit to the Environment Park (ENVIPARK)

On the second day of the PLA, the hosts led the group to the on-site visit of the [Environment Park](#), in Torino.

The presentation and the tour of ENVIPARK were made by [Davide Damosso](#), **Director of ENVIPARK**. ENVIPARK has been a key player in fostering innovation for over 20 years, acting as a competence centre that supports **companies, research and development institutions**, and **public administration** at local, national, and European levels. Its dual business model focuses on **innovation services** and

technology park development, aiming to create a hub for enhancing competencies and facilitating stakeholder collaboration to launch new initiatives and projects. This process, particularly for small and medium-sized enterprises (SMEs), is often challenging and slow, which can create competitive delays in industrial ecosystems, so ENVIPARK is designed to smoothen this process.

The technology park aspect emphasizes the importance of utilizing public funding effectively to generate revenue through services provided to investing companies. However, while innovation services can have a significant impact on the local territory, generating revenue from these services can be difficult due to market conditions. Balancing the infrastructure and innovation services pillars is essential to ensure that public investments retain their value.

ENVIPARK has been built on the site of a defunct steel works and hosts around 60 companies, employing approximately 600 people.

The campus is designed **with environmental sustainability in mind**, featuring green roofs, walls, rainwater recovery systems, and bee farming activities. It also hosts open labs for experimental activities focused on areas such as green chemistry, circular economy, hydrogen, and surface engineering. ENVIPARK facilitates innovation by providing companies with access to demo sites for testing their tools and collaborating with universities and researchers.

ENVIPARK's innovation services aim to enhance environmental performance, beginning with stakeholder engagement to develop innovative ideas. They also conduct performance measurements, including life cycle assessments (LCA) and energy-environmental analyses. The organization engages in B2B contracts and EU-funded projects across various themes, including energy, mobility, green chemistry, and decarbonization efforts in harbours.

Specifically, ENVIPARK is involved in hydrogen projects through partnerships with institutions like Istituto Italiano di Tecnologia (IIT) and Politecnico di Torino, with the aim of establishing the region as a **leader in EU-funded hydrogen projects**. The PLA participants had the pleasure of visiting the hydrogen lab ([HYSLAB](#)), which was an interesting, diverse experience.

7 Concluding remarks

Overall, the PLA was an occasion to discuss the role of VET in promoting the green transition across and beyond Europe, by showcasing the work of ETF and international organisations in the field.

The presentations confirmed that countries may have very different VET systems, but the goals are the same for all. Collaboration between countries and across the different sectors (business, education, trade unions) is perceived as essential to enable a smooth, successful and inclusive transition to the green economy.

The well-balanced programme, including the on-site visit to showcase practical examples, represented an opportunity to discover how to support the green transition by looking at the respective roles of the public, private and R&D sectors and exploring how benefits can flow from close collaboration between them.